
```

    name: <unnamed>
    log: /Users/connorbrennan/Library/CloudStorage/OneDrive-TheUniversityo
> fChicago/mmb/output/stepwise_regressions/piq_timing_max_all_sim.smcl
    log type: smcl
    opened on: 10 Jan 2025, 11:33:22
    - capture ! rm ./output/stepwise_regressions/`depvar'`type'.pdf
    = capture ! rm ./output/stepwise_regressions/piq_timing_max_all_sim.pdf
    - di "*****"
> *****"
*****
> **
    - di "Outcomes of bi-directional stepwise regressions with `depvar' with rul
> e fixed effects"
    = di "Outcomes of bi-directional stepwise regressions with piq_timing_max wi
> th rule fixed effects"
Outcomes of bi-directional stepwise regressions with piq_timing_max with rule
> fixed effects
    - di "Independent Variable set: `type'"
    = di "Independent Variable set: all_sim"
Independent Variable set: all_sim
    - di "*****"
> *****"
*****
> **
    - ${reg_`depvar'`type'}
    = nbreg piq_timing_max ln_neq cb_authors_ext estimated est_late est_early
> stky_pr_rotemberg stky_pr_calvo if piq_timing_max<60 , vce(r)

```

```

> ----- begin nbreg -----
    - if _by() {
        local BY "`by' `_byvars' `_byrc0':"
    }
    - `BY' _vce_parserun nbreg, mark(Exposure OFFset CLuster) : `0'
    = _vce_parserun nbreg, mark(Exposure OFFset CLuster) : piq_timing_max l
> n_neq cb_authors_ext estimated est_late est_early stky_pr_rotemberg stky_
> pr_calvo if piq_timing_max<60 , vce(r)

```

```

> ----- begin _vce_parserun -----
    - version 9
    - local version : di "version " string(_caller()) ":"
    - local bycall = _by()
    - _on_colon_parse `0'
    = _on_colon_parse nbreg, mark(Exposure OFFset CLuster) : piq_timing_max
> ln_neq cb_authors_ext estimated est_late est_early stky_pr_rotemberg st
> ky_pr_calvo if piq_timing_max<60 , vce(r)

```

```

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before "`('before)'"
}
- if ``"before"' == ":" {
= if ``nbreg, mark(Exposure OFFset CLuster) "' == ":" {
  sreturn local after ``"after"'
  exit
}
- while ``"COLON"' != ":" & ``"after"' != "" {
= while ``"' != ":" & ``": piq_timing_max ln_neq cb_authors_ext estim
> ated est_late est_early stky_pr_rotemberg stky_pr_calvo if piq_timing_ma
> x<60 , vce(r)'" != "" {
- gettoken COLON after : after, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')
  local COLON
}
- else if ``"COLON"' != ":" {
= else if ``:"' != ":" {
  local before ``"before' `COLON"'
  local COLON
}
- }
- while ``"COLON"' != ":" & ``"after"' != "" {
= while ``:"' != ":" & ``" piq_timing_max ln_neq cb_authors_ext estim
> ated est_late est_early stky_pr_rotemberg stky_pr_calvo if piq_timing_ma
> x<60 , vce(r)'" != "" {
  gettoken COLON after : after, parse(":") bind match(par) quotes
  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if ``"COLON"' != ":" {
    local before ``"before' `COLON"'
    local COLON
  }
}
- if ``"COLON"' != ":" {

```

```

= if `":'" != ":" {
  di as err ""' found where ':' expected"
  exit 198
}
- sreturn local before `""before'"
= sreturn local before `""nbreg, mark(Exposure OFFset CLuster) '"
- sreturn local after `""after'"
= sreturn local after `"" piq_timing_max ln_neq cb_authors_ext estima
> ted est_late est_early stky_pr_rotemberg stky_pr_calvo if piq_timing_max
> <60 , vce(r)'"

-----
> ----- end _on_colon_parse -----
- local ZERO `""s(before)'"
= local ZERO `""nbreg, mark(Exposure OFFset CLuster) '"
- local 0 `""s(after)'"
= local 0 `"" piq_timing_max ln_neq cb_authors_ext estimated est_late e
> st_early stky_pr_rotemberg stky_pr_calvo if piq_timing_max<60 , vce(r)'"
- quietly syntax [anything(equalok)] [if] [in] [fw aw pw iw] [, VCE(stri
> ng asis) VCE1(string asis) LRMODEL * ]
- if `""vce'" == "" {
= if `""r'" == "" {
  MYRESULT
  exit
}
- local AFTER `""0'"
= local AFTER `"" piq_timing_max ln_neq cb_authors_ext estimated est_la
> te est_early stky_pr_rotemberg stky_pr_calvo if piq_timing_max<60 , vce(
> r)'"
- local 0 `""ZERO'"
= local 0 `""nbreg, mark(Exposure OFFset CLuster) '"
- syntax name(name=caller id="calling command name") [, WYPES(string) N
> OBOOTstrap NOJACKknife NOOTHERvce NOTEST PANELdata STdata bootopts(string as
> is) jkopts(string asis) robustok multivce REQUIREDopts(namelist) NOEQLIST EQ
> opts(passthru) EQARGopts(passthru) noNEEDVARLIST COMMONopts(namelist) MARKop
> ts(passthru) SMARKopts(passthru) RMCOLLopts(passthru) RMDCOLLOpts(passthru)
> NUMDEPvars(passthru) NEEDEQUAL ALLDEPSMISSing PAREntheses UNPARFIRSTeq OR EQ
> UAL UNEQUALFIRSTeq IGNORENOCONS ]
- if `""requiredopts'" != "" {
= if `""'" != "" {
  tempname reqopts
  .`reqopts' = . _optlist.new
  foreach req of local requiredopts {
    .`reqopts'.addopt `req', passthru
  }
}
- if ""wtypes'" == "" {

```

```

= if "" == "" {
- local wtypes fw aw pw iw
- }
- if "`paneldata'" != "" {
= if "" != "" {
    local panelopt "CLuster(varname) I(varname)"
    }
- if "`stdata'" != "" {
= if "" != "" {
    local stopt "CLuster(varname) SHared(varname)"
    }
- local typelist svy jackknife bootstrap
- if "`stdata'" == "" & replay() & ! _by() {
= if "" == "" & replay() & ! _by() {
    local ecmd `e(cmd)'
    local ecmdname `e(cmdname)'
    if ``"ecmd" == "" {
        error 301
    }
    else if ``"ecmd" != "caller" & ``"ecmdname" == "caller" & `:li
> st ecmd in typelist' {
    `ecmd' `0'
    MYRESULT exit
    }
    MYRESULT
    exit
    }
- gettoken svy typelist : typelist
- if "`reqopts'" != "" {
= if "" != "" {
    local REQOPTLIST ``".`reqopts'.dumpoptions"'
    local REQOPTNAMES ``".`reqopts'.dumpnames"'
    }
- local 0 ``"AFTER"'
= local 0 `` piq_timing_max ln_neq cb_authors_ext estimated est_late e
> st_early stky_pr_rotemberg stky_pr_calvo if piq_timing_max<60 , vce(r)"
- quietly syntax [anything(equalok)] [if/] [in] [`wtypes'] [, VCE(string
> asis) VCE1(string asis) Robust NODOTS `panelopt' `stopt' `REQOPTLIST' * ]
= quietly syntax [anything(equalok)] [if/] [in] [fw aw pw iw] [, VCE(str
> ing asis) VCE1(string asis) Robust NODOTS * ]
- if `:list vce == vce1' {
= if 0 {
    local vce1
    }
- if ``"vce1" != "" & "multivce" == "" {
= if `"" != "" & "" == "" {

```

```

    di as err "option vce() specified multiple times"
    exit 198
  }
- if "`robust'" != "" & "`robustok'" == "" {
= if "" != "" & "" == "" {
    di as err "options vce() and robust may not be combined"
    exit 198
  }
- if ``if''' != "" {
= if ``piq_timing_max<60 '' != "" {
- local if ``if (`if')''
= local if ``if (piq_timing_max<60 )''
- }
- if "`robust'" != "" {
= if "" != "" {
    local options ``robust' `options'''
  }
- if "`weight'" != "" {
= if "" != "" {
    local wgt [`weight'`exp']
  }
- if ``options''' != "" {
= if `''' != "" {
    local opts ``':list retok options'''
  }
- gettoken uvcetype vceopts : vce, parse(" ,")
- capture unabVCetype, `uvcetype'
= capture unabVCetype, r

```

```

> ----- begin _vce_parserun.unabVCetype -----
- syntax [, B00Tstrap BStrap JACKknife JACKNife JKnife Robust * ]
- if "`bstrap'" != "" {
= if "" != "" {
    local bootstrap bootstrap
  }
- if "`jknife'" != "" | "`jackknife'" != "" {
= if "" != "" | "" != "" {
    local jackknife jackknife
  }
- local vcetype ``jackknife' `bootstrap' `robust' `options'''
= local vcetype ``robust''
- sreturn local vcetype ``':list retok vcetype'''
= sreturn local vcetype ``robust''

```

```

> ----- end _vce_parserun.unabVCetype -----
- if c(rc) {

```

```

    di as err "invalid vce() option"
    exit c(rc)
}
- local vcetype `s(vcetype)'
= local vcetype robust
- if "`lrmodel'" != "" {
= if "" != "" {
    _check_lrmodel `caller', vcetype(`vcetype')
}
- if "`vce1'" != "" & "`multivce'" != "" {
= if `"' != "" & "" != "" {
    gettoken uvceltype vcelopts : vce1, parse(" ,")
    capture unabVCetype, `uvceltype'
    if c(rc) {
        di as err "invalid vce() option"
        exit c(rc)
    }
    local vceltype `s(vcetype)'
    if `:list vceltype in typelist' | `:list vcetype in typelist' {
        di as err "options vce(`vce') and vce(`vce1') cannot be combined"
        exit 198
    }
    MYRESULT
    exit
}
- if _caller() >= 17 {
- if "`vcetype'" == "cluster" {
= if "robust" == "cluster" {
    gettoken vceopts vcelopts: vceopts, parse(",")
    if `:list sizeof vceopts' > 1 {
        local typelist "`typelist' cluster_multiway"
        local vcetype cluster_multiway
        if `:list sizeof vcelopts' > 0 {
            gettoken comma vcelopts: vcelopts, parse(",")
            local vcelopts: list retokenize vcelopts
            di as err "{p}VCE option " "{bf:`vcelopts'} not allowed{p_end}"
            exit 198
        }
    }
}
- }
- if ! `:list vcetype in typelist' {
= if ! 0 {
- if "`vcetype'" != "robust" & "`noothervce'" == "noothervce" {
= if "robust" != "robust" & "" == "noothervce" {
    di as err "option vce(`uvceltype') not allowed"

```

```

        exit 198
    }
- MYRESULT

```

```

> ----- begin _vce_parserun.MYRESULT -----
    - args exit
    - sreturn local exit ``exit''
    = sreturn local exit `''`

```

```

> ----- end _vce_parserun.MYRESULT -----
    - exit

```

```

> ----- end _vce_parserun -----
    - if ``s(exit)'' != "" {
= if "" != "" {
    version 10: ereturn local cmdline ``nbreg `0''
    exit
    }
- version 6, missing
- local version : di "version " string(_caller()) ":"
- if replay() {
    if ``e(cmd)'' != "nbreg" { error 301 }
    if _by() { error 190 }
    global S_1 = e(chi2_c)
    Display `0'
    error `e(rc)'
    exit
    }
- `version' `BY' Estimate `0'
= version 18: Estimate piq_timing_max ln_neq cb_authors_ext estimated e
> st_late est_early stky_pr_rotemberg stky_pr_calvo if piq_timing_max<60 ,
> vce(r)

```

```

> ----- begin nbreg.Estimate -----
    - local vvpoi : di "version " string(_caller()) ", missing:"
    - if _caller() >= 11 {
    - local vv : di "version " string(_caller()) ":"
    - local mm e2
    - local negh negh
    - }
    - else {
        local vv "version 8.1:"
        local mm d2
    }
    - version 6, missing
    - local awopt = cond(_caller()<7, "aw", "")

```

```

- syntax varlist(numeric fv ts) [fw `awopt' pw iw] [if] [in] [, IRr FROM
> (string) Level(cilevel) OFFset(varname numeric ts) Exposure(varname numeric
> ts) noCONstant Robust CLuster(varname) SCore(string) NOLOg LOg noDISPLAY noL
> Rtest Dispersion(string) CRITTYPE(passthru) VCE(passthru) moptobj(passthru)
> * ]
= syntax varlist(numeric fv ts) [fw pw iw] [if] [in] [, IRr FROM(string
> ) Level(cilevel) OFFset(varname numeric ts) Exposure(varname numeric ts) noC
> ONstant Robust CLuster(varname) SCore(string) NOLOg LOg noDISPLAY noLRtest D
> isperison(string) CRITTYPE(passthru) VCE(passthru) moptobj(passthru) * ]
- local fvops = "`s(fvops)'" == "true" | _caller() >= 11
= local fvops = "" == "true" | _caller() >= 11
- if _by() {
    _byoptnotallowed score() ``score'""
}
- _get_diopts diopts options, `options'
= _get_diopts diopts options,

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options,

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevels
> NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells NO
> OMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(string) sfor
> mat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAPON(
> string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBREV
> ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels A
> LLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells
> EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat
> (string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passth
> ru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passth
> ru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```



```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive ``allbaselevels' `nbaselevels'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive ``baselevels' `nbaselevels'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```

```

        = if 0 < 2 {
        - exit
    }
> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
        - exit
    }
> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
        - exit
    }
> ----- end opts_exclusive -----
    - opts_exclusive "`omitted' `noomitted'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----

```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local K : list sizeof namelist

```

```

- gettoken c_diopts c_opts : namelist
- opts_exclusive ""`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ""`opts'" != "" {
= while "" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ""`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ""`opts'" != "" {
= while "" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ""`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if ``allbaselevels'`baselevels' == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if ``emptycells' == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if ``omitted' == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
}

```

```

- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wraon , `fvwraon'

```

```

= Wrapon ,


---


> 

---

 begin _get_diopts.Wrapon 

---


- capture syntax [, WOrd Width]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd Width]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}


---


> 

---

 end _get_diopts.Wrapon 

---


- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselevel
> s' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflegend
> ' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fvwr
> ap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
= c_local diopts
- if `K' == 2 {

```



```

= if 2 == 2 {
- c_local `c_opts' ``options'
= c_local options `''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95
}

> ----- end _get_diopts.GetDiopts -----

- c_local `name1' ``diopts'
= c_local diopts `''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- sreturn clear
- GetDiopts DEFAULT

}

> ----- begin _get_diopts.GetDiopts -----

- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevels
> NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells NO
> OMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(string) sfor
> mat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAPON(
> string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBREV
> ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels A
> LLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells
> EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat
> (string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passth
> ru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passth
> ru) NOABBREV ABBREV *]
- opts_exclusive ``allbaselevels' `noallbaselevels'
= opts_exclusive " "

}

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist

```

```

- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

>

 end opts_exclusive

```

- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
- }

```

```

- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `"sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `"pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wraon , `fvwraon'
= Wraon ,

```



```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd Width]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd Width]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselevel
> s' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflegend
> ' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fvwr
> ap' `fvwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `abbrev'
= c_local DEFAULT
- if `K' == 2 {
= if 1 == 2 {

```

```

        c_local `c_opts' ``options'''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
}

> ----- end _get_diopts.GetDiopts -----

    - if ``name2''' == "" {
    = if ``options''' == "" {
        GetDiopts DUPS, `options'
    }
    - else {
    - GetDiopts DUPS options, `options'
    = GetDiopts DUPS options,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevels
> NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells NO
> OMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(string) sfor
> mat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAPON(
> string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBREV
> ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels A
> LLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells
> EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat
> (string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passth
> ru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passth
> ru) NOABBREV ABBREV *]
    - opts_exclusive ``allbaselevels' `noallbaselevels'''
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"

```

```

= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive ``fvlabel' `nofvlabel'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive ``omitted' `noomitted'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0

```

```

- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}


---


> 

---

 end opts_exclusive 

---


    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
= local baselevels
    - local emptycells `emptycells' `noemptycells'
= local emptycells
    - local omitted `omitted' `noomitted'
= local omitted
    - local lstretch `lstretch' `nolstretch'
= local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
    - local abbrev `abbrev' `noabbrev'
= local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
    - if c(showbaselevels) == "all" {
        local allbaselevels allbaselevels
    }
    - else if c(showbaselevels) == "on" {
        local baselevels baselevels
    }
    - }
    - if "`emptycells'" == "" {
= if "" == "" {
    - if c(showemptycells) == "off" {
        local emptycells noemptycells
    }
    - }
    - if "`omitted'" == "" {
= if "" == "" {
    - if c(showomitted) == "off" {
        local omitted noomitted
    }
    - }
    - if "`lstretch'" == "" {
= if "" == "" {
    - if c(lstretch) == "off" {
        local lstretch nolstretch

```



```

    }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth(`"'cformat'"') > 9 {
        local cformat "%9.0g"
        di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat `"'cformat'"'
    local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth(`"'sformat'"') > 8 {
        local sformat "%8.2f"
        di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat `"'sformat'"'
    local sformat `"sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth(`"'pformat'"') > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat `"'pformat'"'
    local pformat `"pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {

```

```

        di as err "invalid fvwrapon() option;"
        syntax [, WOrd Width]
        exit 198
    }
    - opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
= local fvwrapon
    - if `:length local fvwrapon' {
= if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }
> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
= if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselevel
> s' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflegend
> ' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fvwr
> ap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
= c_local DUPS
    - if `K' == 2 {
= if 2 == 2 {
    - c_local `c_opts' ```options'""
= c_local options `""'
    - }
    - sreturn local coding `coding'

```

```

= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- c_local `name2' ``options'
= c_local options `''
- }
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS' != '' {
= if `'' != '' {
  if (strpos(`DUPS', "(")) {
    gettoken DUPS : DUPS, parse("(")
    local DUPS `DUPS'()'
  }
  di as err "duplicate {bf:`DUPS'} option not allowed"
  exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname'
= sreturn local level = `95'
- }

```

```

> ----- end _get_diopts -----
- mlopts mlopts, `options' `log' `nolog'
= mlopts mlopts,

```

```

> ----- begin mlopts -----
- version 8.0
- local maxoptlist MLOPTs(string) TRace TRACEDiffs GRADient HESSian SH
> OWSTEP ITERate(int -1) TOLerance(real -1) LTOLerance(real -1) GTOLerance(rea
> l -1) NONRTOLerance SHOWNRtolerance SHOWTOLerance NRTOLerance(real -1) QTOLe
> rance(real -1) DIFFicult HALFSTEPonly CONSTraints(string) noCNSNOTES COLLine
> ar TECHnique(passthru) VCE(passthru) DOTS depsilon(passthru) SHOWH NOTCONCAV
> E(passthru) USEVIEWS NOLOg LOg nrderiv
- syntax namelist(id="macro names" min=1 max=2) [, `maxoptlist' * ]
= syntax namelist(id="macro names" min=1 max=2) [, MLOPTs(string) TRac
> e TRACEDiffs GRADient HESSian SHOWSTEP ITERate(int -1) TOLerance(real -1) LT
> OLerance(real -1) GTOLerance(real -1) NONRTOLerance SHOWNRtolerance SHOWTOLe
> rance NRTOLerance(real -1) QTOLerance(real -1) DIFFicult HALFSTEPonly CONSTR

```

```

> aints(string) noCNSNOTes COLlinear TECHnique(passthru) VCE(passthru) DOTS de
> psilon(passthru) SHOWH NOTCONCAVE(passthru) USEVIEWS NOLOg LOg nrderiv * ]
    - gettoken dest rest : namelist
    - if "`rest'" == "" {
    = if "" == "" {
    - syntax namelist [, `maxoptlist' ]
    = syntax namelist [, MLOPTs(string) TRace TRACEDIfs GRADient HESSian
> SHOWSTEP ITERate(int -1) TOLerance(real -1) LTOLerance(real -1) GTOLerance(r
> eal -1) NONRTOLerance SHOWNRTolerance SHOWTOLerance NRTOLerance(real -1) QTOL
> erance(real -1) DIFFicult HALFSTEPonly CONSTraints(string) noCNSNOTes COLli
> near TECHnique(passthru) VCE(passthru) DOTS depsilon(passthru) SHOWH NOTCONC
> AVE(passthru) USEVIEWS NOLOg LOg nrderiv ]
    - }
    - local mlopts `mlopts' `trace' `tracediffs' `gradient' `hessian' `sho
> wstep' `difficult' `halfsteponly' `nonrtolerance' `shownrtolerance' `showtol
> erance' `dots' `depsilon' `showh' `notconcave' `useviews' `log' `nolog' `nrd
> eriv'
    = local mlopts
    - if `tolerance' != -1 {
    = if -1 != -1 {
        local tol "tolerance(`tolerance')"
    }
    - if `ltolerance' != -1 {
    = if -1 != -1 {
        local ltol "ltolerance(`ltolerance')"
    }
    - if `gtolerance' != -1 {
    = if -1 != -1 {
        local gtol "gtolerance(`gtolerance')"
    }
    - if `nrtolerance' != -1 {
    = if -1 != -1 {
        local nrtol "nrtolerance(`nrtolerance')"
    }
    - if `qtolerance' != -1 {
    = if -1 != -1 {
        local qtol "qtolerance(`qtolerance')"
    }
    - if `iterate' != -1 {
    = if -1 != -1 {
        local iter "iterate(`iterate')"
    }
    - sreturn clear
    - if "`technique'\vce'" != "" {
    = if "" != "" {
        ml_technique, `technique' `vce' nodefault

```

```

    if ``s(technique)'' != "" {
    local technique "technique(`s(technique)')"
    }
    if ``s(vce)'' != "" {
    local vce ``s(vceopt)''
    }
    sreturn local technique ``technique''
    sreturn local vce ``vce''
    }
- if ``constraints'' != "" {
= if "" != "" {
    capture confirm name `constraints'
    if _rc {
    CheckClist constraints , constraints(`constraints')
    }
    else {
    CheckCmat `constraints'
    }
    local const "constraints(`constraints)'"
    sreturn local constraints ``constraints''
    }
- sreturn local collinear ``collinear''
= sreturn local collinear ""
- c_local `dest' `mlopts' `tol' `ltol' `gtol' `nrtol' `iter' `const' `
> cnsnotes' `collinear' `technique' `vce' `qtol'
= c_local mlopts
- if ``rest'' != "" {
= if "" != "" {
    c_local `rest' ``options''
    }
}

> _____ end mlopts _____

- local coll `s(collinear)'
= local coll
- local cns `s(constraints)'
= local cns
- local mlopts `mlopts' `critttype'
= local mlopts
- Dispers , `dispers'
= Dispers ,

> _____ begin nbreg.Dispers _____

- sret clear
- syntax [, Mean Constant ]
- if ``constan''=="" {
= if ""=="" {

```

```

- sret local dispers "mean"
- exit

```

```

> ----- end nbreg.Dispers -----
- local dispers `s(dispers)'
= local dispers mean
- if "`dispers'"=="mean" {
= if "mean"=="mean" {
- local prog "nbreg_lf"
- local parm "alpha"
- local LLprog "LLalpha"
- }
- else {
  local prog "nbreg_al"
  local parm "delta"
  local LLprog "LLdelta"
}
- local title "Negative binomial regression"
- if ``score'""!=" " {
= if `""'!=" " {
  local nword : word count `score'
  if `nword'==1 & bsubstr("`score'",-1,1)=="*" {
    local score = bsubstr("`score'",1,length("`score'")-1)
    local score `score'1 `score'2
    local nword 2
  }
  confirm new variable `score'
  if `nword' != 2 {
    version 7: di as err "option {bf:score()} must contain the name of " "
> two new variables"
    exit 198
  }
  local scname1 : word 1 of `score'
  local scname2 : word 2 of `score'
  tempvar scvar1 scvar2
  local scopt "score(`scvar1' `scvar2')"
}
- if "`offset'""!=" " & "`exposur'""!=" " {
= if ""!=" " & ""!=" " {
  version 7: di as err "options {bf:offset()} and {bf:exposure()} may no
> t be specified together"
  exit 198
}
- if "`constan'""!=" " {
= if ""!=" " {
  local nvar : word count `varlist'

```

```

        if `nvar' == 1 {
            version 7: di as err "independent variables required with " "option {b
> f:noconstant}"
            exit 102
        }
    }
    - marksample touse
    - if ``cluster' != "" {
    = if ``' != "" {
        local clopt cluster(`cluster')
    }
    - _vce_parse, argopt(CCluster) opt(Robust oim opg) old: [`weight'`exp'],
> `vce' `clopt' `robust'
    = _vce_parse, argopt(CCluster) opt(Robust oim opg) old: [], vce(r)
}
> ----- begin _vce_parse -----
    - version 10
    - _on_colon_parse `0'
    = _on_colon_parse , argopt(CCluster) opt(Robust oim opg) old: [], vce(r)
> )
}
> ----- begin _on_colon_parse -----
    - version 8.2
    - sreturn local before ""
    - sreturn local after ""
    - gettoken before after : 0, parse(":") bind match(par) quotes
    - if "`par'" != "" {
    = if "" != "" {
        local before `("before')"'
    }
    - if ``before' == ":" {
    = if `', argopt(CCluster) opt(Robust oim opg) old"" == ":" {
        sreturn local after ``after'""
        exit
    }
    - while ``COLON' != ":" & ``after' != "" {
    = while ``' != ":" & `': [], vce(r) '' != "" {
    - gettoken COLON after : after, parse(":") bind match(par) quotes
    - if "`par'" != "" {
    = if "" != "" {
        local before `before' (`COLON')
        local COLON
    }
    - else if ``COLON' != ":" {
    = else if `":' != ":" {
        local before ``before' `COLON'""

```

```

    local COLON
  }
- }
- while `""COLON"" != ":" & `""after"" != "" {
= while `":"" != ":" & `"" [], vce(r) "" != "" {
  gettoken COLON after : after, parse(":") bind match(par) quotes
  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if `""COLON"" != ":" {
    local before `""before' `COLON""
    local COLON
  }
}
- if `""COLON"" != ":" {
= if `":"" != ":" {
  di as err "" found where ':' expected"
  exit 198
}
- sreturn local before `""before""
= sreturn local before `", argopt(CLister) opt(Robust oim opg) old""
- sreturn local after `""after""
= sreturn local after `"" [], vce(r) ""

```

```

> ----- end _on_colon_parse -----
- local 0 `""s(before)""
= local 0 `", argopt(CLister) opt(Robust oim opg) old""
- local user `""s(after)""
= local user `"" [], vce(r) ""
- syntax [varname(default=none)], [ OPTlist(namelist) ARGOPTlist(namel
> ist) PWallowed(namelist) OLD_is_ok NOARGOPT_is_ok ]
- local touse `varlist'
= local touse
- tempname o a
- .`o' = . _optlist.new
= .__000001 = . _optlist.new
- class {
- instance:
-   array options = {}
-   array names = {}
- }
- local optlist : list uniq optlist
- foreach name of local optlist {
- .`o'.addopt `name'
= .__000001.addopt Robust

```



```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("Robust")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "Robust"
- .names.Arrpush "`mname'"
= .names.Arrpush "robust"

> ----- end _optlist.addopt -----
- }
- .`o'.addopt `name'
= .__000001.addopt oim

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("oim")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "oim"
- .names.Arrpush "`mname'"
= .names.Arrpush "oim"

> ----- end _optlist.addopt -----
- }
- .`o'.addopt `name'
= .__000001.addopt opg

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("opg")
- if "`passthru'" != "" {
= if "" != "" {

```

```

        local optspec `optspec'(passthru)
    }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "opg"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "opg"


---


> 

---

 end _optlist.addopt 

---


    - }
    - .`a' = ._optlist.new
    = __000002 = ._optlist.new
    - local argoptlist : list uniq argoptlist
    - foreach name of local argoptlist {
    - .`a'.addopt `name'
    = __000002.addopt CLuster


---


> 

---

 begin _optlist.addopt 

---


    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("CLuster")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
    }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "CLuster"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "cluster"


---


> 

---

 end _optlist.addopt 

---


    - }
    - local OPTNAMES ```.`o'.dumpnames'''


---


> 

---

 begin _optlist.dumpnames 

---


    - version 9
    - forval i = 1/`.names.arnels' {
    = forval i = 1/3 {
    - local namelist `namelist' `.names[`i']'
    = local namelist robust
    - }
    - local namelist `namelist' `.names[`i']'
    = local namelist robust oim
    - }
    - local namelist `namelist' `.names[`i']'
    = local namelist robust oim opg

```

```

- }
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist "robust oim opg"
- class exit ``namelist'''
= class exit "robust oim opg"

> ----- end _optlist.dumpnames -----

= local OPTNAMES "robust oim opg"
- local ARGOPTNAMES ```.a'.dumpnames'''

> ----- begin _optlist.dumpnames -----

- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/1 {
- local namelist `namelist' `.names['i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist "cluster"
- class exit ``namelist'''
= class exit "cluster"

> ----- end _optlist.dumpnames -----

= local ARGOPTNAMES "cluster"
- local AND : list OPTNAMES & ARGOPTNAMES
- if `:list sizeof AND' {
= if 0 {
di as err "vcetype ``:word 1 of `AND'' specified twice"
exit 198
}
- local pwallowed : list uniq pwallowed
- local pwlist robustcluster
- foreach n of local pwallowed {
local lc = lower("`n'")
local pwlist `pwlist' `lc'
}
- if "`old_is_ok'" != "" {
= if "old_is_ok" != "" {
- local ROBUST robust
- if `:list ROBUST in OPTNAMES' {
= if 1 {
- local robust Robust
- }
- local CLUSTER cluster

```

```

- if `:list CLUSTER in ARGOPTNAMES' {
= if 1 {
- local cluster CLuster(varname)
- }
- }
- local 0 ``user'''
= local 0 `` [], vce(r) ''
- syntax [fw aw pw iw] [, VCE(string asis) `robust' `cluster' ]
= syntax [fw aw pw iw] [, VCE(string asis) Robust CLuster(varname) ]
- if ``vce''' != "" {
= if ``r''' != "" {
- gettoken name args : vce, parse(" ,")
- local args : list retok args
- capture ParseVCE `o' `a' , `name'
= capture ParseVCE __000001 __000002 , r

> ----- begin _vce_parse.ParseVCE -----
- gettoken 0 0 : 0, parse(" ,")
- gettoken A 0 : 0, parse(" ,")
- local OPTSPECS ```. `0'.dumpoptions' `.`A'.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/3 {
- local optlist `optlist' `.options[`i']'
= local optlist Robust
- }
- local optlist `optlist' `.options[`i']'
= local optlist Robust oim
- }
- local optlist `optlist' `.options[`i']'
= local optlist Robust oim opg
- }
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist ``Robust oim opg'''
- class exit ``optlist'''
= class exit ``Robust oim opg'''

> ----- end _optlist.dumpoptions -----

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/1 {

```

```

- local optlist `optlist' `.options['i']'
= local optlist CCluster
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `CCluster'
- class exit ```optlist'''
= class exit `CCluster'

> ----- end _optlist.dumpoptions -----
= local OPTSPECS `"Robust oim opg CCluster"
- local OPTNAMES ```.`0'.dumpnames' `.`A'.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/3 {
- local namelist `namelist' `.names['i']'
= local namelist robust
- }
- local namelist `namelist' `.names['i']'
= local namelist robust oim
- }
- local namelist `namelist' `.names['i']'
= local namelist robust oim opg
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `robust oim opg'
- class exit ```namelist'''
= class exit `robust oim opg'

> ----- end _optlist.dumpnames -----

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/1 {
- local namelist `namelist' `.names['i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `cluster'
- class exit ```namelist'''
= class exit `cluster'

```

```

> ----- end _optlist.dumpnames -----
    = local OPTNAMES `"robust oim opg cluster"
    - syntax [, `OPTSPECS']
    = syntax [, Robust oim opg CLuster]
    - foreach OPT of local OPTNAMES {
    - if ``"OPT" != "" {
    = if `"robust" != "" {
    - return local vce `OPT'
    = return local vce robust
    - continue, break
    }
    }

> ----- end _vce_parse.ParseVCE -----
    - if c(rc) {
    di as err "vcetype {bf:`name'} not allowed"
    exit 198
    }
    - local name `r(vce)'
    = local name robust
    - if "weight" == "pweight" & !`:list name in pwlist' {
    = if "" == "pweight" & !1 {
    di as err "pweights are not allowed with vce(`name')"
    exit 198
    }
    - return add
    - if ``"robust" != "" & !inlist("`name'", "", "robust", "eim", "oim", "cl
> uster") {
    = if ``" != "" & !inlist("robust", "", "robust", "eim", "oim", "cluster")
> {
    opts_exclusive "`robust' vce(`name')"
    }
    - if "`name'" == "cluster" {
    = if "robust" == "cluster" {
    if ``args'" == "" {
    di as err "invalid vce(cluster) option"
    exit 198
    }
    confirm var `args'
    unab args : `args'
    local markout `args'
    if "`cluster'" != "" {
    if !`:list args == cluster' {
    di as err "options cluster() and vce(cluster) are in conflict"
    exit 100

```

```

    }
    }
    }
- else if "`cluster'" != "" & !inlist("`name'", "eim", "oim") {
= else if "" != "" & !inlist("robust", "eim", "oim") {
    opts_exclusive "cluster() vce(`name')"
    }
- if ``"args"`` != "" {
= if `""` != "" {
    if ! `:list name in ARGOPTNAMES' {
    di as err "invalid vce() option"
    exit 198
    }
    if "`name'" == "hc2" {
    confirm var `args'
    unab args : `args'
    local markout `args'
    }
    return local vceargs ``":list retok args"``
    }
- else if `:list name in ARGOPTNAMES' {
= else if 0 {
    if "`noargopt_is_ok'" == "" {
    di as err "invalid vce() option"
    exit 198
    }
    }
- }
- else {
    if "`weight'" == "pweight" | "`robust'" != "" {
    local vce robust
    }
    if "`cluster'" != "" {
    local vce cluster
    local args `cluster'
    local markout `cluster'
    }
    return local vce ``"vce"``
    return local vceargs ``"args"``
    }
- if "`return(vce)'" != "" {
= if "robust" != "" {
- if ``"return(vceargs)"`` != "" {
= if `""` != "" {
    local ss " "
    }
}

```

```

- return local vceopt `"vce(`return(vce)`ss`return(vceargs))"'
= return local vceopt `"vce(robust)'"
- }
- if "`return(vce)'" == "cluster" {
= if "robust" == "cluster" {
    return local cluster `return(vceargs)'
    }
- if inlist("`return(vce)'", "robust", "cluster") {
= if inlist("robust", "robust", "cluster") {
- return local robust robust
- }
- if "`touse'" != "" {
= if "" != "" {
    if "`markout'" != "" {
        markout `touse' `markout', strok
    }
}
}
}

> ----- end _vce_parse -----
- local cluster `r(cluster)'
= local cluster
- local robust `r(robust)'
= local robust robust
- local vce ``r(vceopt)''
= local vce `"vce(robust)'"
- if ``cluster'' != "" {
= if ``' != "" {
    markout `touse' `cluster', strok
}
- if "`exposur'" != "" {
= if "" != "" {
    capture assert `exposur' > 0 if `touse'
    if _rc {
        version 7: di as err "option {bf:exposure()} must be greater than zero
> "
        exit 459
    }
    tempvar offset
    qui gen double `offset' = ln(`exposur')
    local offvar "ln(`exposur')
    }
- if "`offset'" != "" {
= if "" != "" {
    markout `touse' `offset'
    local offopt "offset(`offset')
    if "`offvar'" == "" {

```



```

    local offvar "`offset'"
  }
}
- gettoken y xvars : varlist
- _fv_check_depvar `y'
= _fv_check_depvar piq_timing_max
- tsunab y : `y'
= tsunab y : piq_timing_max

> ----- begin tsunab -----
- version 6
- gettoken user 0: 0, parse(" :")
- gettoken colon 0: 0, parse(" :")
- if "`colon'" != ":" { error 198 }
= if `:"' != ":" { error 198 }
- syntax [varlist(ts default=empty)] [, MIN(integer 1) MAX(integer 320
> 00) NAME(string)]
- c_local `user' `varlist'
= c_local y piq_timing_max
- local n : word count `varlist'
= local n : word count piq_timing_max
- if `n'>=`min' & `n'<=`max' { exit }
= if 1>=1 & 1<=32000 { exit }

> ----- end tsunab -----
- local yname : subinstr local y "." "_"
- if "`weight'" != "" {
= if "" != "" {
  if "`weight'" == "fweight" {
    local wt `[fw`exp']'
  }
  else local wt `[aw`exp']'
}
- summarize `y' `wt' if `touse', meanonly
= summarize piq_timing_max if __000000, meanonly
- if r(N) == 0 { error 2000 }
- if r(N) == 1 { error 2001 }
- if r(min) < 0 {
  version 7: di as err "{bf:`y'} must be greater than or equal to zero"
  exit 459
}
- if r(min) == r(max) & r(min) == 0 {
  version 7: di as err "{bf:`y'} is zero for all observations"
  exit 498
}
- tempname mean

```

```

- scalar `mean' = r(mean)
= scalar __000001 = r(mean)
- if "`display'"==" " {
= if ""==" " {
- capture assert `y' == int(`y') if `touse'
= capture assert piq_timing_max == int(piq_timing_max) if __000000
- if _rc {
di in gr "note: you are responsible for " "interpretation of non-count
> dep. variable"
}
- }
- if "`display'"==" " & "`weight'"=="aweight" {
= if ""==" " & ""=="aweight" {
di in gr "note: you are responsible for interpretation " "of analytic
> weights"
}
- if `fvops' {
= if 1 {
- local rmcoll "version 11: _rmcoll"
- }
- else local rmcoll _rmcoll
- if "`display'"!=" " & "`weight'"=="aweight" {
= if ""!=" " & ""=="aweight" {
`rmcoll' `xvars' [iw`exp'] if `touse', `constan' `coll'
}
- else `rmcoll' `xvars' [weight`exp'] if `touse', `constan' `coll'
= else version 11: _rmcoll ln_neq cb_authors_ext estimated est_late est
> _early stky_pr_rottemberg stky_pr_calvo [] if __000000,
note: est_early omitted because of collinearity.
- local xvars `r(varlist)'
= local xvars ln_neq cb_authors_ext estimated est_late o.est_early stky_
> pr_rottemberg stky_pr_calvo
- _parse_iterlog, `log' `nolog'
= _parse_iterlog,

> ----- begin _parse_iterlog -----
- version 16
- syntax [, NOLOG LOG]
- if "`log'`nolog'" != "" {
= if "" != "" {
opts_exclusive "`log' `nolog'"
}
- else if "`c(iterlog)'" == "on" {
= else if "on" == "on" {
- local log log
- }

```

```

- else {
  local nolog nolog
}
- sreturn local log `log'
= sreturn local log log
- sreturn local nolog `nolog'
= sreturn local nolog

```

```

> ----- end _parse_iterlog -----
- local log "`s(nolog)'"
= local log ""
- if "`log'"!=" | "`display'"!=" { local nohead "*" }
= if ""!=" | ""!=" { local nohead "*" }
- if ``from'"==" & "`lrtest'"==" {
= if ``'"==" & ""==" {
- if "`robust'`cns'`cluster'"!=" | "`weight'"=="pweight" {
= if "robust"!=" | ""=="pweight" {
- local lrtest "nolrtest"
- }
- `nohead' di in gr _n "Fitting Poisson model:"
= di in gr _n "Fitting Poisson model:"

```

Fitting Poisson model:

```

- `vvpoi' poisson `y' `xvars' [`weight'`exp'] if `touse', nodisplay `off
> opt' `constan' `mlopts' `robust'
= version 18, missing: poisson piq_timing_max ln_neq cb_authors_ext esti
> mated est_late o.est_early stky_pr_rotemberg stky_pr_calvo [] if __000000, n
> odisplay robust

```

```

> ----- begin poisson -----
- if _by() {
  local BY `by' `_byvars' `_byrc0':"
}
- `BY' _vce_parserun poisson, mark(Exposure OFFset CLuster) : `0'
= _vce_parserun poisson, mark(Exposure OFFset CLuster) : piq_timing_m
> ax ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg st
> ky_pr_calvo [] if __000000, nodisplay robust

```

```

> ----- begin _vce_parserun -----
- version 9
- local version : di "version " string(_caller()) ":"
- local bycall = _by()
- _on_colon_parse `0'
= _on_colon_parse poisson, mark(Exposure OFFset CLuster) : piq_timin
> g_max ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg
> stky_pr_calvo [] if __000000, nodisplay robust

```

```

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before "`('before)'"
}
- if ``"before"' == ":" {
= if ``poisson, mark(Exposure OFFset CLuster) "' == ":" {
  sreturn local after ``"after"'
  exit
}
- while ``COLON"' != ":" & ``"after"' != "" {
= while ``"' != ":" & ``: piq_timing_max ln_neq cb_authors_ext est
> imated est_late o.est_early stky_pr_rottemberg stky_pr_calvo [] if __000000,
> nodisplay   robust"' != "" {
- gettoken COLON after : after, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')
  local COLON
}
- else if ``COLON"' != ":" {
= else if ``:"' != ":" {
  local before ``"before' `COLON"'
  local COLON
}
- }
- while ``COLON"' != ":" & ``"after"' != "" {
= while ``:"' != ":" & `` piq_timing_max ln_neq cb_authors_ext est
> imated est_late o.est_early stky_pr_rottemberg stky_pr_calvo [] if __000000,
> nodisplay   robust"' != "" {
  gettoken COLON after : after, parse(":") bind match(par) quotes
  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if ``COLON"' != ":" {
    local before ``"before' `COLON"'
    local COLON
  }
}
- if ``COLON"' != ":" {

```

```

    = if `":'" != ":" {
        di as err ""' found where ':' expected"
        exit 198
    }
    - sreturn local before ``"before"'
    = sreturn local before `"poisson, mark(Exposure OFFset CLuster) "'
    - sreturn local after ``"after"'
    = sreturn local after `" piq_timing_max ln_neq cb_authors_ext esti
> mated est_late o.est_early stky_pr_rottemberg stky_pr_calvo [] if __000000, n
> odisplay    robust"'

> ----- end _on_colon_parse -----
    - local ZERO ``"s(before)'"
    = local ZERO `"poisson, mark(Exposure OFFset CLuster) "'
    - local 0 ``"s(after)'"
    = local 0 `" piq_timing_max ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rottemberg stky_pr_calvo [] if __000000, nodisplay    ro
> bust"'
    - quietly syntax [anything(equalok)] [if] [in] [fw aw pw iw] [, VCE(
> string asis) VCE1(string asis) LRMODEL * ]
    - if ``"vce'" == "" {
    = if `""' == "" {
    - MYRESULT

> ----- begin _vce_parserun.MYRESULT -----
    - args exit
    - sreturn local exit ``"exit"'
    = sreturn local exit `""'

> ----- end _vce_parserun.MYRESULT -----
    - exit

> ----- end _vce_parserun -----
    - if "`s(exit)'" != "" {
    = if "" != "" {
        version 10: ereturn local cmdline `"poisson `0'"
        exit
    }
    - version 6, missing
    - local version : di "version " string(_caller()) ":"
    - if replay() {
        if "`e(cmd)'" != "poisson" {
            error 301
        }
        if _by() { error(190) }
        Display `0'
    }

```

```

        error `e(rc)'
        exit
    }
    - `version' `BY' Estimate `0'
    = version 18: Estimate piq_timing_max ln_neq cb_authors_ext estimated
> est_late o.est_early stky_pr_rotemberg stky_pr_calvo [] if __000000, nodisp
> lay      robust

```

```

> ----- begin poisson.Estimate -----
    - local vv "version 8.1:"
    - local mm d2
    - local eval poiss_lf
    - version 6, missing
    - local awopt = cond(_caller()<7, "aw", "")
    - syntax varlist(numeric fv ts) [fw `awopt' pw iw] [if] [in] [, IRr
> FROM(string) Level(cilevel) OFFset(varname numeric ts) Exposure(varname nume
> ric ts) noCONstant Robust CLuster(varname) SCore(string) noDISPLAY CRITTYPE(
> passthru) MATAevaluator moptobj(passthru) * ]
    = syntax varlist(numeric fv ts) [fw pw iw] [if] [in] [, IRr FROM(st
> ring) Level(cilevel) OFFset(varname numeric ts) Exposure(varname numeric ts)
> noCONstant Robust CLuster(varname) SCore(string) noDISPLAY CRITTYPE(passthr
> u) MATAevaluator moptobj(passthru) * ]
    - local fvops = "`s(fvops)'" == "true" | _caller() >= 11
    = local fvops = "true" == "true" | _caller() >= 11
    - if `fvops' {
    = if 1 {
    - local vv : di "version " string(max(11,_caller())) ", missing:"
    - local mm e2
    - if "`mataevaluator'" != "" {
    = if "" != "" {
        local eval mopt__poisson_e2()
    }
    - local negh negh
    - }
    - if _by() {
        _byoptnotallowed score ``score'``
    }
    - _get_diopts diopts options, `options'
    = _get_diopts diopts options,

```

```

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]
    - gettoken name1 namelist : namelist
    - gettoken name2 namelist : namelist
    - GetDiopts diopts options, `options'

```

```

= GetDiopts diopts options,


---


> 

---

 begin _get_diopts.GetDiopts 

---


    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElev
> els NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcell
> s NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(string)
> sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRA
> PON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABB
> REV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASEleve
> ls ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYce
> lls EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cfo
> rmat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pa
> ssthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pa
> ssthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'"" != "" {
    = while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'"" != "" {
    = while `""' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```



```

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive "`versus' `compare'"
= opts_exclusive " "


---



```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
    = local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
    = local baselevels
    - local emptycells `emptycells' `noemptycells'
    = local emptycells
    - local omitted `omitted' `noomitted'
    = local omitted
    - local lstretch `lstretch' `nolstretch'
    = local lstretch
    - local fvlabel `fvlabel' `nofvlabel'

```

```

= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
  }

```

```

}
sreturn local sformat ``sformat'''
local sformat `sformat(`sformat')''
}
- if `:length local pformat' {
= if 0 {
confirm numeric format `pformat'
if fmtwidth(`pformat') > 5 {
local pformat "%5.3f"
di "{txt}note: invalid pformat(), using default"
}
sreturn local pformat ``pformat'''
local pformat `pformat(`pformat')''
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

> begin _get_diopts.Wrapon

```

- capture syntax [, WOrd WIdth]
- if c(rc) {
di as err "invalid fvwrapon() option;"
syntax [, WOrd WIdth]
exit 198
}
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

> begin opts_exclusive

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
local ++n
gettoken item`n' opts : opts, bind
}

```

```

        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
}

> ----- end opts_exclusive -----

    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }
}

> ----- end _get_diopts.Wrapon -----

    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `basel
> evels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coefle
> gend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `
> fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
    = c_local diopts
    - if `K' == 2 {
    = if 2 == 2 {
        - c_local `c_opts' ``options''
    = c_local options `''
        - }
        - sreturn local coding `coding'
    = sreturn local coding
        - sreturn local versus `versus'
    = sreturn local versus
        - sreturn local compare `compare'
    = sreturn local compare
        - sreturn local level `level'
    = sreturn local level 95
}

> ----- end _get_diopts.GetDiopts -----

    - c_local `name1' ``diopts''
    = c_local diopts `''
    - local snames : s(macros)
    - foreach sname of local snames {
        - local S_`sname' = s(`sname')
    = local S_level = s(level)
        - }
        - local S_`sname' = s(`sname')
    = local S_fvops = s(fvops)

```

```

- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElev
> els NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcell
> s NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(string)
> sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRA
> PON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABB
> REV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASEleve
> ls ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYce
> lls EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cfo
> rmat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pa
> ssthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pa
> ssthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0

```



```

- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive ``baselevels' `nobaselevels'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive ``emptycells' `noemptycells'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'

```

```

= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {

```

```

    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat ``sformat''
  local sformat `sformat(`sformat')`
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth(`pformat') > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat ``pformat''
  local pformat `pformat(`pformat')`
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
  - capture syntax [, W0rd WIdth]
  - if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, W0rd WIdth]
    exit 198
  }
  - opts_exclusive ``word' `width' fvwrapon
= opts_exclusive " " fvwrapon

```

```

> _____ begin opts_exclusive _____
  - version 8.2
  - args opts optname errcode optslab
  - local opts `opts'
= local opts
  - local n 0
  - while ``opts'' != "" {
= while `""' != "" {
    local ++n

```



```

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElev
> els NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcell
> s NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(string)
> sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRA
> PON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABB
> REV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASEleve
> ls ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYce
> lls EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cfo
> rmat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pa
> ssthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pa
> ssthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while `"'opts'"' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while `"'opts'"' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport` `fullcnsreport`"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend` `selegend`"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`nocl' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "'`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'

```

```

= local abbrev
- if "`allbaselevels'"`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"

```

```

    local sformat ``sformat(`sformat')''
  }
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth(`"pformat"') > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat ``pformat''
  local pformat `pformat(`pformat')''
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

> _____ begin _get_diopts.Wrapon _____

```

- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

> _____ begin opts_exclusive _____

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```



```

        - exit
    > ----- end opts_exclusive -----
        - local fvwrapon `word' `width'
        = local fvwrapon
        - if `:length local fvwrapon' {
        = if 0 {
            c_local fvwrapon fvwrapon(`fvwrapon')
        }

    > ----- end _get_diopts.Wrapon -----
        - if "`fvwrap'" != "" {
        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `basele
> evels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coefle
> gend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `
> fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
        = c_local DUPS
        - if `K' == 2 {
        = if 2 == 2 {
            - c_local `c_opts' ``options'
            = c_local options `''
            - }
            - sreturn local coding `coding'
            = sreturn local coding
            - sreturn local versus `versus'
            = sreturn local versus
            - sreturn local compare `compare'
            = sreturn local compare
            - sreturn local level `level'
            = sreturn local level 95

    > ----- end _get_diopts.GetDiopts -----
        - c_local `name2' ``options'
        = c_local options `''
        - }
        - local DUPS : list DUPS - DEFAULT
        - gettoken DUPS : DUPS
        - if ``DUPS' != "" {
        = if `'' != "" {
            if (strpos(`DUPS', "(")) {
                gettoken DUPS : DUPS, parse("(")
                local DUPS `DUPS'()'
            }
        }
    }

```

```

        di as err "duplicate {bf:`DUPS`} option not allowed"
        exit 198
    }
    - sreturn clear
    - foreach sname of local snames {
    - sreturn local `sname' = `"'S_`sname'""'
    = sreturn local level = `"95"'
    - }
    - sreturn local `sname' = `"'S_`sname'""'
    = sreturn local fvops = `"true"'
    - }
}

> ----- end _get_diopts -----

    - mlopts mlopts, `options'
    = mlopts mlopts,

}

> ----- begin mlopts -----

    - version 8.0
    - local maxoptlist MLOPTs(string) TRace TRACEDIfs GRADient HESSia
> n SHOWSTEP ITERate(int -1) TOLerance(real -1) LTOLerance(real -1) GTOLerance
> (real -1) NONRTOLerance SHOWNRtolerance SHOWTOLerance NRTOLerance(real -1) Q
> TOLerance(real -1) DIFFicult HALFSTEPonly CONSTraints(string) noCNSNOTes COL
> linear TECHnique(passthru) VCE(passthru) DOTS depsilon(passthru) SHOWH NOTCO
> NCAVE(passthru) USEVIEWS NOLOg LOg nrderiv
    - syntax namelist(id="macro names" min=1 max=2) [, `maxoptlist' *
> ]
    = syntax namelist(id="macro names" min=1 max=2) [, MLOPTs(string)
> TRace TRACEDIfs GRADient HESSian SHOWSTEP ITERate(int -1) TOLerance(real -1
> ) LTOLerance(real -1) GTOLerance(real -1) NONRTOLerance SHOWNRtolerance SHOW
> TOLerance NRTOLerance(real -1) QTOLerance(real -1) DIFFicult HALFSTEPonly CO
> NSTraints(string) noCNSNOTes COLLlinear TECHnique(passthru) VCE(passthru) DOT
> S depsilon(passthru) SHOWH NOTCONCAVE(passthru) USEVIEWS NOLOg LOg nrderiv *
> ]
    - gettoken dest rest : namelist
    - if "`rest'" == "" {
    = if "" == "" {
    - syntax namelist [, `maxoptlist' ]
    = syntax namelist [, MLOPTs(string) TRace TRACEDIfs GRADient HESS
> ian SHOWSTEP ITERate(int -1) TOLerance(real -1) LTOLerance(real -1) GTOLeran
> ce(real -1) NONRTOLerance SHOWNRtolerance SHOWTOLerance NRTOLerance(real -1)
> QTOLerance(real -1) DIFFicult HALFSTEPonly CONSTraints(string) noCNSNOTes C
> OLLlinear TECHnique(passthru) VCE(passthru) DOTS depsilon(passthru) SHOWH NOT
> CONCAVE(passthru) USEVIEWS NOLOg LOg nrderiv ]
    - }
    - local mlopts `mlopts' `trace' `tracediffs' `gradient' `hessian'
> `showstep' `difficult' `halfsteponly' `nonrtolerance' `shownrtolerance' `sho

```

```

> wtolerance' `dots' `depsilon' `showh' `notconcave' `useviews' `log' `nolog'
> `nrderiv'
    = local mlopts
    - if `tolerance' != -1 {
    = if -1 != -1 {
        local tol "tolerance(`tolerance')"
    }
    - if `ltolerance' != -1 {
    = if -1 != -1 {
        local ltol "ltolerance(`ltolerance')"
    }
    - if `gtolerance' != -1 {
    = if -1 != -1 {
        local gtol "gtolerance(`gtolerance')"
    }
    - if `nrtolerance' != -1 {
    = if -1 != -1 {
        local nrtol "nrtolerance(`nrtolerance')"
    }
    - if `qtolerance' != -1 {
    = if -1 != -1 {
        local qtol "qtolerance(`qtolerance')"
    }
    - if `iterate' != -1 {
    = if -1 != -1 {
        local iter "iterate(`iterate')"
    }
    - sreturn clear
    - if "`technique' `vce'" != "" {
    = if "" != "" {
        ml_technique, `technique' `vce' nodefault
        if "`s(technique)'" != "" {
            local technique "technique(`s(technique)')"
        }
        if "`s(vce)'" != "" {
            local vce "`s(vceopt)'"
        }
        sreturn local technique "`technique'"
        sreturn local vce "`vce'"
    }
    - if "`constraints'" != "" {
    = if "" != "" {
        capture confirm name `constraints'
        if _rc {
            CheckClist constraints , constraints(`constraints')
        }
    }

```

```

else {
  CheckCmat `constraints'
}
local const "constraints(`constraints')"
sreturn local constraints "`constraints'"
}
- sreturn local collinear "`collinear'"
= sreturn local collinear ""
- c_local `dest' `mlopts' `tol' `ltol' `gtol' `nrtol' `iter' `cons
> t' `cnsnotes' `collinear' `technique' `vce' `qtol'
= c_local mlopts
- if ""rest"" != "" {
= if "" != "" {
  c_local `rest' ""options""
}
}

> ----- end mlopts -----

- local coll `s(collinear)'
= local coll
- local cns `s(constraints)'
= local cns
- local mlopts `mlopts' `critttype'
= local mlopts
- if ""score"" != "" {
= if "" != "" {
  confirm new variable `score'
  local nword : word count `score'
  if `nword' > 1 {
    di in red "score() must contain the name of only " "one new variab
> le"
  }
  exit 198
}
tempvar scvar
local scopt score(`scvar')
}
- if ""offset"" != "" & ""exposur"" != "" {
= if "" != "" & "" != "" {
  di in red "only one of offset() or exposure() can be specified"
  exit 198
}
- if ""constan"" != "" {
= if "" != "" {
  local nvar : word count `varlist'
  if `nvar' == 1 {
    di in red "independent variables required with " "noconstant optio
> n"

```

```

    exit 100
  }
}
- marksample touse
- if ``cluster''!= "" {
= if `''!= "" {
    markout `touse' `cluster', strok
    local clopt cluster(`cluster')
  }
- if "`exposur''!= "" {
= if ""!= "" {
    capture assert `exposur' > 0 if `touse'
    if _rc {
      di in red "exposure() must be greater than zero"
      exit 459
    }
    tempvar offset
    qui gen double `offset' = ln(`exposur')
    local offvar "ln(`exposur')
  }
- if "`offset''!= "" {
= if ""!= "" {
    markout `touse' `offset'
    local offopt "offset(`offset')
    if "`offvar'==" {
      local offvar "`offset'
    }
  }
- gettoken y xvars : varlist
- _fv_check_depvar `y'
= _fv_check_depvar piq_timing_max
- tsunab y : `y'
= tsunab y : piq_timing_max

```

```

> ----- begin tsunab -----
    - version 6
    - gettoken user 0: 0, parse(" :")
    - gettoken colon 0: 0, parse(" :")
    - if ``colon'' != ":" { error 198 }
    = if `:"' != ":" { error 198 }
    - syntax [varlist(ts default=empty)] [, MIN(integer 1) MAX(integer
> 32000) NAME(string)]
    - c_local `user' `varlist'
    = c_local y piq_timing_max
    - local n : word count `varlist'
    = local n : word count piq_timing_max

```

```

- if `n'>=`min' & `n'<=`max' { exit }
= if 1>=1 & 1<=32000 { exit }

> ----- end tsunab -----
- local yname : subinstr local y "." "_"
- if "`weight'"!="" {
= if ""!="" {
  if "`weight'"=="fweight" {
    local wt `[fw`exp']""
  }
  else if "`weight'"=="iweight" {
    local wt `[iw`exp']""
  }
  else local wt `[aw`exp']""
}
- summarize `y' `wt' if `touse', meanonly
= summarize piq_timing_max if __000002, meanonly
- if r(N) == 0 { error 2000 }
- if r(N) == 1 { error 2001 }
- if r(min) < 0 {
  di in red "`y' must be greater than or equal to zero"
  exit 459
}
- if r(min) == r(max) & r(min) == 0 {
  di in red "`y' is zero for all observations"
  exit 498
}
- tempname mean nobs
- scalar `mean' = r(mean)
= scalar __000003 = r(mean)
- scalar `nobs' = r(N)
= scalar __000004 = r(N)
- if "`display'"!="" {
= if "nodisplay"="" {
  capture assert `y' == int(`y') if `touse'
  if _rc {
    __New_Note `0'
  }
}
- if "`display'"!="" & "`weight'"=="aweight" {
= if "nodisplay"="" & ""=="aweight" {
  di in blu "note: you are responsible for interpretation " "of anal
> ytic weights."
}
- if "`constan'`cns'"!="" & "`cluster'"!="" & "`weight'"!="pweight"
> {

```

```

= if ""==" & ""==" & ""!="pweight" {
- tempname c
- if "`offset'"!="" {
= if ""!=" {
SolveC `y' `offset' [`weight'`exp'] if `touse', n(`nobs') mean(`me
> an')
scalar `c' = r(_cons)
if `c'>=. {
di in blu "note: exposure = exp(`offvar') overflows;" _n "      co
> uld not estimate constant-only model" _c
if "`exposur'"==" {
di in blu _n "      use exposure() option for exposure = `offvar'.
> "
}
else di in blu "."
local cfail 1
}
local c "`c'+`offset'"
}
- else scalar `c' = ln(`mean')
= else scalar __000005 = ln(__000003)
- if "`cfail'"==" {
= if ""==" {
- LikePois `y' `c' [`weight'`exp'] if `touse', n(`nobs')
= LikePois piq_timing_max __000005 [] if __000002, n(__000004)

> ----- begin poisson.LikePois -----
- gettoken y 0 : 0
- gettoken xb 0 : 0
- syntax [fw aw pw iw] [if] , Nobs(string)
- if "`weight'"!="" {
= if ""!=" {
if "`weight'"=="fweight" {
local wt `[fw`exp']"
}
else if "`weight'"=="iweight" {
local wt `[iw`exp']"
}
else local wt `[aw`exp']"
}
- tempvar lnf
- qui gen double `lnf' = `y'*(`xb')-exp(`xb')-lgamma(`y'+1) `if'
= qui gen double __000006 = piq_timing_max*(__000005)-exp(__000005
> )-lgamma(piq_timing_max+1) if __000002
- summarize `lnf' `wt' `if', meanonly
= summarize __000006 if __000002, meanonly

```

```

- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- if "`weight'"=="aweight" {
= if ""=="aweight" {
    ret scalar lnf = r(N)*r(mean)
  }
- else ret scalar lnf = r(sum)

```

```

> ----- end poisson.LikePois -----
- if r(lnf)<. {
- local ll0 "lf0(1 `r(lnf)')"
= local ll0 "lf0(1 -401.5531151051299)"
- }
- else {
  di in blu "note: could not compute " "constant-only model log like
> lihood."
}
- }
- }
- if `fvops' {
= if 1 {
- local rmcoll "version 11: _rmcoll"
- }
- else local rmcoll _rmcoll
- if "`display'"!=" " & "`weight'"=="aweight" {
= if "nodisplay"!=" " & ""=="aweight" {
  `rmcoll' `xvars' [iw`exp'] if `touse', `constan' `coll'
}
- else `rmcoll' `xvars' [`weight'`exp'] if `touse', `constan' `coll'
= else version 11: _rmcoll ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rotemberg stky_pr_calvo [] if __000002,
- local xvars `r(varlist)'
= local xvars ln_neq cb_authors_ext estimated est_late o.est_early s
> tky_pr_rotemberg stky_pr_calvo
- if "`from'"==" " {
= if ""==" " {
- `vv' Ipois `y' `xvars' [`weight'`exp'] if `touse', n(`nobs') mean(
> `mean') `constan' `offopt'
= version 18, missing: Ipois piq_timing_max ln_neq cb_authors_ext es
> timated est_late o.est_early stky_pr_rotemberg stky_pr_calvo [] if __000002,
> n(__000004) mean(__000003)

```

```

> ----- begin poisson.Ipois -----
- local vv : display "version " string(_caller()) ", missing:"
- version 6, missing
- syntax varlist(fv ts) [fw aw pw iw/] [if] , Nobs(string) Mean(st

```



```

> ring) [ noCONstant OFFset(string) ]
    - gettoken y xvars : varlist
    - tempvar xb z
    - tempname b1 b2 lnf1
    - if "`weight'"!="" {
= if ""!="" {
    local awt `[aw=`exp']''
    local wt `"(`exp')*'
    local exp `"=`exp'
    }
    - quietly {
    - if "`offset'"!="" {
= if ""!="" {
    tempvar ynew
    gen double `ynew' = `y' - `offset'*`mean' `if'
    local poff "+`offset'"
    }
    - else local ynew `y'
= else local ynew piq_timing_max
    - `vv' _regress `ynew' `xvars' `awt' `if', `constan'
    = version 18, missing: _regress piq_timing_max ln_neq cb_authors_
> ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo if __000
> 002,

----- begin _ereturn_display -----
>
    - version 11
    - if "`e(b)'" == "" & "`e(V)'" == "" {
= if "matrix" == "" & "matrix" == "" {
    exit
    }
    - if "`e(cmd)'" == "regress" {
= if "regress" == "regress" {
    - local ALTOPT Beta
    - }
    - syntax [, eform(passthru) First neq(integer -1) PLus `ALTOPT'
> *]

= syntax [, eform(passthru) First neq(integer -1) PLus Beta *]
    - _get_mcompare, `options'
    = _get_mcompare, level(95.00) fwrap(1)

----- begin _get_mcompare -----
>
    - version 11
    - local cmd ``e(cmd)'''
= local cmd `"regress"
    - syntax [name(name=caller)] [, *]
    - local is_pwc = inlist("pwcompare", "`cmd'", "`caller'") | in

```

```

> list("pwmean", "`cmd'", "`caller'")
      = local is_pwc = inlist("pwcompare", "regress", "") | inlist("
> pwmean", "regress", "")
      - local is_marg = inlist("margins", "`cmd'", "`e(cmd2)'", "`ca
> ller'")
      = local is_marg = inlist("margins", "regress", "", "")
      - local OPTIONS NOADJust BONferroni DUNCAn DUNNett SCHeffe SID
> ak SNK TUKey ADJustall
      - if `is_pwc' {
      = if 0 {
          syntax [name] [, `OPTIONS' MCOMPare(string) *]
        }
      - else {
      - syntax [name] [, MCOMPare(string) *]
      - local suboption mcompare()
      - }
      - sreturn clear
      - sreturn local options ``options'""
      = sreturn local options ``level(95.00) fwrap(1)""
      - if `is_pwc' {
      = if 0 {
          local METHOD `noadjust' `bonferroni' `duncan' `dunnett' `sch
> effe' `sidak' `snk' `tukey'
          local METHOD : list uniq METHOD
          opts_exclusive ``METHOD'""
          local ALL `adjustall'
          opts_exclusive ``noadjust' `ALL'""
        }
      - local 0 `", `mcompare'""
      = local 0 `", ""
      - capture syntax [, `OPTIONS']
      = capture syntax [, NOADJust BONferroni DUNCAn DUNNett SCHeffe
> SIDak SNK TUKey ADJustall]
      - if c(rc) {
          di as err "invalid mcompare() option;"
          di as err "method ``mcompare' not allowed"
          error 198
        }
      - local METHOD `METHOD' `noadjust' `bonferroni' `duncan' `dunn
> ett' `scheffe' `sidak' `snk' `tukey'
      = local METHOD
      - local METHOD : list uniq METHOD
      - local ALL `ALL' `adjustall'
      = local ALL
      - local ALL : list uniq ALL
      - opts_exclusive ``METHOD'"" `suboption'

```

```

= opts_exclusive "" mcompare()
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- if "`METHOD'" == "" {
= if "" == "" {
- if "`ALL'" != "" {
= if "" != "" {
di as err "multiple comparison method required with the adju
> stall option"
    exit 198
    }
- local METHOD noadjust
- local noadjust noadjust
- }
- opts_exclusive "`ALL' `noadjust'" `suboption'
= opts_exclusive " noadjust" mcompare()
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0
- while ``opts' != "" {
= while "`noadjust'" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts' != "" {
= while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 1 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - local EXCLUDE duncan dunnett snk tukey
    - if `:list METHOD in EXCLUDE' {
    = if 0 {
        if `is_pwc' {
            local opt : copy local METHOD
        }
        else {
            local opt "mcompare(`METHOD')"
        }
        local cmdlist anova manova regress mvreg pwmean
        if "`cmd'" == "pwcompare" {
            local cmd ``e(cmd_est)'''
        }
        if `is_marg' {
            local cmd margins
        }
        if !`:list cmd in cmdlist' | !`is_pwc' {
            di as err `"method `opt' is not allowed with results from `c
> md'''
            exit 322
        }
        if ``e(prefix)''' == "svy" {
            di as err `"method `opt' is not allowed with results using t
> he svy prefix"
            exit 322
        }
        local vce ``e(vce)'''
        if !inlist("`vce'", "", "ols") {
            di as err `"method `opt' is not allowed with results using v
> ce(`vce')"'
            exit 322
        }
    }
    - local EXCLUDE duncan dunnett snk tukey scheffe
    - if `:list METHOD in EXCLUDE' {
    = if 0 {
        if "`ALL'" != "" {
            di as err `"option adjustall is not allowed with method `MET

```

```

> HOD'''
    exit 198
    }
    }
    - sreturn local method `""METHOD'''
    = sreturn local method `""noadjust'''
    - sreturn local adjustall `""ALL'''
    = sreturn local adjustall `""'

> ----- end _get_mcompare -----
    - if "`s(method)'" != "" {
    = if "noadjust" != "" {
    - loca mcopt mcompare(`s(method)' `s(adjustall)')
    = loca mcopt mcompare(noadjust )
    - }
    - _get_diopts diopts, `s(options)'
    = _get_diopts diopts, level(95.00) fwrap(1)

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]
    - gettoken name1 namelist : namelist
    - gettoken name2 namelist : namelist
    - GetDiopts diopts options, `options'
    = GetDiopts diopts options, level(95.00) fwrap(1)

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```



```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``versus' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``abbrev' `noabbrev'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted

```

```

    }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat)'"
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat)'"
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat)'"
  }
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
  }
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
  }
}

```

```

- Wraapon , `fvwraapon'
= Wraapon ,

```

```

> ----- begin _get_diopts.Wraapon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwraapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwraapon
= opts_exclusive " " fvwraapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local fvwraapon `word' `width'
= local fvwraapon
- if `:length local fvwraapon' {
= if 0 {
  c_local fvwraapon fvwraapon(`fvwraapon')
}

```

```

> ----- end _get_diopts.Wraapon -----
- if "`fvwrap'" != "" {
= if "fvwrap(1)" != "" {
- FVWrap, `fvwrap'
= FVWrap, fvwraapon(1)

```

```

> ----- begin _get_diopts.FVWrap -----
- syntax, fvwraapon(integer)
- if `fvwrap' < 0 {
= if 1 < 0 {

```

```

        di as err "{p}invalid option {bf:fvwrap(`fvwrap')}); " "n
> onnegative integer required{p_end}"
        exit 198
    }
}

> ----- end _get_diopts.FVWrap -----
    - }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

    = c_local diopts                fvwrap(1)
    - if `K' == 2 {
    = if 2 == 2 {
    - c_local `c_opts' ``options'''
    = c_local options `'''
    - }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
    - c_local `name1' ``diopts'''
    = c_local diopts `fvwrap(1)''
    - local snames : s(macros)
    - foreach sname of local snames {
    - local S_`sname' = s(`sname')
    = local S_level = s(level)
    - }
    - local S_`sname' = s(`sname')
    = local S_method = s(method)
    - }
    - local S_`sname' = s(`sname')
    = local S_options = s(options)
    - }
    - sreturn clear
    - GetDiopts DEFAULT

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS

```

```

> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"

```

```

= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive ``coding' `compare'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive ``versus' `compare'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `''` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `''` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {

```

```

= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
}

```

```

- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth(`"pformat"') > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat `"pformat"'
  local pformat `pformat(pformat)'"
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> _____ begin opts_exclusive _____
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"opts"' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }

> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
    - if ``name2'' == "" {
    = if ``' == "" {
    - GetDiopts DUPS, `options'
    = GetDiopts DUPS,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV

    - syntax namelist(max=2) [, `DIOPTS' *]

```

```

= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

```



```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted` `noomitted`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch` `nolstretch`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive ``versus' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
= local baselevels
    - local emptycells `emptycells' `noemptycells'
= local emptycells
    - local omitted `omitted' `noomitted'
= local omitted
    - local lstretch `lstretch' `nolstretch'
= local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
    - local abbrev `abbrev' `noabbrev'
= local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
        - if c(showbaselevels) == "all" {
            local allbaselevels allbaselevels
        }
    - else if c(showbaselevels) == "on" {
        local baselevels baselevels

```

```

    }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
  }
}

```

```

    }
    sreturn local pformat ``pformat'''
    local pformat `pformat(pformat)''
  }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')

```

```

    }
}

> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

    = c_local DUPS
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
    - }
    - else {
        GetDiopts DUPS options, `options'
        c_local `name2' ``options''
    }
    - local DUPS : list DUPS - DEFAULT
    - gettoken DUPS : DUPS
    - if ``DUPS'' != "" {
    = if ``'' != "" {
        if (strpos(`DUPS', "(")) {
            gettoken DUPS : DUPS, parse("(")
            local DUPS `DUPS'()'
        }
        di as err "duplicate {bf:`DUPS'} option not allowed"
        exit 198
    }
    - sreturn clear
    - foreach sname of local snames {
    - sreturn local `sname' = ``S_`sname''

```



```

= sreturn local level = `"95"'
- }
- sreturn local `sname' = `"'S_`sname'""'
= sreturn local method = `"noadjust"'
- }
- sreturn local `sname' = `"'S_`sname'""'
= sreturn local options = `"level(95.00) fwrap(1)""'
- }

> ----- end _get_diopts -----

- if !`:length local first' {
= if !0 {
- local first showeqns
- }
- if `neq' < 1 {
= if -1 < 1 {
- _ms_eq_info
- local neqopt neq(`r(k_eq)')
= local neqopt neq(1)
- }
- else {
local neqopt neq(`neq')
}
- _coef_table, nodiparm nocnsreport noeqcheck eformall `eform' `
> first' `neqopt' `plus' `beta' `mcopt' `diopts'
= _coef_table, nodiparm nocnsreport noeqcheck eformall showeqns
> neq(1) mcompare(noadjust ) fwrap(1)

> ----- begin _coef_table -----

- version 11
- local vv : di "version " string(max(11,_caller())) ", missin
> g:"
- if (!c(noisily) & c(coeftabresults) == "off") {
exit
}
- _check_eclass
- syntax [, BMATrix(passthru) VMATrix(passthru) * ]
- if "`e(b)'" == "" & "`e(V)'" == "" & "`bmatrix'`vmatrix'"=="
> " {
= if "matrix" == "" & "matrix" == "" & ""==" {
exit
}
- local mc_cmds contrast margins pwcompare pwmean
- local cmd "`e(cmd)'"
= local cmd "regress"
- local keepmc : list cmd in mc_cmds

```

```

- if inlist("`cmd'", "pwcompare", "pwmean") {
= if inlist("regress", "pwcompare", "pwmean") {
    local groups GROUPS
  }
- if "`cmd'" == "regress" {
= if "regress" == "regress" {
- local beta Beta
- }
- if "`cmd'" == "gsem" {
= if "regress" == "gsem" {
    local fvignore fvignore(int 0)
    local flignore flignore
  }
- if "`cmd'" == "sem" {
= if "regress" == "sem" {
    local standardized STANDARDIZED
    local showginvariant SHOWGINvariant
    local nolabel NOLABel LABel NOFVLABel FVLABel
    local nofootnote NOFOOTnote
    local wrap wrap(numlist max=1) fvwrap(passthru)
  }
- if "`e(mi)'"=="mi" {
= if ""=="mi" {
    local dftable DFTable
    local dfonly DFONLY
    local noclustreport NOCLUSTReport
    local pisematrix PISEMATrix(string)
  }
- syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st
> ring asis) `beta' `standardized' NOCI NOPValues `dftable' `dfonly' dfci DFPV
> alues dfmissing `groups' COEFLegend selegend `fvignore' `flignore' `showginv
> ariant' `nolabel' `nofootnote' `wrap' sort `pisematrix' depname(string) COEF
> Title(string) coeftitle2(string) ptitle(string) cititle(string) NOMCLEgend n
> oCNSReport FULLCNSReport `noclustreport' cformat(passthru) sformat(passthru)
> pformat(passthru) NOFirst First SHOWEQns neq(integer -1) NODIPARM NOTEST SE
> Parator(integer 0) NOSKIP OFFSETONLY1 Plus NOEQCHECK EFORMALL CITYPE(string)
> eqselect(string) noEFORMNOTE * ]
    = syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st

```

```

> ring asis) Beta NOCI NOPValues dfci DFPValues dfmissing COEFLegend seleg
> end      sort depname(string) COEFTitle(string) coeftitle2(string) ptitle(
> string) cititle(string) NOMCLEgend noCNSReport FULLCNSReport cformat(passth
> ru) sformat(passthru) pformat(passthru) NOFirst First SHOWEQns neq(integer -
> 1) NODIPARM NOTEST SEParator(integer 0) NOSKIP OFFSETONLY1 PPlus NOEQCHECK EF
> ORMALL CITYPE(string) eqselect(string) noEFORMNOTE * ]
    - if "`wrap'" != "" {
    = if "" != "" {
      opts_exclusive `wrap(`wrap') `fvwrap''
      local fvwrap fvwrap(`wrap')
    }
    - if "`nolabel' `label'" != "" {
    = if "" != "" {
      opts_exclusive "`nolabel' `label'"
      opts_exclusive "`nofvlabel' `fvlabel'"
      opts_exclusive "`nolabel' `fvlabel'"
      opts_exclusive "`nofvlabel' `label'"
      if "`nolabel'" != "" {
        local fvlabel nofvlabel
      }
      else {
        local fvlabel fvlabel
      }
    }
    - else local fvlabel `nofvlabel' `fvlabel'
    = else local fvlabel
    - local type `coeflegend' `selegend'
    = local type
    - opts_exclusive "`type' `standardized'"
    = opts_exclusive " "



---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts'' != "" {
    = while `""' != "" {
      local ++n
      gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
    - if ("`rowmatrix`"!=" & "`norowci`"!=") {
= if ("`"!=" & "`"!=") {
    di as err "{bf:norowci} requires {bf:rowmatrix()}"
    exit 198
    }
    - if ("`dftable`"!=" & "`norowci`"!=") {
= if ("`"!=" & "`"!=") {
    di as err "{bf:norowci} is not allowed with {bf:`dftable`}"
    exit 198
    }
    - if ("`dfonly`"!=" & "`norowci`"!=") {
= if ("`"!=" & "`"!=") {
    di as err "{bf:norowci} is not allowed with {bf:`dfonly`}"
    exit 198
    }
    - if ("`noci`"!=" & "`norowci`"!=") {
= if ("`"!=" & "`"!=") {
    di as err "{bf:norowci} is not allowed with {bf:`noci`}"
    exit 198
    }
    - if "`standardized`" != "" & "`bstdmatrix`" != "" {
= if "" != "" & "" != "" {
        local beta beta
        local standardized
    }
    - if `:length local type' == 0 {
= if 0 == 0 {
        - local type `beta' `noci' `nopvalues' `dftable' `dfonly' `gro
> ups' `dfci' `dfpvalues'
        = local type
        - }
        - opts_exclusive "`type'"
        = opts_exclusive ""
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while "`opts`" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`first' `nofirst'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`first' `showeqns'"
= opts_exclusive " showeqns"

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts showeqns
- local n 0
- while ``opts' != "" {
= while `"showeqns" != "" {
  local ++n
  - gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {

```

```

- exit


---


> 

---

 end opts_exclusive 

---


- local cnsreport `cnsreport' `fullcnsreport'
= local cnsreport nocnsreport
- opts_exclusive "`cnsreport'"
= opts_exclusive "nocnsreport"


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts nocnsreport
- local n 0
- while ``opts' != "" {
= while `"nocnsreport" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts' != "" {
= while `"' != "" {
- local ++n
- gettoken item`n' opts : opts, bind
- }
- if `n' < 2 {
= if 1 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- if ``showeqns' != "" {
= if `"showeqns" != "" {
- local nofirst nofirst
- }
- if ``ematrix'`noeqcheck' == "" {
= if `"noeqcheck" == "" {
- if ``e(error)' == "matrix" {
- local ematrix e(error)
- }
- }
- _get_mcompare, `options'
= _get_mcompare, mcompare(noadjust ) fwrap(1)


---


> 

---

 begin _get_mcompare 

---


- version 11
- local cmd ``e(cmd)'"

```

```

        = local cmd `"regress"
        - syntax [name(name=caller)] [, *]
        - local is_pwc = inlist("pwcompare", "`cmd'", "`caller'") |
> inlist("pwmean", "`cmd'", "`caller'")
        = local is_pwc = inlist("pwcompare", "regress", "") | inlist
> ("pwmean", "regress", "")
        - local is_marg = inlist("margins", "`cmd'", "`e(cmd2)'", "`
> caller'")
        = local is_marg = inlist("margins", "regress", "", "")
        - local OPTIONS NOADJust BONferroni DUNCAn DUNNett SCHeffe S
> IDak SNK TUKey ADJustall
        - if `is_pwc' {
        = if 0 {
            syntax [name] [, `OPTIONS' MCOMPare(string) *]
        }
        - else {
        - syntax [name] [, MCOMPare(string) *]
        - local suboption mcompare()
        - }
        - sreturn clear
        - sreturn local options ``options'""
        = sreturn local options `fvwrap(1)'
        - if `is_pwc' {
        = if 0 {
            local METHOD `noadjust' `bonferroni' `duncan' `dunnett' `s
> cheffe' `sidak' `snk' `tukey'
            local METHOD : list uniq METHOD
            opts_exclusive ``METHOD'
            local ALL `adjustall'
            opts_exclusive ``noadjust' `ALL'
        }
        - local 0 `", `mcompare'""
        = local 0 `", noadjust'
        - capture syntax [, `OPTIONS']
        = capture syntax [, NOADJust BONferroni DUNCAn DUNNett SCHeff
> fe SIDak SNK TUKey ADJustall]
        - if c(rc) {
            di as err "invalid mcompare() option;"
            di as err "method ``mcompare' not allowed"
            error 198
        }
        - local METHOD `METHOD' `noadjust' `bonferroni' `duncan' `du
> nnett' `scheffe' `sidak' `snk' `tukey'
        = local METHOD noadjust
        - local METHOD : list uniq METHOD
        - local ALL `ALL' `adjustall'

```

```

= local ALL
- local ALL : list uniq ALL
- opts_exclusive "`METHOD'" `suboption'
= opts_exclusive "noadjust" mcompare()

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0
- while `"'opts'"' != "" {
= while `"noadjust"' != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while `"'opts'"' != "" {
= while `"' != "" {
- local ++n
- gettoken item`n' opts : opts, bind
- }
- if `n' < 2 {
= if 1 < 2 {
- exit

> ----- end opts_exclusive -----
- if "`METHOD'" == "" {
= if "noadjust" == "" {
- if "`ALL'" != "" {
di as err "multiple comparison method required with the ad
> justall option"
- exit 198
- }
- local METHOD noadjust
- local noadjust noadjust
- }
- opts_exclusive "`ALL' `noadjust'" `suboption'
= opts_exclusive " noadjust" mcompare()

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0

```



```

- while ``opts'' != "" {
= while "noadjust" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts'' != "" {
= while ``'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local EXCLUDE duncan dunnett snk tukey
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if `is_pwc' {
    local opt : copy local METHOD
  }
  else {
    local opt "mcompare(`METHOD')"
  }
  local cmdlist anova manova regress mvreg pwmean
  if ``cmd'' == "pwcompare" {
    local cmd ``e(cmd_est)''
  }
  if `is_marg' {
    local cmd margins
  }
  if !`:list cmd in cmdlist' | !`is_pwc' {
    di as err ``method `opt' is not allowed with results from
> `cmd''

    exit 322
  }
  if ``e(prefix)'' == "svy" {
    di as err ``method `opt' is not allowed with results using
> the svy prefix''

    exit 322
  }
  local vce ``e(vce)''
  if !inlist("`vce'", "", "ols") {
    di as err ``method `opt' is not allowed with results using
> vce(`vce)''

```

```

        exit 322
    }
}
- local EXCLUDE duncan dunnett snk tukey scheffe
- if `:list METHOD in EXCLUDE' {
= if 0 {
    if "`ALL'" != "" {
        di as err `"option adjustall is not allowed with method `M
> ETHOD'"
        exit 198
    }
}
- sreturn local method ``METHOD'"
= sreturn local method "noadjust"
- sreturn local adjustall ``ALL'"
= sreturn local adjustall ""



---


> ----- end _get_mcompare -----
- local method ``s(method)'"
= local method "noadjust"
- local all ``s(adjustall)'"
= local all ""
- local options ``s(options)'"
= local options "fvwrap(1)"
- if "method" != "noadjust" {
= if "noadjust" != "noadjust" {
    local keepmc 1
}
- opts_exclusive "all" `groups'"
= opts_exclusive " "



---


> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'" != "" {
= while `'" != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
    - if "`method'" == "dunnett" {
    = if "noadjust" == "dunnett" {
      opts_exclusive "`method' `groups'"
    }
    - _get_diopts diopts options, `options' `fvwrap' `fvlabel'
    = _get_diopts diopts options, fvwrap(1)
  -----

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]
    - gettoken name1 namelist : namelist
    - gettoken name2 namelist : namelist
    - GetDiopts diopts options, `options'
    = GetDiopts diopts options, fvwrap(1)
  -----

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASelevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
  -----

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
      local ++n
      gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```


- exit

```
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
```

```

confirm numeric format `cformat'
if fmtwidth("`cformat'") > 9 {
local cformat "%9.0g"
di "{txt}note: invalid cformat(), using default"
}
sreturn local cformat "`cformat'"
local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
confirm numeric format `sformat'
if fmtwidth("`sformat'") > 8 {
local sformat "%8.2f"
di "{txt}note: invalid sformat(), using default"
}
sreturn local sformat "`sformat'"
local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
confirm numeric format `pformat'
if fmtwidth("`pformat'") > 5 {
local pformat "%5.3f"
di "{txt}note: invalid pformat(), using default"
}
sreturn local pformat "`pformat'"
local pformat `pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
local levelopt level(`level')
}
- Wraon , `fvwraon'
= Wraon ,

```

```

> _____ begin _get_diopts.Wraon _____
- capture syntax [, W0rd WIdth]
- if c(rc) {
di as err "invalid fvwrapon() option;"
syntax [, W0rd WIdth]
exit 198
}

```

```

- opts_exclusive "`word' `width'" fvwraon
= opts_exclusive " " fvwraon
_____
> _____ begin opts_exclusive _____
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
_____
> _____ end opts_exclusive _____
- local fvwraon `word' `width'
= local fvwraon
- if `:length local fvwraon' {
= if 0 {
  c_local fvwraon fvwraon(`fvwraon')
}
_____
> _____ end _get_diopts.Wrapon _____
- if "`fvwrap'" != "" {
= if "fvwrap(1)" != "" {
- FVWrap, `fvwrap'
= FVWrap, fvwraon(1)
_____
> _____ begin _get_diopts.FVWrap _____
- syntax, fvwraon(integer)
- if `fvwrap' < 0 {
= if 1 < 0 {
  di as err "{p}invalid option {bf:fvwrap(`fvwrap')}"; "
> "nonnegative integer required{p_end}"
  exit 198
}
_____
> _____ end _get_diopts.FVWrap _____
- }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp

```

```
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'
```

```

= c_local diopts                                fvwrap(1)
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options''
= c_local options `''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```
> ----- end _get_diopts.GetDiopts -----
- c_local `name1' ``diopts''
= c_local diopts `fvwrap(1)''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_method = s(method)
- }
- local S_`sname' = s(`sname')
= local S_options = s(options)
- }
- sreturn clear
- GetDiopts DEFAULT

```

```
> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```



```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```

```

- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')"'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')"'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat')"'
  }
}

```

```

- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

        = c_local DEFAULT
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95
    }
}

> ----- end _get_diopts.GetDiopts -----

        - if ``name2'' == "" {
        = if ``options'' == "" {
            GetDiopts DUPS, `options'
        }
        - else {
        - GetDiopts DUPS options, `options'
        = GetDiopts DUPS options,

> ----- begin _get_diopts.GetDiopts -----
        - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
        - syntax namelist(max=2) [, `DIOPTS' *]
        = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
        - opts_exclusive ``allbaselevels' `noallbaselevels''

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0

```

```

- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `""opts"" != "" {
= while `"" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `""opts"" != "" {
= while `"" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```



```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive ``coeflegend' `selegend'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive ``noci' `nopvalues'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev' `noabbrev'"

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if ``allbaselevels'`baselevels' == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if ``emptycells' == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}

```

```

- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat')'
  }
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']

```

```

    }
    - if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
    - Wrapon , `fvwrapon'
= Wrapon ,

```

```

> ----- begin _get_diopts.Wrapon -----
    - capture syntax [, WOrd WIdth]
    - if c(rc) {
        di as err "invalid fvwrapon() option;"
        syntax [, WOrd WIdth]
        exit 198
    }
    - opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
= local fvwrapon
    - if `:length local fvwrapon' {
= if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }

```

```

> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
= if "" != "" {
        FVWrap, `fvwrap'
    }

```

```

        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

```

```

        = c_local DUPS
        - if `K' == 2 {
        = if 2 == 2 {
        - c_local `c_opts' ``options''
        = c_local options ``''
        - }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
        - c_local `name2' ``options''
        = c_local options ``''
        - }
        - local DUPS : list DUPS - DEFAULT
        - gettoken DUPS : DUPS
        - if ``DUPS'' != "" {
        = if ``'' != "" {
            if (strpos(`DUPS'', "(")) {
            gettoken DUPS : DUPS, parse("(")
            local DUPS `DUPS'()'
            }
            di as err "duplicate {bf:`DUPS'} option not allowed"
            exit 198
        }
        - sreturn clear
        - foreach sname of local snames {
        - sreturn local `sname' = ``S_`sname''
        = sreturn local level = `95'
        - }
        - sreturn local `sname' = ``S_`sname''
        = sreturn local method = `noadjust'
        - }
        - sreturn local `sname' = ``S_`sname''
        = sreturn local options = `fvwrap(1)'
        - }

```

```

> ----- end _get_diopts -----
    - local legend coeflegend selegend
    - local legend : list legend & diopts
    - local diopts : list diopts - legend
    - local lstretch lstretch nolstretch
    - local lstretch : list lstretch & diopts
    - local diopts : list diopts - lstretch
    - local markdown markdown
    - local markdown : list markdown & diopts
    - local diopts : list diopts - markdown
    - _get_diopts ignore, `diopts' `cformat' `sformat' `pformat'
    = _get_diopts ignore, fwrap(1)

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]
    - gettoken name1 namelist : namelist
    - gettoken name2 namelist : namelist
    - GetDiopts diopts options, `options'
    = GetDiopts diopts options, fwrap(1)

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels` `nbaselevels`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels` `nbaselevels`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```



```

> ----- end opts_exclusive -----
- opts_exclusive ``emptycells' `noemptycells'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``fvlabel' `nofvlabel'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``omitted' `noomitted'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {

```

```

- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS' ]
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

> _____ begin _get_diopts.Wrapon _____

```

- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

```

```

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "fvwrap(1)" != "" {
- FVWrap, `fvwrap'
= FVWrap, fvwrap(1)

```

```

> ----- begin _get_diopts.FVWrap -----
- syntax, fvwrap(integer)
- if `fvwrap' < 0 {
= if 1 < 0 {
  di as err "{p}invalid option {bf:fvwrap(`fvwrap')}"; "
> "nonnegative integer required{p_end}"
  exit 198
}

```

```

> ----- end _get_diopts.FVWrap -----
        - }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

        = c_local diopts                                fvwrap(1)
        - if `K' == 2 {
        = if 2 == 2 {
        - c_local `c_opts' ``options''
        = c_local options `''
        - }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
        - c_local `name1' ``diopts''
        = c_local ignore `fvwrap(1)'
        - local snames : s(macros)
        - foreach sname of local snames {
        - local S_`sname' = s(`sname')
        = local S_level = s(level)
        - }
        - local S_`sname' = s(`sname')
        = local S_options = s(options)
        - }
        - local S_`sname' = s(`sname')
        = local S_method = s(method)
        - }
        - sreturn clear
        - GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
        - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)

```



```

> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----

    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
= local baselevels
    - local emptycells `emptycells' `noemptycells'
= local emptycells
    - local omitted `omitted' `noomitted'
= local omitted
    - local lstretch `lstretch' `nolstretch'
= local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
    - local abbrev `abbrev' `noabbrev'
= local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
        - if c(showbaselevels) == "all" {
            local allbaselevels allbaselevels
        }
    }

```

```

- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {

```

```

        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat ``pformat''
    local pformat `pformat(pformat)''
    }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
    }
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
    }
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {

```



```

        = if 0 {
            c_local fvwrapon fvwrapon(`fvwrapon`)
        }
    }
> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options'
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
    }
> ----- end _get_diopts.GetDiopts -----
    - if ``name2' == "" {
    = if '' == "" {
    - GetDiopts DUPS, `options'
    = GetDiopts DUPS,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV

    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW

```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit

> ----- end opts_exclusive -----

    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```

```

- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}

```



```

- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

        = c_local DUPS
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95
    }

> ----- end _get_diopts.GetDiopts -----

- }
- else {
    GetDiopts DUPS options, `options'
    c_local `name2' ``options''
}
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS'' != "" {
= if `'' != "" {
    if (strpos(`DUPS', "(")) {
        gettoken DUPS : DUPS, parse("(")
        local DUPS `DUPS'()'
    }
    di as err "duplicate {bf:`DUPS'} option not allowed"
    exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname''
= sreturn local level = `95'
- }
- sreturn local `sname' = ``S_`sname''
= sreturn local options = `fvwrap(1)'

```

```

- }
- sreturn local `sname' = ``S_`sname'""
= sreturn local method = ``noadjust"
- }

> ----- end _get_diopts -----
- local cformat ``s(cformat)""
= local cformat ``"
- local sformat ``s(sformat)""
= local sformat ``"
- local pformat ``s(pformat)""
= local pformat ``"
- _get_eformopts , eformopts(`options') allowed(__all__) sopti
> ons
= _get_eformopts , eformopts() allowed(__all__) soptions

> ----- begin _get_eformopts -----
- version 8.0
- syntax [, eformopts(string asis) soptions ALLOWed(string)
> ]
- local 0 , `eformopts'
= local 0 ,
- local EFALL NOHR hr NOSHR shr or IRr RRr tr TRatio
- if ``soptions' != "" {
= if "soptions" != "" {
- syntax [, EForm1(passthru) EForm `EFALL' * ]
= syntax [, EForm1(passthru) EForm NOHR hr NOSHR shr or IRr
> RRr tr TRatio * ]
- local opts ``options'""
= local opts ``"
- local 0 , `eform1' `eform' `nohr' `hr' `noshr' `shr' `or'
> `irr' `rrr' `tr' `tratio'
= local 0 ,
- }
- if ``allowed' == "__all__" {
= if "__all__" == "__all__" {
- local allowed `EFALL'
= local allowed NOHR hr NOSHR shr or IRr RRr tr TRatio
- }
- foreach ef of local allowed {
- capture confirm name `ef'
= capture confirm name NOHR
- if _rc {
di as err "`ef' is not a valid name"
exit 198
}

```

```

- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr
- }
- capture confirm name `ef'
= capture confirm name hr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr
- }
- capture confirm name `ef'
= capture confirm name NOSHR
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr
- }
- capture confirm name `ef'
= capture confirm name shr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr
- }
- capture confirm name `ef'
= capture confirm name or
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or
- }
- capture confirm name `ef'
= capture confirm name IRr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'

```

```

= local efopts nohr hr noshr shr or irr
- }
- capture confirm name `ef'
= capture confirm name RRr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr rrr
- }
- capture confirm name `ef'
= capture confirm name tr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr rrr tr
- }
- capture confirm name `ef'
= capture confirm name TRatio
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr rrr tr tratio
- }
- local efopts : list uniq efopts
- syntax [, EForm1(string) EForm `allowed' ]
= syntax [, EForm1(string) EForm NOHR hr NOSHR shr or IRr RR
> r tr TRatio ]
- foreach ef of local efopts {
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }

```

```

- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- if ```eform1'''=="Odds ratio" {
= if `'''=="Odds ratio" {
    local eform_cons_ti = "Odds"
    local eform_cons_note = "odds ratios"
}
- else if ```eform1'''=="Haz. ratio" {
= else if `'''=="Haz. ratio" {
    local eform_cons_ti = "Hazard"
    local eform_cons_note = "hazard ratios"
}
- else if ```eform1'''=="Time ratio" {
= else if `'''=="Time ratio" {
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
}
- else if ```eform1'''=="IRR" {
= else if `'''=="IRR" {
    local eform_cons_ti = "Inc. rate"
    local eform_cons_note = "incidence-rate ratios"
    local eform_cons_ti2 = "incidence rate"
}
- else if ```eform1'''=="Risk ratio" {
= else if `'''=="Risk ratio" {
    local eform_cons_ti = "Risk"
    local eform_cons_note = "risk ratios"
}
- else if ```eform1'''=="Hlth ratio" {
= else if `'''=="Hlth ratio" {
    local eform_cons_ti = "Health"
    local eform_cons_note = "health ratios"
}

```

```

- local k : list sizeof eform
- if `k' {
= if 0 {
  opts_exclusive "`eform'"
  if `:length local eform1' {
    opts_exclusive "eform() `eform'"
  }
}
- if `k' {
= if 0 {
  if ("`eform'"=="eform") local eform1 = "exp(b)"
  else if ("`eform'"=="hr") {
    local eform1 = "Haz. ratio"
    local eform_cons_ti = "Hazard"
    local eform_cons_note = "hazard ratios"
  }
  else if ("`eform'"=="shr") {
    local eform1 = "SHR"
    local eform_cons_ti = "Subhazard"
    local eform_cons_note = "subhazard ratios"
  }
  else if ("`eform'"=="tr") {
    local eform1 = "Time ratio"
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
  }
  else if ("`eform'"=="tratio") {
    local eform1 = "Time ratio"
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
  }
  else if ("`eform'"=="or") {
    local eform1 = "Odds ratio"
    if ("`e(cmd)'"=="asclogit" | "`e(cmd)'"=="cmclogit" | "`e(
> cmd)'"=="cmmixlogit" | "`e(cmd)'"=="cmxtmixlogit" ) {
      local eform_cons_ti = "Rel. risk"
      local eform_cons_note = "relative-risk ratios"
      local eform_cons_ti2 = "relative risk"
    }
    else {
      local eform_cons_ti = "Odds"
      local eform_cons_note = "odds ratios"
    }
  }
  else if ("`eform'"=="irr") {
    local eform1 = "IRR"

```

```

local eform_cons_ti = "Inc. rate"
local eform_cons_note = "incidence-rate ratios"
local eform_cons_ti2 = "incidence rate"
}
else if ("`eform'"=="rrr") {
local eform1 = "RRR"
local eform_cons_ti = "Rel. risk"
local eform_cons_note = "relative-risk ratios"
local eform_cons_ti2 = "relative risk"
}
else if ("`eform'"!="nohr") & ("`eform'"!="nosh") {
local eform1 = upper("`eform'")
}
}
- sreturn clear
- sreturn local options ``opts'''
= sreturn local options `'''
- sreturn local opt `eform'
= sreturn local opt
- sreturn local str `eform1'
= sreturn local str
- if ``eform1''' != "" {
= if `''' != "" {
sreturn local eform eform("`eform1'")
}
- else sreturn local eform ""
- sreturn local eform_cons_ti `eform_cons_ti'
= sreturn local eform_cons_ti
- sreturn local eform_cons_note `eform_cons_note'
= sreturn local eform_cons_note
- sreturn local eform_cons_ti2 `eform_cons_ti2'
= sreturn local eform_cons_ti2

```

```

> ----- end _get_eformopts -----
- local tr_item = ``s(eform_cons_note)'''
= local tr_item = `'''
- if inlist("`bmatrix'", "", "e(b)") & "`e(k_eform)'" == "0" {
= if inlist("", "", "e(b)") & "" == "0" {
local eform
}
- else local eform ``s(str)'''
= else local eform `'''
- local eform_cons_ti ``s(eform_cons_ti)'''
= local eform_cons_ti `'''
- local eform_cons_ti2 ``s(eform_cons_ti2)'''
= local eform_cons_ti2 `'''

```



```

- if ("`e(consonly)'"!="1" | ``eform_cons_ti'"'=="") {
= if ("'"!="1" | `"'=="") {
- local eformdi ``s(str)''
= local eformdi `''
- }
- else {
  local eformdi ``eform_cons_ti''
  local tr_item = cond(missing("`eform_cons_ti2'"), strlower(`
> "`eform_cons_ti'"), ``eform_cons_ti2'')
  }
- local coefttl = cond(`"eform"'"'==`"', ``coeftitle'',"`, ``
> eformdi'')
= local coefttl = cond(`"'==`"', `"', `''')
- local options ``s(options)''
= local options `''
- _get_diparmopts, diparmopts(`options') level(`level')
= _get_diparmopts, diparmopts() level(95)


---


> ----- begin _get_diparmopts -----
- if _caller() < 8.2 {
  _get_diparmopts_8 `0'
  exit
  }
- version 9
- local version : di "version " string(_caller()) ":"
- syntax [, diparmopts(string asis) EXECute soptions bottom
> plus SYNTAXonly * ]
- local goptions `options'
= local goptions level(95)
- SpliceGlobals junk , `goptions'
= SpliceGlobals junk , level(95)


---


> ----- begin _get_diparmopts.SpliceGlobals -----
- syntax name(id="macro name" name=c_diparm) [, diparm(str
> ing asis) Level(cilevel) dof(passthru) syntaxonly ]
- if ``dof'"' == "" & ``e(df_r)'"' != "" {
= if `"' == "" & ``138'"' != "" {
- capture confirm integer number `e(df_r)'
= capture confirm integer number 138
- if !c(rc) {
- local gdof dof(`e(df_r)')
= local gdof dof(138)
- }
- capture
- }
- else local gdof ``dof''

```

```

= else local gdof `""'
- local glevel `level'
= local glevel 95
- local lopt level(`glevel')
= local lopt level(95)
- if (`""diparm"" == "") exit
= if (`"" == "") exit

```

```

> ----- end _get_diparmopts.SpliceGlobals -----
- local 0 `", `diparmopts'""
= local 0 `", ""
- local diparmopts
- local k 0
- syntax [, diparm(string asis) * ]
- while `""diparm"" != "" {
= while `"" != "" {
    local ++k
    local single 1
    local after
    capture _on_colon_parse `diparm'
    if !c(rc) {
        local single 0
        local diparm `""s(before)""
        local after `""s(after)""
    }
    capture
    SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `gopt

```

> ions'

```

    local diparm`k' `""diparm""
    local diparmopts `""diparmopts' : `diparm'""
    if `single' | `"":list retok after'"" == "" {
        local 0 `", `options'""
        syntax [, diparm(string asis) * ]
    }
    else {
        local diparm `""after'""
    }
}
- if `""soptions'"" == "" {
= if `"" == "" {
- syntax [, diparm(string asis) ]
- }
- if ("`execute'" == "") {
= if ("" == "") {
- sreturn clear
- sreturn local options `""options'""

```

```

= sreturn local options `""'
- sreturn local diparm ``diparmopts'''
= sreturn local diparm `""'
- forval i = 1/`k' {
= forval i = 1/0 {
    sreturn local diparm`i' ``diparm`i''''
    }
- sreturn local k `k'
= sreturn local k 0
- exit

```

>

 end _get_diparmopts

```

- local NODIPARM : length local nodiparm
- if `NODIPARM' {
= if 8 {
- local options
- }
- local GTOPTS parse(":") bind quotes
- local k 0
- if !`NODIPARM' {
= if !8 {
    if ``e(diparm)''' != "" {
        local i 0
        local diparm ``e(diparm)'''
    }
    else if ``e(diparm1)''' != "" {
        local i 1
        local diparm ``e(diparm1)'''
    }
    while `:length local diparm' {
        gettoken diparm rest : diparm, `GTOPTS'
        while `:length local rest' {
            local ++k
            local diparm`k' : copy local diparm
            gettoken COLON rest : rest, `GTOPTS'
            gettoken diparm rest : rest, `GTOPTS'
        }
        local ++k
        local diparm`k' : copy local diparm
        local ++i
        local diparm ``e(diparm`i')'''
    }
}
- if `:length local options' {
= if 0 {
    local 0 `", `options'''

```

```

syntax [, diparm(string asis) *]
if `k' & `:length local diparm' {
local ++k
local diparm`k' __sep__
}
while `:length local diparm' {
gettoken diparm rest : diparm, `GTPTS'
while `:length local rest' {
local ++k
local diparm`k' : copy local diparm
gettoken COLON rest : rest, `GTPTS'
gettoken diparm rest : rest, `GTPTS'
}
local ++k
local diparm`k' : copy local diparm
local 0 `", `options'""
syntax [, diparm(string asis) *]
}
}
- if "`markdown'" != "" {
= if "" != "" {
local lsize = c(linesize)
set linesize 255
}
- `vv' mata: _coef_table()
= version 11, missing: mata: _coef_table()

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options, fwrap(1)

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASelevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPvalues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE

```

```

> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'`` != "" {
    = while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'`` != "" {
    = while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```



```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding` `compare`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`versus` `compare`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {

```

```

= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `"cformat(`cformat')"'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `"sformat(`sformat')"'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `"pformat(`pformat')"'
  }

```

```

    }
    - if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
    }
    - if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
    - Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
    - capture syntax [, WOrd WIdth]
    - if c(rc) {
        di as err "invalid fvwrapon() option;"
        syntax [, WOrd WIdth]
        exit 198
    }
    - opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit

> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
= if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }

> ----- end _get_diopts.Wrapon -----

```

```

- if "`fvwrap'" != "" {
= if "fvwrap(1)" != "" {
- FVWrap, `fvwrap'
= FVWrap, fvwrap(1)
}

> ----- begin _get_diopts.FVWrap -----
- syntax, fvwrap(integer)
- if `fvwrap' < 0 {
= if 1 < 0 {
di as err "{p}invalid option {bf:fvwrap(`fvwrap')}"; "
> "nonnegative integer required{p_end}"
exit 198
}

> ----- end _get_diopts.FVWrap -----
- }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local diopts fvwrap(1)
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options''
= c_local options ``''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
- c_local `name1' ``diopts''
= c_local __00000B ``fvwrap(1)''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_k = s(k)

```

```

- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0

```

```

- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```



```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'

```

```

= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {

```

```

    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat ``sformat''
    local sformat `sformat(`sformat')'
    }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth(`pformat') > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
        }
    sreturn local pformat ``pformat''
    local pformat `pformat(`pformat')'
    }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
    }
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
    - capture syntax [, W0rd WIdth]
    - if c(rc) {
        di as err "invalid fvwrapon() option;"
        syntax [, W0rd WIdth]
        exit 198
    }
    - opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts'' != "" {
= while `""' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
        - local fvwrapon `word' `width'
        = local fvwrapon
        - if `:length local fvwrapon' {
        = if 0 {
            c_local fvwrapon fvwrapon(`fvwrapon')
        }
    }
}
> ----- end _get_diopts.Wrapon -----
        - if "`fvwrap'" != "" {
        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'
        = c_local DEFAULT
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95
    }
}
> ----- end _get_diopts.GetDiopts -----
        - if ``name2'' == "" {
        = if ``' == "" {
        - GetDiopts DUPS, `options'
        = GetDiopts DUPS,
    }
}
> ----- begin _get_diopts.GetDiopts -----
        - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB

```

```

> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'opts'"' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'opts'"' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {

```

```

= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `"sformat(`sformat')"'
}
}

```

```

- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth(`"pformat"') > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat `"pformat"'
    local pformat `pformat(pformat)'"'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> begin _get_diopts.Wrapon
- capture syntax [, W0rd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, W0rd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> begin opts_exclusive
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"opts"' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }

> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local DUPS
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
    - }
    - else {
        GetDiopts DUPS options, `options'
        c_local `name2' ``options''
    }
    - local DUPS : list DUPS - DEFAULT
    - gettoken DUPS : DUPS
    - if ``DUPS'' != "" {
    = if `""' != "" {
        if (strpos(`DUPS', "(")) {
            gettoken DUPS : DUPS, parse("(")
            local DUPS `DUPS'()'
        }
    }

```

```

        di as err "duplicate {bf:`DUPS`} option not allowed"
        exit 198
    }
    - sreturn clear
    - foreach sname of local snames {
    - sreturn local `sname' = ``S_`sname''''
    = sreturn local level = ``95''
    - }
    - sreturn local `sname' = ``S_`sname''''
    = sreturn local k = ``0''
    - }
}

> ----- end _get_diopts -----

    - if ``markdown' != '' {
    = if '' != '' {
        set linesize `lsize'
    }
    - if ``eqselect' == '' & ``eformnote' != "noeformnote" {
    = if '' == '' & '' != "noeformnote" {
    - if ``eformdi' != '' & (`e(cmd)' != "gnbreg" | ``e(prefix)'
> == "svy") {
    = if ``' != '' & ("regress" != "gnbreg" | "" == "svy") {
        local k_eform `e(k_eform)'
        if (`k_eform' == '') {
            local k_eform = 1
        }
        local k_eq `e(k_eq)'
        if (`k_eq' == '') {
            local k_eq = 1
        }
        if (`k_eform' < `k_eq' & `k_eform') {
            if (`e(cmd2)' == "stintreg" | ``e(cmd2)' == "streg") & ("
> `e(cmd)' == "weibull" | ``e(cmd)' == "gompertz") {
            }
            else {
                _eform_multeq_note efnote : `k_eform' ``tr_item''
                di as txt ``efnote''
            }
        }
    }
    - if (`eformdi' != '' & ``e(noconstant)' == "0" & ``eform_co
> ns_ti' != '' & ``e(consonly)' != "1") {
        = if (`' != '' & "" == "0" & ``' != '' & "" != "1") {
            if (`e(cmd)' == "asclogit" | ``e(cmd)' == "cmclogit" | ``e(cm
> d)' == "cmmixlogit" | ``e(cmd)' == "cmxtmixlogit" ) {
                local asvar = ``e(ranvars)'`e(fixvars)'`e(indvars)'' != ''

```



```

if ``e(casevars)'' != "" & `asvar' {
local note1 "Exponentiated coefficients represent odds ratio
> s for "
local note2 "alternative-specific variables (first equation)
> and "
local note3 "{help j_cmrisk##_new:relative-risk ratios} "
local note4 "for case-specific variables."
di as txt "{p 0 6 2}Note: `note1'`note2'`note3'`note4'`p_end
> }"
}
}
if ``eform_cons_ti' == "Inc. rate" {
local eform_cons_note "incidence rate"
}
else if ``eform_cons_ti' == "Rel. risk" {
local eform_cons_note "relative risk"
}
else if ``eform_cons_ti' == "Health" {
local eform_cons_note "health (probability of no disease)"
}
else {
local eform_cons_note = strlower(```eform_cons_ti'')
}
local eform_cons_note "baseline `eform_cons_note'"
if (``e(cmd2)''=="") {
local cmd `e(cmd)'
}
else {
local cmd `e(cmd2)'
}
local f2 = udsustr("`cmd'",1,2)
local is_re = ("`f2'=="xt" | "`f2'=="me")
if `is_re' {
local extranote " (conditional on zero random effects)"
}
di as txt "{p 0 6 2}Note: {bf:_cons} estimates " ``eform_con
> s_note'`extranote'`_c
if (``e(cmd)''=="mlogit" | ``e(cmd)''=="asclogit" | ``e(cmd)
> ""=="cmclogit" | ``e(cmd)''=="cmmixlogit" | ``e(cmd)''=="cmxtmixlogit" ) {
di as txt " for each outcome" _c
}
di as txt ".{p_end}"
}
- }
- return add
- if !`keepmc' {

```

```

        = if !0 {
        - return local mcmethod
        - return local mctitle
        - }
    }
end _coef_table

end _ereturn_display

- mat `b1' = (1/`mean')*e(b)
= mat __000008 = (1/__000003)*e(b)
- mat score double `xb' = `b1' `if'
= mat score double __000006 = __000008 if __000002
- LikePois `y' `xb' `poff' [`weight' `exp'] `if', n(`nobs')
= LikePois piq_timing_max __000006 [] if __000002, n(__000004)

begin poisson.LikePois

- gettoken y 0 : 0
- gettoken xb 0 : 0
- syntax [fw aw pw iw] [if] , Nobs(string)
- if "`weight'"!="" {
= if ""!="" {
    if "`weight'"=="fweight" {
        local wt `[fw`exp']
    }
    else if "`weight'"=="iweight" {
        local wt `[iw`exp']
    }
    else local wt `[aw`exp']
}
- tempvar lnf
- qui gen double `lnf' = `y'*(`xb')-exp(`xb')-lgamma(`y'+1) `if

'

= qui gen double __00000B = piq_timing_max*(__000006)-exp(__0000
> 06)-lgamma(piq_timing_max+1) if __000002
- summarize `lnf' `wt' `if', meanonly
= summarize __00000B if __000002, meanonly
- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- if "`weight'"=="aweight" {
= if ""=="aweight" {
    ret scalar lnf = r(N)*r(mean)
}
- else ret scalar lnf = r(sum)

end poisson.LikePois

- scalar `lnf1' = r(lnf)

```

```

= scalar __00000A = r(lnf)
- }
- if "`constan'"==" " {
= if ""==" " {
- SolveC `y' `xb'`poff' [`weight'`exp'] `if', n(`nobs') mean(`mean
> ')
= SolveC piq_timing_max __000006 [] if __000002, n(__000004) mean(
> __000003)

> _____ begin poisson.SolveC _____
- gettoken y 0 : 0
- gettoken xb 0 : 0
- syntax [fw aw pw iw] [if] , Nobs(string) Mean(string)
- if "`weight'"=="pweight" {
= if ""=="pweight" {
    local weight "aweight"
}
- capture confirm variable `xb'
= capture confirm variable __000006
- if _rc {
    tempvar xbnew
    qui gen double `xbnew' = (`xb') `if'
    local xb `xbnew'
}
- summarize `xb' [`weight'`exp'] `if', meanonly
= summarize __000006 [] if __000002, meanonly
- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- if r(max) - r(min) > 2*709 {
    exit
}
- if r(max) > 709 | r(min) < -709 {
    tempname shift
    if r(max) > 709 { scalar `shift' = 709 - r(max) }
    else scalar `shift' = -709 - r(min)
    local shift "+`shift'"
}
- tempvar expoff
- qui gen double `expoff' = exp(`xb'`shift') `if'
= qui gen double __00000B = exp(__000006) if __000002
- summarize `expoff' [`weight'`exp'], meanonly
= summarize __00000B [], meanonly
- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- return scalar _cons = ln(`mean')-ln(r(mean))`shift'
= return scalar _cons = ln(__000003)-ln(r(mean))

```

```

> ----- end poisson.SolveC -----
- tempname c
- scalar `c' = r(_cons)
= scalar __00000B = r(_cons)
- if `c'<. {
= if __00000B<. {
- local c "+`c'"
= local c "+__00000B"
- }
- else local c
- LikePois `y' `xb'`poff'`c' [`weight'`exp'] `if', n(`nobs')
= LikePois piq_timing_max __000006+__00000B [] if __000002, n(__00
> 0004)

> ----- begin poisson.LikePois -----
- gettoken y 0 : 0
- gettoken xb 0 : 0
- syntax [fw aw pw iw] [if] , Nobs(string)
- if "`weight'"!="" {
= if ""!="" {
if "`weight'"=="fweight" {
local wt `[fw`exp']"
}
else if "`weight'"=="iweight" {
local wt `[iw`exp']"
}
else local wt `[aw`exp']"
}
- tempvar lnf
- qui gen double `lnf' = `y'*(`xb')-exp(`xb')-lgamma(`y'+1) `if
> '
= qui gen double __00000C = piq_timing_max*(__000006+__00000B)-e
> xp(__000006+__00000B)-lgamma(piq_timing_max+1) if __000002
- summarize `lnf' `wt' `if', meanonly
= summarize __00000C if __000002, meanonly
- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- if "`weight'"=="aweight" {
= if ""=="aweight" {
ret scalar lnf = r(N)*r(mean)
}
- else ret scalar lnf = r(sum)

> ----- end poisson.LikePois -----
- tempname lnflc

```

```

- scalar `lnf1c' = r(lnf)
= scalar __00000C = r(lnf)
- }
- else local lnf1c .
- capture {
- gen double `z' = `y'*exp(-(`xb'`poff'`c'))-1 +`xb'`c' `if'
= gen double __000007 = piq_timing_max*exp(-(__000006+__00000B))-1
> +__000006+__00000B if __000002
- `vv' _regress `z' `xvars' [aw=`wt'exp(`xb'`poff'`c')] `if', `con
> stan'
= version 18, missing: _regress __000007 ln_neq cb_authors_ext es
> timated est_late o.est_early stky_pr_rotemberg stky_pr_calvo [aw=exp(__00000
> 6+__00000B)] if __000002,
-----
> ----- begin _ereturn_display -----
- version 11
- if "`e(b)'" == "" & "`e(V)'" == "" {
= if "matrix" == "" & "matrix" == "" {
exit
}
- if "`e(cmd)'" == "regress" {
= if "regress" == "regress" {
- local ALTOPT Beta
- }
- syntax [, eform(passthru) First neq(integer -1) PLus `ALTOPT'
> *]
= syntax [, eform(passthru) First neq(integer -1) PLus Beta *]
- _get_mcompare, `options'
= _get_mcompare, level(95.00) fwrap(1)
-----
> ----- begin _get_mcompare -----
- version 11
- local cmd ``e(cmd)''
= local cmd `regress'
- syntax [name(name=caller)] [, *]
- local is_pwc = inlist("pwcompare", "`cmd'", "`caller'") | in
> list("pwmean", "`cmd'", "`caller'")
= local is_pwc = inlist("pwcompare", "regress", "") | inlist("
> pwmean", "regress", "")
- local is_marg = inlist("margins", "`cmd'", "`e(cmd2)'", "`ca
> ller'")
= local is_marg = inlist("margins", "regress", "", "")
- local OPTIONS NOADJust BONferroni DUNCAn DUNNett SCHeffe SID
> ak SNK TUKey ADJustall
- if `is_pwc' {
= if 0 {

```

```

        syntax [name] [, `OPTIONS' MCOMPare(string) *]
    }
    - else {
    - syntax [name] [, MCOMPare(string) *]
    - local suboption mcompare()
    - }
    - sreturn clear
    - sreturn local options ``options'''
    = sreturn local options ``level(95.00) fvwrap(1)'''
    - if `is_pwc' {
    = if 0 {
        local METHOD `noadjust' `bonferroni' `duncan' `dunnett' `sch
> effe' `sidak' `snk' `tukey'
        local METHOD : list uniq METHOD
        opts_exclusive ``METHOD'''
        local ALL `adjustall'
        opts_exclusive ``noadjust' `ALL'''
    }
    - local 0 `", `mcompare'''
    = local 0 `", ""
    - capture syntax [, `OPTIONS']
    = capture syntax [, NOADJUST BONferroni DUNCan DUNNett SCHeffe
> SIDak SNK TUKey ADJustall]
    - if c(rc) {
        di as err "invalid mcompare() option;"
        di as err "method ``mcompare'' not allowed"
        error 198
    }
    - local METHOD `METHOD' `noadjust' `bonferroni' `duncan' `dunn
> ett' `scheffe' `sidak' `snk' `tukey'
    = local METHOD
    - local METHOD : list uniq METHOD
    - local ALL `ALL' `adjustall'
    = local ALL
    - local ALL : list uniq ALL
    - opts_exclusive ``METHOD''' `suboption'
    = opts_exclusive ``" mcompare()'

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `"" != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
}
> ----- end opts_exclusive -----
    - if ``METHOD'' == "" {
= if "" == "" {
    - if ``ALL'' != "" {
= if "" != "" {
        di as err "multiple comparison method required with the adju
> stall option"
        exit 198
    }
    - local METHOD noadjust
    - local noadjust noadjust
    - }
    - opts_exclusive ``ALL' `noadjust'' `suboption'
= opts_exclusive " noadjust" mcompare()
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts noadjust
    - local n 0
    - while ``opts'' != "" {
= while "noadjust" != "" {
        local ++n
        - gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
        - }
        - while ``opts'' != "" {
= while ``'' != "" {
            local ++n
            gettoken item`n' opts : opts, bind
        }
        - if `n' < 2 {
= if 1 < 2 {
            - exit
        }
    }
}
> ----- end opts_exclusive -----
    - local EXCLUDE duncan dunnett snk tukey
    - if `:list METHOD in EXCLUDE' {

```

```

= if 0 {
  if `is_pwc' {
    local opt : copy local METHOD
  }
  else {
    local opt "mcompare(`METHOD')"
  }
  local cmdlist anova manova regress mvreg pwmean
  if "`cmd'" == "pwcompare" {
    local cmd ``e(cmd_est)'''
  }
  if `is_marg' {
    local cmd margins
  }
  if !`:list cmd in cmdlist' | !`is_pwc' {
    di as err ``method `opt' is not allowed with results from `c
> md'''

    exit 322
  }
  if ``e(prefix)''' == "svy" {
    di as err ``method `opt' is not allowed with results using t
> he svy prefix'''

    exit 322
  }
  local vce ``e(vce)'''
  if !inlist("`vce'", "", "ols") {
    di as err ``method `opt' is not allowed with results using v
> ce(`vce')'''

    exit 322
  }
}
- local EXCLUDE duncan dunnett snk tukey scheffe
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if "`ALL'" != "" {
    di as err ``option adjustall is not allowed with method `MET
> HOD'''

    exit 198
  }
}
- sreturn local method ``METHOD'''
= sreturn local method ``noadjust'''
- sreturn local adjustall ``ALL'''
= sreturn local adjustall `'''

> _____ end _get_mcompare _____

```



```

- if "`s(method)'" != "" {
= if "noadjust" != "" {
- loca mcopt mcompare(`s(method)' `s(adjustall)')
= loca mcopt mcompare(noadjust )
- }
- _get_diopts diopts, `s(options)'
= _get_diopts diopts, level(95.00) fvwrap(1)

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options, level(95.00) fvwrap(1)

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'" != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

- exit

```
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
```

```

confirm numeric format `cformat'
if fmtwidth("`cformat'") > 9 {
local cformat "%9.0g"
di "{txt}note: invalid cformat(), using default"
}
sreturn local cformat "`cformat'"
local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
confirm numeric format `sformat'
if fmtwidth("`sformat'") > 8 {
local sformat "%8.2f"
di "{txt}note: invalid sformat(), using default"
}
sreturn local sformat "`sformat'"
local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
confirm numeric format `pformat'
if fmtwidth("`pformat'") > 5 {
local pformat "%5.3f"
di "{txt}note: invalid pformat(), using default"
}
sreturn local pformat "`pformat'"
local pformat `pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
local levelopt level(`level')
}
- Wraon , `fvwraon'
= Wraon ,

```

```

> _____ begin _get_diopts.Wraon _____
- capture syntax [, W0rd WIdth]
- if c(rc) {
di as err "invalid fvwrapon() option;"
syntax [, W0rd WIdth]
exit 198
}

```



```

- opts_exclusive "`word' `width'" fwrapon
= opts_exclusive " " fwrapon
_____
> _____ begin opts_exclusive _____
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
_____
> _____ end opts_exclusive _____
- local fwrapon `word' `width'
= local fwrapon
- if `:length local fwrapon' {
= if 0 {
    c_local fwrapon fwrapon(`fwrapon')
}
_____
> _____ end _get_diopts.Wrapon _____
- if "`fwrap'" != "" {
= if "fwrap(1)" != "" {
- FVWrap, `fwrap'
= FVWrap, fwrap(1)
_____
> _____ begin _get_diopts.FVWrap _____
- syntax, fwrap(integer)
- if `fwrap' < 0 {
= if 1 < 0 {
    di as err "{p}invalid option {bf:fwrap(`fwrap')}"; " "n
> onnegative integer required{p_end}"
    exit 198
}
_____
> _____ end _get_diopts.FVWrap _____
- }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar

```

```

> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'
    = c_local diopts                                fvwrap(1)
    - if `K' == 2 {
    = if 2 == 2 {
    - c_local `c_opts' ``options''
    = c_local options ``''
    - }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
    - c_local `name1' ``diopts''
    = c_local diopts `fvwrap(1)''
    - local snames : s(macros)
    - foreach sname of local snames {
    - local S_`sname' = s(`sname')
    = local S_level = s(level)
    - }
    - local S_`sname' = s(`sname')
    = local S_method = s(method)
    - }
    - local S_`sname' = s(`sname')
    = local S_options = s(options)
    - }
    - sreturn clear
    - GetDiopts DEFAULT

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA

```

```

> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```



```

- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}

```

```

- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

        = c_local DEFAULT
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95



---


> 

---

 end _get_diopts.GetDiopts 

---


        - if ``name2'' == "" {
        = if ``' == "" {
        - GetDiopts DUPS, `options'
        = GetDiopts DUPS,



---


> 

---

 begin _get_diopts.GetDiopts 

---


        - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(strin
> g) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
        - syntax namelist(max=2) [, `DIOPTS' *]
        = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
        - opts_exclusive ``allbaselevels' `noallbaselevels''
        = opts_exclusive " "



---


> 

---

 begin opts_exclusive 

---



```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`omitted' `noomitted'"

```

```

= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive ``lstretch' `nolstretch'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive ``cnsreport' `fullcnsreport'
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0

```

```

- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {

```

```

- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {

```

```

        local levelopt level(`level')
    }
    - Wrapon , `fvwrapon'
    = Wrapon ,

> ----- begin _get_diopts.Wrapon -----
    - capture syntax [, WOrd WIdth]
    - if c(rc) {
        di as err "invalid fvwrapon() option;"
        syntax [, WOrd WIdth]
        exit 198
    }
    - opts_exclusive "`word' `width'" fvwrapon
    = opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }

> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar

```

```
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'
```

```
    = c_local DUPS
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
```

```
> _____ end _get_diopts.GetDiopts _____

    - }
    - else {
        GetDiopts DUPS options, `options'
        c_local `name2' ``options''
    }
    - local DUPS : list DUPS - DEFAULT
    - gettoken DUPS : DUPS
    - if ``DUPS'' != "" {
    = if ``'' != "" {
        if (strpos(`DUPS'', "(")) {
            gettoken DUPS : DUPS, parse("(")
            local DUPS `DUPS'()'
        }
        di as err "duplicate {bf:`DUPS'} option not allowed"
        exit 198
    }
    - sreturn clear
    - foreach sname of local snames {
    - sreturn local `sname' = ``S_`sname''
    = sreturn local level = `95'
    - }
    - sreturn local `sname' = ``S_`sname''
    = sreturn local method = `noadjust'
    - }
    - sreturn local `sname' = ``S_`sname''
    = sreturn local options = `level(95.00) fvwrap(1)''
    - }
```

```
> _____ end _get_diopts _____
```

```

- if !':length local first' {
= if !0 {
- local first showeqns
- }
- if `neq' < 1 {
= if -1 < 1 {
- _ms_eq_info
- local neqopt neq(`r(k_eq)')
= local neqopt neq(1)
- }
- else {
  local neqopt neq(`neq')
  }
- _coef_table, nodiparm nocnsreport noeqcheck eformall `eform' `
> first' `neqopt' `plus' `beta' `mcopt' `diopts'
  = _coef_table, nodiparm nocnsreport noeqcheck eformall showeqns
> neq(1) mcompare(noadjust ) fwrap(1)

> ----- begin _coef_table -----
- version 11
- local vv : di "version " string(max(11,_caller())) ", missin
> g:"
- if (!c(noisily) & c(coeftabresults) == "off") {
  exit
  }
- _check_eclass
- syntax [, BMATrix(passthru) VMATrix(passthru) * ]
- if "`e(b)'" == "" & "`e(V)'" == "" & "`bmatrix'`vmatrix'"=="
> " {
  = if "matrix" == "" & "matrix" == "" & ""==" {
    exit
    }
  - local mc_cmds contrast margins pwcompare pwmean
  - local cmd "`e(cmd)'"
  = local cmd "regress"
  - local keepmc : list cmd in mc_cmds
  - if inlist("`cmd'", "pwcompare", "pwmean") {
  = if inlist("regress", "pwcompare", "pwmean") {
    local groups GROUPS
    }
  - if "`cmd'" == "regress" {
  = if "regress" == "regress" {
    - local beta Beta
    - }
  - if "`cmd'" == "gsem" {
  = if "regress" == "gsem" {

```

```

        local fvignore fvignore(int 0)
        local flignore flignore
    }
    - if "`cmd'" == "sem" {
= if "regress" == "sem" {
    local standardized STANDARDIZED
    local showginvariant SHOWGINvariant
    local nolabel NOLABel LABel NOFVLABel FVLABel
    local nofootnote NOFOOTnote
    local wrap wrap(numlist max=1) fvwrap(passthru)
    }
    - if "`e(mi)'"=="mi" {
= if ""=="mi" {
    local dftable DFTable
    local dfonly DFONLY
    local noclustreport NOCLUSTReport
    local pisematrix PISEMATrix(string)
    }
    - syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st
> ring asis) `beta' `standardized' NOCI NOPValues `dftable' `dfonly' dfci DFPV
> alues dfmissing `groups' COEFLegend selegend `fvignore' `flignore' `showginv
> ariant' `nolabel' `nofootnote' `wrap' sort `pisematrix' depname(string) COEF
> Title(string) coeftitle2(string) ptitle(string) cititle(string) NOMCLEgend n
> oCNSReport FULLCNSReport `noclustreport' cformat(passthru) sformat(passthru)
> pformat(passthru) NOFirst First SHOWEQns neq(integer -1) NODIPARM NOTEST SE
> Parator(integer 0) NOSKIP OFFSETONLY1 PPlus NOEQCHECK EFORMALL CITYPE(string)
> eqselect(string) noEFORMNOTE * ]
    = syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st
> ring asis) Beta NOCI NOPValues dfci DFPValues dfmissing COEFLegend seleg
> end sort depname(string) COEFTitle(string) coeftitle2(string) ptitle(
> string) cititle(string) NOMCLEgend noCNSReport FULLCNSReport cformat(passth
> ru) sformat(passthru) pformat(passthru) NOFirst First SHOWEQns neq(integer -
> 1) NODIPARM NOTEST SEParator(integer 0) NOSKIP OFFSETONLY1 PPlus NOEQCHECK EF
> ORMALL CITYPE(string) eqselect(string) noEFORMNOTE * ]
    - if "`wrap'" != "" {
= if "" != "" {
    opts_exclusive `wrap(`wrap') `fvwrap'
    local fvwrap fvwrap(`wrap')

```

```

}
- if "`nolabel'`label'" != "" {
= if "" != "" {
  opts_exclusive "`nolabel' `label'"
  opts_exclusive "`nofvlabel' `fvlabel'"
  opts_exclusive "`nolabel' `fvlabel'"
  opts_exclusive "`nofvlabel' `label'"
  if "`nolabel'" != "" {
    local fvlabel nofvlabel
  }
  else {
    local fvlabel fvlabel
  }
}
- else local fvlabel `nofvlabel' `fvlabel'
= else local fvlabel
- local type `coeflegend' `selegend'
= local type
- opts_exclusive "`type' `standardized'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- if (``rowmatrix'=="" & "`norowci'!=") {
= if (``'=="" & ""!=") {
  di as err "{bf:norowci} requires {bf:rowmatrix()}"
  exit 198
}
- if ("`dftable'!=" & "`norowci'!=") {
= if (""!=" & ""!=") {
  di as err "{bf:norowci} is not allowed with {bf:`dftable'}"
  exit 198

```

```

    }
    - if ("`dfonly`"!=" & "`norowci`"!=") {
= if ("!=" & "!=") {
    di as err "{bf:norowci} is not allowed with {bf:`dfonly`}"
    exit 198
    }
    - if ("`noci`"!=" & "`norowci`"!=") {
= if ("!=" & "!=") {
    di as err "{bf:norowci} is not allowed with {bf:`noci`}"
    exit 198
    }
    - if "`standardized`" != "" & "`bstdmatrix`" != "" {
= if "" != "" & "" != "" {
    local beta beta
    local standardized
    }
    - if `:length local type' == 0 {
= if 0 == 0 {
    - local type `beta' `noci' `nopvalues' `dftable' `dfonly' `gro
> ups' `dfci' `dfpvalues'
    = local type
    - }
    - opts_exclusive "`type`"
= opts_exclusive ""

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while "`opts`" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`first' `nofirst`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2

```



```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`first' `showeqns'"
= opts_exclusive " showeqns"

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts showeqns
- local n 0
- while `"'`opts'" != "" {
= while `"showeqns'" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 1 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local cnsreport `cnsreport' `fullcnsreport'
= local cnsreport nocnsreport
- opts_exclusive "`cnsreport'"
= opts_exclusive "nocnsreport"

```

```

> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts nocnsreport
- local n 0
- while ```opts'`` != "" {
= while `"nocnsreport" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ```opts'`` != "" {
= while `"" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {
- exit
}

> ----- end opts_exclusive -----

- if ```showeqns'`` != "" {
= if `"showeqns" != "" {
- local nofirst nofirst
- }
- if ```ematrix'`noeqcheck'`` == "" {
= if `"noeqcheck" == "" {
  if ```e(error)'`` == "matrix" {
    local ematrix e(error)
  }
}
- _get_mcompare, `options'
= _get_mcompare, mcompare(noadjust ) fwrap(1)

> ----- begin _get_mcompare -----

- version 11
- local cmd ```e(cmd)'``
= local cmd `"regress"
- syntax [name(name=caller)] [, *]
- local is_pwc = inlist("pwcompare", "`cmd'", "`caller'") |
> inlist("pwmean", "`cmd'", "`caller'")
= local is_pwc = inlist("pwcompare", "regress", "") | inlist
> ("pwmean", "regress", "")
- local is_marg = inlist("margins", "`cmd'", "`e(cmd2)'", "`
> caller'")
= local is_marg = inlist("margins", "regress", "", "")
- local OPTIONS NOADJUST BONferroni DUNCAn DUNNett SCHeffe S

```

```

> IDak SNK TUKey ADJustall
    - if `is_pwc' {
    = if 0 {
        syntax [name] [, `OPTIONS' MCOMPare(string) *]
    }
    - else {
    - syntax [name] [, MCOMPare(string) *]
    - local suboption mcompare()
    - }
    - sreturn clear
    - sreturn local options ``options'''
    = sreturn local options ``fvwrap(1)'''
    - if `is_pwc' {
    = if 0 {
        local METHOD `noadjust' `bonferroni' `duncan' `dunnett' `s
> cheffe' `sidak' `snk' `tukey'
        local METHOD : list uniq METHOD
        opts_exclusive ``METHOD'''
        local ALL `adjustall'
        opts_exclusive ``noadjust' `ALL'''
    }
    - local 0 `", `mcompare'''
    = local 0 `", noadjust'''
    - capture syntax [, `OPTIONS']
    = capture syntax [, NOADJust BONferroni DUNCAn DUNNett SCHeff
> fe SIDak SNK TUKey ADJustall]
    - if c(rc) {
        di as err "invalid mcompare() option;"
        di as err "method ``mcompare'' not allowed"
        error 198
    }
    - local METHOD `METHOD' `noadjust' `bonferroni' `duncan' `du
> nnett' `scheffe' `sidak' `snk' `tukey'
    = local METHOD noadjust
    - local METHOD : list uniq METHOD
    - local ALL `ALL' `adjustall'
    = local ALL
    - local ALL : list uniq ALL
    - opts_exclusive ``METHOD''' `suboption'
    = opts_exclusive "noadjust" mcompare()

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts noadjust

```

```

- local n 0
- while ``opts'' != "" {
= while "noadjust" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 1 < 2 {
- exit
}

> ----- end opts_exclusive -----

- if "METHOD" == "" {
= if "noadjust" == "" {
  if "ALL" != "" {
di as err "multiple comparison method required with the ad
> justall option"
  exit 198
  }
  local METHOD noadjust
  local noadjust noadjust
  }
- opts_exclusive "`ALL' `noadjust'" `suboption'
= opts_exclusive " noadjust" mcompare()

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0
- while ``opts'' != "" {
= while "noadjust" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
    = if 1 < 2 {
    - exit
  }
}

> ----- end opts_exclusive -----
- local EXCLUDE duncan dunnett snk tukey
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if `is_pwc' {
    local opt : copy local METHOD
  }
  else {
    local opt "mcompare(`METHOD')"
  }
  local cmdlist anova manova regress mvreg pwmean
  if "`cmd'" == "pwcompare" {
    local cmd ``e(cmd_est)'''
  }
  if `is_marg' {
    local cmd margins
  }
  if !`:list cmd in cmdlist' | !`is_pwc' {
    di as err ``method `opt' is not allowed with results from
> `cmd'''
    exit 322
  }
  if ``e(prefix)''' == "svy" {
    di as err ``method `opt' is not allowed with results using
> the svy prefix"
    exit 322
  }
  local vce ``e(vce)'''
  if !inlist("`vce'", "", "ols") {
    di as err ``method `opt' is not allowed with results using
> vce(`vce')"
    exit 322
  }
}
- local EXCLUDE duncan dunnett snk tukey scheffe
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if "`ALL'" != "" {
    di as err ``option adjustall is not allowed with method `M
> ETHOD'''
    exit 198
  }
}

```

```

    }
    }
    - sreturn local method ``METHOD'''
    = sreturn local method "noadjust"
    - sreturn local adjustall ``ALL'''
    = sreturn local adjustall ''''

> ----- end _get_mcompare -----
    - local method ``s(method)'''
    = local method "noadjust"
    - local all ``s(adjustall)'''
    = local all ''''
    - local options ``s(options)'''
    = local options "fvwrap(1)"
    - if ``method'" != "noadjust" {
    = if "noadjust" != "noadjust" {
        local keepmc 1
    }
    - opts_exclusive "all" groups"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while ``''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - if ``method'" == "dunnett" {
    = if "noadjust" == "dunnett" {
        opts_exclusive "method" groups"
    }
    - _get_diopts diopts options, `options' `fvwrap' `fvlabel'
    = _get_diopts diopts options, fvwrap(1)

> ----- begin _get_diopts -----
    - version 11

```

```

- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options, fwrap(1)

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```



```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while `"'opts'" != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while `"'opts'" != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
    = local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
    = local baselevels
    - local emptycells `emptycells' `noemptycells'
    = local emptycells
    - local omitted `omitted' `noomitted'

```

```

= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {

```

```

confirm numeric format `sformat'
if fmtwidth("`sformat'") > 8 {
  local sformat "%8.2f"
  di "{txt}note: invalid sformat(), using default"
}
sreturn local sformat "`sformat'"
local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

        = while `""` != "" {
            local ++n
            gettoken item`n` opts : opts, bind
        }
        - if `n` < 2 {
        = if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----
    - local fwrapon `word' `width'
    = local fwrapon
    - if `:length local fwrapon' {
    = if 0 {
        c_local fwrapon fwrapon(`fwrapon')
    }

> ----- end _get_diopts.Wrapon -----
    - if "`fwrap'" != "" {
    = if "fwrap(1)" != "" {
    - FVWrap, `fwrap'
    = FVWrap, fwrap(1)

> ----- begin _get_diopts.FVWrap -----
    - syntax, fwrap(integer)
    - if `fwrap' < 0 {
    = if 1 < 0 {
        di as err "{p}invalid option {bf:fwrap(`fwrap')}"; "
> "nonnegative integer required{p_end}"
        exit 198
    }

> ----- end _get_diopts.FVWrap -----
    - }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fwrap' `fwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local diopts                                fwrap(1)
    - if `K' == 2 {
    = if 2 == 2 {
    - c_local `c_opts' ``options'
    = c_local options `''
    - }
    - sreturn local coding `coding'
    = sreturn local coding

```

```

- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- c_local `name1' `""`diopts'""
= c_local diopts `""fvwrap(1)""
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_method = s(method)
- }
- local S_`sname' = s(`sname')
= local S_options = s(options)
- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGENd cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```



```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}
}
> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}
}
> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist

```

```

- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
- }

```

```

- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `"sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `"pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wraon , `fvwraon'
= Wraon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd Width]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd Width]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DEFAULT
- if `K' == 2 {

```



```

= if 1 == 2 {
  c_local `c_opts' ``options'''
}
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- if ``name2''' == "" {
= if ``options''' == "" {
  GetDiopts DUPS, `options'
}
- else {
- GetDiopts DUPS options, `options'
= GetDiopts DUPS options,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASelevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive ``allbaselevels' `noallbaselevels'''
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `'''' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "


---



```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {

```

```

        local lstretch nolstretch
    }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
        local cformat "%9.0g"
        di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
        local sformat "%8.2f"
        di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
    - capture syntax [, W0rd WIdth]

```



```

- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

```

```

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DUPS
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options'
= c_local options `"'

```

```

- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- c_local `name2' ``options''
= c_local options ``''
- }
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS'' != "" {
= if ``'' != "" {
  if (strpos(`DUPS', "(")) {
    gettoken DUPS : DUPS, parse("(")
    local DUPS `DUPS'()'
  }
  di as err "duplicate {bf:`DUPS'} option not allowed"
  exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname''
= sreturn local level = `95'
- }
- sreturn local `sname' = ``S_`sname''
= sreturn local method = `noadjust'
- }
- sreturn local `sname' = ``S_`sname''
= sreturn local options = `fvwrap(1)'
- }

```

```

> ----- end _get_diopts -----
- local legend coeflegend selegend
- local legend : list legend & diopts
- local diopts : list diopts - legend
- local lstretch lstretch nolstretch
- local lstretch : list lstretch & diopts
- local diopts : list diopts - lstretch
- local markdown markdown
- local markdown : list markdown & diopts

```

```

- local diopts : list diopts - markdown
- _get_diopts ignore, `diopts' `cformat' `sformat' `pformat'
= _get_diopts ignore, fwrap(1)

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options, fwrap(1)

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASelevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"

```

```

= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `'' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive "`emptycells' `noemptycells'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0

```

```

- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'

```



```

= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
    }
    di "{txt}note: invalid cformat(), using default"

```

```

}
sreturn local cformat ``cformat'''
local cformat `cformat(`cformat')''
}
- if `:length local sformat' {
= if 0 {
confirm numeric format `sformat'
if fmtwidth(`sformat') > 8 {
local sformat "%8.2f"
di "{txt}note: invalid sformat(), using default"
}
sreturn local sformat ``sformat'''
local sformat `sformat(`sformat')''
}
- if `:length local pformat' {
= if 0 {
confirm numeric format `pformat'
if fmtwidth(`pformat') > 5 {
local pformat "%5.3f"
di "{txt}note: invalid pformat(), using default"
}
sreturn local pformat ``pformat'''
local pformat `pformat(`pformat')''
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {
di as err "invalid fvwrapon() option;"
syntax [, W0rd WIdth]
exit 198
}
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----

```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local fwrapon `word' `width'
= local fwrapon
- if `:length local fwrapon' {
= if 0 {
    c_local fwrapon fwrapon(`fwrapon')
}

> ----- end _get_diopts.Wrapon -----

- if "`fwrap'" != "" {
= if "fwrap(1)" != "" {
- FVWrap, `fwrap'
= FVWrap, fwrap(1)

> ----- begin _get_diopts.FVWrap -----

- syntax, fwrap(integer)
- if `fwrap' < 0 {
= if 1 < 0 {
    di as err "{p}invalid option {bf:fwrap(`fwrap')}"; "
> "nonnegative integer required{p_end}"
    exit 198
}

> ----- end _get_diopts.FVWrap -----

- }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fwrap' `fwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local diopts fwrap(1)
- if `K' == 2 {

```

```

= if 2 == 2 {
- c_local `c_opts' ``options'''
= c_local options `'''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95
}

> ----- end _get_diopts.GetDiopts -----
- c_local `name1' ``diopts'''
= c_local ignore ``fvwrap(1)'''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_options = s(options)
- }
- local S_`sname' = s(`sname')
= local S_method = s(method)
- }
- sreturn clear
- GetDiopts DEFAULT
}

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive ``allbaselevels' `noallbaselevels'''
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells` `noemptycells`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while ``opts`` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel` `nofvlabel`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while ``opts`` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`omitted' `noomitted'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```



```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }

```

```

- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')"'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')"'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat')"'
  }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS' ]
  }

```

```

- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd Width]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd Width]
    exit 198
    }
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
    }

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
    FVWrap, `fvwrap'
    }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'

```

```

> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
    - if ``name2'' == "" {
    = if ``'' == "" {
    - GetDiopts DUPS, `options'
    = GetDiopts DUPS,

```

```

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGENd cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```



```

        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist

```

```

- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
- }

```

```

- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `"sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `"pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wraon , `fvwraon'
= Wraon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd Width]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd Width]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DUPS
- if `K' == 2 {

```

```

= if 1 == 2 {
    c_local `c_opts' ``options'
}
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts -----
- }
- else {
    GetDiopts DUPS options, `options'
    c_local `name2' ``options'
}
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS' != "" {
= if `"' != "" {
    if (strpos(`DUPS', "(")) {
        gettoken DUPS : DUPS, parse("(")
        local DUPS `DUPS'()'
    }
    di as err "duplicate {bf:`DUPS'} option not allowed"
    exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname'
= sreturn local level = `95'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local options = `fvwrap(1)'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local method = `noadjust'
- }

```

```

> ----- end _get_diopts -----
- local cformat ``s(cformat)'
= local cformat `"'
- local sformat ``s(sformat)'
= local sformat `"'

```

```

- local pformat ``s(pformat)''
= local pformat ``''
- _get_eformopts , eformopts(`options') allowed(__all__) sopti
> ons
= _get_eformopts , eformopts() allowed(__all__) soptions
_____
> _____ begin _get_eformopts _____
- version 8.0
- syntax [, eformopts(string asis) soptions ALLOWed(string)
> ]
- local 0 , `eformopts'
= local 0 ,
- local EFALL NOHR hr NOSHR shr or IRr RRr tr TRatio
- if ``soptions'' != "" {
= if "soptions" != "" {
- syntax [, EForm1(passthru) EForm `EFALL' * ]
= syntax [, EForm1(passthru) EForm NOHR hr NOSHR shr or IRr
> RRr tr TRatio * ]
- local opts ``options''
= local opts ``''
- local 0 , `eform1' `eform' `nohr' `hr' `noshr' `shr' `or'
> `irr' `rrr' `tr' `tratio'
= local 0 ,
- }
- if ``allowed'' == "__all__" {
= if "__all__" == "__all__" {
- local allowed `EFALL'
= local allowed NOHR hr NOSHR shr or IRr RRr tr TRatio
- }
- foreach ef of local allowed {
- capture confirm name `ef'
= capture confirm name NOHR
- if _rc {
di as err ``ef' is not a valid name"
exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr
- }
- capture confirm name `ef'
= capture confirm name hr
- if _rc {
di as err ``ef' is not a valid name"
exit 198
}
- local efopts `efopts' `=lower("`ef'")'

```

```

= local efopts nohr hr
- }
- capture confirm name `ef'
= capture confirm name NOSHr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
  }
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr
- }
- capture confirm name `ef'
= capture confirm name shr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
  }
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr
- }
- capture confirm name `ef'
= capture confirm name or
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
  }
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or
- }
- capture confirm name `ef'
= capture confirm name IRr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
  }
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr
- }
- capture confirm name `ef'
= capture confirm name RRr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
  }
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr rrr

```



```

= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- if ```eform1'``'=="Odds ratio" {
= if `''''=="Odds ratio" {
    local eform_cons_ti = "Odds"
    local eform_cons_note = "odds ratios"
}
- else if ```eform1'``'=="Haz. ratio" {
= else if `''''=="Haz. ratio" {
    local eform_cons_ti = "Hazard"
    local eform_cons_note = "hazard ratios"
}
- else if ```eform1'``'=="Time ratio" {
= else if `''''=="Time ratio" {
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
}
- else if ```eform1'``'=="IRR" {
= else if `''''=="IRR" {
    local eform_cons_ti = "Inc. rate"
    local eform_cons_note = "incidence-rate ratios"
    local eform_cons_ti2 = "incidence rate"
}
- else if ```eform1'``'=="Risk ratio" {
= else if `''''=="Risk ratio" {
    local eform_cons_ti = "Risk"
    local eform_cons_note = "risk ratios"
}
- else if ```eform1'``'=="Hlth ratio" {
= else if `''''=="Hlth ratio" {
    local eform_cons_ti = "Health"
    local eform_cons_note = "health ratios"
}
- local k : list sizeof eform
- if `k' {
= if 0 {
    opts_exclusive "`eform'"
    if `:length local eform1' {
    opts_exclusive "eform() `eform'"
    }
}
- if `k' {
= if 0 {

```

```

if ("`eform`"=="eform") local eform1 = "exp(b)"
else if ("`eform`"=="hr") {
  local eform1 = "Haz. ratio"
  local eform_cons_ti = "Hazard"
  local eform_cons_note = "hazard ratios"
}
else if ("`eform`"=="shr") {
  local eform1 = "SHR"
  local eform_cons_ti = "Subhazard"
  local eform_cons_note = "subhazard ratios"
}
else if ("`eform`"=="tr") {
  local eform1 = "Time ratio"
  local eform_cons_ti = "Time"
  local eform_cons_note = "time ratios"
}
else if ("`eform`"=="tratio") {
  local eform1 = "Time ratio"
  local eform_cons_ti = "Time"
  local eform_cons_note = "time ratios"
}
else if ("`eform`"=="or") {
  local eform1 = "Odds ratio"
  if ("`e(cmd)`"=="asclogit" | "`e(cmd)`"=="cmclogit" | "`e(
> cmd)`"=="cmmixlogit" | "`e(cmd)`"=="cmxtmixlogit" ) {
    local eform_cons_ti = "Rel. risk"
    local eform_cons_note = "relative-risk ratios"
    local eform_cons_ti2 = "relative risk"
  }
  else {
    local eform_cons_ti = "Odds"
    local eform_cons_note = "odds ratios"
  }
}
else if ("`eform`"=="irr") {
  local eform1 = "IRR"
  local eform_cons_ti = "Inc. rate"
  local eform_cons_note = "incidence-rate ratios"
  local eform_cons_ti2 = "incidence rate"
}
else if ("`eform`"=="rrr") {
  local eform1 = "RRR"
  local eform_cons_ti = "Rel. risk"
  local eform_cons_note = "relative-risk ratios"
  local eform_cons_ti2 = "relative risk"
}

```

```

        else if ("`eform`"!="nohr") & ("`eform`"!="noshr") {
          local eform1 = upper("`eform`")
        }
      }
    - sreturn clear
    - sreturn local options ``opts``
    = sreturn local options ````
    - sreturn local opt `eform'
    = sreturn local opt
    - sreturn local str `eform1'
    = sreturn local str
    - if ``eform1`` != "" {
    = if ```` != "" {
      sreturn local eform eform("`eform1'")
    }
    - else sreturn local eform ""
    - sreturn local eform_cons_ti `eform_cons_ti'
    = sreturn local eform_cons_ti
    - sreturn local eform_cons_note `eform_cons_note'
    = sreturn local eform_cons_note
    - sreturn local eform_cons_ti2 `eform_cons_ti2'
    = sreturn local eform_cons_ti2
  }
}

> ----- end _get_eformopts -----
- local tr_item = ``s(eform_cons_note)``
= local tr_item = ````
- if inlist("`bmatrix'", "", "e(b)") & "`e(k_eform)'" == "0" {
= if inlist("", "", "e(b)") & "" == "0" {
  local eform
}
- else local eform ``s(str)``
= else local eform ````
- local eform_cons_ti ``s(eform_cons_ti)``
= local eform_cons_ti ````
- local eform_cons_ti2 ``s(eform_cons_ti2)``
= local eform_cons_ti2 ````
- if ("`e(consonly)'"!="1" | ``eform_cons_ti""=="") {
= if ("!="1" | ``""=="") {
  - local eformdi ``s(str)``
  = local eformdi ````
  - }
- else {
  local eformdi ``eform_cons_ti``
  local tr_item = cond(missing("`eform_cons_ti2'"), strlower(`
> "`eform_cons_ti'"), ``eform_cons_ti2'")
}

```

```

- local coefttl = cond("`eform`"=="", "`coef`title'", "`
> eformdi'")
= local coefttl = cond("`"=="", "", "")
- local options `s(options)'
= local options ""
- _get_diparmopts, diparmopts(`options') level(`level')
= _get_diparmopts, diparmopts() level(95)


---


> 

---

 begin _get_diparmopts 

---


- if _caller() < 8.2 {
  _get_diparmopts_8 `0'
  exit
}
- version 9
- local version : di "version " string(_caller()) ":"
- syntax [, diparmopts(string asis) EXECute soptions bottom
> plus SYNTAXonly * ]
- local goptions `options'
= local goptions level(95)
- SpliceGlobals junk , `goptions'
= SpliceGlobals junk , level(95)


---


> 

---

 begin _get_diparmopts.SpliceGlobals 

---


- syntax name(id="macro name" name=c_diparm) [, diparm(str
> ing asis) Level(cilevel) dof(passthru) syntaxonly ]
- if "`dof'" == "" & "`e(df_r)'" != "" {
= if "" == "" & "`138'" != "" {
- capture confirm integer number `e(df_r)'
= capture confirm integer number 138
- if !c(rc) {
- local gdof dof(`e(df_r)')
= local gdof dof(138)
- }
- capture
- }
- else local gdof "`dof'"
= else local gdof ""
- local glevel `level'
= local glevel 95
- local lopt level(`glevel')
= local lopt level(95)
- if (`diparm'" == "") exit
= if ("" == "") exit


---


> 

---

 end _get_diparmopts.SpliceGlobals 

---


- local 0 "", `diparmopts'

```

```

= local 0 `", ""
- local diparmopts
- local k 0
- syntax [, diparm(string asis) * ]
- while ``"diparm"" != "" {
= while `"" != "" {
    local ++k
    local single 1
    local after
    capture _on_colon_parse `diparm'
    if !c(rc) {
        local single 0
        local diparm ``"s(before)""
        local after ``"s(after)""
    }
    capture
    SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `gopt

> ions'

    local diparm`k' ``"diparm""
    local diparmopts ``"diparmopts' : `diparm""
    if `single' | ``":list retok after"" == "" {
        local 0 `", `options""
        syntax [, diparm(string asis) * ]
    }
    else {
        local diparm ``"after""
    }
}

- if ``"soptions"" == "" {
= if `"" == "" {
- syntax [, diparm(string asis) ]
- }
- if ("`execute" == "") {
= if ("" == "") {
- sreturn clear
- sreturn local options ``"options""
= sreturn local options `""
- sreturn local diparm ``"diparmopts""
= sreturn local diparm `""
- forval i = 1/`k' {
= forval i = 1/0 {
    sreturn local diparm`i' ``"diparm`i'""
}
- sreturn local k `k'
= sreturn local k 0
- exit

```

>

 end _get_diparmopts

```
- local NODIPARM : length local nodiparm
- if `NODIPARM' {
= if 8 {
- local options
- }
- local GTOPTS parse(":") bind quotes
- local k 0
- if !`NODIPARM' {
= if !8 {
  if ``e(diparm)'' != "" {
    local i 0
    local diparm ``e(diparm)''
  }
  else if ``e(diparm1)'' != "" {
    local i 1
    local diparm ``e(diparm1)''
  }
  while `:length local diparm' {
    gettoken diparm rest : diparm, `GTOPTS'
    while `:length local rest' {
      local ++k
      local diparm`k' : copy local diparm
      gettoken COLON rest : rest, `GTOPTS'
      gettoken diparm rest : rest, `GTOPTS'
    }
    local ++k
    local diparm`k' : copy local diparm
    local ++i
    local diparm ``e(diparm`i)''
  }
}
- if `:length local options' {
= if 0 {
  local 0 `", `options''
  syntax [, diparm(string asis) *]
  if `k' & `:length local diparm' {
    local ++k
    local diparm`k' __sep__
  }
  while `:length local diparm' {
    gettoken diparm rest : diparm, `GTOPTS'
    while `:length local rest' {
      local ++k
      local diparm`k' : copy local diparm
```

```

    gettoken COLON rest : rest, `GTPTS'
    gettoken diparm rest : rest, `GTPTS'
  }
  local ++k
  local diparm`k' : copy local diparm
  local 0 `", `options'""
  syntax [, diparm(string asis) *]
}
}
- if "`markdown'" != "" {
= if "" != "" {
  local lsize = c(linesize)
  set linesize 255
}
- `vv' mata: _coef_table()
= version 11, missing: mata: _coef_table()
}

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options, fwrap(1)
}

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPvalues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPvalues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "
}

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```



```

= local opts
- local n 0
- while ``opts'' != "" {
= while `''` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `''` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `''` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```

```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }

> ----- end opts_exclusive -----
    - local K : list sizeof namelist

```

```

- gettoken c_diopts c_opts : namelist
- opts_exclusive ""`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `""`opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive ""`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `""`opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive ""`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if ``allbaselevels'`baselevels' == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if ``emptycells' == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if ``omitted' == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
}

```

```

- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'

```

```

= Wrapon ,


---


> 

---

 begin _get_diopts.Wrapon 

---


- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}


---


> 

---

 end _get_diopts.Wrapon 

---


- if "`fvwrap'" != "" {
= if "fvwrap(1)" != "" {
- FVWrap, `fvwrap'
= FVWrap, fvwrap(1)


---


> 

---

 begin _get_diopts.FVWrap 

---


- syntax, fvwrap(integer)
- if `fvwrap' < 0 {
= if 1 < 0 {
  di as err "{p}invalid option {bf:fvwrap(`fvwrap')}); "

```



```

> "nonnegative integer required{p_end}"
      exit 198
    }
  }
end _get_diopts.FVWrap

> ----- end _get_diopts.FVWrap -----
- }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `a
> bbrev'

      = c_local diopts                                fvwrap(1)
      - if `K' == 2 {
      = if 2 == 2 {
      - c_local `c_opts' ``options'''
      = c_local options `'''
      - }
      - sreturn local coding `coding'
      = sreturn local coding
      - sreturn local versus `versus'
      = sreturn local versus
      - sreturn local compare `compare'
      = sreturn local compare
      - sreturn local level `level'
      = sreturn local level 95
    }
  }
end _get_diopts.GetDiopts

> ----- end _get_diopts.GetDiopts -----
- c_local `name1' ``diopts'''
= c_local __00000D ``fvwrap(1)'''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_k = s(k)
- }
- sreturn clear
- GetDiopts DEFAULT
}

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)

```

```

> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---



```

```

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
= local baselevels
    - local emptycells `emptycells' `noemptycells'
= local emptycells
    - local omitted `omitted' `noomitted'
= local omitted
    - local lstretch `lstretch' `nolstretch'
= local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
    - local abbrev `abbrev' `noabbrev'
= local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
    - if c(showbaselevels) == "all" {
        local allbaselevels allbaselevels
    }
}

```

```

- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {

```



```

        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat ``pformat''
    local pformat `pformat(pformat)''
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {

```

```

        = if 0 {
            c_local fvwrapon fvwrapon(`fvwrapon')
        }
    }
> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options'
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
    }
> ----- end _get_diopts.GetDiopts -----
    - if ``name2' == "" {
    = if `'' == "" {
    - GetDiopts DUPS, `options'
    = GetDiopts DUPS,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGENd cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV

    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW

```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```



```

- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')"'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')"'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat')"'
  }
}

```

```

- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

```

```

        = c_local DUPS
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95

```

```

> _____ end _get_diopts.GetDiopts _____
        - }
        - else {
            GetDiopts DUPS options, `options'
            c_local `name2' ``options''
        }
        - local DUPS : list DUPS - DEFAULT
        - gettoken DUPS : DUPS
        - if ``DUPS'' != "" {
        = if `""' != "" {
            if (strpos(`DUPS', "(")) {
                gettoken DUPS : DUPS, parse("(")
                local DUPS `DUPS'()'
            }
            di as err "duplicate {bf:`DUPS'} option not allowed"
            exit 198
        }
        - sreturn clear
        - foreach sname of local snames {
            - sreturn local `sname' = ``S_`sname''
        = sreturn local level = `95'
        - }
        - sreturn local `sname' = ``S_`sname''
        = sreturn local k = `0'

```

```

- }


---


> 

---

 end _get_diopts
- if "`markdown'" != "" {
= if "" != "" {
    set linesize `lsize'
  }
- if "`eqselect'" == "" & "`eformnote'" != "noeformnote" {
= if "" == "" & "" != "noeformnote" {
- if "`eformdi'" != "" & ("`e(cmd)'" != "gnbreg" | "`e(prefix)'"
> == "svy") {
= if `"' != "" & ("regress" != "gnbreg" | "" == "svy") {
    local k_eform `e(k_eform)'
    if ("`k_eform'" == "") {
      local k_eform = 1
    }
    local k_eq `e(k_eq)'
    if ("`k_eq'" == "") {
      local k_eq = 1
    }
    if (`k_eform' < `k_eq' & `k_eform') {
      if ("`e(cmd2)'" == "stintreg" | "`e(cmd2)'" == "streg") & ("
> `e(cmd)'" == "weibull" | "`e(cmd)'" == "gompertz") {
      }
      else {
        _eform_multeq_note efnote : `k_eform' ``tr_item'''
        di as txt "`efnote'"
      }
    }
  }
- if ("`eformdi'" != "" & "`e(noconstant)'" == "0" & "`eform_co
> ns_ti'" != "" & "`e(consonly)'" != "1") {
= if (`"' != "" & "" == "0" & `"' != "" & "" != "1") {
    if ("`e(cmd)'" == "asclogit" | "`e(cmd)'" == "cmclogit" | "`e(cm
> d)'" == "cmmixlogit" | "`e(cmd)'" == "cmxtmixlogit" ) {
      local asvar = ``e(ranvars)``e(fixvars)``e(indvars)''' != ""
      if ``e(casevars)''' != "" & `asvar' {
        local note1 "Exponentiated coefficients represent odds ratio
> s for "
        local note2 "alternative-specific variables (first equation)
> and "
        local note3 "{help j_cmrisk##|_new:relative-risk ratios} "
        local note4 "for case-specific variables."
        di as txt "{p 0 6 2}Note: `note1'`note2'`note3'`note4'`p_end
> }"
      }

```

```

    }
    if "`eform_cons_ti'" == "Inc. rate" {
      local eform_cons_note "incidence rate"
    }
    else if "`eform_cons_ti'" == "Rel. risk" {
      local eform_cons_note "relative risk"
    }
    else if "`eform_cons_ti'" == "Health" {
      local eform_cons_note "health (probability of no disease)"
    }
    else {
      local eform_cons_note = strlower("`eform_cons_ti'")
    }
    local eform_cons_note "baseline `eform_cons_note'"
    if ("`e(cmd2)'"=="") {
      local cmd `e(cmd)'
    }
    else {
      local cmd `e(cmd2)'
    }
    local f2 = udsustr("`cmd'",1,2)
    local is_re = ("`f2'"=="xt" | "`f2'"=="me")
    if `is_re' {
      local extranote " (conditional on zero random effects)"
    }
    di as txt "{p 0 6 2}Note: {bf:_cons} estimates " "`eform_con
> s_note'`extranote'" _c
    if ("`e(cmd)'"=="mlogit" | "`e(cmd)'"=="asclogit" | "`e(cmd)
> '"=="cmclogit" | "`e(cmd)'"=="cmmixlogit" | "`e(cmd)'"=="cmxtmixlogit" ) {
      di as txt " for each outcome" _c
    }
    di as txt ".{p_end}"
  }
- }
- return add
- if !`keepmc' {
= if !0 {
- return local mcmethod
- return local mctitle
- }

_____  

> _____ end _coef_table _____  

_____  

> _____ end _return_display _____  

_____  

- mat `b2' = e(b)  

= mat __000009 = e(b)

```

```

- drop `xb'
= drop __000006
- _predict double `xb' `if'
= _predict double __000006 if __000002
- LikePois `y' `xb' `poff' [`weight' `exp'] `if', n(`nobs')
= LikePois piq_timing_max __000006 [] if __000002, n(__000004)

```

```

> ----- begin poisson.LikePois -----
- gettoken y 0 : 0
- gettoken xb 0 : 0
- syntax [fw aw pw iw] [if] , Nobs(string)
- if "`weight'"!="" {
= if ""!="" {
  if "`weight'"=="fweight" {
    local wt `[fw`exp']"
  }
  else if "`weight'"=="iweight" {
    local wt `[iw`exp']"
  }
  else local wt `[aw`exp']"
}
- tempvar lnf
- qui gen double `lnf' = `y'*(`xb')-exp(`xb')-lngamma(`y'+1) `if
> '
= qui gen double __00000D = piq_timing_max*(__000006)-exp(__0000
> 06)-lngamma(piq_timing_max+1) if __000002
- summarize `lnf' `wt' `if', meanonly
= summarize __00000D if __000002, meanonly
- if r(N) != `nobs' { exit }
= if r(N) != __000004 { exit }
- if "`weight'"=="aweight" {
= if ""=="aweight" {
  ret scalar lnf = r(N)*r(mean)
}
- else ret scalar lnf = r(sum)

```

```

> ----- end poisson.LikePois -----
- tempname lnf2
- scalar `lnf2' = r(lnf)
= scalar __00000D = r(lnf)
- }
- if _rc { local lnf2 . }
- if `lnf1'>=. & `lnf1c'>=. & `lnf2'>=. { exit }
= if __00000A>=. & __00000C>=. & __00000D>=. { exit }
- if `lnf2'<.&(`lnf2'>`lnf1'|`lnf1'>=.)&(`lnf2'>`lnf1c'|`lnf1c'>=
> ) {

```

```

        = if __00000D<.&(__00000D>__00000A|__00000A>=.)&(__00000D>__00000C
> |__00000C>=.) {
        - ret matrix b0 `b2'
        = ret matrix b0 __000009
        - exit
    }
}
end poisson.Ipois

- if "`r(b0)'"!="" {
= if "matrix"!=" " {
- tempname from
- mat `from' = r(b0)
= mat __000006 = r(b0)
- }
- }
- if "`from'"!="" {
= if "__000006"!=" " {
- local initopt `"init(`from') search(off)'"
= local initopt `"init(__000006) search(off)'"
- }
- else local initopt "search(on) maxfeas(50)"
- `vv' ml model `mm' `eval' (`yname': `y' = `xvars', `constan' `offo
> pt') [weight`exp'] if `touse', collinear missing max nooutput nopreserve `
> mlopts' title(Poisson regression) `scopt' `robust' `clopt' `initopt' `ll0' `
> negh' `moptobj'
        = version 18, missing: ml model e2 poiss_lf (piq_timing_max: piq_tim
> ing_max = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotem
> berg stky_pr_calvo, ) [] if __000002, collinear missing max nooutput nopres
> erve title(Poisson regression) robust init(__000006) search(off) lf0(1 -4
> 01.5531151051299) negh
    }
}
begin ml

- if _caller()>=11 {
- mopt `0'
= mopt model e2 poiss_lf (piq_timing_max: piq_timing_max = ln_neq
> cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calv
> o, ) [] if __000002, collinear missing max nooutput nopreserve title(Poiss
> on regression) robust init(__000006) search(off) lf0(1 -401.5531151051299)
> negh
    }
}
begin mopt

- local vv : di "version " string(_caller()) ":"
- version 12
- gettoken subcmd 0 : 0, parse(" ,")
- local lcmd : length local subcmd
- if "`subcmd'" == "clear" {
= if "model" == "clear" {

```

```

Clear
exit
}
- if ``subcmd''' == "hold" {
= if ``model''' == "hold" {
  ml_hold `0'
  exit
}
- if ``subcmd''' == "unhold" {
= if ``model''' == "unhold" {
  ml_unhold `0'
  exit
}
- if ``subcmd''' == "score" {
= if "model" == "score" {
  if _caller() > 12 {
    `vv' Score `0'
  }
  else {
    Score `0'
  }
  exit
}
- if ``subcmd''' == "count" {
= if "model" == "count" {
  Count `0'
  exit
}
- if ``subcmd''' == "trace" {
= if "model" == "trace" {
  Trace `0'
  exit
}
- if ``subcmd''' == bsubstr("graph",1,max(2,`lcmd')) {
= if "model" == bsubstr("graph",1,max(2,5)) {
  Graph `0'
  exit
}
- if ``subcmd''' == "init" {
= if "model" == "init" {
  Interactive 0
  `vv' Init `0'
  exit
}
- if ``subcmd''' == bsubstr("maximize",1,max(3,`lcmd')) {
= if "model" == bsubstr("maximize",1,max(3,5)) {

```



```

Interactive 1
`vv' MaxMin maximize `0'
exit
}
- if "`subcmd'" == bsubstr("minimize",1,max(3,`lcmd')) {
= if "model" == bsubstr("minimize",1,max(3,5)) {
Interactive 1
`vv' MaxMin minimize `0'
exit
}
- if "`subcmd'" == bsubstr("display",1,max(2,`lcmd')) {
= if "model" == bsubstr("display",1,max(2,5)) {
Display `0'
exit
}
- if "`subcmd'" == bsubstr("footnote",1,max(4,`lcmd')) {
= if "model" == bsubstr("footnote",1,max(4,5)) {
ml_footnote `0'
exit
}
- if "`subcmd'" == "," {
= if "model" == "," {
Display, `0'
exit
}
- if "`subcmd'" == bsubstr("model",1,max(3,`lcmd')) {
= if "model" == bsubstr("model",1,max(3,5)) {
- `vv' capture noi Model `0'
= version 18: capture noi Model e2 poiss_lf (piq_timing_max: pi
> q_timing_max = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_
> rotemberg stky_pr_calvo, ) [] if __000002, collinear missing max nooutput n
> opreserve title(Poisson regression) robust init(__000006) search(off) lf0
> (1 -401.5531151051299) negh

> ----- begin mopt.Model -----
- local version = string(_caller())
- local vv : di "version `version':"
= local vv : di "version 18:"
- version 12
- syntax anything(id="model" name=spec) [if] [in] [fw aw pw iw
> ] [, BRACKET COLLinear MISSing CONTinue lf0(string) INIT(string) CONSTraints
> (string) noCNSNOTes VCE(passthru) NEGh NOPREserve TECHnique(string) ITERID(s
> tring) CRITtype(string) OBS(numlist max=1 >0) TITle(string) WALDtest(integer
> -1) SVY SUBpop(string) SRSSubpop noSVYadjust SCore(passthru) noOUTput noSCV
> ARS GROUP(varname) ITERPROLOG(string) DERIVPROLOG(string) DERIVH(string) DER
> IVSCALE(string) DERIV(string) nrderiv GNWMATrix(string) KAUXiliary(numlist i

```

```

> nt >=0) MAXimize MINimize USERinfo(namelist) PUPDATED Robust CLuster(passth
> u) moptobj(string) USEVIEWS * ]
    - if ``moptobj`` == "" {
    = if `` == "" {
    - Clear

> ----- begin mopt.Clear -----
    - syntax [, NOTANOPTION]
    - capture drop $ML_w
    = capture drop
    - capture drop $ML_samp
    = capture drop
    - capture drop $ML_sample
    = capture drop
    - capture drop $ML_subv
    = capture drop
    - capture drop $ML_grp
    = capture drop
    - mata: Mopt_drop_external()
    - macro drop ML_*

> ----- end mopt.Clear -----
    - }
    - local maxmin `minimize' `maximize'
    = local maxmin maximize
    - opts_exclusive ``maxmin''
    = opts_exclusive "maximize"

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts maximize
    - local n 0
    - while ``opts`` != "" {
    = while "maximize" != "" {
    - local ++n
    - gettoken item`n' opts : opts, bind
    = gettoken item1 opts : opts, bind
    - }
    - while ``opts`` != "" {
    = while `` != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {

```

```

= if 1 < 2 {
- exit
}

> ----- end opts_exclusive -----
- if `:length local maxmin' {
= if 8 {
- local interactive 0
- }
- else local interactive 1
- _get_diparmopts, diparmopts(`options') soptions syntaxonly
= _get_diparmopts, diparmopts(search(off)) soptions syntaxonly
}

> ----- begin _get_diparmopts -----
- if _caller() < 8.2 {
  _get_diparmopts_8 `0'
  exit
}
- version 9
- local version : di "version " string(_caller()) ":"
- syntax [, diparmopts(string asis) EXECute soptions bottom
> plus SYNTAXonly * ]
- local goptions `options'
= local goptions
- SpliceGlobals junk , `goptions'
= SpliceGlobals junk ,
}

> ----- begin _get_diparmopts.SpliceGlobals -----
- syntax name(id="macro name" name=c_diparm) [, diparm(str
> ing asis) Level(cilevel) dof(passthru) syntaxonly ]
- if ``dof''' == "" & ``e(df_r)''' != "" {
= if `''' == "" & ``138''' != "" {
- capture confirm integer number `e(df_r)'
= capture confirm integer number 138
- if !c(rc) {
- local gdof dof(`e(df_r)')
= local gdof dof(138)
- }
- capture
- }
- else local gdof ``dof'''
= else local gdof `'''
- local glevel `level'
= local glevel 95
- local lopt level(`glevel')
= local lopt level(95)
- if (``diparm''' == "") exit

```

```

= if (``'' == '') exit
> ----- end _get_diparmopts.SpliceGlobals -----
- local 0 `", `diparmopts''
= local 0 `", search(off)''
- local diparmopts
- local k 0
- syntax [, diparm(string asis) * ]
- while ```diparm'' != '' {
= while `'' != '' {
    local ++k
    local single 1
    local after
    capture _on_colon_parse `diparm'
    if !c(rc) {
        local single 0
        local diparm ```s(before)''
        local after ```s(after)''
    }
    capture
    SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `gopt
> ions'

    local diparm`k' ```diparm''
    local diparmopts ```diparmopts' : `diparm''
    if `single' | ```:list retok after'' == '' {
        local 0 `", `options''
        syntax [, diparm(string asis) * ]
    }
    else {
        local diparm ```after''
    }
}
- if ```soptions'' == '' {
= if ``soptions'' == '' {
    syntax [, diparm(string asis) ]
}
- if (``execute'' == '') {
= if ("" == "") {
- sreturn clear
- sreturn local options ```options''
= sreturn local options ``search(off)''
- sreturn local diparm ```diparmopts''
= sreturn local diparm `''
- forval i = 1/`k' {
= forval i = 1/0 {
    sreturn local diparm`i' ```diparm`i''

```

```

    }
    - sreturn local k `k'
    = sreturn local k 0
    - exit
}
end _get_diparmopts
>
- forval k = 1/`s(k)' {
= forval k = 1/0 {
    local diparm`k' ``s(diparm`k)'''
}
- local ndiparm `s(k)'
= local ndiparm 0
- local options ``s(options)'''
= local options ``search(off)'''
- if `interactive' & `:length local options' {
= if 0 & 11 {
    local 0 , `options'
    syntax [, NOTANOPTION]
}
- if `:length local nopreserve' | `:length local score' {
= if 10 | 0 {
    - global ML_preserve no
    - }
    - else global ML_preserve yes
    - gettoken evaltype spec : spec
    - confirm name `evaltype'
    = confirm name e2
    - gettoken evaluator spec : spec
    - global ML_evaltype : copy local evaltype
    - if `:length local srssubpop' {
    = if 0 {
        local 0 , srssubpop
        syntax [, NONOPTION]
        exit 198
    }
    - if `:length local subpop' {
    = if 0 {
        local svy svy
    }
    - if `:length local svy' {
    = if 0 {
        opts_exclusive ``vce' `svy''' vce
        if `:length local weight' {
            di as err "svy option not allowed with weights"
            exit 198
        }
    }
}

```

```

        global ML_noadj : copy local svyadjust
    }
    - global ML_svy : copy local svy
    - if _caller() >= 15 & c(userversion) >= 15 {
    - local fparm "", freeparm"
    - }
    - local eqspec : copy local spec
    - local ieq 0
    - while `:length local eqspec' {
    = while 126 {
    - local ++ieq
    - gettoken eq eqspec : eqspec, bind
    - if bsubstr(trim("`eq'"),1,1) == "/" {
    = if bsubstr(trim("(piq_timing_max: piq_timing_max = ln_neq cb
> _authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo,
>   )"),1,1) == "/" {
        local eq = bsubstr(trim("`eq'"),2,.)
        local spec : subinstr local spec "/"`eq'"" "("(`eq'":`fparm')"
> ', word
    }
    - else {
    - gettoken p1 p2 : eq, parse("()")
    - local p2 = trim("`p2'")
    = local p2 = trim("`piq_timing_max: piq_timing_max = ln_neq cb
> _authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo,
>   )")
    - if bsubstr("`p2'",1,1) == "," {
    = if bsubstr("piq_timing_max: piq_timing_max = ln_neq cb_autho
> rs_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo,   )",1
> ,1) == "," {
        gettoken comma p2 : p2, parse(",")
        local p2 = trim("`p2'")
    }
    - if "`p1'`p2'" == "()" {
    = if `(piq_timing_max: piq_timing_max = ln_neq cb_authors_ext
> estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo,   )" == "()"
> " {
        local spec : subinstr local spec "`eq'" "(eq`ieq':)", word
    }
    - }
    - }
    - while `:length local eqspec' {
    = while 3 {
    - local ++ieq
    - gettoken eq eqspec : eqspec, bind
    - if bsubstr(trim("`eq'"),1,1) == "/" {

```

```

= if bsubstr(trim("[]"),1,1) == "/" {
  local eq = bsubstr(trim("`eq'"),2,.)
  local spec : subinstr local spec "/"`eq'"" `("`eq'":`fparm')"
> ', word
}
- else {
- gettoken p1 p2 : eq, parse("(")
- local p2 = trim("`p2'")
= local p2 = trim("")
- if bsubstr("`p2'",1,1) == "," {
= if bsubstr("",1,1) == "," {
  gettoken comma p2 : p2, parse(",")
  local p2 = trim("`p2'")
}
- if "`p1'`p2'" == "(" {
= if "`[]" == "(" {
  local spec : subinstr local spec "`eq'" "(eq`ieq':)", word
}
- }
- }
- while `:length local eqspec' {
= while 0 {
  local ++ieq
  gettoken eq eqspec : eqspec, bind
  if bsubstr(trim("`eq'"),1,1) == "/" {
    local eq = bsubstr(trim("`eq'"),2,.)
    local spec : subinstr local spec "/"`eq'"" `("`eq'":`fparm')"
> ', word
}
else {
  gettoken p1 p2 : eq, parse("(")
  local p2 = trim("`p2'")
  if bsubstr("`p2'",1,1) == "," {
    gettoken comma p2 : p2, parse(",")
    local p2 = trim("`p2'")
  }
  if "`p1'`p2'" == "(" {
    local spec : subinstr local spec "`eq'" "(eq`ieq':)", word
  }
}
}
- if `interactive' {
= if 0 {
  SetGlobalVar ML_sample : _MLtua
}
- else {

```

```

- global ML_sample : tempvar
- if ``moptobj''' != "" {
= if `''' != "" {
    global ML_sample `moptobj'$ML_sample
    }
- }
- if ``moptobj''' != "" {
= if `''' != "" {
    cap drop $ML_sample
    }
- `vv' mark $ML_sample `if' `in' [`weight'`exp'], `zeroweight'
= version 18: mark __000007 if __000002 [],
- tempname eqlist
- `eqlist' = _eqlist.new, eqopts(NOCONSTant FREEParam) eqargo
> pts(OFFset EXPosure) noneedvarlist numdepvars(0) needequal
    = __000008 = _eqlist.new, eqopts(NOCONSTant FREEParam) eqargo
> pts(OFFset EXPosure) noneedvarlist numdepvars(0) needequal
    -class {
    -instance:
    -      array          n_depvars
    -      string          needequal
    -      string          noneedvarlist
    -      string          wtypes
    -      string          collinear
    -      string          nocons
    -      string          nocons_ignore
    -      double          n_eq
    -      string          gl_if
    -      string          gl_in
    -      string          gl_wgt
    -      string          gl_options
    -      _optlist        eq_opts_allowed
    -class {
    -instance:
    -      array options    = {}
    -      array names      = {}
    -}
    -      array          eq_list
    -      _optlist        mark_opts
    -      array          mark_list
    -      array          mark_name
    -      _optlist        smark_opts
    -      array          smark_list
    -      array          smark_name
    -      _optlist        rmcoll_opts
    -      array          rmcoll_list

```



```

-      array      rmcoll_name
-      _optlist   rmdcoll_opts
-      array      rmdcoll_list
-      array      rmdcoll_name
-}

```

```

> ----- begin _eqlist.new -----
- version 9.2
- ._init

```

```

> ----- begin _eqlist._init -----
- version 9.2
- .n_eq = 0
- .gl_if = ""
- .gl_in = ""
- .gl_wgt = ""
- .gl_options = ""
- .eq_list = {}

```

```

> ----- end _eqlist._init -----
- ._setup `0'
= ._setup , eqopts(NOCONSTant FREEParam) eqargopts(OFFset EXP
> osure) noneedvarlist numdepvars(0) needequal

```

```

> ----- begin _eqlist._setup -----
- version 9.2
- .mark_list = {}
- .mark_name = {}
- .mark_opts.reset

```

```

> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}

```

```

> ----- end _optlist.reset -----
- .smark_list = {}
- .smark_name = {}
- .smark_opts.reset

```

```

> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}

```

```

> ----- end _optlist.reset -----

```

```

- .rmcoll_list = {}
- .rmcoll_name = {}
- .rmcoll_opts.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- .rmdcoll_list = {}
- .rmdcoll_name = {}
- .rmdcoll_opts.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- syntax [, EQopts(namelist) EQARGopts(namelist) noNEEDVAR
> LIST COMMONopts(string asis) MARKopts(namelist) SMARKopts(namelist) RMCOLLop
> ts(namelist) RMDCOLLOpts(namelist) NUMDEPvars(numlist integer >=0) NEEDEQUAL
> WYPES(string) IGNORENOCONS ]
- .eq_opts_allowed.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- foreach opt of local eqopts {
- .eq_opts_allowed.addopt `opt'
= .eq_opts_allowed.addopt NOCONStant
_____
> _____ begin _optlist.addopt _____
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("NOCONStant")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"

```

```

        = .options.Arrpush "NOCONSTant"
        - .names.Arrpush "`mname'"
        = .names.Arrpush "noconstant"
    _____
> _____ end _optlist.addopt _____
    - }
    - .eq_opts_allowed.addopt `opt'
    = .eq_opts_allowed.addopt FREEParam
    _____
> _____ begin _optlist.addopt _____
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("FREEParam")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
    }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "FREEParam"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "freeparm"
    _____
> _____ end _optlist.addopt _____
    - }
    - foreach opt of local eqargopts {
    - .eq_opts_allowed.addopt `opt', passthru
    = .eq_opts_allowed.addopt OFFset, passthru
    _____
> _____ begin _optlist.addopt _____
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("OFFset")
    - if "`passthru'" != "" {
    = if "passthru" != "" {
        - local optspec `optspec'(passthru)
        = local optspec OFFset(passthru)
    }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "OFFset(passthru)"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "offset"
    _____
> _____ end _optlist.addopt _____
    - }

```

```

- .eq_opts_allowed.addopt `opt', passthru
= .eq_opts_allowed.addopt EXPosure, passthru

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("EXPosure")
- if "`passthru'" != "" {
= if "passthru" != "" {
- local optspec `optspec'(passthru)
= local optspec EXPosure(passthru)
- }
- .options.Arrpush "`optspec'"
= .options.Arrpush "EXPosure(passthru)"
- .names.Arrpush "`mname'"
= .names.Arrpush "exposure"

```

```

> ----- end _optlist.addopt -----
- }
- local i 0
- foreach opt of local markopts {
  .mark_opts.addopt `opt', passthru
}
- local i 0
- foreach opt of local smarkopts {
  .smark_opts.addopt `opt', passthru
}
- local i 0
- foreach opt of local rmcollopts {
  .rmcoll_opts.addopt `opt', passthru
}
- local i 0
- foreach opt of local rmdcollopts {
  .rmdcoll_opts.addopt `opt', passthru
}
- .n_depvars.Arrdropall
- if "`numdepvars'" != "" {
= if "0" != "" {
- foreach ndep of local numdepvars {
- .n_depvars.Arrpush `ndep'
= .n_depvars.Arrpush 0
- }
- }
- else .n_depvars.Arrpush 1
- .needequal = "`needequal'"

```

```

        = .needequal = "needequal"
        - .wtypes = "`wtypes'"
        = .wtypes = ""
        - .needvarlist = "`needvarlist'"
        = .needvarlist = "needvarlist"
        - .nocons_ignore = "`ignorenocons'"
        = .nocons_ignore = ""
    _____
> _____ end _eqlist._setup _____
    _____
> _____ end _eqlist.new _____
        - `eqlist'.parse `spec'
        = .__000008.parse (piq_timing_max: piq_timing_max = ln_neq cb
> _authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo,
> ) []
    _____
> _____ begin _eqlist.parse _____
        - version 9.2
        - ._init
    _____
> _____ begin _eqlist._init _____
        - version 9.2
        - .n_eq = 0
        - .gl_if = ""
        - .gl_in = ""
        - .gl_wgt = ""
        - .gl_options = ""
        - .eq_list = {}
    _____
> _____ end _eqlist._init _____
        - local MARKOPTLIST ```.mark_opts.dumpoptions'''
    _____
> _____ begin _optlist.dumpoptions _____
        - version 9
        - forval i = 1/`.options.arnels' {
        = forval i = 1/0 {
            local optlist `optlist' `.options['i']'
        }
        - local optlist : list uniq optlist
        - sreturn local optlist ``optlist'''
        = sreturn local optlist `'''
        - class exit ``optlist'''
        = class exit `'''
    _____
> _____ end _optlist.dumpoptions _____
        = local MARKOPTLIST `'''

```

```

- local SMARKOPTLIST ```.smark_opts.dumpoptions'''


---


> 

---

 begin _optlist.dumpoptions 

---


- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''


---


> 

---

 end _optlist.dumpoptions 

---


= local SMARKOPTLIST `'''
- local RMCOLLOPTLIST ```.rmcoll_opts.dumpoptions'''


---


> 

---

 begin _optlist.dumpoptions 

---


- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''


---


> 

---

 end _optlist.dumpoptions 

---


= local RMCOLLOPTLIST `'''
- local RMDCOLLOPTLIST ```.rmdcoll_opts.dumpoptions'''


---


> 

---

 begin _optlist.dumpoptions 

---


- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''


---



```

```

> ----- end _optlist.dumpoptions -----
      = local RMDCOLLOPTLIST `"'
      - _parse expand EQ GL : 0, gweight common( `MARKOPTLIST' `SM
> ARKOPTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLLlinear )
      = _parse expand EQ GL : 0, gweight common(      COLLlinear )
      - if `EQ_n' == 0 & ``.noneedvarlist' == "" {
      = if 1 == 0 & "noneedvarlist" == "" {
          syntax varlist
          }
      - local rebind = `EQ_n' == 1
      = local rebind = 1 == 1
      - if `rebind' {
      = if 1 {
          - tokenize ``0'', parse(",()[]")
          = tokenize ``(piq_timing_max: piq_timing_max = ln_neq cb_aut
> hors_ext estimated est_late o.est_early stky_pr_rottemberg stky_pr_calvo, )
> []'', parse(",()[]")
          - local rebind = ``1'' != "(" & ``2'' == "("
          = local rebind = ``( '' != "(" & ``piq_timing_max: piq_timing
> _max = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotember
> g stky_pr_calvo'' == "("
          - }
          - if `rebind' {
      = if 0 {
          while `:length local 0' {
              gettoken tok 0 : 0, parse(" ,") bind match(par)
              if ``par'' == "(" {
                  gettoken nxt : 0
                  local nxt = substr(``nxt'',1,1)
                  if inlist(``nxt'', "#", "|") {
                      local ZERO ``ZERO' (`tok')''
                  }
                  else {
                      local ZERO ``(`ZERO') (`tok') `0''
                      local 0
                  }
              }
              else if inlist(``tok'', "if", "in", ",",) {
                  local ZERO ``(`ZERO') `tok' `0''
                  local 0
              }
              else if inlist(substr(``tok'',1,1), "#", "|") {
                  local ZERO ``ZERO`tok''
              }
              else {
                  local ZERO ``ZERO' `tok''

```

```

    }
    }
    _parse expand EQ GL : ZERO, gweight common( `MARKOPTLIST'
> `SMARKOPTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLlinear )
    }
    - forval i = 1/`EQ_n' {
    = forval i = 1/1 {
    - if `i' <= `.n_depvars.arrnels' {
    = if 1 <= 1 {
    - local ndep = `.n_depvars[`i']'
    = local ndep = 0
    - }
    - .eq_list[`i'] = .eqspec.new, numdepvars(`ndep') `.needequ
> al' `.noneedvarlist' wtypes(`.wtypes') `.nocons_ignore'
    = .eq_list[1] = .eqspec.new, numdepvars(0) needequal noneed
> varlist wtypes()
    -class {
    -instance:
    -      double   n_depvars
    -      double   needequal
    -      double   needvarlist
    -      string   wtypes
    -      string   name
    -      string   depvars
    -      double   hasequal
    -      string   indepvars
    -      string   other_markvars
    -      double   nocons
    -      double   nocons_ignore
    -      string   offset
    -      double   exposure
    -      double   freeparm
    -      string   if
    -      string   in
    -      string   wgt
    -      string   options
    -}

> ----- begin _eqspec.new -----
    - version 9.2
    - syntax [, NUMDEPvars(numlist integer >=0 max=1) NEEDEQUA
> L noNEEDVARLIST WYPES(string) IGNORENOCONS ]
    - .n_depvars = 1
    - if `:list sizeof numdepvars' {
    = if 1 {
    - .n_depvars = `numdepvars'

```



```

= .n_depvars = 0
- }
- .needequal = ("`needequal'" != "")
= .needequal = ("needequal" != "")
- .needvarlist = ("`needvarlist'" == "")
= .needvarlist = ("noneedvarlist" == "")
- .nocons_ignore = ("`ignorenocons'" != "")
= .nocons_ignore = ("" != "")
- .wtypes = "`wtypes'"
= .wtypes = ""

> ----- end _eqspec.new -----
- .eq_list['i'].parse `eq_opts_allowed.objkey':`EQ`i'
= .eq_list[1].parse __key(600002b5c300):piq_timing_max: piq_
> timing_max = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_ro
> temberg stky_pr_calvo

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002b5c300):piq_timing_max: piq_
> timing_max = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_ro
> temberg stky_pr_calvo

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par)
> quotes
- if "`par'" != "" {
= if "" != "" {
local before `("before')"'
}
- if ``before'" == ":" {
= if `__key(600002b5c300)'" == ":" {
sreturn local after ``after'"
exit
}
- while ``COLON'" != ":" & ``after'" != "" {
= while ``'" != ":" & `":piq_timing_max: piq_timing_max
> = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stk
> y_pr_calvo'" != "" {
- gettoken COLON after : after, parse(":") bind match(pa
> r) quotes
- if "`par'" != "" {

```

```

= if "" != "" {
    local before `before' (`COLON')
    local COLON
}
- else if ```COLON'"" != ":" {
= else if `":'"" != ":" {
    local before ```before' `COLON'""
    local COLON
}
- }
- while ```COLON'"" != ":" & ```after'"" != "" {
= while `":'"" != ":" & `piq_timing_max: piqu_timing_max
> = ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rottemberg stky
> y_pr_calvo"" != "" {
    gettoken COLON after : after, parse(":") bind match(pa
> r) quotes

    if "`par'" != "" {
        local before `before' (`COLON')
        local COLON
    }
    else if ```COLON'"" != ":" {
        local before ```before' `COLON'""
        local COLON
    }
}
- if ```COLON'"" != ":" {
= if `":'"" != ":" {
    di as err "" found where ':' expected"
    exit 198
}
- sreturn local before ```before'""
= sreturn local before `__key(600002b5c300)""
- sreturn local after ```after'""
= sreturn local after `piq_timing_max: piqu_timing_max =
> ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rottemberg stky
> _pr_calvo""

-----
> ----- end _on_colon_parse -----
    - local ol `s(before)'
    = local ol __key(600002b5c300)
    - if `:list sizeof ol' {
    = if 1 {
    - local OPTLIST ```.ol'.dumpoptions'""
-----
> ----- begin _optlist.dumpoptions -----
    - version 9

```

```

- forval i = 1/`.options.arnels' {
= forval i = 1/4 {
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm OFFSET(passthru)
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm OFFSET(passthru) EXP
> osure(passthru)
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist ``NOCONSTant FREEParm OFFSET(pas
> sthru) EXPosure(passthru)'''
- class exit ```optlist'''
= class exit ``NOCONSTant FREEParm OFFSET(passthru) EXPo
> sure(passthru)'''
_____
> _____ end _optlist.dumpoptions _____
= local OPTLIST ``NOCONSTant FREEParm OFFSET(passthru) EXP
> osure(passthru)'''
- local OPTNAMES ```.`ol'.dumpnames'''
_____
> _____ begin _optlist.dumpnames _____
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/4 {
- local namelist `namelist' `.names['i']'
= local namelist noconstant
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset exposure
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''

```

```

= sreturn local namelist `noconstant freeparm offset ex
> posure''
- class exit ``namelist''
= class exit `noconstant freeparm offset exposure''
-----
> ----- end _optlist.dumpnames -----
= local OPTNAMES `noconstant freeparm offset exposure''
- local NOCONS constant noconstant
- if ``:list NOCONS & OPTNAMES'' == "" {
= if `noconstant'' == "" {
    local NOCONS noCONStant
    }
- else local NOCONS
- }
- local 0 ``s(after)''
= local 0 `piq_timing_max: piq_timing_max = ln_neq cb_aut
> hors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo''
- if ``.wtypes'' != "" {
= if `'' != "" {
    local wgt "[.wtypes]"
    }
- syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST'
> `NOCONS' *]
= syntax [anything(equalok)] [if] [in] [, NOCONStant FREE
> Parm OFFset(passthru) EXposure(passthru) *]
- local HOLDIF ``if''
= local HOLDIF `''
- local HOLDIN ``in''
= local HOLDIN `''
- if ``wgt'' != "" & ``weight'' != "" {
= if "" != "" & "" != "" {
    local HOLDWGT ``[weight`exp]''
    }
- gettoken NAME REST : anything, parse(":")
- if trim("`NAME'") == ":" {
= if trim("piq_timing_max") == ":" {
    di as err "nothing found where equation name expected"
    exit 198
    }
- if `:list sizeof REST' {
= if 10 {
- if strpos("`NAME'", ":") {
= if strpos("piq_timing_max", ":") {
    capture _msparse `NAME'
    if c(rc) {
    di as err "{bf:`NAME'} invalid equation specification"

```

```

        exit 198
    }
}
- else {
-   ._confirm_eqname `NAME'
=   ._confirm_eqname piq_timing_max
}

> ----- begin _eqspec._confirm_eqname -----
- version 9.2
- capture confirm number `0'
= capture confirm number piq_timing_max
- if (! c(rc)) exit
- local hasdot = strpos(`"0"',".")
= local hasdot = strpos(`"piq_timing_max"',".")
- if `hasdot' {
= if 0 {
    syntax varname(ts)
    exit
}
- capture syntax name(id="equation name")
- if (! c(rc)) exit
}

> ----- end _eqspec._confirm_eqname -----
- }
- local NAME : list retok NAME
- gettoken COLON anything : REST, parse(":")
- }
- else {
    local NAME
}
- gettoken DEPVARS REST : anything, parse("=") bind
- if "`DEPVARS'" == "=" {
= if "piq_timing_max " == "=" {
    local REST : copy local anything
    local DEPVARS
}
- if (`:length local DEPVARS' == 0 & `.n_depvars') {
= if (15 == 0 & 0) {
    di as err "nothing found where depvar expected"
    exit 198
}
- if ``"REST"' == "" {
= if `"'= ln_neq cb_authors_ext estimated est_late o.est_ea
> rly stky_pr_rotemberg stky_pr_calvo"' == "" {
    if 0`.needequal' {
    if `.needvarlist' | (`:length local DEPVARS' != 0 & `.n_

```

```

> depvars') {
    di as err "equal sign required to separate depvars from
> indepvars"

    exit 198
  }
  }
  local DEPVARs
  local n_deps : list sizeof anything
  if `n_deps' != 0 | `.needvarlist' {
    if `n_deps' < `.n_depvars' {
      error 102
    }
    forval j = 1/`.n_depvars' {
      gettoken YY anything : anything
      local DEPVARs `DEPVARs' `YY'
    }
    local INDEPVARs : list retok anything
  }
  loca hasequal 0
  }
- else {
- gettoken EQ INDEPVARs : REST, parse("=") bind
- local hasequal 1
- }
- if `:list sizeof DEPVARs' {
= if 1 {
- _fv_check_depvar `DEPVARs'
= _fv_check_depvar piq_timing_max
- tsunab DEPVARs : `DEPVARs'
= tsunab DEPVARs : piq_timing_max
}

> ----- begin tsunab -----
- version 6
- gettoken user 0: 0, parse(" :")
- gettoken colon 0: 0, parse(" :")
- if ``colon'' != ":" { error 198 }
= if ``:"' != ":" { error 198 }
- syntax [varlist(ts default=empty)] [, MIN(integer 1) M
> AX(integer 32000) NAME(string)]
- c_local `user' `varlist'
= c_local DEPVARs piq_timing_max
- local n : word count `varlist'
= local n : word count piq_timing_max
- if `n'>=`min' & `n'<=`max' { exit }
= if 1>=1 & 1<=32000 { exit }

```

```

> ----- end tsunab -----
    - }
    - if `:list sizeof INDEPVARs' {
    = if 7 {
    - fvunab INDEPVARs : `INDEPVARs'
    = fvunab INDEPVARs : ln_neq cb_authors_ext estimated est_
> late o.est_early stky_pr_rotemberg stky_pr_calvo
    -----
> ----- begin fvunab -----
    - version 11
    - _on_colon_parse `0'
    = _on_colon_parse INDEPVARs : ln_neq cb_authors_ext est
> imated est_late o.est_early stky_pr_rotemberg stky_pr_calvo
    -----
> ----- begin _on_colon_parse -----
    - version 8.2
    - sreturn local before ""
    - sreturn local after ""
    - gettoken before after : 0, parse(":") bind match(par
> ) quotes
    - if "`par'" != "" {
    = if "" != "" {
      local before `("`before')"'
    }
    - if ``"before"' == ":" {
    = if `INDEPVARs "' == ":" {
      sreturn local after ``"after"'
      exit
    }
    - while ``COLON'" != ":" & ``"after'" != "" {
    = while `""' != ":" & `": ln_neq cb_authors_ext estim
> ated est_late o.est_early stky_pr_rotemberg stky_pr_calvo"' != "" {
    - gettoken COLON after : after, parse(":") bind match(
> par) quotes
    - if "`par'" != "" {
    = if "" != "" {
      local before `before' (`COLON')
      local COLON
    }
    - else if ``COLON'" != ":" {
    = else if `:"' != ":" {
      local before ``"before' `COLON'"
      local COLON
    }
    - }
    - while ``COLON'" != ":" & ``"after'" != "" {

```

```

= while `":'" != ":" & `"` ln_neq cb_authors_ext estim
> ated est_late o.est_early stky_pr_rotemberg stky_pr_calvo'" != "" {
    gettoken COLON after : after, parse(":") bind match(
> par) quotes
    if "`par'" != "" {
        local before `before' (`COLON')
        local COLON
    }
    else if `""COLON'" != ":" {
        local before `""before' `COLON'"
        local COLON
    }
    }
- if `""COLON'" != ":" {
= if `":'" != ":" {
    di as err ""' found where ':' expected"
    exit 198
    }
- sreturn local before `""before'"
= sreturn local before `INDEPVARs "'
- sreturn local after `""after'"
= sreturn local after `"` ln_neq cb_authors_ext estima
> ted est_late o.est_early stky_pr_rotemberg stky_pr_calvo'"

> _____ end _on_colon_parse _____
- local 0 `""s(before)'"
= local 0 `INDEPVARs "'
- syntax name(id="macro name" name=user)
- local 0 `""s(after)'"
= local 0 `"` ln_neq cb_authors_ext estimated est_late o
> .est_early stky_pr_rotemberg stky_pr_calvo'"
- syntax [varlist(ts fv default=none)] [, MIN(integer 1)
> MAX(integer 32000) NAME(string) ]
- c_local `user' `varlist'
= c_local INDEPVARs ln_neq cb_authors_ext estimated est_
> late o.est_early stky_pr_rotemberg stky_pr_calvo
- local n : list sizeof varlist
- if (`min' <= `n' & `n' <= `max') exit
= if (1 <= 7 & 7 <= 32000) exit

> _____ end fvunab _____
- }
- if inlist("noconstant", "`noconstant'", "`constant'") {
= if inlist("noconstant", "", "") {
    if "`INDEPVARs'" == "" & !`.nocons_ignore' {
        di as err "independent variables are required when optio

```



```

> n noconstant is specified"
    exit 102
  }
  if "`NOCONS'" != "" {
    local options `options' noconstant
  }
  local NOCONS 1
}
- else local NOCONS 0
- if ``offset'`exposure'"" != "" {
= if `""' != "" {
  _check_offset, `offset' `exposure'
  local OFFSET ``s(offset)''
  local EXPOSURE = (`exposure' != "")
  local OTHER `s(offset)'
}
- else local EXPOSURE 0
- local FREEARM = ``freeparm'"" != ""
= local FREEARM = `""' != ""
- local OPTIONS
- local SPACE
- foreach OPTNAME of local OPTNAMES {
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }

```

```

- if ``options'' != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`options''
}
- .name = ``NAME''
= .name = `piq_timing_max'
- .depvars = ``DEPVARs''
= .depvars = `piq_timing_max'
- .hasequal = `hasequal'
= .hasequal = 1
- .indepvars = ``:list retok INDEPVARs''
= .indepvars = `ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rottemberg stky_pr_calvo'
- .other_markvars = ``:list retok OTHER''
= .other_markvars = `''
- .nocons = `NOCONS'
= .nocons = 0
- .if = ``HOLDIF''
= .if = `''
- .in = ``HOLDIN''
= .in = `''
- .wgt = ``HOLDWGT''
= .wgt = `''
- .offset = ``OFFSET''
= .offset = `''
- .exposure = `EXPOSURE'
= .exposure = 0
- .freeparm = `FREEPARM'
= .freeparm = 0
- .options = ``OPTIONS''
= .options = `''

> _____ end _eqspec.parse _____
- }
- local MARKOPLIST ``.mark_opts.dumpoptions''

> _____ begin _optlist.dumpoptions _____
- version 9
- forval i = 1/`.options.arrnels' {
= forval i = 1/0 {
  local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist''
= sreturn local optlist `''
- class exit ``optlist''

```

```

= class exit `""`
-----
> ----- end _optlist.dumpoptions -----
= local MARKOPTLIST `""`
- local MARKOPTNAMES ```.mark_opts.dumpnames'''
-----
> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/0 {
    local namelist `namelist' `names['i']'
}
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `""`
- class exit ``namelist'''
= class exit `""`
-----
> ----- end _optlist.dumpnames -----
= local MARKOPTNAMES `""`
- local OPTLIST1 : subinstr local MARKOPTLIST "(passthru)" "
> (string asis)", all
- local SMARKOPTLIST ```.smark_opts.dumpoptions'''
-----
> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `""`
- class exit ``optlist'''
= class exit `""`
-----
> ----- end _optlist.dumpoptions -----
= local SMARKOPTLIST `""`
- local SMARKOPTNAMES ```.smark_opts.dumpnames'''
-----
> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/0 {
    local namelist `namelist' `names['i']'
}

```

```

- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `'''
- class exit ``namelist'''
= class exit `'''

> ----- end _optlist.dumpnames -----
= local SMARKOPTNAMES `'''
- local OPTLIST1s : substr local SMARKOPTLIST "(passthru)"
> "(string asis)", all
- local RMCOLLOPTLIST ``.rmcoll_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local RMCOLLOPTLIST `'''
- local RMCOLLOPTNAMES ``.rmcoll_opts.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/0 {
local namelist `namelist' `.names['i']'
}
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `'''
- class exit ``namelist'''
= class exit `'''

> ----- end _optlist.dumpnames -----
= local RMCOLLOPTNAMES `'''
- local OPTLIST2 : substr local RMCOLLOPTLIST "(passthru)"
> "(string asis)", all
- local RMDCOLLOPTLIST ``.rmdcoll_opts.dumpoptions'''

```

```

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arrnells' {
    = forval i = 1/0 {
        local optlist `optlist' `.options[`i']'
    }
    - local optlist : list uniq optlist
    - sreturn local optlist ```optlist'''
    = sreturn local optlist `'''
    - class exit ```optlist'''
    = class exit `'''

> ----- end _optlist.dumpoptions -----
    = local RMDCOLLOPTLIST `'''
    - local RMDCOLLOPTNAMES ```.rmdcoll_opts.dumpnames'''

> ----- begin _optlist.dumpnames -----
    - version 9
    - forval i = 1/`.names.arrnells' {
    = forval i = 1/0 {
        local namelist `namelist' `.names[`i']'
    }
    - local namelist : list uniq namelist
    - sreturn local namelist ```namelist'''
    = sreturn local namelist `'''
    - class exit ```namelist'''
    = class exit `'''

> ----- end _optlist.dumpnames -----
    = local RMDCOLLOPTNAMES `'''
    - local OPTLIST3 : substr local RMDCOLLOPTLIST "(passthru)
> " "(string asis)", all
    - local 0 `", `GL_op'''
    = local 0 `", ""
    - syntax [, `OPTLIST1' `OPTLIST1s' `OPTLIST2' `OPTLIST3' COL
> linear noCONSTant * ]
    = syntax [, COLlinear noCONSTant * ]
    - local GL_op ```options'''
    = local GL_op `'''
    - if ```collinear''' != "" {
    = if `''' != "" {
        local GL_op ```GL_op' `collinear'''
        .collinear = ""collinear""
    }
    - if ```constant''' != "" {
    = if `''' != "" {

```

```

        local GL_op ``GL_op' `constant'''
        .nocons = ``constant'''
    }
- local I 0
- foreach OPT of local MARKOPTNAMES {
    if `:list sizeof `OPT'' {
        .mark_list[`++I'] = .eqspec.new, numdep(0) wtypes(`.wtype
> s')

        .mark_list[`I'].parse "" : ``OPT''
        .mark_name.Arrpush ``OPT'''
    }
}
- local I 0
- foreach OPT of local SMARKOPTNAMES {
    if `:list sizeof `OPT'' {
        .smark_list[`++I'] = .eqspec.new, numdep(0) wtypes(`.wtyp
> es')

        .smark_list[`I'].parse "" : ``OPT''
        .smark_name.Arrpush ``OPT'''
    }
}
- local I 0
- foreach OPT of local RMCOLLOPTNAMES {
    if `:list sizeof `OPT'' {
        .rmcoll_list[`++I'] = .eqspec.new, numdep(0) wtypes(`.wty
> pes')

        .rmcoll_list[`I'].parse "" : ``OPT''
        .rmcoll_name.Arrpush ``OPT'''
    }
}
- local I 0
- foreach OPT of local RMDCOLLOPTNAMES {
    if `:list sizeof `OPT'' {
        .rmdcoll_list[`++I'] = .eqspec.new, wtypes(`.wtypes')
        .rmdcoll_list[`I'].parse "" : ``OPT''
        .rmdcoll_name.Arrpush ``OPT'''
    }
}
- .n_eq = `EQ_n'
= .n_eq = 1
- .gl_if = ``GL_if'''
= .gl_if = `'''
- .gl_in = ``GL_in'''
= .gl_in = `'''
- .gl_wgt = ``GL_wt'''
= .gl_wgt = `"[ ]'''

```

```

- .gl_options = ``:list retok GL_op'''
= .gl_options = `'''

> ----- end _eqlist.parse -----
- if ``subpop''' != "" & ``missing''' == "" {
= if "" != "" & "missing" == "" {
  if `interactive' {
    SetGlobalVar ML_samp : _MLtu
  }
  else {
    global ML_samp : tempvar
    if ``moptobj''' != "" {
      global ML_samp `moptobj'$ML_samp
    }
  }
  tempvar markuse
  _svy_setup $ML_sample $ML_samp, svy subpop(`subpop')
  quietly gen byte `markuse' = $ML_samp
}
- else global ML_samp $ML_sample
= else global ML_samp __000007
- if ``collinear''' == "" {
= if "collinear" == "" {
  .`eqlist'.rmcoll $ML_samp, replace `missing'
}
- else if ``missing''' == "" {
= else if "missing" == "" {
  .`eqlist'.markout $ML_samp, replace
}
- if "$ML_samp" != "$ML_sample" {
= if "__000007" != "__000007" {
  `vv' quietly replace $ML_sample = 0 if `markuse' & !$ML_samp
  drop `markuse'
}
- local eq_n = `.`eqlist'.eq count'

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item''' == "count" {
= if "count" == "count" {
  - sreturn local value ``.n_eq'''
= sreturn local value `1'''
  - class exit ``s(value)'''
= class exit `1'''

```

```

> ----- end _eqlist.eq -----
    = local eq_n = 1
    - global ML_n : copy local eq_n
    - global ML_dim = ``.eqlist'.dim'
    -----

> ----- begin _eqlist.dim -----
    - version 9.2
    - syntax
    - local neq = ``.eq count'
    -----

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'" == "count" {
    = if "count" == "count" {
    - sreturn local value ``.n_eq'"
    = sreturn local value ``1'"
    - class exit ``s(value)'"
    = class exit ``1'"
    -----

> ----- end _eqlist.eq -----
    = local neq = 1
    - forval i = 1/`neq' {
    = forval i = 1/1 {
    - local xvarsi ``.eq indepvars `i'"
    -----

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'" == "count" {
    = if "indepvars" == "count" {
    sreturn local value ``.n_eq'"
    class exit ``s(value)'"
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 1 {
    - .eq_list[`idx'].item `item'
    = .eq_list[1].item indepvars
    -----

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - .check_eq_item_name item, `item'
    = .check_eq_item_name item, indepvars
    -----

> ----- begin _eqspec._check_eq_item_name -----

```



```

- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars IND
> EPvars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `w
> gt' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
}
- c_local `c_item' `item'
= c_local item indepvars
_____
> _____ end _eqspec._check_eq_item_name _____
- local value ```.`item'"""
= local value `\"ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rotemberg stky_pr_calvo""
- sreturn local value ```.value'"""
= sreturn local value `\"ln_neq cb_authors_ext estimated
> est_late o.est_early stky_pr_rotemberg stky_pr_calvo""
- class exit ```.value'"""
= class exit `\"ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rotemberg stky_pr_calvo""
_____
> _____ end _eqspec.item _____
- class exit ```.s(value)"""
= class exit `\"ln_neq cb_authors_ext estimated est_late o.
> est_early stky_pr_rotemberg stky_pr_calvo""
_____
> _____ end _eqlist.eq _____
= local xvarsi `\"ln_neq cb_authors_ext estimated est_late o.
> est_early stky_pr_rotemberg stky_pr_calvo""
- local noconsi ```.eq nocons `i'"""
_____
> _____ begin _eqlist.eq _____
- version 9.2
- args item idx
- if ``.item' == "count" {
= if "nocons" == "count" {
    sreturn local value ```.n_eq'"""
    class exit ```.s(value)"""

```

```

    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 1 {
    - .eq_list[`idx'].item `item'
    = .eq_list[1].item nocons
  }
  ----- begin _eqspec.item -----
>
  - version 9.2
  - args item
  - .check_eq_item_name item, `item'
  = .check_eq_item_name item, nocons
  -----
> ----- begin _eqspec._check_eq_item_name -----
  - version 9.2
  - capture syntax name(name=c_item) [, NAME DEPvars IND
> EPvars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTIONS ]
  - if c(rc) error 198
  - if `:list sizeof other' {
  = if 0 {
    local other other_markvars
  }
  - local item `name' `depvars' `indepvars' `if' `in' `w
> gt' `other' `nocons' `offset' `exposure' `freeparm' `options'
  = local item nocons
  - if `:list sizeof item' != 1 {
  = if 1 != 1 {
    error 198
  }
  - c_local `c_item' `item'
  = c_local item nocons
  -----
> ----- end _eqspec._check_eq_item_name -----
  - local value ```.item'''
  = local value ``0'''
  - sreturn local value ``value'''
  = sreturn local value ``0'''
  - class exit ``value'''
  = class exit ``0'''
  -----
> ----- end _eqspec.item -----
  - class exit ``s(value)'''
  = class exit ``0'''
  -----
> ----- end _eqlist.eq -----
  = local noconsi ``0'''
  - local dim = `dim' + `:list sizeof xvars'

```

```

= local dim = + 7
- if "`noconsi'" == "0" {
= if "0" == "0" {
- local ++dim
- }
- }
- sreturn local value ``dim'''
= sreturn local value ``8'''
- class exit ``s(value)'''
= class exit ``8'''

> ----- end _eqlist.dim -----

= global ML_dim = 8
- forval i = 1/`eq_n' {
= forval i = 1/1 {
- local depvars ``eqlist'.eq depvars `i''

> ----- begin _eqlist.eq -----

- version 9.2
- args item idx
- if "`item'" == "count" {
= if "depvars" == "count" {
sreturn local value ``.n_eq'''
class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 1 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item depvars

> ----- begin _eqspec.item -----

- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, depvars

> ----- begin _eqspec._check_eq_item_name -----

- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTIONS ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt

```

```

> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
    = local item depvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item depvars

```

```

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.`item'"""
    = local value `"piq_timing_max"
    - sreturn local value ```.`value'"""
    = sreturn local value `"piq_timing_max"
    - class exit ```.`value'"""
    = class exit `"piq_timing_max"

```

```

> ----- end _eqspec.item -----
    - class exit ```.s(value)"""
    = class exit `"piq_timing_max"

```

```

> ----- end _eqlist.eq -----
    = local depvars piq_timing_max
    - local eq `.`eqlist'.eq name `i'

```

```

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``.item' == "count" {
    = if "name" == "count" {
        sreturn local value ```.n_eq'"""
        class exit ```.s(value)"""
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 1 {
        - .eq_list[`idx'].item `item'
    = .eq_list[1].item name

```

```

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, name

```

```

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2

```

```

- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item name
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
}
- c_local `c_item' `item'
= c_local item name

-----
> ----- end _eqspec._check_eq_item_name -----
- local value ```.item'''
= local value `piq_timing_max'
- sreturn local value ``value'''
= sreturn local value `piq_timing_max'
- class exit ``value'''
= class exit `piq_timing_max'

-----
> ----- end _eqspec.item -----
- class exit ``s(value)'''
= class exit `piq_timing_max'

-----
> ----- end _eqlist.eq -----
= local eq piq_timing_max
- if !`:length local eq' {
= if !14 {
    local eq eq`i'
}
- if `:list eq in eqnames' {
= if 0 {
    di as err "equation ``eq'' multiply defined"
    exit 110
}
- local eqnames `eqnames' `eq'
= local eqnames piq_timing_max
- fvexpand `.`eqlist'.eq indepvars `i' if $ML_samp

-----
> ----- begin _eqlist.eq -----
- version 9.2

```

```

- args item idx
- if "`item'" == "count" {
= if "indepvars" == "count" {
  sreturn local value `"''.n_eq'"
  class exit `"'s(value)'"
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 1 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item indepvars
}

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars
}

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item indepvars
}

> ----- end _eqspec._check_eq_item_name -----
- local value `"''.`item'"
= local value `"ln_neq cb_authors_ext estimated est_late o
> .est_early stky_pr_rotemberg stky_pr_calvo"'
- sreturn local value `"'value'"
= sreturn local value `"ln_neq cb_authors_ext estimated es
> t_late o.est_early stky_pr_rotemberg stky_pr_calvo"'
- class exit `"'value'"
= class exit `"ln_neq cb_authors_ext estimated est_late o.
> est_early stky_pr_rotemberg stky_pr_calvo"'

```

```

> ----- end _eqspec.item -----
    - class exit ``s(value)''
    = class exit ``ln_neq cb_authors_ext estimated est_late o.es
> t_early stky_pr_rottemberg stky_pr_calvo''

> ----- end _eqlist.eq -----
    = fvexpand ln_neq cb_authors_ext estimated est_late o.est_earl
> y stky_pr_rottemberg stky_pr_calvo if __000007
    - if ``r(tsops)'' == "true" {
    = if "" == "true" {
      global ML_preserve no
    }
    - local eq_rhs`i' ``r(varlist)''
    = local eq_rhs1 ``ln_neq cb_authors_ext estimated est_late o.e
> st_early stky_pr_rottemberg stky_pr_calvo''
    - local eq_nocons`i' ``.eqlist'.eq nocons `i''

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'' == "count" {
    = if "nocons" == "count" {
      sreturn local value ``.n_eq''
      class exit ``s(value)''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 1 {
      - .eq_list[`idx'].item `item'
    = .eq_list[1].item nocons

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - .check_eq_item_name item, `item'
    = .check_eq_item_name item, nocons

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
      local other other_markvars
    }

```

```

- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
- local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item nocons
_____
> _____ end _eqspec._check_eq_item_name _____
- local value ```.item'''
= local value `""'
- sreturn local value ``value'''
= sreturn local value `""'
- class exit ``value'''
= class exit `""'
_____
> _____ end _eqspec.item _____
- class exit ``s(value)'''
= class exit `""'
_____
> _____ end _eqlist.eq _____
= local eq_nocons1 0
- local eq_offset`i' `.`eqlist'.eq offset `i'
_____
> _____ begin _eqlist.eq _____
- version 9.2
- args item idx
- if ``item' == "count" {
= if "offset" == "count" {
sreturn local value ``.n_eq'''
class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 1 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item offset
_____
> _____ begin _eqspec.item _____
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, offset
_____
> _____ begin _eqspec._check_eq_item_name _____

```



```

- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item      offset
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
}
- c_local `c_item' `item'
= c_local item offset

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'"""
= local value `""'
- sreturn local value ```.value'"""
= sreturn local value `""'
- class exit ```.value'"""
= class exit `""'

> ----- end _eqspec.item -----
- class exit ```.s(value)"""
= class exit `""'

> ----- end _eqlist.eq -----
= local eq_offset1
- local eq_exposure`i' `.`eqlist'.eq exposure `i'

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "exposure" == "count" {
    sreturn local value ```.n_eq'"""
    class exit ```.s(value)"""
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 1 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item exposure

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, exposure

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item exposure
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
}
- c_local `c_item' `item'
= c_local item exposure

> ----- end _eqspec._check_eq_item_name -----
- local value ```. `item' ""
= local value `""0"
- sreturn local value ```. `value' ""
= sreturn local value `""0"
- class exit ```. `value' ""
= class exit `""0"

> ----- end _eqspec.item -----
- class exit ```. `s(value)' ""
= class exit `""0"

> ----- end _eqlist.eq -----
= local eq_exposure1 0
- local eq_freeparm `i' ``. `eqlist'.eq freeparm `i'

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "" `item' == "count" {

```

```

= if "freeparm" == "count" {
  sreturn local value ```.n_eq'''
  class exit ```s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 1 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item freeparm
}

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, freeparm
}

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEP
> vars IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt
> ' `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item freeparm
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item freeparm
}

> ----- end _eqspec._check_eq_item_name -----
- local value ```.item'''
= local value ``0'''
- sreturn local value ```value'''
= sreturn local value ``0'''
- class exit ```value'''
= class exit ``0'''
}

> ----- end _eqspec.item -----
- class exit ```s(value)'''
= class exit ``0'''
}

```

```

> _____ end _eqlist.eq _____
    = local eq_freeparm1 0
    - local lhs `lhs' `depvars'
    = local lhs piq_timing_max
    - local eq_names `eq_names' `eq'
    = local eq_names piq_timing_max
    - local nxvars :list sizeof eq_rhs`i'
    = local nxvars :list sizeof eq_rhs1
    - local TMP : copy local eq_rhs`i'
    = local TMP : copy local eq_rhs1
    - forval j = 1/`nxvars' {
    = forval j = 1/7 {
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext piq_timing_max:estimated''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext piq_timing_max:estimated piq_timing_max:est_late''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est
> _early''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est
> _early piq_timing_max:stky_pr_rottemberg''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho

```

```

> rs_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est
> _early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo''
- }
- if `eq_freeparm`i'' {
= if 0 {
  if `nxvars` {
    di as err "{it:xvars} not allowed with option {bf:freeparm}"
    exit 198
  }
  if strpos("`eq'", ":") {
    local colna ``colna' /\`eq''
  }
  else {
    local colna ``colna' /:\`eq''
  }
}
- else if !`eq_nocons`i'' {
= else if !0 {
- local colna ``colna' `eq':_cons''
= local colna `` piq_timing_max:ln_neq piq_timing_max:cb_autho
> rs_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est
> _early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_tim
> ing_max:_cons''
- }
- if ``moptobj'' != "" {
= if "" != "" {
  if ``eq_offset`i'' != "" {
    if usubstr("`eq_offset`i'",1,2)=="__" {
      capture clonevar `moptobj'`eq_offset`i' = `eq_offset`i'
      local dropmetoo `dropmetoo' `moptobj'`eq_offset`i'
    }
  }
}
- }
- if ``moptobj'' != "" {
= if "" != "" {
  foreach y of local lhs {
    if usubstr("`y'",1,2)=="__" {
      capture clonevar `moptobj'`y' = `y'
      local tmp `tmp' `moptobj'`y'
      local dropmetoo `dropmetoo' `moptobj'`y'
    }
    else {
      local tmp `tmp' `y'
    }
  }
}

```

```

        local lhs `tmp'
    }
- if `waldtest' > 0 & `:length local lf0' {
= if -1 > 0 & 20 {
    opts_exclusive "waldtest() lf0()"
}
- if `:length local continue' {
= if 0 {
    if !`:length local init' {
        tempname init
        local ub0 `init'
    }
    else tempname ub0
    mat `ub0' = e(b)
    tempname v0 iv0
    mat `v0' = e(V)
    mat `iv0' = syminv(`v0')
    global ML_rank0 = colsof(`v0') - diag0cnt(`iv0')
    if !`:length local lf0' & !missing(e(ll)) {
        local lf0 `=colsof(`ub0')' `e(ll)'
    }
    local ub0
}
- if `:length local init' {
= if 8 {
    - tempname b0
    - local dim : list sizeof colna
    - matrix `b0' = J(1,`dim',0)
    = matrix __000009 = J(1,8,0)
    - matrix colna `b0' = `colna'
    = matrix colna __000009 = piq_timing_max:ln_neq piq_timing_ma
> x:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing
> _max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_cal
> vo piq_timing_max:_cons
    - `vv' _mkvec `b0', from(`init') update first error("initial v
> ector")
    = version 18: _mkvec __000009, from(__000006) update first err
> or("initial vector")

> _____ begin _mkvec _____
    - local vv : display "version " string(_caller()) ":"
    - version 6
    - gettoken matout 0 : 0, parse(", ")
    - if "`matout'"==" | "`matout'"=="," {
= if "__000009"==" | "__000009"=="," {
    error 198

```

```

    }
    - syntax [, FROM(str) UPdate COLnames(str) ERRor(str) FIRST
> ]
    - if "`update'"!="" {
= if "update"!=" {
    - if "`colname'"!="" {
= if ""!=" {
    di in red "update and colnames() cannot both be " "specifi
> ed"
    exit 198
    }
    - capture local colname : colfullnames `matout'
= capture local colname : colfullnames __000009
    - if _rc {
    di in red "matrix `matout' not found"
    exit 111
    }
    - if rowsof(matrix(`matout')) != 1 {
= if rowsof(matrix(__000009)) != 1 {
    di in red "`matout' matrix to be updated must be " "a row
> vector"
    exit 503
    }
    - local matin `matout'
= local matin __000009
    - }
    - if ``error'"!="" {
= if `"initial vector'"!="" {
    - local error ``error': ''
= local error `"initial vector: ''
    - }
    - tempname mat
    - if ``from'"!="" {
= if `__000006'"!="" {
    - From `from'
= From __000006
    _____
> _____ begin _mkvec.From _____
    - gettoken from 0 : 0, parse(",") bind
    - sret clear
    - sret local from `from'
= sret local from __000006
    - if ``0'"!="" {
= if `"'!="" {
    syntax [, COPY SKIP ]
    }

```

```

- sret local copy `copy'
= sret local copy
- sret local skip `skip'
= sret local skip

> ----- end _mkvec.From -----
- local copy `s(copy)'
= local copy
- local skip `s(skip)'
= local skip
- if "`copy'"!="" {
= if ""!="" {
CopyMat `mat' ``error' ``s(from)'
if ``colname'"!="" {
local dim : list sizeof colname
if `dim' != colsof(matrix(`mat')) {
di in red ``error'matrix must '' be dimension '' `dim'
exit 503
}
`vv' mat colnames `mat' = `colname'
}
}
- else {
- `vv' BuildMat `mat' ``error' ``skip' ``s(from)'
= version 18: BuildMat __00000A ``initial vector: '' '' __00

> 0006

> ----- begin _mkvec.BuildMat -----
- local vv : display "version " string(_caller()) ":"
- version 6
- args matall error skip
- macro shift 3
- tokenize ``*'", parse(" =")
= tokenize ``__000006"', parse(" =")
- tempname matadd
- local i 1
- while ``i'"!="" {
= while "__000006'"!="" {
- local k = `i' + 1
= local k = 1 + 1
- if ``k'"=="=" {
= if ""=="=" {
local j = `i' + 2
`vv' MkMat `matadd' ``i' ``j' `skip'
local i = `i' + 3
}
}

```



```

- else {
- ChkMat `matadd' ``i' ``error'
= ChkMat __00000B __000006 `initial vector: '

```

```

> begin _mkvec.ChkMat
- args matout matin error
- capture di matrix(`matin'[1,1])
= capture di matrix(__000006[1,1])
- if _rc {
  capture confirm number `matin'
  if _rc {
    di in red ``error'matrix `matin' not found'
    exit 111
  }
  di in red ``error'list of numbers requires copy optio
> n'

  exit 198
}
- if matrix(rowsof(`matin')!=1 & colsof(`matin')!=1) {
= if matrix(rowsof(__000006)!=1 & colsof(__000006)!=1) {
  di in red ``matin' " matrix(rowsof(`matin')) " x " mat
> rix(colsof(`matin')) " is not a vector"
  exit 503
}
- if matrix(rowsof(`matin')) == 1 {
= if matrix(rowsof(__000006)) == 1 {
- mat `matout' = `matin'
= mat __00000B = __000006
- }
- else mat `matout' = `matin'
= else mat __00000B = __000006'

```

```

> end _mkvec.ChkMat
- local i = `i' + 1
= local i = 1 + 1
- }
- mat `matall' = nullmat(`matall') , `matadd'
= mat __00000A = nullmat(__00000A) , __00000B
- }
- while ``i' != "" {
= while "" != "" {
  local k = `i' + 1
  if ``k' == "" {
    local j = `i' + 2
    `vv' MkMat `matadd' ``i' ``j' `skip'
    local i = `i' + 3

```

```

    }
    else {
        ChkMat `matadd' ``i' ``error'
        local i = `i' + 1
    }
    mat `matall' = nullmat(`matall') , `matadd'
}



---


> ----- end _mkvec.BuildMat -----
    - if ``colname' != "" {
        = if `piq_timing_max:ln_neq piq_timing_max:cb_authors_ext p
> iq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_early p
> iq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timing_max:
> _cons' != "" {
    - `vv' ChkNames `mat' ``matin' ``colname' ``error' ``
> skip' ``first'
        = version 18: ChkNames __00000A "__000009" `piq_timing_max:
> ln_neq piq_timing_max:cb_authors_ext piq_timing_max:estimated piq_timing_max
> :est_late piq_timing_max:o.est_early piq_timing_max:stky_pr_rotemberg piq_ti
> ming_max:stky_pr_calvo piq_timing_max:_cons' `initial vector: ' ' "first
> "



---


> ----- begin _mkvec.ChkNames -----
    - local vv : display "version " string(_caller()) ":"
    - version 6
    - args mat matin names error skip first
    - local dim = colsof(matrix(`mat'))
    = local dim = colsof(matrix(__00000A))
    - if ``first' != "" {
    = if "first' != "" {
    - gettoken name : names
    - local eq1 = bsubstr(`name',1,index(`name',""))
    = local eq1 = bsubstr(`piq_timing_max:ln_neq',1,index(`"
> piq_timing_max:ln_neq',""))
    - }
    - tempname new fill x
    - local k : list sizeof names
    - if ``matin' != "" {
    = if "__000009' != "" {
    - mat `new' = `matin'
    = mat __00000B = __000009
    - }
    - else {
        mat `new' = J(1,`k',0)
        `vv' mat colnames `new' = `names'
    }

```

```

- mat `fill' = J(1,`k',0)
= mat __00000C = J(1,8,0)
- local i 1
- while `i' <= `dim' {
= while 1 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,1..1]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/"`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "_:ln_neq"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/_:ln_neq"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse ln_neq, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'"
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,`_:ln_neq'')
- if `j' == . & ``oname'" != "" {
= if 1 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & ``sspec'" != "" {
= if 1 == . & "/_:ln_neq" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'"=="_" & ``eq1'"!="" {
= if 1==. & ``_"=="_" & ``piq_timing_max:'"!="" {

```

```

        `vv' local j = colnumb(`new',`"'`eq1'`name'")
        if `j' == . & "'`oname'" != "" {
        `vv' local j = colnumb(`new',`"'`eq1'`oname'")
        }
    }
- if `j'!=. {
= if 1!=. {
- if `fill'[1,`j'] {
= if __00000C[1,1] {
    _ms_parse_parts `name'
    if !r(omit) {
    if "'`eq'"=="_" {
    di in red "'`error'duplicate "'`entries for `name' fou
> nd"'

    }
    else di in red "'`error'" "'`duplicate entries for `eq':
> `name' found"'

    exit 507
    }
    else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
    }
    }
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,1] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,1] = __00000A[1,1]
- }
- else if "'`skip'"==" " {
= else if ""==" " {
    if "'`eq'"=="_" {
    local spec : copy local name
    }
    di in red "'`error'extra parameter "'`spec' found"' _
> n "specify skip option if necessary"
    exit 111
    }
- local i = `i' + 1
= local i = 1 + 1
- }
- while `i' <= `dim' {
= while 2 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,2..2]
- local eq : coleq `x'
= local eq : coleq __00000D

```

```

- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "_:cb_authors_ext"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "_:cb_authors_ext"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse cb_authors_ext, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)''
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,`_:cb_authors_ex
> t'')

- if `j' == . & "`oname'" != "" {
= if 2 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & "`sspec'" != "" {
= if 2 == . & "_:cb_authors_ext" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
= if 2==. & ``_'""=="_" & ``piq_timing_max:'""!="" {
    `vv' local j = colnumb(`new',``eq1'`name'')
    if `j' == . & "`oname'" != "" {
      `vv' local j = colnumb(`new',``eq1'`oname'')
    }
  }
- if `j'!=. {
= if 2!=. {
- if `fill'[1,`j'] {

```

```

= if __00000C[1,2] {
  _ms_parse_parts `name'
  if !r(omit) {
    if "`eq'"=="_" {
      di in red `"'error'duplicate "' `"'entries for `name' fou
> nd"'
    }
    else di in red `"'error'"' `"'duplicate entries for `eq':
> `name' found"'
    exit 507
  }
  else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
  }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,2] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,2] = __00000A[1,2]
- }
- else if "`skip'"==" " {
= else if ""==" " {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red `"'error'extra parameter "' `"'`spec' found"' _
> n "specify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 2 + 1
- }
- while `i' <= `dim' {
= while 3 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,3..3]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
  local spec "/"`name'"
}
- else {
- local spec "`eq':`name'"

```

```

= local spec "_:estimated"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "/_:estimated"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse estimated, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)''
    local ospec ``eq':`oname'
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,``_:estimated'')
- if `j' == . & ``oname' != "" {
= if 3 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec' != "" {
= if 3 == . & "/_:estimated" != "" {
  `vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq'=="_" & ``eq1'!="" {
= if 3==. & ``_'=="_" & ``piq_timing_max:'!="" {
  `vv' local j = colnumb(`new',``eq1`name'')
  if `j' == . & ``oname' != "" {
    `vv' local j = colnumb(`new',``eq1`oname'')
  }
}
- if `j'!=. {
= if 3!=. {
- if `fill'[1,`j'] {
= if __00000C[1,3] {
  _ms_parse_parts `name'
  if !r(omit) {
    if "`eq'=="_" {
      di in red ``error'duplicate ' ' `entries for `name' fou
> nd''

    }
    else di in red ``error'' ``duplicate entries for `eq':
> `name' found''

```

```

        exit 507
    }
    else if !missing(`new'[1,`j']) {
        matrix `mat'[1,`i'] = `new'[1,`j']
    }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,3] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,3] = __00000A[1,3]
- }
- else if "`skip'"==" {
= else if ""==" {
    if "`eq'"=="_" {
        local spec : copy local name
    }
    di in red ``error'extra parameter "' ``spec' found"' _
> n "specify skip option if necessary"
    exit 111
}
- local i = `i' + 1
= local i = 3 + 1
- }
- while `i' <= `dim' {
= while 4 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,4..4]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/`name'"
}
- else {
- local spec "`eq':`name'"
= local spec "_:est_late"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "/_:est_late"
- }
- }
- local oname
- local ospec

```



```

- capture _msparse `name', noomit
= capture _msparse est_late, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'''
    local ospec ``eq':`oname'''
  }
- }
- `vv' local j = colnumb(`new',``spec''')
= version 18: local j = colnumb(__00000B,``_:est_late'')
- if `j' == . & ``oname''' != "" {
= if 4 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec''')
}
- if `j' == . & ``sspec''' != "" {
= if 4 == . & "/_:est_late" != "" {
  `vv' local j = colnumb(`new',``sspec''')
}
- if `j'==. & ``eq''''=="_" & ``eq1''''!="" {
= if 4==. & ``_''''=="_" & ``piq_timing_max:''''!="" {
  `vv' local j = colnumb(`new',``eq1''`name''')
  if `j' == . & ``oname''' != "" {
    `vv' local j = colnumb(`new',``eq1''`oname''')
  }
}
- if `j'!=. {
= if 4!=. {
- if `filll'[1,`j'] {
= if __00000C[1,4] {
  _ms_parse_parts `name'
  if !r(omit) {
    if ``eq''''=="_" {
      di in red ``error'duplicate '' ``entries for `name' fou
> nd'''
    }
    else di in red ``error'''' ``duplicate entries for `eq':
> `name' found'''
  }
  exit 507
}
else if !missing(`new'[1,`j']) {
  matrix `mat'[1,`i'] = `new'[1,`j']
}
}
- else mat `filll'[1,`j'] = 1
= else mat __00000C[1,4] = 1
- mat `new'[1,`j'] = `mat'[1,`i']

```

```

= mat __00000B[1,4] = __00000A[1,4]
- }
- else if "`skip'"==" {
= else if ""==" {
    if "`eq'"=="_" {
        local spec : copy local name
    }
    di in red ``error'extra parameter "' ``spec' found"' _
> n "specify skip option if necessary"
    exit 111
}
- local i = `i' + 1
= local i = 4 + 1
- }
- while `i' <= `dim' {
= while 5 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,5..5]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/`name'"
}
- else {
- local spec "`eq':`name'"
= local spec "_:o.est_early"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "/_:o.est_early"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse o.est_early, noomit
- if c(rc) == 0 {
- if r(omit) {
- local oname ``r(stripe)''
= local oname `est_early'
- local ospec "`eq':`oname'"
= local ospec "_:est_early"
- }

```

```

- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,``_:o.est_early''

> )

- if `j' == . & ``oname'' != "" {
= if 5 == . & "est_early" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec'' != "" {
= if 5 == . & "/_:o.est_early" != "" {
  `vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq''=="_" & ``eq1''!="" {
= if 5==. & ``_''=="_" & ``piq_timing_max:''!="" {
  `vv' local j = colnumb(`new',``eq1``name'')
  if `j' == . & ``oname'' != "" {
    `vv' local j = colnumb(`new',``eq1``oname'')
  }
}
- if `j'!=. {
= if 5!=. {
- if `fill'[1,`j'] {
= if __00000C[1,5] {
  _ms_parse_parts `name'
  if !r(omit) {
    if ``eq''=="_" {
      di in red ``error'duplicate '' ``entries for `name' fou
> nd''

    }
    else di in red ``error'' ``duplicate entries for `eq':
> `name' found''

  exit 507
}
else if !missing(`new'[1,`j']) {
  matrix `mat'[1,`i'] = `new'[1,`j']
}
}
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,5] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,5] = __00000A[1,5]
- }
- else if ``skip''=="" {
= else if ""=="" {
  if ``eq''=="_" {
    local spec : copy local name

```

```

    }
    di in red ``error'extra parameter "' ``spec' found" _
> n "specify skip option if necessary"
    exit 111
  }
  - local i = `i' + 1
  = local i = 5 + 1
  - }
  - while `i' <= `dim' {
  = while 6 <= 8 {
  - mat `x' = `mat'[1,`i'..`i']
  = mat __00000D = __00000A[1,6..6]
  - local eq : coleq `x'
  = local eq : coleq __00000D
  - local name : colname `x'
  = local name : colname __00000D
  - if "`eq'" == "/" {
  = if "_" == "/" {
    local spec "/`name'"
  }
  - else {
  - local spec "`eq':`name'"
  = local spec "_:stky_pr_rotemberg"
  - if (usubstr("`eq'",1,1) != "/") {
  = if (usubstr("_",1,1) != "/") {
  - local sspec "/`eq':`name'"
  = local sspec "/_:stky_pr_rotemberg"
  - }
  - }
  - local oname
  - local ospec
  - capture _msparse `name', noomit
  = capture _msparse stky_pr_rotemberg, noomit
  - if c(rc) == 0 {
  - if r(omit) {
    local oname ``r(stripe)'"
    local ospec "`eq':`oname'"
  }
  - }
  - `vv' local j = colnumb(`new',``spec'')
  = version 18: local j = colnumb(__00000B,`_:stky_pr_rotem
> berg'')

  - if `j' == . & "`oname'" != "" {
  = if 6 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }

```

```

- if `j' == . & "`sspec'" != "" {
= if 6 == . & "/_ :stky_pr_rotemberg" != "" {
  `vv' local j = colnumb(`new', "`sspec'")
}
- if `j'==. & "`eq'"=="_" & "`eq1'"!="" {
= if 6==. & "`_"=="_" & "`piq_timing_max:'"!="" {
  `vv' local j = colnumb(`new', "`eq1'`name'")
  if `j' == . & "`oname'" != "" {
    `vv' local j = colnumb(`new', "`eq1'`oname'")
  }
}
- if `j'!=. {
= if 6!=. {
- if `fill'[1,`j'] {
= if __00000C[1,6] {
  _ms_parse_parts `name'
  if !r(omit) {
    if "`eq'"=="_" {
      di in red "`error'duplicate "' `"'entries for `name' fou
> nd"'
    }
    else di in red "`error'"' "duplicate entries for `eq':
> `name' found"'
  }
  exit 507
}
else if !missing(`new'[1,`j']) {
  matrix `mat'[1,`i'] = `new'[1,`j']
}
}
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,6] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,6] = __00000A[1,6]
- }
- else if "`skip'"=="" {
= else if ""=="" {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red "`error'extra parameter "' `"'spec' found"' _
> n "specify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 6 + 1
- }

```

```

- while `i' <= `dim' {
= while 7 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,7..7]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D
- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "_:stky_pr_calvo"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "_:stky_pr_calvo"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse stky_pr_calvo, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)''
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,`_:stky_pr_calvo

> '')

- if `j' == . & "`oname'" != "" {
= if 7 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & "`sspec'" != "" {
= if 7 == . & "_:stky_pr_calvo" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
= if 7==. & ``_'""=="_" & ``piq_timing_max:'""!="" {
    `vv' local j = colnumb(`new',``eq1``name'')
    if `j' == . & "`oname'" != "" {

```

```

        `vv' local j = colnumb(`new', ``eq1'`oname'`)
    }
}
- if `j'!=. {
= if 7!=. {
- if `fill'[1,`j'] {
= if __00000C[1,7] {
    _ms_parse_parts `name'
    if !r(omit) {
        if ``eq'=="_" {
            di in red ``error'duplicate "'`entries for `name' fou
> nd"'
        }
    else di in red ``error'"'`duplicate entries for `eq':
> `name' found"'
        exit 507
    }
    else if !missing(`new'[1,`j']) {
        matrix `mat'[1,`i'] = `new'[1,`j']
    }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000C[1,7] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000B[1,7] = __00000A[1,7]
- }
- else if ``skip'==" " {
= else if ""==" " {
    if ``eq'=="_" {
        local spec : copy local name
    }
    di in red ``error'extra parameter "'`spec' found"' _
> n "specify skip option if necessary"
    exit 111
}
- local i = `i' + 1
= local i = 7 + 1
- }
- while `i' <= `dim' {
= while 8 <= 8 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000D = __00000A[1,8..8]
- local eq : coleq `x'
= local eq : coleq __00000D
- local name : colname `x'
= local name : colname __00000D

```

```

- if "`eq'" == "/" {
= if "_" == "/" {
    local spec "/"`name'
  }
- else {
- local spec "`eq':`name'"
= local spec ":_cons"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/_:_cons"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse _cons, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'''
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000B,``:_cons'')
- if `j' == . & ``oname' != "" {
= if 8 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec' != "" {
= if 8 == . & "/_:_cons" != "" {
  `vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq'=="_" & ``eq1'!="" {
= if 8==. & ``_'=="_" & ``piq_timing_max:'!="" {
  `vv' local j = colnumb(`new',``eq1`name'')
  if `j' == . & ``oname' != "" {
    `vv' local j = colnumb(`new',``eq1`oname'')
  }
}
- if `j'!=. {
= if 8!=. {
- if `fill'[1,`j'] {
= if __00000C[1,8] {
  _ms_parse_parts `name'
  if !r(omit) {

```



```

        if "`eq'"=="_" {
        di in red `"'error'duplicate "' `"'entries for `name' fou
> nd"'
        }
        else di in red `"'error'"' `"'duplicate entries for `eq':
> `name' found"'
        exit 507
        }
        else if !missing(`new'[1,`j']) {
        matrix `mat'[1,`i'] = `new'[1,`j']
        }
        }
        - else mat `fill'[1,`j'] = 1
        = else mat __00000C[1,8] = 1
        - mat `new'[1,`j'] = `mat'[1,`i']
        = mat __00000B[1,8] = __00000A[1,8]
        - }
        - else if "`skip'"==" " {
        = else if ""==" " {
        if "`eq'"=="_" {
        local spec : copy local name
        }
        di in red `"'error'extra parameter "' `"'spec' found"' _
> n "specify skip option if necessary"
        exit 111
        }
        - local i = `i' + 1
        = local i = 8 + 1
        - }
        - while `i' <= `dim' {
        = while 9 <= 8 {
        mat `x' = `mat'[1,`i'..`i']
        local eq : coleq `x'
        local name : colname `x'
        if "`eq'" == "/" {
        local spec "/"`name'"
        }
        else {
        local spec "`eq':`name'"
        if (usubstr("`eq'",1,1) != "/") {
        local sspec "/"`eq':`name'"
        }
        }
        local oname
        local ospec
        capture _msparse `name', noomit

```

```

if c(rc) == 0 {
if r(omit) {
local oname ``r(stripe)''
local ospec ``eq':`oname''
}
}
`vv' local j = colnumb(`new',``spec'')
if `j' == . & ``oname'' != "" {
`vv' local j = colnumb(`new',``ospec'')
}
if `j' == . & ``sspec'' != "" {
`vv' local j = colnumb(`new',``sspec'')
}
if `j'==. & ``eq''=="_" & ``eq1''!="" {
`vv' local j = colnumb(`new',``eq1``name'')
if `j' == . & ``oname'' != "" {
`vv' local j = colnumb(`new',``eq1``oname'')
}
}
if `j'!=. {
if `fill'[1,`j'] {
_ms_parse_parts `name'
if !r(omit) {
if ``eq''=="_" {
di in red ``error'duplicate "' ``entries for `name' fou
> nd''

}
else di in red ``error'' ``duplicate entries for `eq':
> `name' found''

exit 507
}
else if !missing(`new'[1,`j']) {
matrix `mat'[1,`i'] = `new'[1,`j']
}
}
else mat `fill'[1,`j'] = 1
mat `new'[1,`j'] = `mat'[1,`i']
}
else if ``skip''=="" {
if ``eq''=="_" {
local spec : copy local name
}
di in red ``error'extra parameter "' ``spec' found'' _
> n "specify skip option if necessary"
exit 111
}

```

```

        local i = `i' + 1
    }
    - mat `fill' = `fill'*`fill'
    = mat __00000C = __00000C*__00000C
    - sret clear
    - sret local k_fill = `fill'[1,1]
    = sret local k_fill = __00000C[1,1]
    - mat `mat' = `new'
    = mat __00000A = __00000B

```

```

> _____ end _mkvec.ChkNames _____
    - local fill `s(k_fill)'
    = local fill 8
    - }
    - }
    - }
    - else {
        local fill 0
        if "`update'"!="" {
            mat `mat' = `matin'
        }
        else if "`colname'"!="" {
            local dim : list sizeof colname
            mat `mat' = J(1,`dim',0)
            `vv' mat colnames `mat' = `colname'
        }
        else {
            di in red "from() must be specified"
            exit 198
        }
    }
    - sret clear
    - sret local copy `copy'
    = sret local copy
    - sret local skip `skip'
    = sret local skip
    - sret local k = colsof(matrix(`mat'))
    = sret local k = colsof(matrix(__00000A))
    - if "`fill'"!="" {
    = if "8"!="" {
        - sret local k_fill `fill'
    = sret local k_fill 8
    - }
    - else sret local k_fill = colsof(matrix(`mat'))
    = else sret local k_fill = colsof(matrix(__00000A))
    - matrix rename `mat' `matout', replace

```

```

= matrix rename __00000A __000009, replace
> ----- end _mkvec -----
- }
- tempname bomit
- matrix `bomit' = J(1,`:list sizeof colna',0)
= matrix __00000A = J(1,8,0)
- matrix colna `bomit' = `colna'
= matrix colna __00000A = piq_timing_max:ln_neq piq_timing_ma
> x:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing
> _max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_cal
> vo piq_timing_max:_cons
- _ms_omit_info `bomit'
= _ms_omit_info __00000A
- if r(k_omit) | `:length local constraints' {
= if r(k_omit) | 0 {
- nobreak {
- capture noisily break {
- _b_post0 `colna'
= _b_post0 piq_timing_max:ln_neq piq_timing_max:cb_authors_ex
> t piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_earl
> y piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timing_m
> ax:_cons
> ----- begin _b_post0 -----
- version 11
- tempname b V
- local dim : list sizeof 0
- matrix `b' = J( 1,`dim',0)
= matrix __00000B = J( 1,8,0)
- matrix `V' = J(`dim',`dim',0)
= matrix __00000C = J(8,8,0)
- matrix colnames `b' = `0'
= matrix colnames __00000B = piq_timing_max:ln_neq piq_timin
> g_max:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_ti
> ming_max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr
> _calvo piq_timing_max:_cons
- matrix colnames `V' = `0'
= matrix colnames __00000C = piq_timing_max:ln_neq piq_timin
> g_max:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_ti
> ming_max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr
> _calvo piq_timing_max:_cons
- matrix rownames `V' = `0'
= matrix rownames __00000C = piq_timing_max:ln_neq piq_timin
> g_max:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_ti
> ming_max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr

```

```

> _calvo piq_timing_max:_cons
    - ereturn post `b' `V'
    = ereturn post __00000B __00000C
    _____

> _____ end _b_post0 _____
    - local clist : substr local constraints ", " " ", all
    - `vv' makecns `clist', `cnsnotes'
    = version 18: makecns ,
    _____

> _____ begin makecns _____
    - if _caller() < 11 {
      MakeCns `0'
      exit
    }
    - _makecns `0'
    = _makecns ,
    _____

> _____ end makecns _____
    - local constraints ``r(clist)'''
    = local constraints `'''
    - local k_autoCns = e(k_autoCns)
    - tempname C
    - capture matrix `C' = e(Cns)
    = capture matrix __00000B = e(Cns)
    - local rcc = c(rc)
    - }
    - local rc = c(rc)
    - ereturn clear
    - }
    - if (`rc') exit `rc'
    = if (0) exit 0
    - if (`rcc') {
    = if (0) {
      local C
      local k_autoCns
    }
    - }
    - if `:length local constraints' {
    = if 0 {
      local lf0
    }
    - local vce `vce' `robust' `cluster'
    = local vce robust
    - if `:length local vce' {
    = if 6 {
    - _vce_parse, argoptlist(CList) optlist(OIM OPG Robust) old

```

```

> : `wt', `vce'
      = _vce_parse, argoptlist(Cluster) optlist(OIM OPG Robust) old
> : , robust

> ----- begin _vce_parse -----
      - version 10
      - _on_colon_parse `0'
      = _on_colon_parse , argoptlist(Cluster) optlist(OIM OPG Robu
> st) old : , robust

> ----- begin _on_colon_parse -----
      - version 8.2
      - sreturn local before ""
      - sreturn local after ""
      - gettoken before after : 0, parse(":") bind match(par) qu
> otes

      - if "`par'" != "" {
      = if "" != "" {
        local before "`('before')'"
      }
      - if ``"before"' == ":" {
      = if `", argoptlist(Cluster) optlist(OIM OPG Robust) old "
> ' == ":" {

        sreturn local after ``"after"'
        exit
      }
      - while ``"COLON"' != ":" & ``"after"' != "" {
      = while `"' != ":" & `": , robust"' != "" {
      - gettoken COLON after : after, parse(":") bind match(par)
> quotes

      - if "`par'" != "" {
      = if "" != "" {
        local before `before' (`COLON')
        local COLON
      }
      - else if ``"COLON"' != ":" {
      = else if `":' != ":" {
        local before ``"before' `COLON"'
        local COLON
      }
      - }
      - while ``"COLON"' != ":" & ``"after"' != "" {
      = while `":' != ":" & `", robust"' != "" {
        gettoken COLON after : after, parse(":") bind match(par)
> quotes

        if "`par'" != "" {

```

```

        local before `before' (`COLON')
        local COLON
    }
    else if `"'COLON'"' != ":" {
        local before `"'before' `COLON'"'
        local COLON
    }
}
- if `"'COLON'"' != ":" {
= if `":'"' != ":" {
    di as err "' found where ':' expected"
    exit 198
}
- sreturn local before `"'before'"'
= sreturn local before `"', argoptlist(CLister) optlist(OIM
> OPG Robust) old "'
    - sreturn local after `"'after'"'
    = sreturn local after `"', robust"'
}

> ----- end _on_colon_parse -----
    - local 0 `"'s(before)'"'
    = local 0 `"', argoptlist(CLister) optlist(OIM OPG Robust) ol
> d "'
    - local user `"'s(after)'"'
    = local user `"', robust"'
    - syntax [varname(default=none)], [ OPTlist(namelist) ARGOPT
> list(namelist) Pwallowed(namelist) OLD_is_ok NOARGOPT_is_ok ]
    - local touse `varlist'
    = local touse
    - tempname o a
    - `o' = ._optlist.new
    = `__00000C' = ._optlist.new
    - local optlist : list uniq optlist
    - foreach name of local optlist {
    - `o'.addopt `name'
    = `__00000C'.addopt OIM
}

> ----- begin _optlist.addopt -----
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("OIM")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
    }
}

```

```

- .options.Arrpush "`optspec'"
= .options.Arrpush "OIM"
- .names.Arrpush "`mname'"
= .names.Arrpush "oim"

```

```

> ----- end _optlist.addopt -----
- }
- .`o'.addopt `name'
= .__00000C.addopt OPG

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("OPG")
- if "`passthru'" != "" {
= if "" != "" {
  local optspec `optspec'(passthru)
}
- .options.Arrpush "`optspec'"
= .options.Arrpush "OPG"
- .names.Arrpush "`mname'"
= .names.Arrpush "opg"

```

```

> ----- end _optlist.addopt -----
- }
- .`o'.addopt `name'
= .__00000C.addopt Robust

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("Robust")
- if "`passthru'" != "" {
= if "" != "" {
  local optspec `optspec'(passthru)
}
- .options.Arrpush "`optspec'"
= .options.Arrpush "Robust"
- .names.Arrpush "`mname'"
= .names.Arrpush "robust"

```

```

> ----- end _optlist.addopt -----
- }
- .`a' = ._optlist.new

```



```

= __00000D = _optlist.new
- local argoptlist : list uniq argoptlist
- foreach name of local argoptlist {
- `a'.addopt `name'
= __00000D.addopt CLuster

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("CLuster")
- if ""passthru"" != "" {
= if "" != "" {
  local optspec `optspec'(passthru)
}
- .options.Arrpush "`optspec'"
= .options.Arrpush "CLuster"
- .names.Arrpush "`mname'"
= .names.Arrpush "cluster"

```

```

> ----- end _optlist.addopt -----
- }
- local OPTNAMES ```.`o'.dumpnames'''

```

```

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/3 {
- local namelist `namelist' `.names['i']'
= local namelist oim
- }
- local namelist `namelist' `.names['i']'
= local namelist oim opg
- }
- local namelist `namelist' `.names['i']'
= local namelist oim opg robust
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `"oim opg robust"'
- class exit ```namelist'''
= class exit `"oim opg robust"'

```

```

> ----- end _optlist.dumpnames -----
= local OPTNAMES `"oim opg robust"'
- local ARGOPTNAMES ```.`a'.dumpnames'''

```

```

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/1 {
- local namelist `namelist' `.names[`i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `cluster'
- class exit ``namelist'''
= class exit `cluster'

> ----- end _optlist.dumpnames -----
= local ARGOPTNAMES `cluster'
- local AND : list OPTNAMES & ARGOPTNAMES
- if `:list sizeof AND' {
= if 0 {
di as err "vcetype `:word 1 of `AND'' specified twice"
exit 198
}
- local pwallowed : list uniq pwallowed
- local pwlist robust cluster
- foreach n of local pwallowed {
local lc = lower("`n'")
local pwlist `pwlist' `lc'
}
- if "`old_is_ok'" != "" {
= if "old_is_ok" != "" {
- local ROBUST robust
- if `:list ROBUST in OPTNAMES' {
= if 1 {
- local robust Robust
- }
- local CLUSTER cluster
- if `:list CLUSTER in ARGOPTNAMES' {
= if 1 {
- local cluster CLuster(varname)
- }
- }
- local 0 ``user'''
= local 0 `` , robust'''
- syntax [fw aw pw iw] [, VCE(string asis) `robust' `cluster

> ' ]

= syntax [fw aw pw iw] [, VCE(string asis) Robust CLuster(va

```

```

> rname) ]
- if ``vce'' != "" {
= if ``'' != "" {
  gettoken name args : vce, parse(" ,")
  local args : list retok args
  capture ParseVCE `o' `a' , `name'
  if c(rc) {
    di as err "vcetype {bf:`name'} not allowed"
    exit 198
  }
  local name `r(vce)'
  if ``weight' == "pweight" & !`:list name in pwlist' {
    di as err "pweights are not allowed with vce(`name')"
    exit 198
  }
  return add
  if ``robust' != "" & !inlist("`name'", "", "robust", "eim"
> , "oim", "cluster") {
  opts_exclusive "`robust' vce(`name')"
  }
  if "`name'" == "cluster" {
    if ``args' == "" {
      di as err "invalid vce(cluster) option"
      exit 198
    }
    confirm var `args'
    unab args : `args'
    local markout `args'
    if "`cluster'" != "" {
      if !`:list args == cluster' {
        di as err "options cluster() and vce(cluster) are in confl
> ict"
        exit 100
      }
    }
    else if "`cluster'" != "" & !inlist("`name'", "eim", "oim")
> {
  opts_exclusive "cluster() vce(`name')"
  }
  if ``args' != "" {
    if !`:list name in ARGOPTNAMES' {
      di as err "invalid vce() option"
      exit 198
    }
    if "`name'" == "hc2" {

```

```

confirm var `args'
unab args : `args'
local markout `args'
}
return local vceargs ``':list retok args'''
}
else if `:list name in ARGOPTNAMES' {
if "`noargopt_is_ok'" == "" {
di as err "invalid vce() option"
exit 198
}
}
}
- else {
- if "`weight'" == "pweight" | "`robust'" != "" {
= if "" == "pweight" | "robust" != "" {
- local vce robust
- }
- if "`cluster'" != "" {
= if "" != "" {
local vce cluster
local args `cluster'
local markout `cluster'
}
- return local vce ``vce'''
= return local vce `robust'
- return local vceargs ``args'''
= return local vceargs `'''
- }
- if "`return(vce)'" != "" {
= if "robust" != "" {
- if ``return(vceargs)''' != "" {
= if `''' != "" {
local ss " "
}
- return local vceopt `vce(`return(vce)''ss'`return(vceargs
> )')'''

= return local vceopt `vce(robust)'''
- }
- if "`return(vce)'" == "cluster" {
= if "robust" == "cluster" {
return local cluster `return(vceargs)'
}
- if inlist("`return(vce)'", "robust", "cluster") {
= if inlist("robust", "robust", "cluster") {
- return local robust robust

```

```

- }
- if "`touse'" != "" {
= if "" != "" {
  if "`markout'" != "" {
    markout `touse' `markout', strok
  }
}
}

> ----- end _vce_parse -----

- local vce `r(vce)'
= local vce robust
- }
- else if "`weight'" == "pweight" {
= else if "" == "pweight" {
  local vce robust
}
- if `:length local svy' {
= if 0 {
  local vce svy
}
- if ``"vce"' == "cluster" {
= if `"robust"' == "cluster" {
  local cluster `r(cluster)'
  markout $ML_sample `cluster', strok
}
- if `:length local group' {
= if 0 {
  markout $ML_sample `group', strok
  global ML_group : copy local group
  if bsubstr("`type `group'",1,3) == "str" {
    if `interactive' {
      SetGlobalVar ML_grp : _MLgr
    }
    else {
      global ML_grp : tempvar
      if ``"moptobj"' != "" {
        global ML_grp `moptobj'$ML_grp
      }
    }
    quietly egen $ML_grp = group(`group')
    if ! `:length local cluster' {
      local cluster : copy global ML_grp
    }
  }
  else {
    if ! `:length local cluster' {

```

```

        local cluster : copy global ML_group
    }
}
- if "$ML_samp" != "$ML_sample" {
= if "__000007" != "__000007" {
    quietly replace $ML_samp = 0 if $ML_samp & $ML_sample == 0
}
- if `:length local vce' == 0 {
= if 6 == 0 {
    if ``technique''' == "bhhh" {
        local vce opg
    }
    else local vce oim
}
- if inlist("`vce'", "robust", "cluster") & bsubstr("`evaltype
> '",1,1) == "d" {
= if inlist("robust", "robust", "cluster") & bsubstr("e2",1,1)
> == "d" {
    local optname = cond("`svy'"=="" ,"vce(`vce')", "svy")
    di as err "option `optname' is not allowed with evaltype `ev
> altype'"

    exit 198
}
- if `:length local crittype' == 0 {
= if 0 == 0 {
- if inlist("`vce'", "cluster", "robust", "svy") {
= if inlist("robust", "cluster", "robust", "svy") {
- local crittype "log pseudolikelihood"
- }
- else local crittype "log likelihood"
- }
- global ML_waldtest `waldtest'
= global ML_waldtest -1
- if `:length local svy' | `:length local weight' {
= if 0 | 0 {
    if `interactive' {
        SetGlobalVar ML_w : _MLw
    }
    else {
        global ML_w : tempvar
        if ``moptobj''' != "" {
            global ML_w `moptobj'$ML_w
        }
    }
}
}
}

```

```

- if `:length local weight' {
= if 0 {
  if ``moptobj''' != "" {
    cap drop $ML_w
  }
  quietly gen double $ML_w `exp' if $ML_samp
  local wtype ``weight'''
  local wexp ``exp'''
  global ML_wtyp : copy local wtype
  global ML_wexp : copy local wexp
  if "wtype" == "iweight" | "svy" != "" {
    local zeroweight zeroweight
  }
}
- if inlist("`vce'", "svy", "cluster") {
= if inlist("robust", "svy", "cluster") {
  if `interactive' {
    SetGlobalVar ML_subv : _MLsu
  }
  else {
    global ML_subv : tempvar
    if ``moptobj''' != "" {
      global ML_subv `moptobj'$ML_subv
    }
  }
}
- quietly count if $ML_sample
= quietly count if __000007
- if r(N) == 0 {
  error 2000
}
- if ``weight''' != "" {
= if `''' != "" {
  quietly count if $ML_sample & $ML_w != 0
  if r(N) == 0 {
    di in gr "all observation have zero weights"
    exit 2000
  }
}
- if `:length local lf0' {
= if 20 {
- if `:list sizeof lf0' != 2 {
= if 2 != 2 {
  di as err "lf0(`lf0') invalid"
  exit 198
}
}

```

```

- global ML_k0 : word 1 of `lf0'
= global ML_k0 : word 1 of 1 -401.5531151051299
- global ML_ll_0 : word 2 of `lf0'
= global ML_ll_0 : word 2 of 1 -401.5531151051299
- confirm integer number $ML_k0
= confirm integer number 1
- confirm number $ML_ll_0
= confirm number -401.5531151051299
- if $ML_k0 < 0 {
= if 1 < 0 {
    di as err "`lf0(`lf0') invalid"
    exit 198
  }
- }
- if "`obs'" == "" {
= if "" == "" {
  - if "`wtype'" != "fweight" {
= if "" != "fweight" {
  - quietly count if $ML_sample
= quietly count if __000007
  - local obs = r(N)
  - }
- else {
    sum $ML_w if $ML_sample, mean
    local obs = r(sum)
  }
- }
- if `:length local iterid' {
= if 0 {
    local iterid = trim(bsubstr("`"iterid'",1,32))
  }
- if `:length local crittype' {
= if 20 {
  - local crittype = trim(bsubstr("`"crittype'",1,32))
= local crittype = trim(bsubstr("`log pseudolikelihood'",1,32))

> )

- }
- if `:length local derivscale' {
= if 0 {
    confirm matrix `derivscale'
  }
- if `:length local derivh' {
= if 0 {
    confirm matrix `derivh'
  }
- local l : strlen local deriv

```



```

- ParseUsemin, `deriv' len(`l')
= ParseUsemin, len(0)

```

```

> ----- begin mopt.ParseUsemin -----
- syntax [, LEN(integer 0) MIN1(string) NOMIN MIN]
- if ``min1'' != "" & ``nomin'' != "" {
= if `'' != "" & `'' != "" {
  di as err "options min() and nomin are mutually exclusive"
  exit 198
}
- if ``min'' != "" & ``nomin'' != "" {
= if `'' != "" & `'' != "" {
  di as err "options min and nomin are mutually exclusive"
  exit 198
}
- if (``min1'' != "") {
= if (`'' != "") {
  confirm matrix `min1'
  local deriv `min1'
}
- else if (``min'' != "") {
= else if (`'' != "") {
  if (`len' > length(``min')) {
    di as err "must specify a matrix of 2 columns in option mi
> n()"

    exit 198
  }
  local deriv 1
}
- else {
- if (`len' > 0) {
= if (0 > 0) {
  if (``nomin'' == "") {
    di as err "must specify a matrix of 2 columns in option mi
> n()"

    exit 198
  }
  else if (`len' > length(``nomin')) {
    di as err "options min() and nomin are mutually exclusive"
    exit 198
  }
  else {
    local deriv 0
  }
}
- else {

```

```

- local deriv 0
- }
- }
- sreturn local deriv `deriv'
= sreturn local deriv 0

```

```

> ----- end mopt.ParseUsemin -----
- local deriv = s(deriv)
- if `:length local gnwmatrix' {
= if 0 {
  confirm matrix `gnwmatrix'
}
- `vv' mata: Mopt_model()
= version 18: mata: Mopt_model()

```

```

> ----- begin mopt_check_program -----
- version 10
- args name
- capture confirm name `name'
= capture confirm name poiss_lf
- if c(rc) {
  di as err "unrecognized command:  `name' invalid command
> name"
  exit 199
}
- capture which `name'
= capture which poiss_lf
- if !c(rc) {
- exit

```

```

> ----- end mopt_check_program -----
- global ML_stat model
- if !`interactive' {
= if !0 {
- `vv' MaxMin `maxmin', nooutput `score' `options' moptobj(`mo
> ptobj')
= version 18: MaxMin maximize, nooutput  search(off) moptobj()

```

```

> ----- begin mopt.MaxMin -----
- local vv : di "version " string(_caller()) ":"
- version 12
- ChkMacros

```

```

> ----- begin mopt.ChkMacros -----
- if "$ML_stat" != "model" {
= if "model" != "model" {

```

```

        di as err "you must issue -ml model- first"
        exit 198
    }
    - capture confirm var $ML_samp $ML_w $ML_subv
    = capture confirm var __000007 __000007
    - if c(rc) {
        di as err "Since issuing the -ml model- statement, you h
> ave done something to drop" _n "temporary variables ml added to your data.
> You must start again."
        Clear
        exit 111
    }
}

> ----- end mopt.ChkMacros -----
    - syntax name(name=maxmin) [, NEGH TOLerance(numlist max=1 >
> =0) LTOLerance(numlist max=1 >=0) NONRTOLerance NRTOLerance(numlist max=1 >=
> 0) QTOLerance(numlist max=1 >=0) GTOLerance(numlist max=1 >=0) ITERate(numli
> st max=1 >=0) NOTCONCAVE(numlist max=1 >=0) ndami DIFficult HALFSTEPonly D00
> PT SEArch(name) Repeat(passthru) Bounds(string) SCore(string) noWARNing noCL
> EAR NOLOg LOg DOTs SHOWTOLerance SHOWNRtolerance SHOWSTEP TRace COEFDiffs GR
> ADient HESSian noSKIpline noOUTput Level(cilevel) moptobj(string) * ]
    - if `:length local nrtolerance' {
    = if 0 {
        opts_exclusive "nrtolerance() `nonrtolerance'"
    }
    - if `:length local qtolerance' {
    = if 0 {
        opts_exclusive "qtolerance() `nonrtolerance'"
    }
    - opts_exclusive "`nonrtolerance' `shownrtolerance'"
    = opts_exclusive " "
}

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
- if `:length local shownrtolerance' {
= if 0 {
    local showtolerance showtolerance
  }
- if "$ML_preserve" != "no" {
= if "no" != "no" {
    if `:length local score' {
      di as smcl as err "May not specify {bf:score()} option unl
> ess" _n "      a) estimation subsample is the entire data in memory, or" _n "
>      b) you specify option {bf:nopreserve} on {bf:ml model} statement (meani
> ng" _n "      your evaluation program explicitly restricts itself to obs"
> _n "      for which {bf:$}" "{bf:ML_samp==1}."
      exit 198
    }
    preserve
    local N = c(N)
    quietly keep if $ML_sample
    if (`N' != c(N)) {
      mata: Mopt_init_regetviews()
    }
  }
- if `:length local score' {
= if 0 {
    SetupScore ``$ML_evaltype'' ``score''' $ML_n $ML_dim
    local scores ``s(scores)'''
  }
- _parse_iterlog, `nolog' `log'
= _parse_iterlog,

```

```

> ----- begin _parse_iterlog -----
- version 16
- syntax [, NOLOG LOG]
- if "`log'`nolog'" != "" {
= if "" != "" {
    opts_exclusive "`log' `nolog'"
  }
- else if "`c(iterlog)'" == "on" {
= else if "on" == "on" {
- local log log
- }
- else {
    local nolog nolog
  }
- sreturn local log `log'

```

```

= sreturn local log log
- sreturn local nolog `nolog'
= sreturn local nolog

```

```

> ----- end _parse_iterlog -----
- local log ``s(nolog)''
= local log ""
- local tropts `log' `dots' `showtolerance' `showstep' `trac
> e' `coefdiffs'
= local tropts
- if ``tropts'' != "nolog" {
= if "" != "nolog" {
- local tropts `tropts' `gradient' `hessian'
= local tropts
- if ``skipline'' == "" {
= if "" == "" {
- if ``iterate'' != "0" | `:length local tropts' {
= if "" != "0" | 0 {
- di

- }
- }
- }
- else {
  local gradient
  local hessian
  local nolog nolog
}
- if ``search'' != "off" & ``iterate'' != "0" {
= if "off" != "off" & "" != "0" {
  if ``search'' == "quietly" {
    local sopts nolog
  }
  else {
    if `:length local tropts' {
      if ``tropts'' != "nolog" {
        local sopts trace
      }
      else local sopts nolog
    }
  }
  if ``search'' == "norescale" {
    local sopts `sopts' norescale
  }
  Search `bounds', nopreserve `sopts' `repeat' `maxmin'
}

```

```

- tempname value b V iV
- `vv' mata: Mopt_maxmin()
= version 18: mata: Mopt_maxmin()

> ----- begin poiss_lf -----
- version 6
- args todo b lnf g H score
- tempvar xb
- mlevel `xb' = `b'
= mlevel __00000R = __00000L
- mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
= mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
- if `todo' == 0 | `lnf'==. {
= if 2 == 0 | __00000M==. {
exit
}
- qui replace `score' = $ML_y1 - exp(`xb') if $ML_samp
= qui replace __00000P = piq_timing_max - exp(__00000R) if
> __000007
- $ML_ec mlvecsum `lnf' `g' = `score'
= * mlvecsum __00000M __00000N = __00000P
- if `todo' == 1 | `lnf'==. {
= if 2 == 1 | __00000M==. {
exit
}
- mlmatsum `lnf' `H' = exp(`xb')
= mlmatsum __00000M __00000O = exp(__00000R)

> ----- end poiss_lf -----
Iteration 0: Log pseudolikelihood = -276.54667

> ----- begin poiss_lf -----
- version 6
- args todo b lnf g H score
- tempvar xb
- mlevel `xb' = `b'
= mlevel __00000R = __00000L
- mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
= mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
- if `todo' == 0 | `lnf'==. {
= if 0 == 0 | __00000M==. {
- exit

```

```

> _____ end poiss_lf _____
> _____ begin poiss_lf _____
    - version 6
    - args todo b lnf g H score
    - tempvar xb
    - mlevel `xb' = `b'
    = mlevel __00000R = __00000L
    - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
    = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
    - if `todo' == 0 | `lnf'==. {
    = if 0 == 0 | __00000M==. {
    - exit
    _____
> _____ end poiss_lf _____
> _____ begin poiss_lf _____
    - version 6
    - args todo b lnf g H score
    - tempvar xb
    - mlevel `xb' = `b'
    = mlevel __00000R = __00000L
    - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
    = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
    - if `todo' == 0 | `lnf'==. {
    = if 2 == 0 | __00000M==. {
    exit
    }
    - qui replace `score' = $ML_y1 - exp(`xb') if $ML_samp
    = qui replace __00000P = piq_timing_max - exp(__00000R) if
> __000007
    - $ML_ec mlevelsum `lnf' `g' = `score'
    = * mlevelsum __00000M __00000N = __00000P
    - if `todo' == 1 | `lnf'==. {
    = if 2 == 1 | __00000M==. {
    exit
    }
    - mlmatsum `lnf' `H' = exp(`xb')
    = mlmatsum __00000M __000000 = exp(__00000R)
    _____
> _____ end poiss_lf _____

```

Iteration 1: Log pseudolikelihood = **-276.07973**

```
> ----- begin poiss_lf -----
      - version 6
      - args todo b lnf g H score
      - tempvar xb
      - mlevel `xb' = `b'
      = mlevel __00000R = __00000L
      - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
      = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
      - if `todo' == 0 | `lnf'==. {
      = if 0 == 0 | __00000M==. {
      - exit
      -----
> ----- end poiss_lf -----
      -----
> ----- begin poiss_lf -----
      - version 6
      - args todo b lnf g H score
      - tempvar xb
      - mlevel `xb' = `b'
      = mlevel __00000R = __00000L
      - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
      = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
      - if `todo' == 0 | `lnf'==. {
      = if 0 == 0 | __00000M==. {
      - exit
      -----
> ----- end poiss_lf -----
      -----
> ----- begin poiss_lf -----
      - version 6
      - args todo b lnf g H score
      - tempvar xb
      - mlevel `xb' = `b'
      = mlevel __00000R = __00000L
      - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
      = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
      - if `todo' == 0 | `lnf'==. {
      = if 2 == 0 | __00000M==. {
```



```

        exit
    }
    - qui replace `score' = $ML_y1 - exp(`xb') if $ML_samp
    = qui replace __00000P = piq_timing_max - exp(__00000R) if
> __000007

    - $ML_ec mlvecsum `lnf' `g' = `score'
    = * mlvecsum __00000M __00000N = __00000P
    - if `todo' == 1 | `lnf'==. {
    = if 2 == 1 | __00000M==. {
        exit
    }
    - mlmatsum `lnf' `H' = exp(`xb')
    = mlmatsum __00000M __00000O = exp(__00000R)
    _____
> _____ end poiss_lf _____
Iteration 2:  Log pseudolikelihood = -276.07941
    _____
> _____ begin poiss_lf _____

    - version 6
    - args todo b lnf g H score
    - tempvar xb
    - mlevel `xb' = `b'
    = mlevel __00000R = __00000L
    - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
    = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
    - if `todo' == 0 | `lnf'==. {
    = if 0 == 0 | __00000M==. {
    - exit
    _____
> _____ end poiss_lf _____
    _____
> _____ begin poiss_lf _____

    - version 6
    - args todo b lnf g H score
    - tempvar xb
    - mlevel `xb' = `b'
    = mlevel __00000R = __00000L
    - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
    = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
    - if `todo' == 0 | `lnf'==. {
    = if 0 == 0 | __00000M==. {
    - exit

```

```

> _____ end poiss_lf _____
> _____ begin poiss_lf _____
    - version 6
    - args todo b lnf g H score
    - tempvar xb
    - mlevel `xb' = `b'
    = mlevel __00000R = __00000L
    - mlsun `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
    = mlsun __00000M = -exp(__00000R) + __00000R*piq_timing_ma
> x - lngamma(piq_timing_max+1)
    - if `todo' == 0 | `lnf'==. {
    = if 2 == 0 | __00000M==. {
        exit
    }
    - qui replace `score' = $ML_y1 - exp(`xb') if $ML_samp
    = qui replace __00000P = piq_timing_max - exp(__00000R) if
> __000007
    - $ML_ec mlsun `lnf' `g' = `score'
    = * mlsun __00000M __00000N = __00000P
    - if `todo' == 1 | `lnf'==. {
    = if 2 == 1 | __00000M==. {
        exit
    }
    - mlmatsum `lnf' `H' = exp(`xb')
    = mlmatsum __00000M __00000O = exp(__00000R)
> _____ end poiss_lf _____
Iteration 3:  Log pseudolikelihood = -276.07941
> _____ begin mopt_post _____
    - args b V C wgt touse depvar
    - if `:length local touse' {
    = if 8 {
    - tempname esamp
    - quietly gen byte `esamp' = `touse'
    = quietly gen byte __00000U = __000007
    - }
    - ereturn post `b' `V' `C' `wgt', esample(`esamp') depname
> (`depvar') buildfvinfo
    = ereturn post __00000R __00000S __00000T [], esample(__00
> 000U) depname(piq_timing_max) buildfvinfo
> _____ end mopt_post _____

```

```

- ereturn scalar k_eq_model = abs($ML_waldtest)
= ereturn scalar k_eq_model = abs(-1)
- if `:length global ML_ll_0' {
= if 18 {
- ereturn scalar ll_0 = $ML_ll_0
= ereturn scalar ll_0 = -401.5531151051299
- if `:length global ML_rank0' {
= if 0 {
    ereturn scalar rank0 = $ML_rank0
    ereturn scalar df_m = e(rank) - $ML_rank0
  }
- else ereturn scalar df_m = e(rank) - $ML_k0
= else ereturn scalar df_m = e(rank) - 1
- }
- if !`:length global ML_ll_0' | inlist(e(vce), "robust", "c
> luster", "linearized") {
    = if !18 | inlist(e(vce), "robust", "cluster", "linearized")
> {
    - if "$ML_svy" == "" {
    = if "" == "" {
    - _prefix_model_test, minimum
    _____
> _____ begin _prefix_model_test _____
    - version 9
    - syntax [name(name=cmd)] [, svy noADJust noSVYadjust MINi
> mum ]
    - if (inlist("`cmd'", "asmixlogit", "cmmixlogit", "cmxtmixlog
> it")) {
    = if (inlist("", "asmixlogit", "cmmixlogit", "cmxtmixlogit"))
> {
        _asmixtest, `svy' `adjust' `svyadjust'
        exit
    }
    - local K = 1
    - if "`e(k_eq_model)'" != "" {
    = if "1" != "" {
    - capture confirm integer number `e(k_eq_model)'
    = capture confirm integer number 1
    - if ! c(rc) {
    - local K = e(k_eq_model)
    - }
    - }
    - if "`e(k_eq_model_skip)'" != "" {
    = if "" != "" {
        capture confirm integer number `e(k_eq_model_skip)'
        if ! c(rc) {

```

```

    local skip = e(k_eq_model_skip)
  }
}
- ereturn local df_m
- ereturn local F
- ereturn local chi2
- ereturn local chi2type
- ereturn local p
- if (`K' == 0) {
= if (1 == 0) {
  exit
}
- forval i = 1/`K' {
= forval i = 1/1 {
- if !`:list i in skip' {
= if !0 {
- local spec "`spec' ([#`i'])"
= local spec " ([#1])"
- }
- }
- tempname cns omit
- capture matrix `cns' = get(Cns)
= capture matrix __00000U = get(Cns)
- if (c(rc)) local cns
- if "`cns'" != "" {
= if "__00000U" != "" {
- local k_autoCns = e(k_autoCns)
- if missing(`k_autoCns') {
= if missing(1) {
  local k_autoCns 0
}
- if rowsof(`cns') == `k_autoCns' {
= if rowsof(__00000U) == 1 {
- local cns
- }
- }
- if "`svy'" != "" & "`adjust'`svyadjust'" != "" {
= if "" != "" & "" != "" {
  local adjust nosvyadjust
}
- else local adjust
- _ms_omit_info e(b), nocons
- matrix `omit' = r(omit)
= matrix __00000V = r(omit)
- capture test `spec', `adjust'
= capture test ([#1]),

```

```

> ----- begin test -----
- if "`e(cmd)'" == "anova" | "`e(cmd)'" == "manova" {
= if "mopt" == "anova" | "mopt" == "manova" {
    AnovaTestChooser `0'
    return add
    exit
}
- if "`e(cmd)'" == "mixed" {
= if "mopt" == "mixed" {
    MixedTestChooser `0'
    return add
    exit
}
- if _caller() < 8 {
    _test `0'
    return add
    exit
}
- is_svy

> ----- begin is_svy -----
- version 8
- syntax [, Regression]
- if ``"e(prefix)"" == "svy" {
= if `""' == "svy" {
    return scalar is_svy = 1
}
- else if "`regression'" == "" {
= else if "" == "" {
- return scalar is_svy = ("`e(N_psu)'" != "")
= return scalar is_svy = (" != ")
- }
- else {
    capt mat list e(b)
    local rc = _rc
    return scalar is_svy = ("`e(N_psu)'" != "") & (`rc'
> == 0)

}

> ----- end is_svy -----
- local is_svy = r(is_svy)
- if replay() & `is_svy' == 0 {
= if replay() & 0 == 0 {
    _test `0'
    return add

```

```

        exit
    }
- version 8
- WaldTest `is_svy' `0'
= WaldTest 0 ([#1]),

```

```

> ----- begin test.WaldTest -----
- gettoken is_svy 0 : 0
- if ``is_svy' == "1" {
= if "0" == "1" {
    if ``e(complete)' == "available" {
        di as err ``must run svy command with "complete" "'
> "option before using this command"
        exit 301
    }
}
- gettoken tok : 0, parse(" (,") bind
- local single single
- local zero ``0'
= local zero `` ([#1]), "'
- if ``tok' == "(" {
= if ``('' == "(" {
- local single
- while ``tok' == "(" {
= while ``('' == "(" {
- gettoken tok 0 : 0, parse(" (,") match(paren) bind
- local eqns ``eqns' ``tok'
= local eqns `` ``[#1]'
- gettoken tok : 0, parse(" (,") bind
- }
- while ``tok' == "(" {
= while ``",'' == "(" {
    gettoken tok 0 : 0, parse(" (,") match(paren) bind
    local eqns ``eqns' ``tok'
    gettoken tok : 0, parse(" (,") bind
}
- if ``tok' != "," & ``tok' != "" {
= if ``",'' != "," & ``",'' != "" {
    local single single
}
- }
- if ``single'=="single" {
= if ""=="single" {
    local eqns
    local 0 ``zero'
    while ``tok' != "" & ``tok' != "," {

```

```

        gettoken tok 0 : 0, parse(" ,") bind
        local eqns ``"eqns' `tok'"
        gettoken tok : 0, parse(" ,") bind
    }
    local eqns ``"eqns'"
}

- syntax [, Accumulate noSVYadjust common CONSTant MIN
> imum Mtest Mtest2(passthru) noTest COEF matvlg(passthru) DF(numlist max=1 >0
> ) ]

- if ``df'" != "" {
= if "" != "" {
    local dof = `df'
}
- else if ``e(df_r)'" != "" {
= else if "" != "" {
    local dof = e(df_r)
}
- else {
- local dof = .
- }
- if ``mtest'`mtest2'" != "" {
= if `"' != "" {
    if inlist("`e(cmd)'", "svymean", "svytotal", "svyrat
> io") {
        di as err ``mtest option not allowed after `e(cmd)'"
> '

        exit 301
    }
    _mtest syntax, `mtest' `mtest2'
    local mtmethod `r(method)'
}
- if ``mtmethod'" != "" {
= if "" != "" {
    if ``test'" != "" {
        di as err "options mtest and notest may not be combi
> ned"

        exit 198
    }
    if ``accumulate'" != "" {
        di as err "options mtest and accumulate may not be c
> ombined"

        exit 198
    }
}
- if `is_svy' {
= if 0 {

```

```

        if ``e(cmd)''' == "margins" {
        local vce ``e(model_vce)'''
        }
        else local vce ``e(vce)'''
        if inlist(```vce''', "bootstrap", "sdr") {
        if missing(`dof') {
        local svyadjust nosvyadjust
        }
        }
        }
- if !`is_svy' & ``svyadjust' != "" {
= if !0 & "" != "" {
di as err "option nosvyadjust is allowed only with s
> vy data"
        exit 198
        }
- local svy_adjust = `is_svy' & ``svyadjust' == ""
= local svy_adjust = 0 & "" == ""
- if `svy_adjust' & missing(`dof') & (missing(e(N_psu)
> ) | missing(e(N_strata))) {
= if 0 & missing(.) & (missing(e(N_psu)) | missing(e(N
> _strata))) {
        di as err "impossible to adjust p-values"
        exit 198
        }
- if `is_svy' & ``test' == "" {
= if 0 & ``' == "" {
        if ``svyadjust' == "" {
        di _n as txt "Adjusted Wald test"
        }
        else di _n as txt "Unadjusted Wald test"
        }
- local tmp : subinstr local eqns "==" "", all count(
> local nch)
- if `nch' > 0 {
= if 0 > 0 {
        di as err "==" invalid operator"
        exit 198
        }
- local eqns : subinstr local eqns "==" "=", all
- ExpandExpns ``eqns' "common" "constant"
= ExpandExpns ``[#1]' " "
> ----- begin test.ExpandExpns -----
- args expns common constant
- gettoken exp expns : expns

```



```

- while ``exp''' != "" {
= while ``[#1]''' != "" {
- Expand ``exp''' ``common''' ``constant'''
= Expand ``[#1]''' "" ""

> ----- begin test.Expand -----
- args exp common constant
- local junk : substr local exp "=" "=", count(l
> ocal nch) all
- if `nch' <= 1 {
= if 0 <= 1 {
- return local explist ``exp'''
= return local explist ``[#1]'''
- return local nexp 1
- exit

> ----- end test.Expand -----
- local explist ``explist' `r(explist)'''
= local explist `` `[#1]'''
- local nexp = `nexp' + `r(nexp)'
= local nexp = + 1
- gettoken exp expns : expns
- }
- while ``exp''' != "" {
= while ``''' != "" {
Expand ``exp''' ``common''' ``constant'''
local explist ``explist' `r(explist)'''
local nexp = `nexp' + `r(nexp)'
gettoken exp expns : expns
}
- return local explist ``explist'''
= return local explist `` `[#1]'''
- return local nexp `nexp'
= return local nexp 1

> ----- end test.ExpandExpns -----
- local explist ``r(explist)'''
= local explist `` `[#1]'''
- local nexp `r(nexp)'
= local nexp 1
- local acc `accumulate'
= local acc
- foreach exp of local explist {
- quietly _test `exp' , `acc' `common' `constant' note
> st
= quietly _test [#1] , notest

```

```

- local acc acc
- }
- if "`test'" == "notest" {
= if "" == "notest" {
    _test , notest
    exit
    }
- quietly _test , `matvlc'
= quietly _test ,
- if `dof' < . {
= if . < . {
    local testtype F
    tempname F df1 df2 p drop
    if "`r(F)'" != "" {
        scalar `F' = r(F)
    }
    else {
        scalar `F' = r(chi2)/r(df)
    }
    scalar `df1' = r(df)
    scalar `df2' = `dof'
    scalar `p' = Ftail(`df1', `df2', `F')
    scalar `drop' = r(drop)
    }
- else {
- local testtype chi2
- tempname chi2 df1 p drop
- scalar `chi2' = r(chi2)
= scalar __00000W = r(chi2)
- scalar `df1' = r(df)
= scalar __00000X = r(df)
- scalar `p' = r(p)
= scalar __00000Y = r(p)
- scalar `drop' = r(drop)
= scalar __00000Z = r(drop)
- }
- local i 1
- while "`r(dropped_`i')'" != "" {
= while "5" != "" {
- local dropped_`i' `r(dropped_`i')'
= local dropped_1 5
- local ++i
- }
- while "`r(dropped_`i')'" != "" {
= while "" != "" {
    local dropped_`i' `r(dropped_`i')'

```

```

        local ++i
    }
- if `svy_adjust' {
= if 0 {
    if "`df'" != "" {
        local svy_d = `df'
    }
    else if !missing(e(df_r)) {
        local svy_d = e(df_r)
    }
    else local svy_d = e(N_psu)-e(N_strata)
    if missing(`svy_d') {
        di as err "internal error in adjustment for svy"
        exit 10001
    }
    if "`testtype'" == "F" {
        scalar `F' = ((`svy_d'-`df1'+1)/`svy_d') * `F'
    }
    else {
        tempname F df2
        scalar `F' = ((`svy_d'-`df1'+1)/(`svy_d'*`df1')) * `
> chi2'

    }
    scalar `df2' = `svy_d' - `df1' + 1
    if `df2' < 0 {
        scalar `F' = .
    }
    scalar `p' = Ftail(`df1', `df2', `F')
    local testtype F
}
- if "`mtmethod'" != "" {
= if "" != "" {
    tempname R r Rr V b VR tm Wald
    mat `V' = e(V)
    mat `b' = e(b)
    mat `Rr' = get(Rr)
    local nb = rowsof(`V')
    local nr = rowsof(`Rr')
    mat `R' = `Rr'[1...,1..`nb']
    mat `VR' = `R'*`V'*`R''
    mat `r' = `R'*`b'' - `Rr'[1...,`= `nb'+1']
    mat `Wald' = `r'*syminv(`VR')*`r'
    mat `tm' = J(`nr', 3, .)
    mat colnames `tm' = `testtype' df p
    forvalues it = 1 / `nr' {
        mat `Wald' = `r'[`it',1]^2 / `VR'[`it',`it']

```

```

mat `tm'[`it',1] = `Wald'[1,1]
mat `tm'[`it',2] = 1
if `svy_adjust' {
mat `tm'[`it',3] = Ftail(1,`svy_d',`tm'[`it',1])
}
else if "`testtype'" == "chi2" {
mat `tm'[`it',3] = chi2tail(1,`tm'[`it',1])
}
else {
mat `tm'[`it',3] = Ftail(1,`df2',`tm'[`it',1])
}
}
if "`mtmethod'" != "noadjust" {
_mtest adjust `tm', mtest(`mtmethod') pindex(3) appe
> nd

mat `tm' = r(result)
local pindex 4
}
else local pindex 3
}

- _test, notest
- local i 1
- while "`dropped_`i'" != "" {
= while "5" != "" {
- di as txt "          Constraint `dropped_`i' dropped"
= di as txt "          Constraint 5 dropped"
- local ++i
- }
- while "`dropped_`i'" != "" {
= while "" != "" {
di as txt "          Constraint `dropped_`i' dropped"
local ++i
}
- if "`mtmethod'" == "" {
= if "" == "" {
- di
- if "`testtype'" == "chi2" {
= if "chi2" == "chi2" {
- di as txt _col(12) "chi2(" %3.0f `df1' ") =" as res
> %8.2f `chi2'

= di as txt _col(12) "chi2(" %3.0f __00000X ") =" as r
> es %8.2f __00000W

- di as txt _col(10) "Prob > chi2 = " as res %8.4f `p
> '

= di as txt _col(10) "Prob > chi2 = " as res %8.4f __
> 00000Y

```

```

- }
- else {
  di as txt "          F(" %3.0f `df1' ", " %6.0f `df2' ")
>  =" as res %8.2f `F'
    di as txt _col(13) "Prob > F =" as res %10.4f `p'
    }
- }
- else {
  local nexpt = rowsof(`tm')
  local ncol = colsof(`tm')
  if "`testtype'" == "F" {
    local d "F(df,`= `df2'')"
    local dip "p > F"
  }
  else {
    local d chi2
    local dip "p > chi2"
  }
  di
  di as txt "{hline 7}{c TT}{hline 30}"
  di as txt "          {c |}{ralign 12: `d'}          df{ralign
> 11: `dip'}"
    di as txt "{hline 7}{c +}{hline 30}"
    forvalues it = 1 / `nexpt' {
      di as txt "    (`it') {c |}" as res _col(12) %9.2f `t
> m'[`it',1] _col(22) %6.0f `tm'[`it',2] _col(33) %6.4f `tm'[`it',`pindex'] as
> txt "*"
    }
    di as txt "{hline 7}{c +}{hline 30}"
    di as txt "    All {c |}" as res _col(12) %9.2f ``tes
> ttype' _col(22) %6.0f `df1' _col(33) %6.4f `p'
    di as txt "{hline 7}{c BT}{hline 30}"
    _mtest footer 1 "`mtmethod'" "*"
  }
- if "`coef'" != "" {
= if "" != "" {
  Table
}
- return scalar p = `p'
= return scalar p = __00000Y
- return scalar df = `df1'
= return scalar df = __00000X
- if "`testtype'" == "F" {
= if "chi2" == "F" {
  return scalar F = `F'
  return scalar df_r = `df2'

```

```

    }
    - else return scalar chi2 = `chi2'
= else return scalar chi2 = __00000W
    - return scalar drop = `drop'
= return scalar drop = __00000Z
    - local i 1
    - while "`dropped_`i'" != "" {
= while "5" != "" {
    - return scalar dropped_`i' = `dropped_`i''
= return scalar dropped_1 = 5
    - local ++i
    - }
    - while "`dropped_`i'" != "" {
= while "" != "" {
        return scalar dropped_`i' = `dropped_`i''
        local ++i
    }
    - if "`mtmethod'" != "" {
= if "" != "" {
        return matrix mtest `tm'
        return local mtmethod `mtmethod'
    }
}

> ----- end test.WaldTest -----
    - return add

> ----- end test -----
    - if !c(rc) {
    - if `:length local minimum' {
= if 7 {
    - quietly test, min

> ----- begin test -----
    - if "`e(cmd)'" == "anova" | "`e(cmd)'" == "manova" {
= if "mopt" == "anova" | "mopt" == "manova" {
        AnovaTestChooser `0'
        return add
        exit
    }
    - if "`e(cmd)'" == "mixed" {
= if "mopt" == "mixed" {
        MixedTestChooser `0'
        return add
        exit
    }
    - if _caller() < 8 {

```

```

        _test `0'
        return add
        exit
    }
- is_svy

```

```

> ----- begin is_svy -----
    - version 8
    - syntax [, Regression]
    - if ``e(prefix)'' == "svy" {
= if `""' == "svy" {
        return scalar is_svy = 1
    }
    - else if "regression" == "" {
= else if "" == "" {
    - return scalar is_svy = ("e(N_psu)'' != "")
= return scalar is_svy = ("'' != "")
    - }
    - else {
        capt mat list e(b)
        local rc = _rc
        return scalar is_svy = ("e(N_psu)'' != "") & (`rc'
> == 0)

    }

```

```

> ----- end is_svy -----
    - local is_svy = r(is_svy)
    - if replay() & `is_svy' == 0 {
= if replay() & 0 == 0 {
    - _test `0'
= _test , min
    - return add
    - exit

```

```

> ----- end test -----
    - }
    - ereturn scalar df_m = r(df)
    - local drop = r(drop)
    - if `drop' {
= if 1 {
    - local drop 0
    - local i 1
    - local idrop ``r(dropped_`i')''
= local idrop `5'
    - while "idrop" != "" {
= while "5" != "" {

```

```

- if !`omit'[1,`idrop'] {
= if !__00000V[1,5] {
    local ++drop
  }
- local ++i
- local idrop ``r(dropped_`i')''
= local idrop `''
- }
- while ``idrop' != '' {
= while '' != '' {
    if !`omit'[1,`idrop'] {
      local ++drop
    }
    local ++i
    local idrop ``r(dropped_`i')''
  }
- }
- if `drop' == 0 | ``cns' != '' {
= if 0 == 0 | '' != '' {
- if !missing(e(df_r)) {
  ereturn scalar F = r(F)
}
- else {
- ereturn scalar chi2 = r(chi2)
- ereturn local chi2type Wald
- }
- ereturn scalar p = r(p)
- }
- else {
  if !missing(e(df_r)) {
    ereturn scalar F = .
  }
  else {
    ereturn scalar chi2 = .
    ereturn local chi2type Wald
  }
  ereturn scalar p = .
}
- }
- else {
  if missing(e(df_r)) {
    ereturn local chi2type Wald
  }
  ereturn scalar df_m = 0
}

```

```

> ----- end _prefix_model_test -----
- }
- else {
  _prefix_model_test, $ML_svy $ML_noadj
}
- }
- else if `:length global ML_ll_0' {
= else if 18 {
  if ``maxmin''' == "minimize" {
    ereturn scalar chi2 = -2*(e(ll)-e(ll_0))
  }
  else {
    ereturn scalar chi2 = 2*(e(ll)-e(ll_0))
  }
  ereturn scalar p = chi2tail(e(df_m), e(chi2))
  ereturn local chi2type "LR"
}
- if `:length global ML_wexp' {
= if 0 {
  ereturn local wtype ``$ML_wtyp''
  ereturn local wexp ``$ML_wexp''
}
- if `:length global ML_group' {
= if 0 {
  ereturn local group ``$ML_group''
  if ``e(clustvar)''' == "$ML_grp" & "$ML_grp" != "" {
    ereturn local clustvar ``$ML_group''
  }
}
- ereturn local cmd "ml"
- if `:length local score' {
= if 0 {
  mata: Mopt_score(0)
  ereturn local scorevars `scores'
}
- if "$ML_preserve" != "no" {
= if "no" != "no" {
  restore
  if ``e(prefix)''' == "svy" & e(N_strata_omit) {
    tempname v
    quietly _svy2 $ML_sample if $ML_sample, type(total) svy v(
> `v') subpop(`e(subpop)') touse($ML_sample)
  }
  ereturn repost, esample($ML_sample)
}
- if ``moptobj''' != "" {

```

```

= if `""' != "" {
    local clear noclear
}
- if !`:length local clear' {
= if !0 {
- Clear
}

> ----- begin mopt.Clear -----
- syntax [, NOTANOPTION]
- capture drop $ML_w
= capture drop __000007
- capture drop $ML_samp
= capture drop __000007
- capture drop $ML_sample
= capture drop __000007
- capture drop $ML_subv
= capture drop
- capture drop $ML_grp
= capture drop
- mata: Mopt_drop_external()
- macro drop ML_*

> ----- end mopt.Clear -----
- }
- else {
    capture confirm var $ML_sample
    if c(rc) {
        quietly gen byte $ML_sample = e(sample)
    }
}
- if `:length local output' == 0 {
= if 8 == 0 {
    Display, level(`level') `options'
}

> ----- end mopt.MaxMin -----
- }

> ----- end mopt.Model -----
- if c(rc) {
    local rc = c(rc)
    Clear
    exit `rc'
}
- exit

```

```

> ----- end mopt -----
    - exit
> ----- end ml -----
    - if "`score'" != "" {
= if "" != "" {
    label var `scvar' "Score index from poisson"
    rename `scvar' `score'
    est local scorevars `score'
}
    - est scalar r2_p = 1 - e(ll)/e(ll_0)
    - est hidden local gof "poiss_g"
    - est local offset "`offvar'"
= est local offset ""
    - est local offset1
    - est local estat_cmd "poisson_estat"
    - est hidden local marginsderiv default N IR
    - est local predict "poisso_p"
    - est local cmd "poisson"
    - global S_E_ll = e(ll)
    - global S_E_ll0 `e(ll_0)'
= global S_E_ll0 -401.5531151051299
    - global S_E_chi2 = e(chi2)
    - global S_E_mdf = e(df_m)
    - global S_E_pr2 `e(r2_p)'
= global S_E_pr2 .3124710163678913
    - global S_E_nobs = e(N)
    - global S_E_tdf = e(N)
    - global S_E_off `e(offset)'
= global S_E_off
    - global S_E_depv `e(depvar)'
= global S_E_depv piq_timing_max
    - global S_E_cmd `e(cmd)'
= global S_E_cmd poisson
    - if "`display'"==" " {
= if "nodisplay"==" " {
        Display, `irr' level(`level') `diopts'
    }
    - error `e(rc)'
= error 0

> ----- end poisson.Estimate -----
    - version 10: ereturn local cmdline `"poisson `0'"
    = version 10: ereturn local cmdline `"poisson piq_timing_max ln_neq cb
> _authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo
> [] if __000000, nodisplay    robust"

```

```

> ----- end poisson -----
- tempname bp
- mat `bp' = e(b)
= mat __000002 = e(b)
- if "`lrtest'"==" " {
= if "nolrtest"==" " {
    tempname llp
    scalar `llp' = e(ll)
  }
- }
- else if "`'from'"==" " {
= else if `""'==" " {
    `vvpoi' capture poisson `y' `xvars' [`weight'`exp'] if `touse', `offop
> t' `constan' iter(1)
    tempname bp
    mat `bp' = e(b)
  }
- if "`constan'"==" " & "`'from'"==" " {
= if ""==" " & `""'==" " {
- if "`offset'"!=" " {
= if ""!=" " {
    SolveC `y' `offset' [`weight'`exp'] if `touse', mean(`mean')
    local c = r(_cons)
  }
- else local c = ln(`mean')
= else local c = ln(__000001)
- tempname b0 ll0
- if `c'<. {
= if 1.12358520959949<. {
- mat `b0' = (`c', 0)
= mat __000003 = (1.12358520959949, 0)
- }
- else mat `b0' = (0, 0)
= else mat __000003 = (0, 0)
- mat colnames `b0' = `y':_cons ln`parm':_cons
= mat colnames __000003 = piq_timing_max:_cons lnalpha:_cons
- if "`weight'"=="aweight" {
= if ""=="aweight" {
    local wt `[aw`exp']
  }
- else if "`weight'"!=" " {
= else if ""!=" " {
    local wt `[iw`exp']
  }
- `nohead' di in gr _n "Fitting constant-only model:"

```

```
= di in gr _n "Fitting constant-only model:"
```

```
Fitting constant-only model:
```

```
  - `vv' ml model `mm' `prog' (`yname': `y'=, `constan' `offopt') /ln`parm  
> ' if `touse' `wt', collinear missing max nooutput nopreserve wald(0) init(`b  
> 0', copy) search(off) `mlopts' `robust' nocnsnotes `negh'  
    = version 18: ml model e2 nbreg_lf (piq_timing_max: piq_timing_max=, )  
> /lnalpha if __000000 , collinear missing max nooutput nopreserve wald(0) ini  
> t(__000003, copy) search(off) robust nocnsnotes negh
```

```
> ----- begin ml -----  
    - if _caller()>=11 {  
    - mopt `0'  
    = mopt model e2 nbreg_lf (piq_timing_max: piq_timing_max=, ) /lnalpha  
> if __000000 , collinear missing max nooutput nopreserve wald(0) init(__0000  
> 03, copy) search(off) robust nocnsnotes negh
```

```
> ----- begin mopt -----  
    - local vv : di "version " string(_caller()) ":"  
    - version 12  
    - gettoken subcmd 0 : 0, parse(" ,")  
    - local lcmd : length local subcmd  
    - if "`subcmd'" == "clear" {  
    = if "model" == "clear" {  
      Clear  
      exit  
    }  
    - if ``"subcmd"' == "hold" {  
    = if ``"model"' == "hold" {  
      ml_hold `0'  
      exit  
    }  
    - if ``"subcmd"' == "unhold" {  
    = if ``"model"' == "unhold" {  
      ml_unhold `0'  
      exit  
    }  
    - if "`subcmd'" == "score" {  
    = if "model" == "score" {  
      if _caller() > 12 {  
        `vv' Score `0'  
      }  
      else {  
        Score `0'  
      }  
    }  
    exit
```

```

}
- if "`subcmd'" == "count" {
= if "model" == "count" {
  Count `0'
  exit
}
- if "`subcmd'" == "trace" {
= if "model" == "trace" {
  Trace `0'
  exit
}
- if "`subcmd'" == bsubstr("graph",1,max(2,`lcmd')) {
= if "model" == bsubstr("graph",1,max(2,5)) {
  Graph `0'
  exit
}
- if "`subcmd'" == "init" {
= if "model" == "init" {
  Interactive 0
  `vv' Init `0'
  exit
}
- if "`subcmd'" == bsubstr("maximize",1,max(3,`lcmd')) {
= if "model" == bsubstr("maximize",1,max(3,5)) {
  Interactive 1
  `vv' MaxMin maximize `0'
  exit
}
- if "`subcmd'" == bsubstr("minimize",1,max(3,`lcmd')) {
= if "model" == bsubstr("minimize",1,max(3,5)) {
  Interactive 1
  `vv' MaxMin minimize `0'
  exit
}
- if "`subcmd'" == bsubstr("display",1,max(2,`lcmd')) {
= if "model" == bsubstr("display",1,max(2,5)) {
  Display `0'
  exit
}
- if "`subcmd'" == bsubstr("footnote",1,max(4,`lcmd')) {
= if "model" == bsubstr("footnote",1,max(4,5)) {
  ml_footnote `0'
  exit
}
- if "`subcmd'" == "," {
= if "model" == "," {

```

```

    Display, `0'
    exit
  }
  - if "`subcmd'" == bsubstr("model",1,max(3,`lcmd')) {
  = if "model" == bsubstr("model",1,max(3,5)) {
  - `vv' capture noi Model `0'
  = version 18: capture noi Model e2 nbreg_lf (piq_timing_max: piq_ti
> ming_max=, ) /lnalpha if __000000 , collinear missing max nooutput nopreser
> ve wald(0) init(__000003, copy) search(off) robust nocnsnotes negh

> ----- begin mopt.Model -----
  - local version = string(_caller())
  - local vv : di "version `version':"
  = local vv : di "version 18:"
  - version 12
  - syntax anything(id="model" name=spec) [if] [in] [fw aw pw iw] [,
> BRACKET COLLinear MISSing CONTinue lf0(string) INIT(string) CONSTraints(str
> ing) noCNSNOTES VCE(passthru) NEGh NOPREserve TECHnique(string) ITERID(strin
> g) CRITtype(string) OBS(numlist max=1 >0) TITle(string) WALDtest(integer -1)
> SVY SUBpop(string) SRSsubpop noSVYadjust SCORE(passthru) noOUTput noSCVARS
> GROUP(varname) ITERPROLOG(string) DERIVPROLOG(string) DERIVH(string) DERIVSC
> ALE(string) DERIV(string) nrderiv GNWMATrix(string) KAUXiliary(numlist int >
> =0) MAXimize MINimize USERinfo(namelist) PUPDATED Robust CLuster(passthru) m
> optobj(string) USEVIEWS * ]
  - if ```moptobj'``' == "" {
  = if `""' == "" {
  - Clear

> ----- begin mopt.Clear -----
  - syntax [, NOTANOPTION]
  - capture drop $ML_w
  = capture drop
  - capture drop $ML_samp
  = capture drop
  - capture drop $ML_sample
  = capture drop
  - capture drop $ML_subv
  = capture drop
  - capture drop $ML_grp
  = capture drop
  - mata: Mopt_drop_external()
  - macro drop ML_*

> ----- end mopt.Clear -----
  - }
  - local maxmin `minimize' `maximize'

```

```

= local maxmin maximize
- opts_exclusive "`maxmin'"
= opts_exclusive "maximize"

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts maximize
- local n 0
- while ```opts'"" != "" {
= while `"maximize" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {
- exit

> ----- end opts_exclusive -----
- if `:length local maxmin' {
= if 8 {
- local interactive 0
- }
- else local interactive 1
- _get_diparmopts, diparmopts(`options') soptions syntaxonly
= _get_diparmopts, diparmopts(search(off)) soptions syntaxonly

> ----- begin _get_diparmopts -----
- if _caller() < 8.2 {
  _get_diparmopts_8 `0'
  exit
}
- version 9
- local version : di "version " string(_caller()) ":"
- syntax [, diparmopts(string asis) EXECute soptions bottom plus
> SYNTAXonly * ]
- local goptions `options'
= local goptions
- SpliceGlobals junk , `goptions'

```



```

= SpliceGlobals junk ,


---


> 

---

 begin _get_diparmopts.SpliceGlobals 

---


    - syntax name(id="macro name" name=c_diparm) [, diparm(string
> asis) Level(cilevel) dof(passthru) syntaxonly ]
    - if ``dof`` == "" & ``e(df_r)`` != "" {
    = if ```` == "" & ```` != "" {
        capture confirm integer number `e(df_r)`
        if !c(rc) {
            local gdof dof(`e(df_r)`)
        }
        capture
    }
    - else local gdof ``dof``
    = else local gdof ````
    - local glevel `level`
    = local glevel 95
    - local lopt level(`glevel`)
    = local lopt level(95)
    - if (``diparm`` == "") exit
    = if (```` == "") exit


---


> 

---

 end _get_diparmopts.SpliceGlobals 

---


    - local 0 `", `diparmopts``
    = local 0 `", search(off)``
    - local diparmopts
    - local k 0
    - syntax [, diparm(string asis) * ]
    - while ``diparm`` != "" {
    = while ```` != "" {
        local ++k
        local single 1
        local after
        capture _on_colon_parse `diparm`
        if !c(rc) {
            local single 0
            local diparm ``s(before)``
            local after ``s(after)``
        }
        capture
        SpliceGlobals diparm , diparm(`diparm`) `syntaxonly` `goptions
> `

    local diparm`k` ``diparm``
    local diparmopts ``diparmopts` : `diparm``
    if `single` | ``:list retok after`` == "" {
    local 0 `", `options``

```

```

syntax [, diparm(string asis) * ]
}
else {
local diparm ``after'''
}
}
- if ``soptions''' == "" {
= if "soptions" == "" {
syntax [, diparm(string asis) ]
}
- if ("execute" == "") {
= if (" == ") {
- sreturn clear
- sreturn local options ``options'''
= sreturn local options "search(off)"
- sreturn local diparm ``diparmopts'''
= sreturn local diparm `'''
- forval i = 1/`k' {
= forval i = 1/0 {
sreturn local diparm`i' ``diparm`i''''
}
- sreturn local k `k'
= sreturn local k 0
- exit

```

```

> ----- end _get_diparmopts -----
- forval k = 1/`s(k)' {
= forval k = 1/0 {
local diparm`k' ``s(diparm`k)'''
}
- local ndiparm `s(k)'
= local ndiparm 0
- local options ``s(options)'''
= local options "search(off)"
- if `interactive' & `:length local options' {
= if 0 & 11 {
local 0 , `options'
syntax [, NOTANOPTION]
}
- if `:length local nopreserve' | `:length local score' {
= if 10 | 0 {
- global ML_preserve no
- }
- else global ML_preserve yes
- gettoken evaltype spec : spec
- confirm name `evaltype'

```

```

= confirm name e2
- gettoken evaluator spec : spec
- global ML_evaltype : copy local evaltype
- if `:length local srssubpop' {
= if 0 {
  local 0 , srssubpop
  syntax [, NONOPTION]
  exit 198
}
- if `:length local subpop' {
= if 0 {
  local svy svy
}
- if `:length local svy' {
= if 0 {
  opts_exclusive "`vce' `svy'" vce
  if `:length local weight' {
    di as err "svy option not allowed with weights"
    exit 198
  }
  global ML_noadj : copy local svyadjust
}
- global ML_svy : copy local svy
- if _caller() >= 15 & c(userversion) >= 15 {
- local fparm ", freeparm"
- }
- local eqspec : copy local spec
- local ieq 0
- while `:length local eqspec' {
= while 46 {
- local ++ieq
- gettoken eq eqspec : eqspec, bind
- if bsubstr(trim("`eq'"),1,1) == "/" {
= if bsubstr(trim("(piq_timing_max: piqu_timing_max=,  )"),1,1) ==
> "/" {
  local eq = bsubstr(trim("`eq'"),2,.)
  local spec : subinstr local spec "/"`eq' " ("`eq'":`fparm' )", w
> ord
}
- else {
- gettoken p1 p2 : eq, parse("(")
- local p2 = trim("`p2'")
= local p2 = trim("`piq_timing_max: piqu_timing_max=,  )")
- if bsubstr("`p2'",1,1) == "," {
= if bsubstr("piq_timing_max: piqu_timing_max=,  )",1,1) == "," {
  gettoken comma p2 : p2, parse(",")

```

```

        local p2 = trim("`p2'")
    }
- if "`p1'`p2'" == "()" {
= if `(piq_timing_max: piq_timing_max=, )"' == "()" {
    local spec : subinstr local spec "`eq'" "(eq`ieq:)", word
    }
- }
- }
- while `:length local eqspec' {
= while 9 {
- local ++ieq
- gettoken eq eqspec : eqspec, bind
- if bsubstr(trim("`eq'"),1,1) == "/" {
= if bsubstr(trim("/lnalpha"),1,1) == "/" {
- local eq = bsubstr(trim("`eq'"),2,.)
= local eq = bsubstr(trim("/lnalpha"),2,.)
- local spec : subinstr local spec "/"`eq'" `("`eq":`fparm')"', w
> ord
        = local spec : subinstr local spec "/lnalpha" `("lnalpha":, freep
> arm)'"', word
    - }
- else {
    gettoken p1 p2 : eq, parse("()")
    local p2 = trim("`p2'")
    if bsubstr("`p2'",1,1) == "," {
    gettoken comma p2 : p2, parse(",")
    local p2 = trim("`p2'")
    }
    if "`p1'`p2'" == "()" {
    local spec : subinstr local spec "`eq'" "(eq`ieq:)", word
    }
    }
- }
- while `:length local eqspec' {
= while 0 {
    local ++ieq
    gettoken eq eqspec : eqspec, bind
    if bsubstr(trim("`eq'"),1,1) == "/" {
    local eq = bsubstr(trim("`eq'"),2,.)
    local spec : subinstr local spec "/"`eq'" `("`eq":`fparm')"', w
> ord
    }
    else {
    gettoken p1 p2 : eq, parse("()")
    local p2 = trim("`p2'")
    if bsubstr("`p2'",1,1) == "," {

```

```

gettoken comma p2 : p2, parse(",")
local p2 = trim("`"p2"'")
}
if `"p1"p2"' == "()" {
local spec : subinstr local spec "`eq'" "(eq`ieq':)", word
}
}
}
- if `interactive' {
= if 0 {
SetGlobalVar ML_sample : _MLtua
}
- else {
- global ML_sample : tempvar
- if ``moptobj' != "" {
= if `"' != "" {
global ML_sample `moptobj'$ML_sample
}
- }
- if ``moptobj' != "" {
= if `"' != "" {
cap drop $ML_sample
}
- `vv' mark $ML_sample `if' `in' [`weight'`exp'], `zeroweight'
= version 18: mark __000005 if __000000 [],
- tempname eqlist
- `.eqlist' = .eqlist.new, eqopts(NOCONSTANT FREEParam) eqargopts(
> OFFset EXPosure) noneedvarlist numdepvars(0) needequal
= __000006 = .eqlist.new, eqopts(NOCONSTANT FREEParam) eqargopts(
> OFFset EXPosure) noneedvarlist numdepvars(0) needequal
-class {
-instance:
- array n_depvars
- string needequal
- string noneedvarlist
- string wtypes
- string collinear
- string nocons
- string nocons_ignore
- double n_eq
- string gl_if
- string gl_in
- string gl_wgt
- string gl_options
- _optlist eq_opts_allowed
-class {

```

```

        -instance:
        -      array options    = {}
        -      array names      = {}
        -}

        -      array          eq_list
        -      _optlist        mark_opts
        -      array          mark_list
        -      array          mark_name
        -      _optlist        smark_opts
        -      array          smark_list
        -      array          smark_name
        -      _optlist        rmcoll_opts
        -      array          rmcoll_list
        -      array          rmcoll_name
        -      _optlist        rmdcoll_opts
        -      array          rmdcoll_list
        -      array          rmdcoll_name
        -}
    _____
> _____ begin _eqlist.new _____
    - version 9.2
    - ._init
    _____
> _____ begin _eqlist._init _____
    - version 9.2
    - .n_eq = 0
    - .gl_if = ""
    - .gl_in = ""
    - .gl_wgt = ""
    - .gl_options = ""
    - .eq_list = {}
    _____
> _____ end _eqlist._init _____
    - ._setup `0'
    = ._setup , eqopts(NOCONSTant FREEParam) eqargopts(OFFset EXPosur
> e) noneedvarlist numdepvars(0) needequal
    _____
> _____ begin _eqlist._setup _____
    - version 9.2
    - .mark_list = {}
    - .mark_name = {}
    - .mark_opts.reset
    _____
> _____ begin _optlist.reset _____
    - version 9
    - .options = {}

```

```

- .names = {}
-----
> ----- end _optlist.reset -----
- .smark_list = {}
- .smark_name = {}
- .smark_opts.reset
-----
> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}
-----
> ----- end _optlist.reset -----
- .rmcoll_list = {}
- .rmcoll_name = {}
- .rmcoll_opts.reset
-----
> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}
-----
> ----- end _optlist.reset -----
- .rmdcoll_list = {}
- .rmdcoll_name = {}
- .rmdcoll_opts.reset
-----
> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}
-----
> ----- end _optlist.reset -----
- syntax [, EQopts(namelist) EQARGopts(namelist) noNEEDVARLIST
> COMMONopts(string asis) MARKopts(namelist) SMARKopts(namelist) RMCOLLOpts(n
> amelist) RMDCOLLOpts(namelist) NUMDEPvars(numlist integer >=0) NEEDEQUAL WTY
> PES(string) IGNORENOCONS ]
- .eq_opts_allowed.reset
-----
> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}
-----
> ----- end _optlist.reset -----
- foreach opt of local eqopts {

```

```

- .eq_opts_allowed.addopt `opt'
= .eq_opts_allowed.addopt NOCONSTant


---


> 

---

 begin _optlist.addopt 

---


- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("NOCONSTant")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "NOCONSTant"
- .names.Arrpush "`mname'"
= .names.Arrpush "noconstant"


---


> 

---

 end _optlist.addopt 

---


- }
- .eq_opts_allowed.addopt `opt'
= .eq_opts_allowed.addopt FREEParam


---


> 

---

 begin _optlist.addopt 

---


- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("FREEParam")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "FREEParam"
- .names.Arrpush "`mname'"
= .names.Arrpush "freeparm"


---


> 

---

 end _optlist.addopt 

---


- }
- foreach opt of local eqargopts {
- .eq_opts_allowed.addopt `opt', passthru
= .eq_opts_allowed.addopt OFFset, passthru


---


> 

---

 begin _optlist.addopt 

---


- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")

```



```

= local mname = lower("OFFset")
- if "`passthru'" != "" {
= if "passthru" != "" {
- local optspec `optspec'(passthru)
= local optspec OFFset(passthru)
- }
- .options.Arrpush "`optspec'"
= .options.Arrpush "OFFset(passthru)"
- .names.Arrpush "`mname'"
= .names.Arrpush "offset"
}

> ----- end _optlist.addopt -----

- }
- .eq_opts_allowed.addopt `opt', passthru
= .eq_opts_allowed.addopt EXPosure, passthru
}

> ----- begin _optlist.addopt -----

- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("EXPosure")
- if "`passthru'" != "" {
= if "passthru" != "" {
- local optspec `optspec'(passthru)
= local optspec EXPosure(passthru)
- }
- .options.Arrpush "`optspec'"
= .options.Arrpush "EXPosure(passthru)"
- .names.Arrpush "`mname'"
= .names.Arrpush "exposure"
}

> ----- end _optlist.addopt -----

- }
- local i 0
- foreach opt of local markopts {
. mark_opts.addopt `opt', passthru
}
- local i 0
- foreach opt of local smarkopts {
. smark_opts.addopt `opt', passthru
}
- local i 0
- foreach opt of local rmcollopts {
. rmcoll_opts.addopt `opt', passthru
}
- local i 0

```

```

- foreach opt of local rmdcollopts {
  .rmdcoll_opts.addopt `opt', passthru
}
- .n_depvars.Arrdropall
- if "`numdepvars'" != "" {
= if "0" != "" {
- foreach ndep of local numdepvars {
- .n_depvars.Arrpush `ndep'
= .n_depvars.Arrpush 0
- }
- }
- else .n_depvars.Arrpush 1
- .needequal = "`needequal'"
= .needequal = "needequal"
- .wtypes = "`wtypes'"
= .wtypes = ""
- .noneedvarlist = "`needvarlist'"
= .noneedvarlist = "noneedvarlist"
- .nocons_ignore = "`ignorenocons'"
= .nocons_ignore = ""

> _____ end _eqlist._setup _____
> _____ end _eqlist.new _____
- .`eqlist'.parse `spec'
= .__000006.parse (piq_timing_max: piq_timing_max=, ) ("lnalpha"
> :, freeparm)

> _____ begin _eqlist.parse _____
- version 9.2
- . _init

> _____ begin _eqlist._init _____
- version 9.2
- .n_eq = 0
- .gl_if = ""
- .gl_in = ""
- .gl_wgt = ""
- .gl_options = ""
- .eq_list = {}

> _____ end _eqlist._init _____
- local MARKOPTLIST ```.mark_opts.dumpoptions'''

> _____ begin _optlist.dumpoptions _____
- version 9

```

```

- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `'''
- class exit ```optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local MARKOPTLIST `'''
- local SMARKOPTLIST ```.smark_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `'''
- class exit ```optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local SMARKOPTLIST `'''
- local RMCOLLOPTLIST ```.rmcoll_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `'''
- class exit ```optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local RMCOLLOPTLIST `'''
- local RMDCOLLOPTLIST ```.rmdcoll_opts.dumpoptions'''

```

```

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
    - local optlist : list uniq optlist
    - sreturn local optlist ```optlist'''
= sreturn local optlist `'''
    - class exit ```optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local RMDCOLLOPTLIST `'''
    - _parse expand EQ GL : 0, gweight common( `MARKOPTLIST' `SMARKO
> PTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLLlinear )
= _parse expand EQ GL : 0, gweight common(      COLLlinear )
    - if `EQ_n' == 0 & ``.noneedvarlist'" == "" {
= if 2 == 0 & "noneedvarlist" == "" {
    syntax varlist
    }
    - local rebind = `EQ_n' == 1
= local rebind = 2 == 1
    - if `rebind' {
= if 0 {
    tokenize ```0''', parse(",()[]")
    local rebind = ```1''' != "(" & ```2''' == "("
    }
    - if `rebind' {
= if 0 {
    while `:length local 0' {
    gettoken tok 0 : 0, parse(" ,") bind match(par)
    if ``par'" == "(" {
    gettoken nxt : 0
    local nxt = substr(```nxt''',1,1)
    if inlist(```nxt''', "#", "|") {
    local ZERO ```ZERO' (`tok')''
    }
    else {
    local ZERO ``(`ZERO') (`tok') `0'''
    local 0
    }
    }
    else if inlist("`tok'", "if", "in", ",",) {
    local ZERO ``(`ZERO') `tok' `0'''
    local 0

```

```

    }
    else if inlist(substr(`""tok'""',1,1), "#", "|") {
        local ZERO `""ZERO'""tok'""'
    }
    else {
        local ZERO `""ZERO' `tok'""'
    }
}

_parse expand EQ GL : ZERO, gweight common( `MARKOPTLIST' `SMA
> RKOPTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLlinear )
}
- forval i = 1/`EQ_n' {
= forval i = 1/2 {
- if `i' <= `.n_depvars.arrnels' {
= if 1 <= 1 {
- local ndep = `.n_depvars[`i']'
= local ndep = 0
- }
- .eq_list[`i'] = .eqspec.new, numdepvars(`ndep') `.needequal'
> `.noneedvarlist' wtypes(`.wtypes') `.nocons_ignore'
= .eq_list[1] = .eqspec.new, numdepvars(0) needequal noneedvarl
> ist wtypes()
-class {
-instance:
- double n_depvars
- double needequal
- double needvarlist
- string wtypes
- string name
- string depvars
- double hasequal
- string indepvars
- string other_markvars
- double nocons
- double nocons_ignore
- string offset
- double exposure
- double freeparm
- string if
- string in
- string wgt
- string options
-}

> ----- begin _eqspec.new -----
- version 9.2

```

```

- syntax [, NUMDEPvars(numlist integer >=0 max=1) NEEDEQUAL no
> NEEDVARLIST WYPES(string) IGNORENOCONS ]
- .n_depvars = 1
- if `:list sizeof numdepvars' {
= if 1 {
- .n_depvars = `numdepvars'
= .n_depvars = 0
- }
- .needequal = ("`needequal'" != "")
= .needequal = ("needequal" != "")
- .needvarlist = ("`needvarlist'" == "")
= .needvarlist = ("noneedvarlist" == "")
- .nocons_ignore = ("`ignorenocons'" != "")
= .nocons_ignore = ("" != "")
- .wtypes = "`wtypes'"
= .wtypes = ""

> ----- end _eqspec.new -----
- .eq_list['i'].parse `.eq_opts_allowed.objkey':`EQ_`i'
= .eq_list[1].parse __key(600002b2d240):piq_timing_max: piq_timi
> ng_max=

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002b2d240):piq_timing_max: piq_timi
> ng_max=

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quot
> es
- if "`par'" != "" {
= if "" != "" {
local before `("before')"'
}
- if ``before'" == ":" {
= if `__key(600002b2d240)' == ":" {
sreturn local after ``after'"
exit
}
- while ``COLON'" != ":" & ``after'" != "" {
= while `"' != ":" & `:piq_timing_max: piq_timing_max=" !
> = "" {

```

```

- gettoken COLON after : after, parse(":") bind match(par) q
> uotes
- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')
  local COLON
}
- else if ``"COLON"' != ":" {
= else if `":'" != ":" {
  local before ``"before' `COLON'
  local COLON
}
- }
- while ``"COLON"' != ":" & ``"after"' != "" {
= while `":'" != ":" & `piq_timing_max: piqu_timing_max="" !

> = "" {
  gettoken COLON after : after, parse(":") bind match(par) q
> uotes
  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if ``"COLON"' != ":" {
    local before ``"before' `COLON'
    local COLON
  }
}
- if ``"COLON"' != ":" {
= if `":'" != ":" {
  di as err "" found where ':' expected"
  exit 198
}
- sreturn local before ``"before'
= sreturn local before `__key(600002b2d240)'
- sreturn local after ``"after'
= sreturn local after `piq_timing_max: piqu_timing_max=""

> ----- end _on_colon_parse -----
- local ol `s(before)'
= local ol __key(600002b2d240)
- if `:list sizeof ol' {
= if 1 {
- local OPTLIST ```.ol'.dumpoptions'

> ----- begin _optlist.dumpoptions -----
- version 9

```

```

- forval i = 1/`.options.arnels' {
= forval i = 1/4 {
- local optlist `optlist' `.options[`i']'
= local optlist NOCONSTant
- }
- local optlist `optlist' `.options[`i']'
= local optlist NOCONSTant FREEParam
- }
- local optlist `optlist' `.options[`i']'
= local optlist NOCONSTant FREEParam OFFSET(passthru)
- }
- local optlist `optlist' `.options[`i']'
= local optlist NOCONSTant FREEParam OFFSET(passthru) EXPosur
> e(passthru)
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist ``NOCONSTant FREEParam OFFSET(passthru)
> u) EXPosure(passthru)''
- class exit ```optlist'''
= class exit ``NOCONSTant FREEParam OFFSET(passthru) EXPosure
> (passthru)''
_____
> _____ end _optlist.dumpoptions _____
= local OPTLIST ``NOCONSTant FREEParam OFFSET(passthru) EXPosur
> e(passthru)''
- local OPTNAMES ```.`ol'.dumpnames'''
_____
> _____ begin _optlist.dumpnames _____
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/4 {
- local namelist `namelist' `.names[`i']'
= local namelist noconstant
- }
- local namelist `namelist' `.names[`i']'
= local namelist noconstant freeparm
- }
- local namelist `namelist' `.names[`i']'
= local namelist noconstant freeparm offset
- }
- local namelist `namelist' `.names[`i']'
= local namelist noconstant freeparm offset exposure
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''

```



```

= sreturn local namelist `noconstant freeparm offset exposu
> re"
- class exit ``namelist''
= class exit `noconstant freeparm offset exposure'

> ----- end _optlist.dumpnames -----
= local OPTNAMES `noconstant freeparm offset exposure'
- local NOCONS constant noconstant
- if ``:list NOCONS & OPTNAMES'' == "" {
= if `noconstant' == "" {
    local NOCONS noCONStant
    }
- else local NOCONS
- }
- local 0 ``s(after)''
= local 0 `piq_timing_max: piqu_timing_max='
- if ``.wtypes' != "" {
= if `'' != "" {
    local wgt `[.wtypes]'
    }
- syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST' `NOC
> ONS' *]
= syntax [anything(equalok)] [if] [in] [, NOCONStant FREEParM
> OFFset(passthru) EXPosure(passthru) *]
- local HOLDIF ``if''
= local HOLDIF `''
- local HOLDIN ``in''
= local HOLDIN `''
- if `wgt' != "" & `weight' != "" {
= if "" != "" & "" != "" {
    local HOLDWGT `[weight'exp]'
    }
- gettoken NAME REST : anything, parse(":")
- if trim("`NAME'") == ":" {
= if trim("piq_timing_max") == ":" {
    di as err "nothing found where equation name expected"
    exit 198
    }
- if `:list sizeof REST' {
= if 2 {
- if strpos("`NAME'", ":") {
= if strpos("piq_timing_max", ":") {
    capture _msparse `NAME'
    if c(rc) {
    di as err "{bf:`NAME'} invalid equation specification"
    exit 198

```

```

    }
    }
    - else {
    - ._confirm_eqname `NAME'
    = ._confirm_eqname piq_timing_max
    }
}

> ----- begin _eqspec._confirm_eqname -----
    - version 9.2
    - capture confirm number `0'
    = capture confirm number piq_timing_max
    - if (! c(rc)) exit
    - local hasdot = strpos(`"0"',".")
    = local hasdot = strpos(`"piq_timing_max"',".")
    - if `hasdot' {
    = if 0 {
        syntax varname(ts)
        exit
    }
    - capture syntax name(id="equation name")
    - if (! c(rc)) exit
    }

> ----- end _eqspec._confirm_eqname -----
    - }
    - local NAME : list retok NAME
    - gettoken COLON anything : REST, parse(":")
    - }
    - else {
        local NAME
    }
    - gettoken DEPVARs REST : anything, parse("=") bind
    - if "`DEPVARs'" == "=" {
    = if "piq_timing_max" == "=" {
        local REST : copy local anything
        local DEPVARs
    }
    - if (`:length local DEPVARs' == 0 & `.n_depvars') {
    = if (14 == 0 & 0) {
        di as err "nothing found where depvar expected"
        exit 198
    }
    - if ``"REST"' == "" {
    = if `"' == "" {
        if 0`.needequal' {
            if `.needvarlist' | (`:length local DEPVARs' != 0 & `.n_depvars'
> ars') {
            di as err "equal sign required to separate depvars from inde

```

```

> pvars"
    exit 198
  }
}
local DEPVARs
local n_deps : list sizeof anything
if `n_deps' != 0 | `.needvarlist' {
  if `n_deps' < `.n_depvars' {
    error 102
  }
  forval j = 1/`.n_depvars' {
    gettoken YY anything : anything
    local DEPVARs `DEPVARs' `YY'
  }
  local INDEPVARs : list retok anything
}
local hasequal 0
}
- else {
- gettoken EQ INDEPVARs : REST, parse("=") bind
- local hasequal 1
- }
- if `:list sizeof DEPVARs' {
= if 1 {
- _fv_check_depvar `DEPVARs'
= _fv_check_depvar piq_timing_max
- tsunab DEPVARs : `DEPVARs'
= tsunab DEPVARs : piq_timing_max
}

> ----- begin tsunab -----
- version 6
- gettoken user 0: 0, parse(" :")
- gettoken colon 0: 0, parse(" :")
- if `"'colon'"' != ":" { error 198 }
= if `":'"' != ":" { error 198 }
- syntax [varlist(ts default=empty)] [, MIN(integer 1) MAX(i
> nteger 32000) NAME(string)]
- c_local `user' `varlist'
= c_local DEPVARs piq_timing_max
- local n : word count `varlist'
= local n : word count piq_timing_max
- if `n'>=`min' & `n'<=`max' { exit }
= if 1>=1 & 1<=32000 { exit }

> ----- end tsunab -----
- }

```

```

- if `:list sizeof INDEPVARs' {
= if 0 {
    fvnab INDEPVARs : `INDEPVARs'
}
- if inlist("noconstant", "`noconstant'", "`constant'") {
= if inlist("noconstant", "", "") {
    if "`INDEPVARs'" == "" & !`.nocons_ignore' {
        di as err "independent variables are required when option no
> constant is specified"
        exit 102
    }
    if "`NOCONS'" != "" {
        local options `options' noconstant
    }
    local NOCONS 1
}
- else local NOCONS 0
- if ``"offset"exposure"" != "" {
= if `""' != "" {
    . _check_offset, `offset' `exposure'
    local OFFSET "`s(offset)'"
    local EXPOSURE = ("`exposure'" != "")
    local OTHER `s(offset)'
}
- else local EXPOSURE 0
- local FREEARM = ``freeparm"" != ""
= local FREEARM = `""' != ""
- local OPTIONS
- local SPACE
- foreach OPTNAME of local OPTNAMES {
- if ``"OPTNAME"" != "" {
= if `""' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
    local SPACE " "
}
- }
- if ``"OPTNAME"" != "" {
= if `""' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
    local SPACE " "
}
- }
- if ``"OPTNAME"" != "" {
= if `""' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
    local SPACE " "
}

```

```

    }
- }
- if ````OPTNAME'''' != "" {
= if ````' != "" {
    local OPTIONS ````OPTIONS``SPACE``OPTNAME''''
    local SPACE " "
    }
- }
- if ````options'''' != "" {
= if ````' != "" {
    local OPTIONS ````OPTIONS``SPACE``options''''
    }
- .name = ````NAME''''
= .name = ``piq_timing_max''
- .depvars = ````DEPVARs''''
= .depvars = ``piq_timing_max''
- .hasequal = `hasequal'
= .hasequal = 1
- .indepvars = ````:list retok INDEPVARs''''
= .indepvars = ````'
- .other_markvars = ````:list retok OTHER''''
= .other_markvars = ````'
- .nocons = `NOCONS'
= .nocons = 0
- .if = ````HOLDIF''''
= .if = ````'
- .in = ````HOLDIN''''
= .in = ````'
- .wgt = ````HOLDWGT''''
= .wgt = ````'
- .offset = ````OFFSET''''
= .offset = ````'
- .exposure = `EXPOSURE'
= .exposure = 0
- .freeparm = `FREEPARM'
= .freeparm = 0
- .options = ````OPTIONS''''
= .options = ````'

```

```

> _____ end _eqspec.parse _____
- }
- if `i' <= `.n_depvars.arnels' {
= if 2 <= 1 {
    local ndep = `.n_depvars[`i']'
    }
- .eq_list[`i'] = ._eqspec.new, numdepvars(`ndep') `needequal'

```

```

> `.noneedvarlist' wtypes(`.wtypes') `.nocons_ignore'
      = .eq_list[2] = ._eqspec.new, numdepvars(0) needequal noneedvarl
> ist wtypes()

> ----- begin _eqspec.new -----
      - version 9.2
      - syntax [, NUMDEPvars(numlist integer >=0 max=1) NEEDEQUAL no
> NEEDVARLIST WTYPES(string) IGNORENOCONS ]
      - .n_depvars = 1
      - if `:list sizeof numdepvars' {
      = if 1 {
      - .n_depvars = `numdepvars'
      = .n_depvars = 0
      - }
      - .needequal = ("`needequal'" != "")
      = .needequal = ("needequal" != "")
      - .needvarlist = ("`needvarlist'" == "")
      = .needvarlist = ("noneedvarlist" == "")
      - .nocons_ignore = ("`ignorenocons'" != "")
      = .nocons_ignore = ("" != "")
      - .wtypes = "`wtypes'"
      = .wtypes = ""

> ----- end _eqspec.new -----
      - .eq_list['i'].parse `.eq_opts_allowed.objkey':`EQ`i'
      = .eq_list[2].parse __key(600002b2d240):"lnalpha":, freeparm

> ----- begin _eqspec.parse -----
      - version 9.2
      - _on_colon_parse `0'
      = _on_colon_parse __key(600002b2d240):"lnalpha":, freeparm

> ----- begin _on_colon_parse -----
      - version 8.2
      - sreturn local before ""
      - sreturn local after ""
      - gettoken before after : 0, parse(":") bind match(par) quot
> es
      - if "`par'" != "" {
      = if "" != "" {
        local before ``(`before)''
      }
      - if ```before'"" == ":" {
      = if ``__key(600002b2d240)"" == ":" {
        sreturn local after ```after'""
      }
      exit

```

```

    }
    - while `""`COLON`""` != ":" & `""`after`""` != "" {
= while `""` != ":" & `""`lnalpha":, freeparm`""` != "" {
    - gettoken COLON after : after, parse(":") bind match(par) q

> uotes

    - if ``par`` != "" {
= if "" != "" {
    local before `before' (`COLON')
    local COLON
    }
    - else if `""`COLON`""` != ":" {
= else if `":` != ":" {
    local before `""before' `COLON`""
    local COLON
    }
    - }
    - while `""`COLON`""` != ":" & `""`after`""` != "" {
= while `":` != ":" & `""lnalpha":, freeparm`""` != "" {
    gettoken COLON after : after, parse(":") bind match(par) q

> uotes

    if ``par`` != "" {
    local before `before' (`COLON')
    local COLON
    }
    else if `""`COLON`""` != ":" {
    local before `""before' `COLON`""
    local COLON
    }
    }
    - if `""`COLON`""` != ":" {
= if `":` != ":" {
    di as err "" found where ':' expected"
    exit 198
    }
    - sreturn local before `""before`""
= sreturn local before `__key(600002b2d240)`""
    - sreturn local after `""after`""
= sreturn local after `""lnalpha":, freeparm`""



---


> 

---

 end _on_colon_parse 

---



    - local ol `s(before)'
= local ol __key(600002b2d240)
    - if `:list sizeof ol' {
= if 1 {
    - local OPTLIST `"".`ol'.dumpoptions`""

```

```

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
    = forval i = 1/4 {
    - local optlist `optlist' `.options[`i']'
    = local optlist NOCONSTant
    - }
    - local optlist `optlist' `.options[`i']'
    = local optlist NOCONSTant FREEParam
    - }
    - local optlist `optlist' `.options[`i']'
    = local optlist NOCONSTant FREEParam OFFSET(passthru)
    - }
    - local optlist `optlist' `.options[`i']'
    = local optlist NOCONSTant FREEParam OFFSET(passthru) EXPosur
> e(passthru)
    - }
    - local optlist : list uniq optlist
    - sreturn local optlist ```optlist'''
    = sreturn local optlist ``NOCONSTant FREEParam OFFSET(passthru)
> u) EXPosure(passthru)''
    - class exit ```optlist'''
    = class exit ``NOCONSTant FREEParam OFFSET(passthru) EXPosure
> (passthru)''
    -----
> ----- end _optlist.dumpoptions -----
    = local OPTLIST ``NOCONSTant FREEParam OFFSET(passthru) EXPosur
> e(passthru)''
    - local OPTNAMES ```.`ol'.dumpnames'''
    -----
> ----- begin _optlist.dumpnames -----
    - version 9
    - forval i = 1/`.names.arnels' {
    = forval i = 1/4 {
    - local namelist `namelist' `.names[`i']'
    = local namelist noconstant
    - }
    - local namelist `namelist' `.names[`i']'
    = local namelist noconstant freeparm
    - }
    - local namelist `namelist' `.names[`i']'
    = local namelist noconstant freeparm offset
    - }
    - local namelist `namelist' `.names[`i']'
    = local namelist noconstant freeparm offset exposure
    - }

```



```

- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `noconstant freeparm offset exposu
> re''

- class exit ``namelist'''
= class exit `noconstant freeparm offset exposure''

-----
> ----- end _optlist.dumpnames -----
= local OPTNAMES `noconstant freeparm offset exposure''
- local NOCONS constant noconstant
- if ``:list NOCONS & OPTNAMES''' == "" {
= if `noconstant'' == "" {
    local NOCONS noCONSTant
  }
- else local NOCONS
- }
- local 0 ``s(after)'''
= local 0 ``lnalpha":, freeparm''
- if ``.wtypes''' != "" {
= if `''' != "" {
    local wgt "[.wtypes]"
  }
- syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST' `NOC
> ONS' *]
= syntax [anything(equalok)] [if] [in] [, NOCONSTant FREEParM
> OFFset(passthru) EXPosure(passthru) *]
- local HOLDIF ``if'''
= local HOLDIF `'''
- local HOLDIN ``in'''
= local HOLDIN `'''
- if ``wgt'' != "" & ``weight'' != "" {
= if "" != "" & "" != "" {
    local HOLDWGT ``[weight'exp]''
  }
- gettoken NAME REST : anything, parse(":")
- if trim("`NAME'") == ":" {
= if trim("lnalpha") == ":" {
    di as err "nothing found where equation name expected"
    exit 198
  }
- if `:list sizeof REST' {
= if 1 {
- if strpos("`NAME'", ":") {
= if strpos("lnalpha'", ":") {
    capture _msparse `NAME'
    if c(rc) {

```

```

        di as err "{bf:`NAME'} invalid equation specification"
        exit 198
    }
}
- else {
-   ._confirm_eqname `NAME'
=   ._confirm_eqname lnalpha
}

> ----- begin _eqspec._confirm_eqname -----
- version 9.2
- capture confirm number `0'
= capture confirm number lnalpha
- if (! c(rc)) exit
- local hasdot = strpos("`0'", ".")
= local hasdot = strpos("`lnalpha'", ".")
- if `hasdot' {
= if 0 {
    syntax varname(ts)
    exit
}
- capture syntax name(id="equation name")
- if (! c(rc)) exit
}

> ----- end _eqspec._confirm_eqname -----
- }
- local NAME : list retok NAME
- gettoken COLON anything : REST, parse(":")
- }
- else {
    local NAME
}
- gettoken DEPVARS REST : anything, parse("=") bind
- if "`DEPVARS'" == "=" {
= if "" == "=" {
    local REST : copy local anything
    local DEPVARS
}
- if (`:length local DEPVARS' == 0 & `.n_depvars') {
= if (0 == 0 & 0) {
    di as err "nothing found where depvar expected"
    exit 198
}
- if ``REST' == "" {
= if `"' == "" {
- if 0`.needequal' {
= if 01 {

```

```

> ars') {
- if `.needvarlist' | (:length local DEPVARS' != 0 & `.n_depvars'
= if 0 | (0 != 0 & 0) {
  di as err "equal sign required to separate depvars from inde
> pvars"
  exit 198
}
- }
- local DEPVARS
- local n_deps : list sizeof anything
- if `n_deps' != 0 | `.needvarlist' {
= if 0 != 0 | 0 {
  if `n_deps' < `.n_depvars' {
    error 102
  }
  forval j = 1/`.n_depvars' {
    gettoken YY anything : anything
    local DEPVARS `DEPVARS' `YY'
  }
  local INDEPVARS : list retok anything
}
- local hasequal 0
- }
- else {
  gettoken EQ INDEPVARS : REST, parse("=") bind
  local hasequal 1
}
- if `:list sizeof DEPVARS' {
= if 0 {
  _fv_check_depvar `DEPVARS'
  tsunab DEPVARS : `DEPVARS'
}
- if `:list sizeof INDEPVARS' {
= if 0 {
  fvunab INDEPVARS : `INDEPVARS'
}
- if inlist("noconstant", "`noconstant'", "`constant'") {
= if inlist("noconstant", "", "") {
  if "`INDEPVARS'" == "" & !`.nocons_ignore' {
    di as err "independent variables are required when option no
> constant is specified"
    exit 102
  }
  if "`NOCONS'" != "" {
    local options `options' noconstant
  }
}

```

```

    local NOCONS 1
  }
- else local NOCONS 0
- if ``offset``exposure`` != "" {
= if ```` != "" {
  ._check_offset, `offset` `exposure`
  local OFFSET ``s(offset)``
  local EXPOSURE = (`exposure`` != "")
  local OTHER `s(offset)`
}
- else local EXPOSURE 0
- local FREEARM = ``freeparm`` != ""
= local FREEARM = ``freeparm`` != ""
- local OPTIONS
- local SPACE
- foreach OPTNAME of local OPTNAMES {
- if ````OPTNAME`` != "" {
= if ```` != "" {
  local OPTIONS ``OPTIONS``SPACE``OPTNAME``
  local SPACE " "
}
- }
- if ````OPTNAME`` != "" {
= if ``freeparm`` != "" {
- local OPTIONS ``OPTIONS``SPACE``OPTNAME``
= local OPTIONS ``freeparm``
- local SPACE " "
- }
- }
- if ````OPTNAME`` != "" {
= if ```` != "" {
  local OPTIONS ``OPTIONS``SPACE``OPTNAME``
  local SPACE " "
}
- }
- if ````OPTNAME`` != "" {
= if ```` != "" {
  local OPTIONS ``OPTIONS``SPACE``OPTNAME``
  local SPACE " "
}
- }
- if ``options`` != "" {
= if ```` != "" {
  local OPTIONS ``OPTIONS``SPACE``options``
}
- .name = ``NAME``

```

```

= .name = `"\lnalpha"
- .depvars = `""`DEPVARs'""
= .depvars = `""
- .hasequal = `hasequal'
= .hasequal = 0
- .indepvars = `""`list retok INDEPVARs'""
= .indepvars = `""
- .other_markvars = `""`list retok OTHER'""
= .other_markvars = `""
- .nocons = `NOCONS'
= .nocons = 0
- .if = `""`HOLDIF'""
= .if = `""
- .in = `""`HOLDIN'""
= .in = `""
- .wgt = `""`HOLDWGT'""
= .wgt = `""
- .offset = `""`OFFSET'""
= .offset = `""
- .exposure = `EXPOSURE'
= .exposure = 0
- .freeparm = `FREEPARM'
= .freeparm = 1
- .options = `""`OPTIONS'""
= .options = `""freeparm"

> ----- end _eqspec.parse -----
- }
- local MARKOPTLIST `""`.mark_opts.dumpoptions'""

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist `""`optlist'""
= sreturn local optlist `""
- class exit `""`optlist'""
= class exit `""

> ----- end _optlist.dumpoptions -----
= local MARKOPTLIST `""
- local MARKOPTNAMES `""`.mark_opts.dumpnames'""

```

```

> ----- begin _optlist.dumpnames -----
    - version 9
    - forval i = 1/`.names.arnels' {
    = forval i = 1/0 {
        local namelist `namelist' `.names['i']'
    }
    - local namelist : list uniq namelist
    - sreturn local namelist ``namelist'''
    = sreturn local namelist `'''
    - class exit ``namelist'''
    = class exit `'''
    -----

> ----- end _optlist.dumpnames -----
    = local MARKOPTNAMES `'''
    - local OPTLIST1 : substr local MARKOPTLIST "(passthru)" "(str
> ing asis)", all
    - local SMARKOPTLIST ```.smark_opts.dumpoptions'''
    -----

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
    = forval i = 1/0 {
        local optlist `optlist' `.options['i']'
    }
    - local optlist : list uniq optlist
    - sreturn local optlist ``optlist'''
    = sreturn local optlist `'''
    - class exit ``optlist'''
    = class exit `'''
    -----

> ----- end _optlist.dumpoptions -----
    = local SMARKOPTLIST `'''
    - local SMARKOPTNAMES ```.smark_opts.dumpnames'''
    -----

> ----- begin _optlist.dumpnames -----
    - version 9
    - forval i = 1/`.names.arnels' {
    = forval i = 1/0 {
        local namelist `namelist' `.names['i']'
    }
    - local namelist : list uniq namelist
    - sreturn local namelist ``namelist'''
    = sreturn local namelist `'''
    - class exit ``namelist'''
    = class exit `'''
    -----

```

```

> ----- end _optlist.dumpnames -----
    = local SMARKOPTNAMES `'''
    - local OPTLIST1s : substr local SMARKOPTLIST "(passthru)" "(s
> tring asis)", all
    - local RMCOLLOPTLIST ```.rmcoll_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
    = forval i = 1/0 {
        local optlist `optlist' `.options['i']'
    }
    - local optlist : list uniq optlist
    - sreturn local optlist ```optlist'''
    = sreturn local optlist `'''
    - class exit ```optlist'''
    = class exit `'''

> ----- end _optlist.dumpoptions -----
    = local RMCOLLOPTLIST `'''
    - local RMCOLLOPTNAMES ```.rmcoll_opts.dumpnames'''

> ----- begin _optlist.dumpnames -----
    - version 9
    - forval i = 1/`.names.arnels' {
    = forval i = 1/0 {
        local namelist `namelist' `.names['i']'
    }
    - local namelist : list uniq namelist
    - sreturn local namelist ```namelist'''
    = sreturn local namelist `'''
    - class exit ```namelist'''
    = class exit `'''

> ----- end _optlist.dumpnames -----
    = local RMCOLLOPTNAMES `'''
    - local OPTLIST2 : substr local RMCOLLOPTLIST "(passthru)" "(s
> tring asis)", all
    - local RMDCOLLOPTLIST ```.rmdcoll_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
    = forval i = 1/0 {
        local optlist `optlist' `.options['i']'
    }

```

```

- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `'''
- class exit ```optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local RMDCOLLOPTLIST `'''
- local RMDCOLLOPTNAMES ```.rmdcoll_opts.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/0 {
    local namelist `namelist' `.names['i']'
}
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `'''
- class exit ```namelist'''
= class exit `'''

> ----- end _optlist.dumpnames -----
= local RMDCOLLOPTNAMES `'''
- local OPTLIST3 : substr local RMDCOLLOPTLIST "(passthru)" "(
> string asis)", all
- local 0 `", `GL_op'''
= local 0 `", ""
- syntax [, `OPTLIST1' `OPTLIST1s' `OPTLIST2' `OPTLIST3' COLLline
> ar noCONSTant * ]
= syntax [, COLLlinear noCONSTant * ]
- local GL_op ```options'''
= local GL_op `'''
- if ```collinear''' != "" {
= if `''' != "" {
    local GL_op ```GL_op' `collinear'''
    .collinear = ``collinear'"
}
- if ```constant''' != "" {
= if `''' != "" {
    local GL_op ```GL_op' `constant'''
    .nocons = ``constant'"
}
- local I 0
- foreach OPT of local MARKOPTNAMES {
if `:list sizeof `OPT'' {

```



```

        .mark_list[`${++I}`] = ._eqspec.new, numdep(0) wtypes(`.wtypes`)
        .mark_list[`${I}`].parse "" : ``OPT``
        .mark_name.Arrpush ``OPT``
    }
}
- local I 0
- foreach OPT of local SMARKOPTNAMES {
    if `:list sizeof `OPT`` {
        .smark_list[`${++I}`] = ._eqspec.new, numdep(0) wtypes(`.wtypes`)
        .smark_list[`${I}`].parse "" : ``OPT``
        .smark_name.Arrpush ``OPT``
    }
}
- local I 0
- foreach OPT of local RMCOLLOPTNAMES {
    if `:list sizeof `OPT`` {
        .rmcoll_list[`${++I}`] = ._eqspec.new, numdep(0) wtypes(`.wtypes`)
        .rmcoll_list[`${I}`].parse "" : ``OPT``
        .rmcoll_name.Arrpush ``OPT``
    }
}
- local I 0
- foreach OPT of local RMDCOLLOPTNAMES {
    if `:list sizeof `OPT`` {
        .rmdcoll_list[`${++I}`] = ._eqspec.new, wtypes(`.wtypes`)
        .rmdcoll_list[`${I}`].parse "" : ``OPT``
        .rmdcoll_name.Arrpush ``OPT``
    }
}
- .n_eq = `EQ_n`
= .n_eq = 2
- .gl_if = ``GL_if``
= .gl_if = ``
- .gl_in = ``GL_in``
= .gl_in = ``
- .gl_wgt = ``GL_wt``
= .gl_wgt = ``
- .gl_options = ``:list retok GL_op``
= .gl_options = ``

> ----- end _eqlist.parse -----
- if ``subpop`` != `` & ``missing`` == `` {
= if `` != `` & "missing" == `` {
    if `interactive` {
        SetGlobalVar ML_samp : _MLtu
    }
}

```

```

    }
    else {
        global ML_samp : tempvar
        if ``moptobj' != "" {
            global ML_samp `moptobj'$ML_samp
        }
    }
    tempvar markuse
    _svy_setup $ML_sample $ML_samp, svy subpop(`subpop')
    quietly gen byte `markuse' = $ML_samp
}
- else global ML_samp $ML_sample
= else global ML_samp __000005
- if ``collinear' == "" {
= if "collinear" == "" {
    .`eqlist'.rmcoll $ML_samp, replace `missing'
}
- else if ``missing' == "" {
= else if "missing" == "" {
    .`eqlist'.markout $ML_samp, replace
}
- if "$ML_samp" != "$ML_sample" {
= if "__000005" != "__000005" {
    `vv' quietly replace $ML_sample = 0 if `markuse' & !$ML_samp
    drop `markuse'
}
- local eq_n = `.`eqlist'.eq count'
}

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "count" == "count" {
    - sreturn local value ``.n_eq'
= sreturn local value `2'
    - class exit ``s(value)'
= class exit `2'
}

> ----- end _eqlist.eq -----
= local eq_n = 2
- global ML_n : copy local eq_n
- global ML_dim = `.`eqlist'.dim'

> ----- begin _eqlist.dim -----
- version 9.2
- syntax

```

```

- local neq = `.eq count'
> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "`item'" == "count" {
= if "count" == "count" {
- sreturn local value ```.n_eq'''
= sreturn local value `2'''
- class exit ``s(value)'''
= class exit `2'''
> ----- end _eqlist.eq -----
= local neq = 2
- forval i = 1/`neq' {
= forval i = 1/2 {
- local xvarsi ```.eq indepvars `i'''
> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "`item'" == "count" {
= if "indepvars" == "count" {
sreturn local value ```.n_eq'''
class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item indepvars
> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars
> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPOsure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}

```

```

- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
    = local item indepvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item indepvars
    _____
> _____ end _eqspec._check_eq_item_name _____
    - local value ```.`item'```
    = local value ````
    - sreturn local value ```.value```
    = sreturn local value ````
    - class exit ```.value```
    = class exit ````
    _____
> _____ end _eqspec.item _____
    - class exit ```.s(value)```
    = class exit ````
    _____
> _____ end _eqlist.eq _____
    = local xvarsi ````
    - local noconsi ```.eq nocons `i'```
    _____
> _____ begin _eqlist.eq _____
    - version 9.2
    - args item idx
    - if ``item' == "count" {
    = if "nocons" == "count" {
        sreturn local value ```.n_eq```
        class exit ```.s(value)```
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
        - .eq_list[`idx'].item `item'
        = .eq_list[1].item nocons
    }
    _____
> _____ begin _eqspec.item _____
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, nocons
    _____
> _____ begin _eqspec._check_eq_item_name _____

```

```

        - version 9.2
        - capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
        - if c(rc) error 198
        - if `:list sizeof other' {
        = if 0 {
            local other other_markvars
        }
        - local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
        = local item      nocons
        - if `:list sizeof item' != 1 {
        = if 1 != 1 {
            error 198
        }
        - c_local `c_item' `item'
        = c_local item nocons
    _____
> _____ end _eqspec._check_eq_item_name _____
        - local value ```.`item'"""
        = local value ``0""
        - sreturn local value ```value'"""
        = sreturn local value ``0""
        - class exit ```value'"""
        = class exit ``0""
    _____
> _____ end _eqspec.item _____
        - class exit ```s(value)"""
        = class exit ``0""
    _____
> _____ end _eqlist.eq _____
        = local noconsi ``0""
        - local dim = `dim' + `:list sizeof xvarsi'
        = local dim = + 0
        - if ``noconsi'"" == "0" {
        = if "0" == "0" {
            - local ++dim
            - }
            - }
        - local xvarsi ```.eq indepvars `i'"""
    _____
> _____ begin _eqlist.eq _____
        - version 9.2
        - args item idx
        - if ``item'"" == "count" {
        = if "indepvars" == "count" {

```

```

        sreturn local value ```.n_eq'''
        class exit ```s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
    - .eq_list[`idx'].item `item'
= .eq_list[2].item indepvars
}

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars
}

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
= if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
    - if `:list sizeof item' != 1 {
= if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
= c_local item indepvars
}

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.`item''''
= local value `'''
    - sreturn local value ```value'''
= sreturn local value `'''
    - class exit ```value'''
= class exit `'''
}

> ----- end _eqspec.item -----
    - class exit ```s(value)'''
= class exit `'''
}

> ----- end _eqlist.eq -----

```

```

= local xvarsi `""'
- local noconsi ```.eq nocons `i'"""

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "nocons" == "count" {
  sreturn local value ```.n_eq'"""
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item nocons

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, nocons

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item nocons

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'"""
= local value ``0"
- sreturn local value ``value'"""
= sreturn local value ``0"

```

```

- class exit ``value'''
= class exit ``0'''


---


> 

---

 end _eqspec.item 

---


- class exit ``s(value)'''
= class exit ``0'''


---


> 

---

 end _eqlist.eq 

---


= local noconsi ``0'''
- local dim = `dim' + `:list sizeof xvarsi'
= local dim = 1 + 0
- if ``noconsi''' == "0" {
= if "0" == "0" {
- local ++dim
- }
- }
- sreturn local value ``dim'''
= sreturn local value ``2'''
- class exit ``s(value)'''
= class exit ``2'''


---


> 

---

 end _eqlist.dim 

---


= global ML_dim = 2
- forval i = 1/`eq_n' {
= forval i = 1/2 {
- local depvars `.`eqlist'.eq depvars `i'''


---


> 

---

 begin _eqlist.eq 

---


- version 9.2
- args item idx
- if ``item''' == "count" {
= if "depvars" == "count" {
sreturn local value ``.n_eq'''
class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item depvars


---


> 

---

 begin _eqspec.item 

---


- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, depvars


---



```



```

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item depvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item depvars
    -----

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.item'''
    = local value "piq_timing_max"
    - sreturn local value ```.value'''
    = sreturn local value "piq_timing_max"
    - class exit ```.value'''
    = class exit "piq_timing_max"
    -----

> ----- end _eqspec.item -----
    - class exit ```.s(value)'''
    = class exit "piq_timing_max"
    -----

> ----- end _eqlist.eq -----
    = local depvars piq_timing_max
    - local eq `.`eqlist'.eq name `i'
    -----

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``.item''' == "count" {
    = if "name" == "count" {
        sreturn local value ```.n_eq'''
        class exit ```.s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
    - .eq_list[`idx'].item `item'

```

```

= .eq_list[1].item name
> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, name
> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item name
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item name
> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'```
= local value `"piq_timing_max"
- sreturn local value ```.`value'```
= sreturn local value `"piq_timing_max"
- class exit ```.`value'```
= class exit `"piq_timing_max"
> ----- end _eqspec.item -----
- class exit ```.s(value)```
= class exit `"piq_timing_max"
> ----- end _eqlist.eq -----
= local eq piq_timing_max
- if !`:length local eq' {
= if !14 {
local eq eq`i'
}
- if `:list eq in eqnames' {

```

```

= if 0 {
  di as err "equation ``eq'' multiply defined"
  exit 110
}
- local eqnames `eqnames' `eq'
= local eqnames piq_timing_max
- fvexpand `.`eqlist'.eq indepvars `i' if $ML_samp

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "indepvars" == "count" {
  sreturn local value ```.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item indepvars

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item indepvars

```

```

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.`item'"""
    = local value `""'
    - sreturn local value ```.`value'"""
    = sreturn local value `""'
    - class exit ```.`value'"""
    = class exit `""'

> ----- end _eqspec.item -----
    - class exit ```.s(value)"""
    = class exit `""'

> ----- end _eqlist.eq -----
    = fvexpand if __000005
    - if ``r(tsops)' == "true" {
    = if "" == "true" {
      global ML_preserve no
    }
    - local eq_rhs`i' ``r(varlist)"""
    = local eq_rhs1 `""'
    - local eq_nocons`i' ``.eqlist'.eq nocons `i'

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item' == "count" {
    = if "nocons" == "count" {
      sreturn local value ```.n_eq"""
      class exit ```.s(value)"""
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
      - .eq_list[`idx'].item `item'
    = .eq_list[1].item nocons

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, nocons

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
    - if c(rc) error 198

```

```

        - if `:list sizeof other' {
        = if 0 {
            local other other_markvars
        }
        - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
        = local item      nocons
        - if `:list sizeof item' != 1 {
        = if 1 != 1 {
            error 198
        }
        - c_local `c_item' `item'
        = c_local item nocons
    _____
> _____ end _eqspec._check_eq_item_name _____
        - local value ```.`item'```
        = local value ``0```
        - sreturn local value ```.value```
        = sreturn local value ``0```
        - class exit ```.value```
        = class exit ``0```
    _____
> _____ end _eqspec.item _____
        - class exit ```.s(value)```
        = class exit ``0```
    _____
> _____ end _eqlist.eq _____
        = local eq_nocons1 0
        - local eq_offset`i' ``.eqlist'.eq offset `i'
    _____
> _____ begin _eqlist.eq _____
        - version 9.2
        - args item idx
        - if ``item' == "count" {
        = if "offset" == "count" {
            sreturn local value ```.n_eq```
            class exit ```.s(value)```
        }
        - else if 0 < `idx' & `idx' <= `.n_eq' {
        = else if 0 < 1 & 1 <= 2 {
            - .eq_list[`idx'].item `item'
            = .eq_list[1].item offset
    _____
> _____ begin _eqspec.item _____
        - version 9.2
        - args item

```

```

- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, offset

```

```

> _____ begin _eqspec._check_eq_item_name _____
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
    }
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item      offset
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
    }
- c_local `c_item' `item'
= c_local item offset

```

```

> _____ end _eqspec._check_eq_item_name _____
- local value ```.`item'```
= local value ````
- sreturn local value ```.value```
= sreturn local value ````
- class exit ```.value```
= class exit ````

```

```

> _____ end _eqspec.item _____
- class exit ```.s(value)```
= class exit ````

```

```

> _____ end _eqlist.eq _____
= local eq_offset1
- local eq_exposure`i' `.`eqlist'.eq exposure `i'

```

```

> _____ begin _eqlist.eq _____
- version 9.2
- args item idx
- if ``item' == "count" {
= if "exposure" == "count" {
    sreturn local value ```.n_eq```
    class exit ```.s(value)```
    }
}

```

```

- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item exposure

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, exposure

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item exposure
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item exposure

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ``.`item'``
= local value ``0''
- sreturn local value ```value'``
= sreturn local value ``0''
- class exit ```value'``
= class exit ``0''

```

```

> ----- end _eqspec.item -----
- class exit ```s(value)``
= class exit ``0''

```

```

> ----- end _eqlist.eq -----
= local eq_exposure1 0
- local eq_freeparm`i' ``.`eqlist'.eq freeparm `i'

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "freeparm" == "count" {
  sreturn local value ```.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item freeparm
-----

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, freeparm
-----

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item freeparm
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item freeparm
-----

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'''
= local value ``0''
- sreturn local value ``value'''
= sreturn local value ``0''
- class exit ``value'''
= class exit ``0''
-----

```



```

> ----- end _eqspec.item -----
    - class exit ``s(value)''
    = class exit ``0''

> ----- end _eqlist.eq -----
    = local eq_freeparm1 0
    - local lhs `lhs' `depvars'
    = local lhs piq_timing_max
    - local eq_names `eq_names' `eq'
    = local eq_names piq_timing_max
    - local nxvars :list sizeof eq_rhs`i'
    = local nxvars :list sizeof eq_rhs1
    - local TMP : copy local eq_rhs`i'
    = local TMP : copy local eq_rhs1
    - forval j = 1/`nxvars' {
    = forval j = 1/0 {
        gettoken xvar TMP : TMP
        local colna ``colna' `eq':`xvar''
    }
    - if `eq_freeparm`i' {
    = if 0 {
        if `nxvars' {
            di as err "{it:xvars} not allowed with option {bf:freeparm}"
            exit 198
        }
        if strpos(`eq', ":") {
            local colna ``colna' /`eq''
        }
        else {
            local colna ``colna' /:`eq''
        }
    }
    - else if !`eq_nocons`i' {
    = else if !0 {
        - local colna ``colna' `eq':_cons''
        = local colna `` piq_timing_max:_cons''
        - }
        - if ``moptobj'' != "" {
        = if "" != "" {
            if ``eq_offset`i'' != "" {
                if usubstr(`eq_offset`i'',1,2)=="__" {
                    capture clonevar `moptobj'`eq_offset`i' = `eq_offset`i'
                    local dropmetoo `dropmetoo' `moptobj'`eq_offset`i'
                }
            }
        }
    }
}

```

```

- }
- local depvars ``.eqlist'.eq depvars `i''

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "depvars" == "count" {
  sreturn local value ``.n_eq'
  class exit ``s(value)''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item depvars

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, depvars

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item depvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item depvars

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ``.item'
= local value ``
- sreturn local value ``value'
= sreturn local value ``

```

```

- class exit ``value'''
= class exit `'''

```

```

> ----- end _eqspec.item -----
- class exit ``s(value)'''
= class exit `'''

```

```

> ----- end _eqlist.eq -----
= local depvars
- local eq `.`eqlist'.eq name `i'

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "name" == "count" {
  sreturn local value ``.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
  - .eq_list[`idx'].item `item'
= .eq_list[2].item name

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, name

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item name
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}

```

```

- c_local `c_item' `item'
= c_local item name
_____
> _____ end _eqspec._check_eq_item_name _____
- local value ```.`item'"""
= local value `"\nalpha"
- sreturn local value ```.value"""
= sreturn local value `"\nalpha"
- class exit ```.value"""
= class exit `"\nalpha"
_____

> _____ end _eqspec.item _____
- class exit ```.s(value)"""
= class exit `"\nalpha"
_____

> _____ end _eqlist.eq _____
= local eq lnalpha
- if !`:length local eq' {
= if !7 {
  local eq eq`i'
}
- if `:list eq in eqnames' {
= if 0 {
  di as err "equation ``eq'' multiply defined"
  exit 110
}
- local eqnames `eqnames' `eq'
= local eqnames piq_timing_max lnalpha
- fvexpand `.`eqlist'.eq indepvars `i'' if $ML_samp
_____

> _____ begin _eqlist.eq _____
- version 9.2
- args item idx
- if ``item' == "count" {
= if "indepvars" == "count" {
  sreturn local value ```.n_eq"""
  class exit ```.s(value)"""
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item indepvars
_____

> _____ begin _eqspec.item _____
- version 9.2
- args item

```

```

- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, indepvars

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item indepvars

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'```
= local value ````
- sreturn local value ```.`value'```
= sreturn local value ````
- class exit ```.`value'```
= class exit ````

```

```

> ----- end _eqspec.item -----
- class exit ```.s(value)```
= class exit ````

```

```

> ----- end _eqlist.eq -----
= fvexpand if __000005
- if ``r(tsops)``` == "true" {
= if ``` == "true" {
global ML_preserve no
}
- local eq_rhs`i' ``r(varlist)```
= local eq_rhs2 ````
- local eq_nocons`i' ``.eqlist'.eq nocons `i'

```

```

> ----- begin _eqlist.eq -----
- version 9.2

```

```

- args item idx
- if "`item'" == "count" {
= if "nocons" == "count" {
  sreturn local value ```.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item nocons
}

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, nocons
}

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item nocons
}

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item''''
= local value ``0'''
- sreturn local value ``value'''
= sreturn local value ``0'''
- class exit ``value'''
= class exit ``0'''

> ----- end _eqspec.item -----
- class exit ``s(value)'''

```

```

= class exit ``0''
> ----- end _eqlist.eq -----
= local eq_nocons2 0
- local eq_offset`i' ``.eqlist'.eq offset `i''
> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "offset" == "count" {
  sreturn local value ``.n_eq''
  class exit ``s(value)''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item offset
> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, offset
> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item offset
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item offset
> ----- end _eqspec._check_eq_item_name -----
- local value ``.item''

```

```

= local value `'''
- sreturn local value `"'value'"
= sreturn local value `'''
- class exit `"'value'"
= class exit `'''

> ----- end _eqspec.item -----

- class exit `"'s(value)'"
= class exit `'''

> ----- end _eqlist.eq -----

= local eq_offset2
- local eq_exposure`i' `.`eqlist'.eq exposure `i'

> ----- begin _eqlist.eq -----

- version 9.2
- args item idx
- if "`item'" == "count" {
= if "exposure" == "count" {
  sreturn local value `"'n_eq'"
  class exit `"'s(value)'"
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item exposure

> ----- begin _eqspec.item -----

- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, exposure

> ----- begin _eqspec._check_eq_item_name -----

- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item exposure
- if `:list sizeof item' != 1 {

```



```

        = if 1 != 1 {
            error 198
        }
        - c_local `c_item' `item'
        = c_local item exposure
    _____
> _____ end _eqspec._check_eq_item_name _____
        - local value ```.`item'"""
        = local value ``0""
        - sreturn local value ```value'"""
        = sreturn local value ``0""
        - class exit ```value'"""
        = class exit ``0""
    _____

> _____ end _eqspec.item _____
        - class exit ```s(value)'"'"'
        = class exit ``0""
    _____

> _____ end _eqlist.eq _____
        = local eq_exposure2 0
        - local eq_freeparm`i' ``.`eqlist'.eq freeparm `i'
    _____

> _____ begin _eqlist.eq _____
        - version 9.2
        - args item idx
        - if ``item'"'"' == "count" {
        = if "freeparm" == "count" {
            sreturn local value ```.n_eq'"'"'
            class exit ```s(value)'"'"'
        }
        - else if 0 < `idx' & `idx' <= `.n_eq' {
        = else if 0 < 2 & 2 <= 2 {
            - .eq_list[`idx'].item `item'
            = .eq_list[2].item freeparm
    _____

> _____ begin _eqspec.item _____
        - version 9.2
        - args item
        - .check_eq_item_name item, `item'
        = .check_eq_item_name item, freeparm
    _____

> _____ begin _eqspec._check_eq_item_name _____
        - version 9.2
        - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
        - if c(rc) error 198

```

```

        - if `:list sizeof other' {
        = if 0 {
            local other other_markvars
        }
        - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
        = local item          freeparm
        - if `:list sizeof item' != 1 {
        = if 1 != 1 {
            error 198
        }
        - c_local `c_item' `item'
        = c_local item freeparm
    _____
> _____ end _eqspec._check_eq_item_name _____
        - local value ```.`item'```
        = local value `1'
        - sreturn local value ```.value```
        = sreturn local value `1'
        - class exit ```.value```
        = class exit `1'
    _____
> _____ end _eqspec.item _____
        - class exit ```.s(value)```
        = class exit `1'
    _____
> _____ end _eqlist.eq _____
    = local eq_freeparm2 1
    - local lhs `lhs' `depvars'
    = local lhs piq_timing_max
    - local eq_names `eq_names' `eq'
    = local eq_names piq_timing_max lnalpha
    - local nxvars :list sizeof eq_rhs`i'
    = local nxvars :list sizeof eq_rhs2
    - local TMP : copy local eq_rhs`i'
    = local TMP : copy local eq_rhs2
    - forval j = 1/`nxvars' {
    = forval j = 1/0 {
        gettoken xvar TMP : TMP
        local colna ```.colna' `eq':`xvar```
    }
    - if `eq_freeparm`i' {
    = if 1 {
        - if `nxvars' {
    = if 0 {
        di as err "{it:xvars} not allowed with option {bf:freeparm}"

```

```

exit 198
}
- if strpos(`""`eq'""', ":") {
= if strpos(`"lnalpha"', ":") {
    local colna `""`colna' /`eq'""'
    }
- else {
- local colna `""`colna' /:`eq'""'
= local colna `""`piq_timing_max:_cons /:"lnalpha""
- }
- }
- else if !`eq_nocons`i'' {
= else if !0 {
    local colna `""`colna' `eq':_cons""
    }
- if ""`moptobj'"" != "" {
= if "" != "" {
    if ""`eq_offset`i'"" != "" {
    if usubstr(`eq_offset`i'""',1,2)=="__" {
    capture clonevar `moptobj'`eq_offset`i'' = `eq_offset`i''
    local dropmetoo `dropmetoo' `moptobj'`eq_offset`i''
    }
    }
    }
- }
- if ""`moptobj'"" != "" {
= if "" != "" {
    foreach y of local lhs {
    if usubstr(`y'""',1,2)=="__" {
    capture clonevar `moptobj'`y' = `y'
    local tmp `tmp' `moptobj'`y'
    local dropmetoo `dropmetoo' `moptobj'`y'
    }
    else {
    local tmp `tmp' `y'
    }
    }
    local lhs `tmp'
    }
- if `waldtest' > 0 & `:length local lf0' {
= if 0 > 0 & 0 {
    opts_exclusive "waldtest() lf0()"
    }
- if `:length local continue' {
= if 0 {
    if !`:length local init' {

```

```

tempname init
local ub0 `init'
}
else tempname ub0
mat `ub0' = e(b)
tempname v0 iv0
mat `v0' = e(V)
mat `iv0' = syminv(`v0')
global ML_rank0 = colsof(`v0') - diag0cnt(`iv0')
if !':length local lf0' & !missing(e(ll)) {
local lf0 `=colsof(`ub0')' `e(ll)'
}
local ub0
}
- if `:length local init' {
= if 14 {
- tempname b0
- local dim : list sizeof colna
- matrix `b0' = J(1,`dim',0)
= matrix __000007 = J(1,2,0)
- matrix colna `b0' = `colna'
= matrix colna __000007 = piq_timing_max:_cons /:lnalpha
- `vv' _mkvec `b0', from(`init') update first error("initial vecto
> r")
= version 18: _mkvec __000007, from(__000003, copy) update first e
> rror("initial vector")

> ----- begin _mkvec -----
- local vv : display "version " string(_caller()) ":"
- version 6
- gettoken matout 0 : 0, parse(", ")
- if "`matout'"==" | "`matout'"==" ," {
= if "__000007"==" | "__000007"==" ," {
error 198
}
- syntax [, FROM(str) UPdate COLnames(str) ERRor(str) FIRST ]
- if "`update'"!=" {
= if "update"!=" {
- if "`colname'"!=" {
= if ""!=" {
di in red "update and colnames() cannot both be " "specified"
exit 198
}
- capture local colname : colfullnames `matout'
= capture local colname : colfullnames __000007
- if _rc {

```

```

        di in red "matrix `matout' not found"
        exit 111
    }
- if rowsof(matrix(`matout')) != 1 {
= if rowsof(matrix(__000007)) != 1 {
    di in red "`matout' matrix to be updated must be " "a row vect
> or"

        exit 503
    }
- local matin `matout'
= local matin __000007
- }
- if ``error'""!="" {
= if `"initial vector'""!="" {
- local error ``error': ''
= local error `"initial vector: ''
- }
- tempname mat
- if ``from'""!="" {
= if `__000003, copy'""!="" {
- From `from'
= From __000003, copy

```

```

> ----- begin _mkvec.From -----
        - gettoken from 0 : 0, parse(",") bind
        - sret clear
        - sret local from `from'
        = sret local from __000003
        - if ``0'""!="" {
        = if `", copy'""!="" {
        - syntax [, COPY SKIP ]
        - }
        - sret local copy `copy'
        = sret local copy copy
        - sret local skip `skip'
        = sret local skip

```

```

> ----- end _mkvec.From -----
        - local copy `s(copy)'
        = local copy copy
        - local skip `s(skip)'
        = local skip
        - if ``copy'""!="" {
        = if "copy'""!="" {
        - CopyMat `mat' ``error'"" `s(from)'
        = CopyMat __000008 `"initial vector: '' __000003

```

```

> ----- begin _mkvec.CopyMat -----
- args matall error
- tempname matadd
- local i 3
- while "`i'"!=" " {
= while "__000003"!=" " {
- capture di matrix("`i'"[1,1])
= capture di matrix(__000003[1,1])
- if _rc == 0 {
- ChkMat `matadd' "`i'" "`error'"
= ChkMat __000009 __000003 `"initial vector: "'

> ----- begin _mkvec.ChkMat -----
- args matout matin error
- capture di matrix(`matin'[1,1])
= capture di matrix(__000003[1,1])
- if _rc {
capture confirm number `matin'
if _rc {
di in red "`error'matrix `matin' not found"
exit 111
}
di in red "`error'list of numbers requires copy option"
exit 198
}
- if matrix(rowsof(`matin'))!=1 & colsof(`matin'))!=1 {
= if matrix(rowsof(__000003))!=1 & colsof(__000003))!=1 {
di in red "`matin' " matrix(rowsof(`matin')) " x " matrix(
> colsof(`matin')) " is not a vector"
exit 503
}
- if matrix(rowsof(`matin')) == 1 {
= if matrix(rowsof(__000003)) == 1 {
- mat `matout' = `matin'
= mat __000009 = __000003
- }
- else mat `matout' = `matin''
= else mat __000009 = __000003'

> ----- end _mkvec.ChkMat -----
- }
- else {
capture confirm number "`i'"
if _rc {
di in red "`error'copy option requires '" "either a matrix

```

```

> or a list of numbers"
    exit 198
    }
    mat `matadd' = J(1,1,``i'')
    }
- mat `mata11' = nullmat(`mata11') , `matadd'
= mat __000008 = nullmat(__000008) , __000009
- local i = `i' + 1
= local i = 3 + 1
- }
- while ``i'!='' {
= while ""!='' {
    capture di matrix(`i'[1,1])
    if _rc == 0 {
    ChkMat `matadd' ``i' ``error'
    }
    else {
    capture confirm number ``i'
    if _rc {
    di in red ``error'copy option requires "" "either a matrix
> or a list of numbers"
    exit 198
    }
    mat `matadd' = J(1,1,``i'')
    }
    mat `mata11' = nullmat(`mata11') , `matadd'
    local i = `i' + 1
    }
}

> ----- end _mkvec.CopyMat -----
- if ``colname'!='' {
= if ``piq_timing_max:_cons /lnalpha'!='' {
- local dim : list sizeof colname
- if `dim' != colsof(matrix(`mat')) {
= if 2 != colsof(matrix(__000008)) {
    di in red ``error'matrix must "" ``be dimension "" `dim'
    exit 503
    }
- `vv' mat colnames `mat' = `colname'
= version 18: mat colnames __000008 = piq_timing_max:_cons /lnal
> pha
- }
- }
- else {
`vv' BuildMat `mat' ``error' ``skip' `s(from)'
if ``colname'!='' {

```

```

`vv' ChkNames `mat' ``matin' ``colname' ``error' ``skip
> `` ``first'
    local fill `s(k_fill)'
    }
    }
- }
- else {
    local fill 0
    if ``update' != ``' {
        mat `mat' = `matin'
    }
    else if ``colname' != ``' {
        local dim : list sizeof colname
        mat `mat' = J(1,`dim',0)
        `vv' mat colnames `mat' = `colname'
    }
    else {
        di in red "from() must be specified"
        exit 198
    }
}
- sret clear
- sret local copy `copy'
= sret local copy copy
- sret local skip `skip'
= sret local skip
- sret local k = colsof(matrix(`mat'))
= sret local k = colsof(matrix(__000008))
- if ``fill' != ``' {
= if ``' != ``' {
    sret local k_fill `fill'
}
- else sret local k_fill = colsof(matrix(`mat'))
= else sret local k_fill = colsof(matrix(__000008))
- matrix rename `mat' `matout', replace
= matrix rename __000008 __000007, replace


---


> 

---

 end _mkvec 

---


- }
- tempname bomit
- matrix `bomit' = J(1,`:list sizeof colna',0)
= matrix __000008 = J(1,2,0)
- matrix colna `bomit' = `colna'
= matrix colna __000008 = piq_timing_max:_cons /:lnalpha
- _ms_omit_info `bomit'
= _ms_omit_info __000008

```



```

- if r(k_omit) | `:length local constraints' {
= if r(k_omit) | 0 {
  nobreak {
    capture noisily break {
      _b_post0 `colna'
      local clist : subinstr local constraints "," " ", all
      `vv' makecns `clist', `cnsnotes'
      local constraints ``r(clist)'''
      local k_autoCns = e(k_autoCns)
      tempname C
      capture matrix `C' = e(Cns)
      local rcc = c(rc)
    }
    local rc = c(rc)
    ereturn clear
  }
  if (`rc') exit `rc'
  if (`rcc') {
    local C
    local k_autoCns
  }
}
- if `:length local constraints' {
= if 0 {
  local lf0
}
- local vce `vce' `robust' `cluster'
= local vce robust
- if `:length local vce' {
= if 6 {
- _vce_parse, argoptlist(CList) optlist(OIM OPG Robust) old : `w
> t', `vce'
= _vce_parse, argoptlist(CList) optlist(OIM OPG Robust) old : ,
> robust

> ----- begin _vce_parse -----
- version 10
- _on_colon_parse `0'
= _on_colon_parse , argoptlist(CList) optlist(OIM OPG Robust)
> old : , robust

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quotes

```

```

- if "`par'" != "" {
= if "" != "" {
  local before `("`before')"'
}
- if ``"before"' == ":" {
= if `", argoptlist(CLister) optlist(OIM OPG Robust) old "" ==

> ":" {

  sreturn local after ``"after"'
  exit
}
- while ``COLON"' != ":" & ``"after"' != "" {
= while `"' != ":" & `": , robust"' != "" {
- gettoken COLON after : after, parse(":") bind match(par) quo

> tes

- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')
  local COLON
}
- else if ``COLON"' != ":" {
= else if `":"' != ":" {
  local before ``"before' `COLON"'
  local COLON
}
- }
- while ``COLON"' != ":" & ``"after"' != "" {
= while `":"' != ":" & `", robust"' != "" {
  gettoken COLON after : after, parse(":") bind match(par) quo

> tes

  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if ``COLON"' != ":" {
    local before ``"before' `COLON"'
    local COLON
  }
}
- if ``COLON"' != ":" {
= if `":"' != ":" {
  di as err "" found where ':' expected"
  exit 198
}
- sreturn local before ``"before"'
= sreturn local before `", argoptlist(CLister) optlist(OIM OPG
> Robust) old ""

```

```

- sreturn local after ``after'''
= sreturn local after `` , robust'''

```

```

> ----- end _on_colon_parse -----
- local 0 ``s(before)'''
= local 0 `` , argoptlist(CLuster) optlist(OIM OPG Robust) old ''
- local user ``s(after)'''
= local user `` , robust'''
- syntax [varname(default=none)], [ OPTlist(namelist) ARGOPTlist
> (namelist) PWallowed(namelist) OLD_is_ok NOARGOPT_is_ok ]
- local touse `varlist'
= local touse
- tempname o a
- `o' = ._optlist.new
= __000009 = ._optlist.new
- local optlist : list uniq optlist
- foreach name of local optlist {
- `o'.addopt `name'
= __000009.addopt OIM

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("OIM")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
}
- .options.Arrpush "`optspec'"
= .options.Arrpush "OIM"
- .names.Arrpush "`mname'"
= .names.Arrpush "oim"

```

```

> ----- end _optlist.addopt -----
- }
- `o'.addopt `name'
= __000009.addopt OPG

```

```

> ----- begin _optlist.addopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("OPG")
- if "`passthru'" != "" {
= if "" != "" {

```

```

        local optspec `optspec'(passthru)
        }
        - .options.Arrpush "`optspec'"
        = .options.Arrpush "OPG"
        - .names.Arrpush "`mname'"
        = .names.Arrpush "opg"
    }
> ----- end _optlist.addopt -----
    - }
    - `o'.addopt `name'
    = __000009.addopt Robust
}
> ----- begin _optlist.addopt -----
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("Robust")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
        }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "Robust"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "robust"
}
> ----- end _optlist.addopt -----
    - }
    - `a' = ._optlist.new
    = __00000A = ._optlist.new
    - local argoptlist : list uniq argoptlist
    - foreach name of local argoptlist {
    - `a'.addopt `name'
    = __00000A.addopt CLuster
}
> ----- begin _optlist.addopt -----
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("CLuster")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
        }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "CLuster"
}

```

```

- .names.Arrpush ``mname''
= .names.Arrpush "cluster"
_____
> _____ end _optlist.addopt _____
- }
- local OPTNAMES ```.`o'.dumpnames'''
_____
> _____ begin _optlist.dumpnames _____
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/3 {
- local namelist `namelist' `.names[`i']'
= local namelist oim
- }
- local namelist `namelist' `.names[`i']'
= local namelist oim opg
- }
- local namelist `namelist' `.names[`i']'
= local namelist oim opg robust
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist ``oim opg robust'''
- class exit ```namelist'''
= class exit ``oim opg robust'''
_____
> _____ end _optlist.dumpnames _____
= local OPTNAMES ``oim opg robust'''
- local ARGOPTNAMES ```.`a'.dumpnames'''
_____
> _____ begin _optlist.dumpnames _____
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/1 {
- local namelist `namelist' `.names[`i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist ``cluster'''
- class exit ```namelist'''
= class exit ``cluster'''
_____
> _____ end _optlist.dumpnames _____
= local ARGOPTNAMES ``cluster'''
- local AND : list OPTNAMES & ARGOPTNAMES

```

```

- if `:list sizeof AND' {
= if 0 {
  di as err "vcetype ``:word 1 of `AND'' specified twice"
  exit 198
}
- local pwallowed : list uniq pwallowed
- local pwlist robust cluster
- foreach n of local pwallowed {
  local lc = lower("`n'")
  local pwlist `pwlist' `lc'
}
- if "`old_is_ok'" != "" {
= if "old_is_ok" != "" {
- local ROBUST robust
- if `:list ROBUST in OPTNAMES' {
= if 1 {
- local robust Robust
- }
- local CLUSTER cluster
- if `:list CLUSTER in ARGOPTNAMES' {
= if 1 {
- local cluster CLuster(varname)
- }
- }
- local 0 ``user''
= local 0 `` , robust''
- syntax [fw aw pw iw] [, VCE(string asis) `robust' `cluster' ]
= syntax [fw aw pw iw] [, VCE(string asis) Robust CLuster(varnam

> e) ]

- if ``vce'' != "" {
= if `'' != "" {
  gettoken name args : vce, parse(" ,")
  local args : list retok args
  capture ParseVCE `o' `a' , `name'
  if c(rc) {
    di as err "vcetype {bf:`name'} not allowed"
    exit 198
  }
  local name `r(vce)'
  if "`weight'" == "pweight" & !`:list name in pwlist' {
    di as err "pweights are not allowed with vce(`name')"
    exit 198
  }
  return add
  if ``robust'' != "" & !inlist("`name'", "", "robust", "eim", "oi
> m", "cluster") {

```

```

opts_exclusive "`robust' vce(`name')"
}
if "`name'" == "cluster" {
if ""`args'" == "" {
di as err "invalid vce(cluster) option"
exit 198
}
confirm var `args'
unab args : `args'
local markout `args'
if "`cluster'" != "" {
if !`:list args == cluster' {
di as err "options cluster() and vce(cluster) are in conflict"
exit 100
}
}
}
else if "`cluster'" != "" & !inlist("`name'", "eim", "oim") {
opts_exclusive "cluster() vce(`name')"
}
if ""`args'" != "" {
if !`:list name in ARGOPTNAMES' {
di as err "invalid vce() option"
exit 198
}
}
if "`name'" == "hc2" {
confirm var `args'
unab args : `args'
local markout `args'
}
return local vceargs ```:list retok args'''
}
else if `:list name in ARGOPTNAMES' {
if "`noargopt_is_ok'" == "" {
di as err "invalid vce() option"
exit 198
}
}
}
- else {
- if "`weight'" == "pweight" | "`robust'" != "" {
= if "" == "pweight" | "robust" != "" {
- local vce robust
- }
- if "`cluster'" != "" {
= if "" != "" {

```

```

        local vce cluster
        local args `cluster'
        local markout `cluster'
    }
    - return local vce ``vce'''
    = return local vce `robust'
    - return local vceargs ``args'''
    = return local vceargs `'''
    - }
    - if ``return(vce)'' != "" {
    = if "robust" != "" {
    - if ``return(vceargs)''' != "" {
    = if `''' != "" {
        local ss " "
    }
    - return local vceopt `vce(`return(vce)''ss`return(vceargs)')'

> '

    = return local vceopt `vce(robust)''
    - }
    - if ``return(vce)'' == "cluster" {
    = if "robust" == "cluster" {
        return local cluster `return(vceargs)'
    }
    - if inlist(`return(vce)'', "robust", "cluster") {
    = if inlist("robust", "robust", "cluster") {
    - return local robust robust
    - }
    - if ``touse'' != "" {
    = if "" != "" {
        if ``markout'' != "" {
            markout `touse' `markout', strok
        }
    }
}



---


> end _vce_parse
    - local vce `r(vce)'
    = local vce robust
    - }
    - else if ``weight'' == "pweight" {
    = else if "" == "pweight" {
        local vce robust
    }
    - if `:length local svy' {
    = if 0 {
        local vce svy
    }
}

```



```

- if ``vce''' == "cluster" {
= if "robust" == "cluster" {
    local cluster `r(cluster)'
    markout $ML_sample `cluster', strok
  }
- if `:length local group' {
= if 0 {
    markout $ML_sample `group', strok
    global ML_group : copy local group
    if bsubstr("`type `group'",1,3) == "str" {
      if `interactive' {
        SetGlobalVar ML_grp : _MLgr
      }
      else {
        global ML_grp : tempvar
        if ``moptobj''' != "" {
          global ML_grp `moptobj'$ML_grp
        }
      }
      quietly egen $ML_grp = group(`group')
      if ! `:length local cluster' {
        local cluster : copy global ML_grp
      }
    }
    else {
      if ! `:length local cluster' {
        local cluster : copy global ML_group
      }
    }
  }
- if "$ML_samp" != "$ML_sample" {
= if "__000005" != "__000005" {
    quietly replace $ML_samp = 0 if $ML_samp & $ML_sample == 0
  }
- if `:length local vce' == 0 {
= if 6 == 0 {
    if ``technique''' == "bhhh" {
      local vce opg
    }
    else local vce oim
  }
- if inlist("`vce'", "robust", "cluster") & bsubstr("`evaltype'",1
> ,1) == "d" {
= if inlist("robust", "robust", "cluster") & bsubstr("e2",1,1) ==
> "d" {
    local optname = cond("`svy'"=="" ,"vce(`vce')","svy")

```

```

di as err "option `optname' is not allowed with evaltype `evalty
> pe'"
    exit 198
}
- if `:length local crittype' == 0 {
= if 0 == 0 {
- if inlist("`vce'", "cluster", "robust", "svy") {
= if inlist("robust", "cluster", "robust", "svy") {
- local crittype "log pseudolikelihood"
- }
- else local crittype "log likelihood"
- }
- global ML_waldtest `waldtest'
= global ML_waldtest 0
- if `:length local svy' | `:length local weight' {
= if 0 | 0 {
    if `interactive' {
        SetGlobalVar ML_w : _MLw
    }
    else {
        global ML_w : tempvar
        if ``moptobj' != "" {
            global ML_w `moptobj'$ML_w
        }
    }
}
- if `:length local weight' {
= if 0 {
    if ``moptobj' != "" {
        cap drop $ML_w
    }
    quietly gen double $ML_w `exp' if $ML_samp
    local wtype ``weight'
    local wexp ``exp'
    global ML_wtyp : copy local wtype
    global ML_wexp : copy local wexp
    if "`wtype'" == "iweight" | "`svy'" != "" {
        local zeroweight zeroweight
    }
}
- if inlist("`vce'", "svy", "cluster") {
= if inlist("robust", "svy", "cluster") {
    if `interactive' {
        SetGlobalVar ML_subv : _MLsu
    }
    else {

```

```

global ML_subv : tempvar
if ``moptobj''' != "" {
global ML_subv `moptobj'$ML_subv
}
}
}
- quietly count if $ML_sample
= quietly count if __000005
- if r(N) == 0 {
error 2000
}
- if ``weight''' != "" {
= if `''' != "" {
quietly count if $ML_sample & $ML_w != 0
if r(N) == 0 {
di in gr "all observation have zero weights"
exit 2000
}
}
- if `:length local lf0' {
= if 0 {
if `:list sizeof lf0' != 2 {
di as err "lf0(`lf0') invalid"
exit 198
}
global ML_k0 : word 1 of `lf0'
global ML_ll_0 : word 2 of `lf0'
confirm integer number $ML_k0
confirm number $ML_ll_0
if $ML_k0 < 0 {
di as err "lf0(`lf0') invalid"
exit 198
}
}
- if ``obs' == "" {
= if "" == "" {
- if ``wtype' != "fweight" {
= if "" != "fweight" {
- quietly count if $ML_sample
= quietly count if __000005
- local obs = r(N)
- }
- else {
sum $ML_w if $ML_sample, mean
local obs = r(sum)
}
}

```

```

- }
- if `:length local iterid' {
= if 0 {
  local iterid = trim(bsubstr("`iterid'",1,32))
}
- if `:length local crittype' {
= if 20 {
- local crittype = trim(bsubstr("`crittype'",1,32))
= local crittype = trim(bsubstr("`log pseudolikelihood'",1,32))
- }
- if `:length local derivscale' {
= if 0 {
  confirm matrix `derivscale'
}
- if `:length local derivh' {
= if 0 {
  confirm matrix `derivh'
}
- local l : strlen local deriv
- ParseUsemin, `deriv' len(`l')
= ParseUsemin, len(0)

```

```

> ----- begin mopt.ParseUsemin -----
- syntax [, LEN(integer 0) MIN1(string) NOMIN MIN]
- if ``min1'' != "" & ``nomin'' != "" {
= if `'' != "" & `'' != "" {
  di as err "options min() and nomin are mutually exclusive"
  exit 198
}
- if ``min1'' != "" & ``nomin'' != "" {
= if `'' != "" & `'' != "" {
  di as err "options min and nomin are mutually exclusive"
  exit 198
}
- if (``min1'' != "") {
= if (`'' != "") {
  confirm matrix `min1'
  local deriv `min1'
}
- else if (``min1'' != "") {
= else if (`'' != "") {
  if (`len' > length(`min1')) {
    di as err "must specify a matrix of 2 columns in option min()"
    exit 198
  }
  local deriv 1

```

```

    }
- else {
- if (`len' > 0) {
= if (0 > 0) {
    if ("`nomin'" == "") {
        di as err "must specify a matrix of 2 columns in option min()"
        exit 198
    }
    else if (`len' > length("`nomin'")) {
        di as err "options min() and nomin are mutually exclusive"
        exit 198
    }
    else {
        local deriv 0
    }
}
- else {
- local deriv 0
- }
- }
- sreturn local deriv `deriv'
= sreturn local deriv 0
}

> ----- end mopt.ParseUsemin -----

- local deriv = s(deriv)
- if `:length local gnwmatrix' {
= if 0 {
    confirm matrix `gnwmatrix'
}
- `vv' mata: Mopt_model()
= version 18: mata: Mopt_model()
}

> ----- begin mopt_check_program -----

- version 10
- args name
- capture confirm name `name'
= capture confirm name nbreg_lf
- if c(rc) {
    di as err "unrecognized command:  `name' invalid command name
> "

    exit 199
}
- capture which `name'
= capture which nbreg_lf
- if !c(rc) {
- exit

```

```

> ----- end mopt_check_program -----
- global ML_stat model
- if !`interactive' {
= if !0 {
- `vv' MaxMin `maxmin', nooutput `score' `options' moptobj(`moptob
> j')
= version 18: MaxMin maximize, nooutput search(off) moptobj()

> ----- begin mopt.MaxMin -----
- local vv : di "version " string(_caller()) ":"
- version 12
- ChkMacros

> ----- begin mopt.ChkMacros -----
- if "$ML_stat" != "model" {
= if "model" != "model" {
di as err "you must issue -ml model- first"
exit 198
}
- capture confirm var $ML_samp $ML_w $ML_subv
= capture confirm var __000005 __000005
- if c(rc) {
di as err "Since issuing the -ml model- statement, you have
> done something to drop" _n "temporary variables ml added to your data. You
> must start again."
Clear
exit 111
}

> ----- end mopt.ChkMacros -----
- syntax name(name=maxmin) [, NEGH TOLerance(numlist max=1 >=0)
> LTOLerance(numlist max=1 >=0) NONRTOLerance NRTOLerance(numlist max=1 >=0) Q
> TOLerance(numlist max=1 >=0) GTOLerance(numlist max=1 >=0) ITERate(numlist m
> ax=1 >=0) NOTCONCAVE(numlist max=1 >=0) ndami DIFFicult HALFSTEPonly DOOPT S
> EArch(name) Repeat(passthru) Bounds(string) SCore(string) noWARNING noCLEAR
> NOLOg LOg DOTs SHOWTOLerance SHOWNrtolerance SHOWSTEP TRace COEFDIffs GRADie
> nt HESSian noSKIPline noOUTput Level(cilevel) moptobj(string) * ]
- if `:length local nrtolerance' {
= if 0 {
opts_exclusive "nrtolerance() `nonrtolerance'"
}
- if `:length local qtolerance' {
= if 0 {
opts_exclusive "qtolerance() `nonrtolerance'"
}
}

```

```

- opts_exclusive "`nonrtolerance' `shownrtolerance'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- if `:length local shownrtolerance' {
= if 0 {
  local showtolerance showtolerance
}
- if "$ML_preserve" != "no" {
= if "no" != "no" {
  if `:length local score' {
    di as smcl as err "May not specify {bf:score()} option unless"
> _n "    a) estimation subsample is the entire data in memory, or" _n "
> b) you specify option {bf:nopreserve} on {bf:ml model} statement (meaning"
> _n "    your evaluation program explicitly restricts itself to obs" _n
> "    for which {bf:$}" "{bf:ML_samp==1}."
    exit 198
  }
  preserve
  local N = c(N)
  quietly keep if $ML_sample
  if (`N' != c(N)) {
    mata: Mopt_init_regetviews()
  }
}
- if `:length local score' {
= if 0 {
  SetupScore ``$ML_evaltype' ``score' $ML_n $ML_dim
  local scores "s(scores)"
}
- _parse_iterlog, `nolog' `log'

```

```

= _parse_iterlog,


---


> 

---

 begin _parse_iterlog 

---


    - version 16
    - syntax [, NOLOG LOG]
    - if "`log'`nolog'" != "" {
= if "" != "" {
    opts_exclusive "`log' `nolog'"
    }
    - else if "`c(iterlog)'" == "on" {
= else if "on" == "on" {
    - local log log
    - }
    - else {
    local nolog nolog
    }
    - sreturn local log `log'
= sreturn local log log
    - sreturn local nolog `nolog'
= sreturn local nolog


---


> 

---

 end _parse_iterlog 

---


    - local log "`s(nolog)'"
= local log ""
    - local tropts `log' `dots' `showtolerance' `showstep' `trace' `
> coefdiffs'
= local tropts
    - if "`tropts'" != "nolog" {
= if "" != "nolog" {
    - local tropts `tropts' `gradient' `hessian'
= local tropts
    - if "`skipline'" == "" {
= if "" == "" {
    - if "`iterate'" != "0" | `:length local tropts' {
= if "" != "0" | 0 {
    - di

```



```

- }
- }
- }
- else {
  local gradient
  local hessian
  local nolog nolog
  }
- if "`search'" != "off" & "`iterate'" != "0" {
= if "off" != "off" & "" != "0" {
  if "`search'" == "quietly" {
    local sopts nolog
  }
  else {
    if `:length local tropts' {
      if "`tropts'" != "nolog" {
        local sopts trace
      }
      else local sopts nolog
    }
    if "`search'" == "norescale" {
      local sopts `sopts' norescale
    }
    Search `bounds', nopreserve `sopts' `repeat' `maxmin'
  }
- tempname value b V iV
- `vv' mata: Mopt_maxmin()
= version 18: mata: Mopt_maxmin()

```

```

> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
  mlsum `lnf' = -lgamma(`y'+1) - exp(`xb') + `y'*`xb'

```

```

    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
        - }
        - if `todo' == 0 | `lnf'==. { exit }
        = if 2 == 0 | __00000K==. { exit }
        - tempname alpha
        - tempvar mu p
        - quietly {
            - gen double `mu' = exp(`xb') if $ML_samp
            = gen double __00000U = exp(__00000Q) if __000005
            - gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
            = gen double __00000V = 1/(1+exp(__00000Q+__00000R)) if __0000
> 05
            - if `lnalpha'<-20 {
            = if __00000R<-20 {
                replace `sc1' = `y'-`mu' if $ML_samp
                replace `sc2' = 0 if $ML_samp
            }
            - else {
            - replace `sc1' = `p'*(`y'-`mu') if $ML_samp
            = replace __00000N = __00000V*(piq_timing_max-__00000U) if __0
> 00005
            - replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
            = replace __000000 = __00000S*(digamma(__00000S) - digamma(piq
> _timing_max+__00000S) - ln(__00000V)) + __00000V*(piq_timing_max-__00000U) i
> f __000005
            - }
            - }
            - $ML_ec tempname g1 g2
            = * tempname g1 g2
            - $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
            = * mlvecsum __00000K = __00000N, eq(1)
            - $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
            = * mlvecsum __00000K = __000000, eq(2)
            - $ML_ec matrix `g' = (`g1',`g2')
            = * matrix __00000L = (,)
            - if `todo' == 1 | `lnf'==. { exit }
            = if 2 == 1 | __00000K==. { exit }
            - tempname alpha d11 d12 d22
            - scalar `alpha' = exp(`lnalpha')

```

```

= scalar __00000W = exp(__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
  mlfmatsum `lnf' `d11' = `mu', eq(1)
  mlfmatsum `lnf' `d12' = 0, eq(1,2)
  mlfmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mlfmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
= mlfmatsum __00000K __00000X = __00000U*__00000V*(__00000W*__0
> 00000V*(piq_timing_max-__00000U)+1), eq(1)
- mlfmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mlfmatsum __00000K __00000Y = __00000W*__00000U*__00000V^2*(p
> iq_timing_max-__00000U), eq(1,2)
- mlfmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p'*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
= mlfmatsum __00000K __00000Z = __00000S*(digamma(__00000S) - d
> igamma(piq_timing_max+__00000S) - ln(__00000V) - __00000S*(trigamma(piq_timi
> ng_max+__00000S) - trigamma(__00000S))) + __00000U*__00000V*(__00000W*__0000
> 0V*(piq_timing_max-__00000U)- 1), eq(2)
- }
- matrix `H' = (`d11',`d12' \ `d12'',`d22')
= matrix __00000M = (__00000X,__00000Y \ __00000Y',__00000Z)

> _____ end nbreg_lf _____
Iteration 0: Log pseudolikelihood = -329.28462
> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
  mlfsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'

```

```

    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piqu_timing_max*ln1p(exp(-__00000Q-__00000R))
        - }
        - if `todo' == 0 | `lnf'==. { exit }
        = if 0 == 0 | __00000K==. { exit }
    }
}
> ----- end nbreg_lf -----
> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piqu_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 0 == 0 | __00000K==. { exit }
}
}
> ----- end nbreg_lf -----
> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb

```

```

- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piqu_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000K==. { exit }

> _____ end nbreg_lf _____

> _____ begin nbreg_lf _____

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(

```

```

> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 2 == 0 | __00000K==. { exit }
- tempname alpha
- tempvar mu p
- quietly {
- gen double `mu' = exp(`xb') if $ML_samp
= gen double __00000U = exp(__00000Q) if __000005
- gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
= gen double __00000V = 1/(1+exp(__00000Q+__00000R)) if __0000
> 05
- if `lnalpha'<-20 {
= if __00000R<-20 {
replace `sc1' = `y'-`mu' if $ML_samp
replace `sc2' = 0 if $ML_samp
}
- else {
- replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000N = __00000V*(piq_timing_max-__00000U) if __0
> 00005
- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
= replace __000000 = __00000S*(digamma(__00000S) - digamma(piq
> _timing_max+__00000S) - ln(__00000V)) + __00000V*(piq_timing_max-__00000U) i
> f __000005
- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000K = __00000N, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000K = __000000, eq(2)
- $ML_ec matrix `g' = (`g1',`g2')
= * matrix __00000L = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000K==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __00000W = exp(__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
mlmatsum `lnf' `d11' = `mu', eq(1)
mlmatsum `lnf' `d12' = 0, eq(1,2)

```

```

        mllmatsum `lnf' `d22' = 0, eq(2)
    }
    - else {
    - mllmatsum `lnf' `d11' = `mu'*`p*(`alpha'*`p*(`y'-`mu')+1),
> eq(1)
        = mllmatsum __00000K __00000X = __00000U*__00000V*(__00000W*__0
> 00000V*(piq_timing_max-__00000U)+1), eq(1)
        - mllmatsum `lnf' `d12' = `alpha'*`mu'*`p^2*(`y'-`mu'), eq(1,2
> )
        = mllmatsum __00000K __00000Y = __00000W*__00000U*__00000V^2*(p
> iq_timing_max-__00000U), eq(1,2)
        - mllmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
        = mllmatsum __00000K __00000Z = __00000S*(digamma(__00000S) - d
> igamma(piq_timing_max+__00000S) - ln(__00000V) - __00000S*(trigamma(piq_timi
> ng_max+__00000S) - trigamma(__00000S))) + __00000U*__00000V*(__00000W*__0000
> 0V*(piq_timing_max-__00000U)- 1), eq(2)
        - }
        - matrix `H' = (`d11',`d12' \ `d12'',`d22')
        = matrix __00000M = (__00000X,__00000Y \ __00000Y',__00000Z)
    }
> _____ end nbreg_lf _____
Iteration 1:  Log pseudolikelihood = -322.25152
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000Q = __00000J, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000R = __00000J, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000S = exp(-__00000R)
    - if `lnalpha' < -20 {
    = if __00000R < -20 {
        mllsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mllsum `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m'
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mllsum __00000K = lngamma(__00000S+piq_timing_max) - lngamma(

```

```

> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 0 == 0 | __00000K==. { exit }
    _____
> _____ end nbreg_lf _____
    _____
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000Q = __00000J, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000R = __00000J, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000S = exp(-__00000R)
    - if `lnalpha' < -20 {
    = if __00000R < -20 {
        mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 0 == 0 | __00000K==. { exit }
    _____
> _____ end nbreg_lf _____
    _____
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000Q = __00000J, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000R = __00000J, eq(2) scalar

```



```

- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piqu_timing_max*ln1p(exp(-__00000Q-__00000R))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 2 == 0 | __00000K==. { exit }
- tempname alpha
- tempvar mu p
- quietly {
- gen double `mu' = exp(`xb') if $ML_samp
= gen double __00000U = exp(__00000Q) if __000005
- gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
= gen double __00000V = 1/(1+exp(__00000Q+__00000R)) if __0000
> 05

- if `lnalpha'<-20 {
= if __00000R<-20 {
    replace `sc1' = `y'-`mu' if $ML_samp
    replace `sc2' = 0 if $ML_samp
  }
- else {
- replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000N = __00000V*(piq_timing_max-__00000U) if __0
> 00005

- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
    = replace __000000 = __00000S*(digamma(__00000S) - digamma(piq
> _timing_max+__00000S) - ln(__00000V)) + __00000V*(piq_timing_max-__00000U) i
> f __000005

- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000K = __00000N, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)

```

```

= * mltvecsum __00000K = __000000, eq(2)
- $ML_ec matrix `g' = (`g1',`g2')
= * matrix __00000L = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000K==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __00000W = exp(__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
  mltmatsum `lnf' `d11' = `mu', eq(1)
  mltmatsum `lnf' `d12' = 0, eq(1,2)
  mltmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mltmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
= mltmatsum __00000K __00000X = __00000U*__00000V*(__00000W*__0
> 00000V*(piq_timing_max-__00000U)+1), eq(1)
- mltmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mltmatsum __00000K __00000Y = __00000W*__00000U*__00000V^2*(p
> iq_timing_max-__00000U), eq(1,2)
- mltmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p'*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
= mltmatsum __00000K __00000Z = __00000S*(digamma(__00000S) - d
> igamma(piq_timing_max+__00000S) - ln(__00000V) - __00000S*(trigamma(piq_timi
> ng_max+__00000S) - trigamma(__00000S))) + __00000U*__00000V*(__00000W*__0000
> 0V*(piq_timing_max-__00000U)- 1), eq(2)
- }
- matrix `H' = (`d11',`d12' \ `d12','`d22')
= matrix __00000M = (__00000X,__00000Y \ __00000Y',__00000Z)

> _____ end nbreg_lf _____
Iteration 2: Log pseudolikelihood = -322.23587
> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar

```

```

- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000K==. { exit }
}
}

> _____ end nbreg_lf _____
}

> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000Q = __00000J, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000R = __00000J, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000S = exp(-__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000K = lngamma(__00000S+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000K==. { exit }
}
}

```

```

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000Q = __00000J, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000R = __00000J, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000S = exp(-__00000R)
    - if `lnalpha' < -20 {
    = if __00000R < -20 {
        mlsun `lnf' = -lgamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
    - mlsun `lnf' = lgamma(`m'+`y') - lgamma(`y'+1) - lgamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000K = lgamma(__00000S+piq_timing_max) - lgamma(
> piq_timing_max+1) - lgamma(__00000S) - __00000S*ln1p(exp(__00000Q+__00000R)
> ) - piq_timing_max*ln1p(exp(-__00000Q-__00000R))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 2 == 0 | __00000K==. { exit }
    - tempname alpha
    - tempvar mu p
    - quietly {
    - gen double `mu' = exp(`xb') if $ML_samp
    = gen double __00000U = exp(__00000Q) if __000005
    - gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
    = gen double __00000V = 1/(1+exp(__00000Q+__00000R)) if __0000
> 05
    - if `lnalpha'<-20 {
    = if __00000R<-20 {
        replace `sc1' = `y'-`mu' if $ML_samp
        replace `sc2' = 0 if $ML_samp
    }
    - else {
    - replace `sc1' = `p'*(`y'-`mu') if $ML_samp
    = replace __00000N = __00000V*(piq_timing_max-__00000U) if __0
> 00005

```

```

- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-'mu') if $ML_samp
= replace __000000 = __00000S*(digamma(__00000S) - digamma(piq
> _timing_max+__00000S) - ln(__00000V)) + __00000V*(piq_timing_max-__00000U) i
> f __000005
- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000K = __00000N, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000K = __00000O, eq(2)
- $ML_ec matrix `g' = (`g1',`g2')
= * matrix __00000L = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000K==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __00000W = exp(__00000R)
- if `lnalpha' < -20 {
= if __00000R < -20 {
mlmatsum `lnf' `d11' = `mu', eq(1)
mlmatsum `lnf' `d12' = 0, eq(1,2)
mlmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mlmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-'mu')+1),
> eq(1)
= mlmatsum __00000K __00000X = __00000U*__00000V*(__00000W*__0
> 00000V*(piq_timing_max-__00000U)+1), eq(1)
- mlmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-'mu'), eq(1,2
> )
= mlmatsum __00000K __00000Y = __00000W*__00000U*__00000V^2*(p
> iq_timing_max-__00000U), eq(1,2)
- mlmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m')
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')))) + `mu'*`p'*(`alpha'*`p'
> *(`y'-'mu')- 1), eq(2)
= mlmatsum __00000K __00000Z = __00000S*(digamma(__00000S) - d
> igamma(piq_timing_max+__00000S) - ln(__00000V) - __00000S*(trigamma(piq_timi
> ng_max+__00000S) - trigamma(__00000S))) + __00000U*__00000V*(__00000W*__0000
> 0V*(piq_timing_max-__00000U)- 1), eq(2)
- }
- matrix `H' = (`d11',`d12' \ `d12'',`d22')
= matrix __00000M = (__00000X,__00000Y \ __00000Y',__00000Z)

```

```

> _____ end nbreg_lf _____
Iteration 3:  Log pseudolikelihood = -322.23587
> _____ begin mopt_post _____
    - args b V C wgt touse depvar
    - if `:length local touse' {
    = if 8 {
    - tempname esamp
    - quietly gen byte `esamp' = `touse'
    = quietly gen byte __00000S = __000005
    - }
    - ereturn post `b' `V' `C' `wt', esample(`esamp') depname(`de
> pvar') buildfvinfo
    = ereturn post __00000Q __00000R [], esample(__00000S) depnam
> e(piq_timing_max) buildfvinfo
> _____ end mopt_post _____
    - ereturn scalar k_eq_model = abs($ML_waldtest)
    = ereturn scalar k_eq_model = abs(0)
    - if `:length global ML_ll_0' {
    = if 0 {
    ereturn scalar ll_0 = $ML_ll_0
    if `:length global ML_rank0' {
    ereturn scalar rank0 = $ML_rank0
    ereturn scalar df_m = e(rank) - $ML_rank0
    }
    else ereturn scalar df_m = e(rank) - $ML_k0
    }
    - if !`:length global ML_ll_0' | inlist(e(vce), "robust", "clust
> er", "linearized") {
    = if !0 | inlist(e(vce), "robust", "cluster", "linearized") {
    - if "$ML_svy" == "" {
    = if "" == "" {
    - _prefix_model_test, minimum
> _____ begin _prefix_model_test _____
    - version 9
    - syntax [name(name=cmd)] [, svy noADJust noSVYadjust MINimum
> ]
    - if (inlist("`cmd'", "asmixlogit", "cmmixlogit", "cmxtmixlogit"))
> ) {
    = if (inlist("", "asmixlogit", "cmmixlogit", "cmxtmixlogit")) {
    _asmixtest, `svy' `adjust' `svyadjust'
    exit
    }
    - local K = 1

```

```

- if "`e(k_eq_model)'" != "" {
= if "0" != "" {
- capture confirm integer number `e(k_eq_model)'
= capture confirm integer number 0
- if ! c(rc) {
- local K = e(k_eq_model)
- }
- }
- if "`e(k_eq_model_skip)'" != "" {
= if "" != "" {
capture confirm integer number `e(k_eq_model_skip)'
if ! c(rc) {
local skip = e(k_eq_model_skip)
}
}
- ereturn local df_m
- ereturn local F
- ereturn local chi2
- ereturn local chi2type
- ereturn local p
- if (`K' == 0) {
= if (0 == 0) {
- exit

```

> _____ end _prefix_model_test _____

```

- }
- else {
_prefix_model_test, $ML_svy $ML_noadj
}
- }
- else if `:length global ML_ll_0' {
= else if 0 {
if ``"maxmin"' == "minimize" {
ereturn scalar chi2 = -2*(e(ll)-e(ll_0))
}
else {
ereturn scalar chi2 = 2*(e(ll)-e(ll_0))
}
ereturn scalar p = chi2tail(e(df_m), e(chi2))
ereturn local chi2type "LR"
}
- if `:length global ML_wexp' {
= if 0 {
ereturn local wtype ``$ML_wtyp"'
ereturn local wexp ``$ML_wexp"'
}

```

```

- if `:length global ML_group' {
= if 0 {
    ereturn local group `"$ML_group"'
    if ``"e(clustvar)'" == "$ML_grp" & "$ML_grp" != "" {
    ereturn local clustvar `"$ML_group"'
    }
    }
- ereturn local cmd "ml"
- if `:length local score' {
= if 0 {
    mata: Mopt_score(0)
    ereturn local scorevars `scores'
    }
- if "$ML_preserve" != "no" {
= if "no" != "no" {
    restore
    if ""e(prefix)'" == "svy" & e(N_strata_omit) {
    tempname v
    quietly _svy2 $ML_sample if $ML_sample, type(total) svy v(`v')
> subpop(`e(subpop)') touse($ML_sample)
    }
    ereturn repost, esample($ML_sample)
    }
- if ``"moptobj'" != "" {
= if `""' != "" {
    local clear noclear
    }
- if !`:length local clear' {
= if !0 {
- Clear

> ----- begin mopt.Clear -----
- syntax [, NOTANOPTION]
- capture drop $ML_w
= capture drop __000005
- capture drop $ML_samp
= capture drop __000005
- capture drop $ML_sample
= capture drop __000005
- capture drop $ML_subv
= capture drop
- capture drop $ML_grp
= capture drop
- mata: Mopt_drop_external()
- macro drop ML_*

```



```

> ----- end mopt.Clear -----
- }
- else {
  capture confirm var $ML_sample
  if c(rc) {
    quietly gen byte $ML_sample = e(sample)
  }
}
- if `:length local output' == 0 {
= if 8 == 0 {
  Display, level(`level') `options'
}
}

> ----- end mopt.MaxMin -----
- }

> ----- end mopt.Model -----
- if c(rc) {
  local rc = c(rc)
  Clear
  exit `rc'
}
- exit

> ----- end mopt -----
- exit

> ----- end ml -----
- mat `b0' = e(b)
= mat __000003 = e(b)
- scalar `ll0' = e(ll)
= scalar __000004 = e(ll)
- local continu "continue"
- }
- if ```from'""'=="" {
= if `""'=="" {
- if "`constan'""'=="" {
= if ""'=="" {
- local dim = colsof(`bp')
= local dim = colsof(__000002)
- if `dim' > 1 {
= if 8 > 1 {
- tempvar xb
- qui mat score `xb' = `bp' if `touse'
= qui mat score __000005 = __000002 if __000000
- if "`weight'""'!=" {

```

```

= if ""!=" {
    local wt `[aw`exp']"
}
- summarize `xb' `wt' if `touse', meanonly
= summarize __000005 if __000000, meanonly
- if "`offset'"!=" {
= if ""!=" {
    qui replace `xb' = `xb' + `b0'[1,1] - r(mean) + `offset'
}
- else {
- qui replace `xb' = `xb' + `b0'[1,1] - r(mean)
= qui replace __000005 = __000005 + __000003[1,1] - r(mean)
- }
- mat `bp'[1,`dim'] = `bp'[1,`dim'] + `b0'[1,1] - r(mean)
= mat __000002[1,8] = __000002[1,8] + __000003[1,1] - r(mean)
- mat `bp' = (`bp', `b0'[1,2..2])
= mat __000002 = (__000002, __000003[1,2..2])
- `LLprog' `y' `xb' `b0'[1,2] [`weight'`exp'] if `touse', nobs(`r(N)')
= LLalpha piq_timing_max __000005 __000003[1,2] [] if __000000, nobs(145
> )

> ----- begin nbreg.LLalpha -----
- gettoken y 0 : 0
- gettoken z 0 : 0
- gettoken b0 0 : 0
- syntax [fw aw pw iw] [if], Nobs(string)
- if "`weight'"!=" {
= if ""!=" {
    if "`weight'"=="fweight" {
        local wt `[fw`exp']"
    }
    else local wt `[aw`exp']"
}
- tempname lnalpha m
- scalar `lnalpha' = `b0'
= scalar __000006 = __000003[1,2]
- local bound -20
- if `lnalpha' < `bound' { scalar `lnalpha' = `bound' }
= if __000006 < -20 { scalar __000006 = -20 }
- scalar `m' = exp(-`lnalpha')
= scalar __000007 = exp(-__000006)
- qui replace `z' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m') -
> `m'*ln1p(exp(`z'+`lnalpha')) - `y'*ln1p(exp(-`z'-`lnalpha')) `if'
= qui replace __000005 = lngamma(__000007+piq_timing_max) - lngamma(pi
> q_timing_max+1) - lngamma(__000007) - __000007*ln1p(exp(__000005+__000006))
> - piq_timing_max*ln1p(exp(-__000005-__000006)) if __000000

```

```

- summarize `z' `wt' `if', meanonly
= summarize __000005 if __000000, meanonly
- if r(N) != `nobs' { exit }
= if r(N) != 145 { exit }
- if "`weight'"=="aweight" {
= if ""=="aweight" {
    ret scalar lnf = r(N)*r(mean)
  }
- else ret scalar lnf = r(sum)

```

```

> ----- end nbreg.LLalpha -----
- if r(lnf) > `ll0' & r(lnf)<. {
= if r(lnf) > __000004 & r(lnf)<. {
- local initopt "init(`bp')"
= local initopt "init(__000002)"
- }
- }
- if "`initopt'"==" " {
= if "init(__000002)"==" " {
    local initopt "init(`b0')"
  }
- }
- else {
    tempname b0
    mat `b0' = (0)
    if _caller() < 15 {
      mat colnames `b0' = ln`parm':_cons
    }
    else {
      mat colnames `b0' = /ln`parm'
    }
    mat `bp' = (`bp',`b0')
    local initopt "init(`bp')"
  }
- `nohead' di in gr _n "Fitting full model:"
= di in gr _n "Fitting full model:"

```

Fitting full model:

```

- }
- else local initopt `"init(`from')"'
= else local initopt `"init()"'
- `vv' ml model `mm' `prog' (`yname': `y'=`xvars', `constan' `offopt') /
> ln`parm' if `touse' [`weight'`exp'], collinear missing max nooutput nopreser
> ve `initopt' search(off) `mlopts' `scopt' `robust' `vce' `continu' title(`ti
> tle') diparm(ln`parm', exp label("`parm'")) `negh' `moptobj'
= version 18: ml model e2 nbreg_lf (piq_timing_max: piq_timing_max=ln_neq
> q cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_ca
> lvo, ) /lnalpha if __000000 [], collinear missing max nooutput nopreserve i
> nit(__000002) search(off) robust vce(robust) continue title(Negative binom
> ial regression) diparm(lnalpha, exp label("alpha")) negh

```

```

> ----- begin ml -----
- if _caller()>=11 {
- mopt `0'
= mopt model e2 nbreg_lf (piq_timing_max: piq_timing_max=ln_neq cb_aut
> hors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo, )
> /lnalpha if __000000 [], collinear missing max nooutput nopreserve init(__00
> 0002) search(off) robust vce(robust) continue title(Negative binomial regr
> ession) diparm(lnalpha, exp label("alpha")) negh

```

```

> ----- begin mopt -----
- local vv : di "version " string(_caller()) ":"
- version 12
- gettoken subcmd 0 : 0, parse(" ,")
- local lcmd : length local subcmd
- if "`subcmd'" == "clear" {
= if "model" == "clear" {
Clear
exit
}
- if ``"subcmd"' == "hold" {
= if ``"model"' == "hold" {
ml_hold `0'
exit
}
- if ``"subcmd"' == "unhold" {
= if ``"model"' == "unhold" {
ml_unhold `0'
exit
}
- if "`subcmd'" == "score" {
= if "model" == "score" {
if _caller() > 12 {

```

```

    `vv' Score `0'
  }
  else {
    Score `0'
  }
  exit
}
- if "`subcmd'" == "count" {
= if "model" == "count" {
  Count `0'
  exit
}
- if "`subcmd'" == "trace" {
= if "model" == "trace" {
  Trace `0'
  exit
}
- if "`subcmd'" == bsubstr("graph",1,max(2,`lcmd')) {
= if "model" == bsubstr("graph",1,max(2,5)) {
  Graph `0'
  exit
}
- if "`subcmd'" == "init" {
= if "model" == "init" {
  Interactive 0
  `vv' Init `0'
  exit
}
- if "`subcmd'" == bsubstr("maximize",1,max(3,`lcmd')) {
= if "model" == bsubstr("maximize",1,max(3,5)) {
  Interactive 1
  `vv' MaxMin maximize `0'
  exit
}
- if "`subcmd'" == bsubstr("minimize",1,max(3,`lcmd')) {
= if "model" == bsubstr("minimize",1,max(3,5)) {
  Interactive 1
  `vv' MaxMin minimize `0'
  exit
}
- if "`subcmd'" == bsubstr("display",1,max(2,`lcmd')) {
= if "model" == bsubstr("display",1,max(2,5)) {
  Display `0'
  exit
}
- if "`subcmd'" == bsubstr("footnote",1,max(4,`lcmd')) {

```

```

= if "model" == bsubstr("footnote",1,max(4,5)) {
  ml_footnote `0'
  exit
}
- if "`subcmd'" == "," {
= if "model" == "," {
  Display, `0'
  exit
}
- if "`subcmd'" == bsubstr("model",1,max(3,`lcmd')) {
= if "model" == bsubstr("model",1,max(3,5)) {
- `vv' capture noi Model `0'
= version 18: capture noi Model e2 nbreg_lf (piq_timing_max: piq_ti
> ming_max=ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotemb
> erg stky_pr_calvo, ) /lnalpha if __000000 [], collinear missing max nooutpu
> t nopreserve init(__000002) search(off) robust vce(robust) continue title(
> Negative binomial regression) diparm(lnalpha, exp label("alpha")) negh

```

```

> ----- begin mopt.Model -----
- local version = string(_caller())
- local vv : di "version `version':"
= local vv : di "version 18:"
- version 12
- syntax anything(id="model" name=spec) [if] [in] [fw aw pw iw] [,
> BRACKET COLLinear MISSing CONTinue lf0(string) INIT(string) CONSTraints(str
> ing) noCNSNOTEs VCE(passthru) NEGH NOPREserve TECHnique(string) ITERID(strin
> g) CRITtype(string) OBS(numlist max=1 >0) TITle(string) WALDtest(integer -1)
> SVY SUBpop(string) SRSubpop noSVYadjust SCORE(passthru) noOUTput noSCVARS
> GROUP(varname) ITERPROLOG(string) DERIVPROLOG(string) DERIVH(string) DERIVSC
> ALE(string) DERIV(string) nrderiv GNWMATrix(string) KAUXiliary(numlist int >
> =0) MAXimize MINimize USERinfo(namelist) PUPDATED Robust CLuster(passthru) m
> optobj(string) USEVIEWS * ]
- if ``moptobj''' == "" {
= if `'''' == "" {
- Clear

```

```

> ----- begin mopt.Clear -----
- syntax [, NOTANOPTION]
- capture drop $ML_w
= capture drop
- capture drop $ML_samp
= capture drop
- capture drop $ML_sample
= capture drop
- capture drop $ML_subv
= capture drop

```

```

- capture drop $ML_grp
= capture drop
- mata: Mopt_drop_external()
- macro drop ML_*

```

```

> ----- end mopt.Clear -----
- }
- local maxmin `minimize' `maximize'
= local maxmin maximize
- opts_exclusive ``maxmin''
= opts_exclusive "maximize"

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts maximize
- local n 0
- while ```opts'`` != "" {
= while `"maximize" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ```opts'`` != "" {
= while `""' != "" {
- local ++n
- gettoken item`n' opts : opts, bind
- }
- if `n' < 2 {
= if 1 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- if `:length local maxmin' {
= if 8 {
- local interactive 0
- }
- else local interactive 1
- _get_diparmopts, diparmopts(`options') soptions syntaxonly
= _get_diparmopts, diparmopts(search(off) diparm(lnalpha, exp labe
> l("alpha"))) soptions syntaxonly

```

```

> ----- begin _get_diparmopts -----
- if _caller() < 8.2 {
- _get_diparmopts_8 `0'

```

```

        exit
    }
    - version 9
    - local version : di "version " string(_caller()) ":"
    - syntax [, diparmopts(string asis) EXECute soptions bottom plus
> SYNTAXonly * ]
    - local goptions `options'
    = local goptions
    - SpliceGlobals junk , `goptions'
    = SpliceGlobals junk ,

> ----- begin _get_diparmopts.SpliceGlobals -----
    - syntax name(id="macro name" name=c_diparm) [, diparm(string
> asis) Level(cilevel) dof(passthru) syntaxonly ]
    - if ``dof''' == "" & ``e(df_r)''' != "" {
    = if `''' == "" & `''' != "" {
        capture confirm integer number `e(df_r)'
        if !c(rc) {
            local gdof dof(`e(df_r)')
        }
        capture
    }
    - else local gdof ``dof'''
    = else local gdof `'''
    - local glevel `level'
    = local glevel 95
    - local lopt level(`glevel')
    = local lopt level(95)
    - if (``diparm''' == "") exit
    = if (``''' == "") exit

> ----- end _get_diparmopts.SpliceGlobals -----
    - local 0 `", `diparmopts'''
    = local 0 `", search(off) diparm(lnalpha, exp label("alpha"))'''
    - local diparmopts
    - local k 0
    - syntax [, diparm(string asis) * ]
    - while ``diparm''' != "" {
    = while `lnalpha, exp label("alpha")' != "" {
    - local ++k
    - local single 1
    - local after
    - capture _on_colon_parse `diparm'
    = capture _on_colon_parse lnalpha, exp label("alpha")

> ----- begin _on_colon_parse -----

```



```

- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
    local before `"(`before)'"
    }
- if ``before'" == ":" {
= if ``lnalpha, exp label("alpha")' == ":" {
    sreturn local after ``after'"
    exit
    }
- while ``COLON'" != ":" & ``after'" != "" {
= while ``'" != ":" & ``'" != "" {
    gettoken COLON after : after, parse(":") bind match(par) quo

> tes

    if "`par'" != "" {
        local before `before' (`COLON')
        local COLON
    }
    else if ``COLON'" != ":" {
        local before ``before' `COLON'"
        local COLON
    }
    }
- if ``COLON'" != ":" {
= if ``'" != ":" {
- di as err "" found where ':' expected"
- exit 198
    }

-----
> ----- end _on_colon_parse -----

- if !c(rc) {
    local single 0
    local diparm ``s(before)'"
    local after ``s(after)'"
    }
- capture
- SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `goptions

> '

= SpliceGlobals diparm , diparm(lnalpha, exp label("alpha")) syn

> taxonly

-----
> ----- begin _get_diparmopts.SpliceGlobals -----
- syntax name(id="macro name" name=c_diparm) [, diparm(string

```

```

> asis) Level(cilevel) dof(passthru) syntaxonly ]
    - if ``dof''' == '' & ``e(df_r)''' != '' {
= if `''' == '' & `''' != '' {
    capture confirm integer number `e(df_r)'
    if !c(rc) {
    local gdof dof(`e(df_r)')
    }
    capture
    }
    - else local gdof ``dof'''
= else local gdof `'''
    - local glevel `level'
= local glevel 95
    - local lopt level(`glevel')
= local lopt level(95)
    - if (``diparm''' == '') exit
= if (``lnalpha, exp label("alpha")''' == '') exit
    - local 0 `diparm'
= local 0 lnalpha, exp label("alpha")
    - syntax anything(id="eqname(s)" name=eqspecs) [, Level(passth
> ru) dof(passthru) * ]
    - if (``eqspecs''' == "__sep__") exit
= if ("lnalpha" == "__sep__") exit
    - if ``level''' == '' {
= if '' == '' {
    - local lopt level(`glevel')
= local lopt level(95)
    - }
    - else local lopt `level'
= else local lopt
    - if ``dof''' == '' {
= if `''' == '' {
    - local dof ``gdof'''
= local dof `'''
    - }
    - if ``syntaxonly''' == '' {
= if "syntaxonly" == '' {
    c_local `c_diparm' ``eqspecs', `options' `lopt' `dof'''
    }
    - else {
    - c_local `c_diparm' ``diparm'''
= c_local diparm `lnalpha, exp label("alpha")'''
    - }

> _____ end _get_diparmopts.SpliceGlobals _____
    - local diparm`k' ``diparm'''

```

```

= local diparm1 ``lnalpha, exp label("alpha")''
- local diparmopts ``diparmopts' : `diparm'''
= local diparmopts `` : lnalpha, exp label("alpha")''
- if `single' | ``:list retok after''' == "" {
= if 1 | `''' == "" {
- local 0 `", `options'''
= local 0 `", search(off)''
- syntax [, diparm(string asis) * ]
- }
- else {
  local diparm ``after'''
  }
- }
- while ``diparm''' != "" {
= while `''' != "" {
  local ++k
  local single 1
  local after
  capture _on_colon_parse `diparm'
  if !c(rc) {
    local single 0
    local diparm ``s(before)'''
    local after ``s(after)'''
  }
  capture
  SpliceGlobals diparm , diparm(`diparm') `syntaxononly' `goptions

> '

  local diparm`k' ``diparm'''
  local diparmopts ``diparmopts' : `diparm'''
  if `single' | ``:list retok after''' == "" {
    local 0 `", `options'''
    syntax [, diparm(string asis) * ]
  }
  else {
    local diparm ``after'''
  }
}
- if ``soptions''' == "" {
= if `"soptions"' == "" {
  syntax [, diparm(string asis) ]
}
- if (`execute' == "") {
= if ("" == "") {
- sreturn clear
- sreturn local options ``options'''
= sreturn local options `"search(off)''

```

```

- sreturn local diparm ``diparmopts'''
= sreturn local diparm `` : lnalpha, exp label("alpha")''
- forval i = 1/`k' {
= forval i = 1/1 {
- sreturn local diparm`i' ``diparm`i''''
= sreturn local diparm1 ``lnalpha, exp label("alpha")''
- }
- sreturn local k `k'
= sreturn local k 1
- exit

```

```

> ----- end _get_diparmopts -----
- forval k = 1/`s(k)' {
= forval k = 1/1 {
- local diparm`k' ``s(diparm`k)''''
= local diparm1 ``lnalpha, exp label("alpha")''
- }
- local ndiparm `s(k)'
= local ndiparm 1
- local options ``s(options)''''
= local options ``search(off)''
- if `interactive' & `:length local options' {
= if 0 & 11 {
    local 0 , `options'
    syntax [, NOTANOPTION]
  }
- if `:length local nopreserve' | `:length local score' {
= if 10 | 0 {
- global ML_preserve no
- }
- else global ML_preserve yes
- gettoken evaltype spec : spec
- confirm name `evaltype'
= confirm name e2
- gettoken evaluator spec : spec
- global ML_evaltype : copy local evaltype
- if `:length local srssubpop' {
= if 0 {
    local 0 , srssubpop
    syntax [, NONOPTION]
    exit 198
  }
- if `:length local subpop' {
= if 0 {
    local svy svy
  }

```

```

- if `:length local svy' {
= if 0 {
  opts_exclusive "`vce' `svy'" vce
  if `:length local weight' {
    di as err "svy option not allowed with weights"
    exit 198
  }
  global ML_noadj : copy local svyadjust
}
- global ML_svy : copy local svy
- if _caller() >= 15 & c(userversion) >= 15 {
- local fparm ", freeparm"
- }
- local eqspec : copy local spec
- local ieq 0
- while `:length local eqspec' {
= while 130 {
- local ++ieq
- gettoken eq eqspec : eqspec, bind
- if bsubstr(trim("`eq'"),1,1) == "/" {
= if bsubstr(trim("(piq_timing_max: piq_timing_max=ln_neq cb_autho
> rs_ext estimated est_late o.est_early stky_pr_rottemberg stky_pr_calvo, )),
> 1,1) == "/" {
  local eq = bsubstr(trim("`eq'"),2,.)
  local spec : subinstr local spec "/"`eq' " ("`eq'":`fparm')"', w
> ord
  }
- else {
- gettoken p1 p2 : eq, parse("(")
- local p2 = trim("`p2'")
= local p2 = trim("`piq_timing_max: piq_timing_max=ln_neq cb_autho
> rs_ext estimated est_late o.est_early stky_pr_rottemberg stky_pr_calvo, )")
- if bsubstr("`p2'",1,1) == "," {
= if bsubstr("piq_timing_max: piq_timing_max=ln_neq cb_authors_ext
> estimated est_late o.est_early stky_pr_rottemberg stky_pr_calvo, )",1,1) ==
> ", " {
  gettoken comma p2 : p2, parse(",")
  local p2 = trim("`p2'")
  }
- if "`p1'`p2'" == "(" {
= if "`(piq_timing_max: piq_timing_max=ln_neq cb_authors_ext estim
> ated est_late o.est_early stky_pr_rottemberg stky_pr_calvo, )" == "(" {
  local spec : subinstr local spec "`eq' "(eq`ieq':)", word
  }
- }
- }

```

```

- while `:length local eqspec' {
= while 9 {
- local ++ieq
- gettoken eq eqspec : eqspec, bind
- if bsubstr(trim("`eq'"),1,1) == "/" {
= if bsubstr(trim("/lnalpha"),1,1) == "/" {
- local eq = bsubstr(trim("`eq'"),2,.)
= local eq = bsubstr(trim("/lnalpha"),2,.)
- local spec : subinstr local spec "/"`eq' " "("("`eq'":`fparm')"' , w
> ord
= local spec : subinstr local spec "/lnalpha" "("("lnalpha":, freep
> arm)"', word
- }
- else {
gettoken p1 p2 : eq, parse("(")
local p2 = trim("`p2'")
if bsubstr("`p2'",1,1) == "," {
gettoken comma p2 : p2, parse(",")
local p2 = trim("`p2'")
}
if "`p1'`p2'" == "(" {
local spec : subinstr local spec "`eq' "(eq`ieq:)", word
}
}
- }
- while `:length local eqspec' {
= while 0 {
local ++ieq
gettoken eq eqspec : eqspec, bind
if bsubstr(trim("`eq'"),1,1) == "/" {
local eq = bsubstr(trim("`eq'"),2,.)
local spec : subinstr local spec "/"`eq' " "("("`eq'":`fparm')"' , w
> ord
}
else {
gettoken p1 p2 : eq, parse("(")
local p2 = trim("`p2'")
if bsubstr("`p2'",1,1) == "," {
gettoken comma p2 : p2, parse(",")
local p2 = trim("`p2'")
}
if "`p1'`p2'" == "(" {
local spec : subinstr local spec "`eq' "(eq`ieq:)", word
}
}
}
}

```

```

- if `interactive' {
= if 0 {
  SetGlobalVar ML_sample : _MLtua
}
- else {
- global ML_sample : tempvar
- if ``moptobj' != "" {
= if `""' != "" {
  global ML_sample `moptobj'$ML_sample
}
- }
- if ``moptobj' != "" {
= if `""' != "" {
  cap drop $ML_sample
}
- `vv' mark $ML_sample `if' `in' [`weight'`exp'], `zeroweight'
= version 18: mark __000006 if __000000 [],
- tempname eqlist
- `eqlist' = .eqlist.new, eqopts(NOCONSTANT FREEParam) eqargopts(
> OFFset EXPosure) noneedvarlist numdepvars(0) needequal
= .__000007 = .eqlist.new, eqopts(NOCONSTANT FREEParam) eqargopts(
> OFFset EXPosure) noneedvarlist numdepvars(0) needequal
-class {
-instance:
-      array          n_depvars
-      string          needequal
-      string          noneedvarlist
-      string          wtypes
-      string          collinear
-      string          nocons
-      string          nocons_ignore
-      double          n_eq
-      string          gl_if
-      string          gl_in
-      string          gl_wgt
-      string          gl_options
-      _optlist        eq_opts_allowed
-class {
-instance:
-      array options   = {}
-      array names     = {}
-}
-      array          eq_list
-      _optlist        mark_opts
-      array          mark_list
-      array          mark_name

```

```

-      _optlist      smark_opts
-      array         smark_list
-      array         smark_name
-      _optlist      rmcoll_opts
-      array         rmcoll_list
-      array         rmcoll_name
-      _optlist      rmdcoll_opts
-      array         rmdcoll_list
-      array         rmdcoll_name
-}

> ----- begin _eqlist.new -----
- version 9.2
- ._init

> ----- begin _eqlist._init -----
- version 9.2
- .n_eq = 0
- .gl_if = ""
- .gl_in = ""
- .gl_wgt = ""
- .gl_options = ""
- .eq_list = {}

> ----- end _eqlist._init -----
- ._setup `0'
= ._setup , eqopts(NOCONSTant FREEParam) eqargopts(OFFset EXPosur
> e) noneedvarlist numdepvars(0) needequal

> ----- begin _eqlist._setup -----
- version 9.2
- .mark_list = {}
- .mark_name = {}
- .mark_opts.reset

> ----- begin _optlist.reset -----
- version 9
- .options = {}
- .names = {}

> ----- end _optlist.reset -----
- .smark_list = {}
- .smark_name = {}
- .smark_opts.reset

> ----- begin _optlist.reset -----

```



```

- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- .rmcoll_list = {}
- .rmcoll_name = {}
- .rmcoll_opts.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- .rmdcoll_list = {}
- .rmdcoll_name = {}
- .rmdcoll_opts.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- syntax [, EQopts(namelist) EQARGopts(namelist) noNEEDVARLIST
> COMMONopts(string asis) MARKopts(namelist) SMARKopts(namelist) RMCOLLOpts(n
> amelist) RMDCOLLOpts(namelist) NUMDEPvars(numlist integer >=0) NEEDEQUAL WTY
> PES(string) IGNORENOCONS ]
- .eq_opts_allowed.reset
_____
> _____ begin _optlist.reset _____
- version 9
- .options = {}
- .names = {}
_____
> _____ end _optlist.reset _____
- foreach opt of local eqopts {
- .eq_opts_allowed.addopt `opt'
= .eq_opts_allowed.addopt NOCONSTant
_____
> _____ begin _optlist.addopt _____
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("NOCONSTant")

```

```

- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "NOCONSTant"
- .names.Arrpush "`mname'"
= .names.Arrpush "noconstant"
}

> ----- end _optlist.addopt -----

- }
- .eq_opts_allowed.addopt `opt'
= .eq_opts_allowed.addopt FREEParm
}

> ----- begin _optlist.addopt -----

- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("FREEParm")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "FREEParm"
- .names.Arrpush "`mname'"
= .names.Arrpush "freeparm"
}

> ----- end _optlist.addopt -----

- }
- foreach opt of local eqargopts {
- .eq_opts_allowed.addopt `opt', passthru
= .eq_opts_allowed.addopt OFFset, passthru
}

> ----- begin _optlist.addopt -----

- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("OFFset")
- if "`passthru'" != "" {
= if "passthru" != "" {
- local optspec `optspec'(passthru)
= local optspec OFFset(passthru)
- }
- .options.Arrpush "`optspec'"
= .options.Arrpush "OFFset(passthru)"
}

```

```

- .names.Arrpush "`mname'"
= .names.Arrpush "offset"


---


> 

---

 end _optlist.addopt 

---


- }
- .eq_opts_allowed.addopt `opt', passthru
= .eq_opts_allowed.addopt EXPosure, passthru


---


> 

---

 begin _optlist.addopt 

---


- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("EXPosure")
- if "`passthru'" != "" {
= if "passthru" != "" {
- local optspec `optspec'(passthru)
= local optspec EXPosure(passthru)
- }
- .options.Arrpush "`optspec'"
= .options.Arrpush "EXPosure(passthru)"
- .names.Arrpush "`mname'"
= .names.Arrpush "exposure"


---


> 

---

 end _optlist.addopt 

---


- }
- local i 0
- foreach opt of local markopts {
- .mark_opts.addopt `opt', passthru
- }
- local i 0
- foreach opt of local smarkopts {
- .smark_opts.addopt `opt', passthru
- }
- local i 0
- foreach opt of local rmcollopts {
- .rmcoll_opts.addopt `opt', passthru
- }
- local i 0
- foreach opt of local rmdcollopts {
- .rmdcoll_opts.addopt `opt', passthru
- }
- .n_depvars.Arrdropall
- if "`numdepvars'" != "" {
= if "0" != "" {
- foreach ndep of local numdepvars {
- .n_depvars.Arrpush `ndep'

```

```

= .n_depvars.Arrpush 0
- }
- }
- else .n_depvars.Arrpush 1
- .needequal = "`needequal'"
= .needequal = "needequal"
- .wtypes = "`wtypes'"
= .wtypes = ""
- .noneedvarlist = "`needvarlist'"
= .noneedvarlist = "noneedvarlist"
- .nocons_ignore = "`ignorenocons'"
= .nocons_ignore = ""

> _____ end _eqlist._setup _____
> _____ end _eqlist.new _____
- .`eqlist'.parse `spec'
= .__000007.parse (piq_timing_max: piq_timing_max=ln_neq cb_autho
> rs_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo, ) ("
> lnalpha":, freeparm)

> _____ begin _eqlist.parse _____
- version 9.2
- .__init

> _____ begin _eqlist._init _____
- version 9.2
- .n_eq = 0
- .gl_if = ""
- .gl_in = ""
- .gl_wgt = ""
- .gl_options = ""
- .eq_list = {}

> _____ end _eqlist._init _____
- local MARKOPTLIST ```.mark_opts.dumpoptions'''

> _____ begin _optlist.dumpoptions _____
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
  local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ```.optlist'''
= sreturn local optlist `'''

```

```

- class exit ``optlist'''
= class exit `'''

```

```

> ----- end _optlist.dumpoptions -----
= local MARKOPTLIST `'''
- local SMARKOPTLIST ```.smark_opts.dumpoptions'''

```

```

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
  local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''

```

```

> ----- end _optlist.dumpoptions -----
= local SMARKOPTLIST `'''
- local RMCOLLOPTLIST ```.rmcoll_opts.dumpoptions'''

```

```

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
  local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''

```

```

> ----- end _optlist.dumpoptions -----
= local RMCOLLOPTLIST `'''
- local RMDCOLLOPTLIST ```.rmdcoll_opts.dumpoptions'''

```

```

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
  local optlist `optlist' `.options['i']'
}
- local optlist : list uniq optlist

```

```

- sreturn local optlist ``optlist'''
= sreturn local optlist `'''
- class exit ``optlist'''
= class exit `'''

> ----- end _optlist.dumpoptions -----
= local RMDCOLLOPTLIST `'''
- _parse expand EQ GL : 0, gweight common( `MARKOPTLIST' `SMARKO
> PTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLLlinear )
= _parse expand EQ GL : 0, gweight common( COLLlinear )
- if `EQ_n' == 0 & ``.noneedvarlist' == "" {
= if 2 == 0 & "noneedvarlist" == "" {
    syntax varlist
  }
- local rebind = `EQ_n' == 1
= local rebind = 2 == 1
- if `rebind' {
= if 0 {
    tokenize ``0'', parse(",()[]")
    local rebind = ``1' != "(" & ``2' == "("
  }
- if `rebind' {
= if 0 {
    while `:length local 0' {
      gettoken tok 0 : 0, parse(" ,") bind match(par)
      if ``par' == "(" {
        gettoken nxt : 0
        local nxt = substr(`nxt',1,1)
        if inlist(`nxt', "#", "|") {
          local ZERO ``ZERO' (`tok')
        }
        else {
          local ZERO ``(`ZERO') (`tok') `0'
          local 0
        }
      }
      else if inlist(`tok', "if", "in", ",") {
        local ZERO ``(`ZERO') `tok' `0'
        local 0
      }
      else if inlist(substr(`tok',1,1), "#", "|") {
        local ZERO ``ZERO' `tok'
      }
      else {
        local ZERO ``ZERO' `tok'
      }
    }
  }

```

```

    }
    _parse expand EQ GL : ZERO, gweight common( `MARKOPTLIST' `SMA
> RKOPTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLLlinear )
    }
    - forval i = 1/`EQ_n' {
    = forval i = 1/2 {
    - if `i' <= `.n_depvars.arrnels' {
    = if 1 <= 1 {
    - local ndep = `.n_depvars[`i']'
    = local ndep = 0
    - }
    - .eq_list[`i'] = .eqspec.new, numdepvars(`ndep') `.needequal'
> `.noneedvarlist' wtypes(`.wtypes') `.nocons_ignore'
    = .eq_list[1] = .eqspec.new, numdepvars(0) needequal noneedvarl
> ist wtypes()
    -class {
    -instance:
    -      double  n_depvars
    -      double  needequal
    -      double  needvarlist
    -      string  wtypes
    -      string  name
    -      string  depvars
    -      double  hasequal
    -      string  indepvars
    -      string  other_markvars
    -      double  nocons
    -      double  nocons_ignore
    -      string  offset
    -      double  exposure
    -      double  freeparm
    -      string  if
    -      string  in
    -      string  wgt
    -      string  options
    -}

> ----- begin _eqspec.new -----
    - version 9.2
    - syntax [, NUMDEPvars(numlist integer >=0 max=1) NEEDEQUAL no
> NEEDVARLIST WYPES(string) IGNORENOCONS ]
    - .n_depvars = 1
    - if `:list sizeof numdepvars' {
    = if 1 {
    - .n_depvars = `numdepvars'
    = .n_depvars = 0

```

```

- }
- .needequal = ("`needequal" != "")
= .needequal = ("needequal" != "")
- .needvarlist = ("`needvarlist" == "")
= .needvarlist = ("noneedvarlist" == "")
- .nocons_ignore = ("`ignorenocons" != "")
= .nocons_ignore = (" " != "")
- .wtypes = "`wtypes"
= .wtypes = ""

> ----- end _eqspec.new -----
- .eq_list['i'].parse `.eq_opts_allowed.objkey':`EQ_`i'
= .eq_list[1].parse __key(60000255b000):piq_timing_max: piq_timi
> ng_max=ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotember
> g stky_pr_calvo

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(60000255b000):piq_timing_max: piq_timi
> ng_max=ln_neq cb_authors_ext estimated est_late o.est_early stky_pr_rotember
> g stky_pr_calvo

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quot
> es
- if "`par" != "" {
= if "" != "" {
  local before "`(`before)'"
}
- if ``"before"" == ":" {
= if `__key(60000255b000)" == ":" {
  sreturn local after ``"after"
  exit
}
- while ``COLON"" != ":" & ``"after"" != "" {
= while `"" != ":" & `":piq_timing_max: piq_timing_max=ln_n
> eq cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_c
> alvo"" != "" {
- gettoken COLON after : after, parse(":") bind match(par) q
> uotes
- if "`par" != "" {
= if "" != "" {

```



```

        local before `before' (`COLON')
        local COLON
    }
    - else if `"'COLON'" != ":" {
    = else if `":'" != ":" {
        local before `"'before' `COLON'"
        local COLON
    }
    - }
    - while `"'COLON'" != ":" & `"'after'" != "" {
    = while `":'" != ":" & `piq_timing_max: piq_timing_max=ln_n
> eq cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_c
> alvo'" != "" {
        gettoken COLON after : after, parse(":") bind match(par) q
> uotes
        if "`par'" != "" {
        local before `before' (`COLON')
        local COLON
        }
        else if `"'COLON'" != ":" {
        local before `"'before' `COLON'"
        local COLON
        }
        }
    - if `"'COLON'" != ":" {
    = if `":'" != ":" {
        di as err ""' found where ':' expected"
        exit 198
    }
    - sreturn local before `"'before'"
    = sreturn local before `__key(60000255b000)'"
    - sreturn local after `"'after'"
    = sreturn local after `piq_timing_max: piq_timing_max=ln_ne
> q cb_authors_ext estimated est_late o.est_early stky_pr_rotemberg stky_pr_ca
> lvo'"

_____
> _____ end _on_colon_parse _____
        - local ol `s(before)'
        = local ol __key(60000255b000)
        - if `:list sizeof ol' {
        = if 1 {
        - local OPTLIST `"'`ol'.dumpoptions'"
        _____
> _____ begin _optlist.dumpoptions _____
        - version 9
        - forval i = 1/`.options.arnels' {

```

```

= forval i = 1/4 {
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm OFFSET(passthru)
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParm OFFSET(passthru) EXPosur
> e(passthru)
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'```
= sreturn local optlist ``NOCONSTant FREEParm OFFSET(passthru)
> u) EXPosure(passthru)```
- class exit ```optlist'```
= class exit ``NOCONSTant FREEParm OFFSET(passthru) EXPosure
> (passthru)```

_____  

> _____ end _optlist.dumpoptions _____  

= local OPTLIST ``NOCONSTant FREEParm OFFSET(passthru) EXPosur
> e(passthru)```
- local OPTNAMES ```.`ol'.dumpnames'```

_____  

> _____ begin _optlist.dumpnames _____
- version 9
- forval i = 1/`.names.arrnels' {
= forval i = 1/4 {
- local namelist `namelist' `.names['i']'
= local namelist noconstant
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset exposure
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'```
= sreturn local namelist ``noconstant freeparm offset exposu

```

```

> re''
    - class exit ``namelist''
    = class exit ``noconstant freeparm offset exposure''

> ----- end _optlist.dumpnames -----
    = local OPTNAMES ``noconstant freeparm offset exposure''
    - local NOCONS constant noconstant
    - if ``:list NOCONS & OPTNAMES'' == '' {
    = if ``noconstant'' == '' {
        local NOCONS noCONSTant
    }
    - else local NOCONS
    - }
    - local 0 ``s(after)''
    = local 0 ``piq_timing_max: piq_timing_max=ln_neq cb_authors_e
> xt estimated est_late o.est_early stky_pr_rotemberg stky_pr_calvo''
    - if ``.wtypes'' != '' {
    = if ``'' != '' {
        local wgt ``[.wtypes]''
    }
    - syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST' `NOC
> ONS' *]
    = syntax [anything(equalok)] [if] [in] [, NOCONSTant FREEParm
> OFFset(passthru) EXPosure(passthru) *]
    - local HOLDIF ``if''
    = local HOLDIF ``''
    - local HOLDIN ``in''
    = local HOLDIN ``''
    - if ``wgt'' != '' & ``weight'' != '' {
    = if '' != '' & '' != '' {
        local HOLDWGT ``[weight`exp]''
    }
    - gettoken NAME REST : anything, parse(":")
    - if trim("`NAME'") == ":" {
    = if trim("piq_timing_max") == ":" {
        di as err "nothing found where equation name expected"
        exit 198
    }
    - if `:list sizeof REST' {
    = if 8 {
    - if strpos("`NAME'", ":") {
    = if strpos("`piq_timing_max'", ":") {
        capture _msparse `NAME'
        if c(rc) {
            di as err "{bf:`NAME'} invalid equation specification"
            exit 198

```

```

    }
    }
    - else {
    - ._confirm_eqname `NAME'
    = ._confirm_eqname piq_timing_max
    }
}

> ----- begin _eqspec._confirm_eqname -----
    - version 9.2
    - capture confirm number `0'
    = capture confirm number piq_timing_max
    - if (! c(rc)) exit
    - local hasdot = strpos(`"0"',".")
    = local hasdot = strpos(`"piq_timing_max"',".")
    - if `hasdot' {
    = if 0 {
        syntax varname(ts)
        exit
    }
    - capture syntax name(id="equation name")
    - if (! c(rc)) exit
    }

> ----- end _eqspec._confirm_eqname -----
    - }
    - local NAME : list retok NAME
    - gettoken COLON anything : REST, parse(":")
    - }
    - else {
        local NAME
    }
    - gettoken DEPVARs REST : anything, parse("=") bind
    - if "`DEPVARs'" == "=" {
    = if "piq_timing_max" == "=" {
        local REST : copy local anything
        local DEPVARs
    }
    - if (`:length local DEPVARs' == 0 & `.n_depvars') {
    = if (14 == 0 & 0) {
        di as err "nothing found where depvar expected"
        exit 198
    }
    - if ``"REST"' == "" {
    = if `"'=ln_neq cb_authors_ext estimated est_late o.est_early s
> tky_pr_rottemberg stky_pr_calvo"' == "" {
        if 0`.needequal' {
        if `.needvarlist' | (`:length local DEPVARs' != 0 & `.n_depvar
> ars') {

```

```

di as err "equal sign required to separate depvars from inde
> pvars"
    exit 198
  }
}
local DEPVARs
local n_deps : list sizeof anything
if `n_deps' != 0 | `.needvarlist' {
  if `n_deps' < `.n_depvars' {
    error 102
  }
  forval j = 1/`.n_depvars' {
    gettoken YY anything : anything
    local DEPVARs `DEPVARs' `YY'
  }
  local INDEPVARs : list retok anything
}
local hasequal 0
}
- else {
- gettoken EQ INDEPVARs : REST, parse("=") bind
- local hasequal 1
- }
- if `:list sizeof DEPVARs' {
= if 1 {
- _fv_check_depvar `DEPVARs'
= _fv_check_depvar piq_timing_max
- tsunab DEPVARs : `DEPVARs'
= tsunab DEPVARs : piq_timing_max
}
}
> ----- begin tsunab -----
- version 6
- gettoken user 0: 0, parse(" :")
- gettoken colon 0: 0, parse(" :")
- if `"'colon'" != ":" { error 198 }
= if `":'" != ":" { error 198 }
- syntax [varlist(ts default=empty)] [, MIN(integer 1) MAX(i
> nteger 32000) NAME(string)]
- c_local `user' `varlist'
= c_local DEPVARs piq_timing_max
- local n : word count `varlist'
= local n : word count piq_timing_max
- if `n'>=`min' & `n'<=`max' { exit }
= if 1>=1 & 1<=32000 { exit }
}
> ----- end tsunab -----

```

```

- }
- if `:list sizeof INDEPVARs' {
= if 7 {
- fvnab INDEPVARs : `INDEPVARs'
= fvnab INDEPVARs : ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rottemberg stky_pr_calvo


---


> 

---

 begin fvnab 

---


- version 11
- _on_colon_parse `0'
= _on_colon_parse INDEPVARs : ln_neq cb_authors_ext estimate
> d est_late o.est_early stky_pr_rottemberg stky_pr_calvo


---


> 

---

 begin _on_colon_parse 

---


- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) qu
> otes
- if "`par'" != "" {
= if "" != "" {
local before `('before')'
}
- if ``before' == ":" {
= if `INDEPVARs ' == ":" {
sreturn local after ``after'
exit
}
- while ``COLON' != ":" & ``after' != "" {
= while ``' != ":" & `": ln_neq cb_authors_ext estimated
> est_late o.est_early stky_pr_rottemberg stky_pr_calvo' != "" {
- gettoken COLON after : after, parse(":") bind match(par)
> quotes
- if "`par'" != "" {
= if "" != "" {
local before `before' (`COLON')
local COLON
}
- else if ``COLON' != ":" {
= else if `:"' != ":" {
local before ``before' `COLON'
local COLON
}
- }
- while ``COLON' != ":" & ``after' != "" {
= while `:"' != ":" & `": ln_neq cb_authors_ext estimated

```

```

> est_late o.est_early stky_pr_rotemberg stky_pr_calvo"" != "" {
    gettoken COLON after : after, parse(":") bind match(par)
> quotes
    if "`par'" != "" {
        local before `before' (`COLON')
        local COLON
    }
    else if ``"COLON"' != ":" {
        local before ``before' `COLON'
        local COLON
    }
    }
- if ``COLON' != ":" {
= if `:"' != ":" {
    di as err "" found where ':' expected"
    exit 198
}
- sreturn local before ``before'
= sreturn local before `INDEPVARs '
- sreturn local after ``after'
= sreturn local after ` ln_neq cb_authors_ext estimated e
> st_late o.est_early stky_pr_rotemberg stky_pr_calvo""

> ----- end _on_colon_parse -----
- local 0 ``s(before)''
= local 0 `INDEPVARs '
- syntax name(id="macro name" name=user)
- local 0 ``s(after)''
= local 0 ` ln_neq cb_authors_ext estimated est_late o.est_
> early stky_pr_rotemberg stky_pr_calvo""
- syntax [varlist(ts fv default=none)] [, MIN(integer 1) MAX
> (integer 32000) NAME(string) ]
- c_local `user' `varlist'
= c_local INDEPVARs ln_neq cb_authors_ext estimated est_late
> o.est_early stky_pr_rotemberg stky_pr_calvo
- local n : list sizeof varlist
- if (`min' <= `n' & `n' <= `max') exit
= if (1 <= 7 & 7 <= 32000) exit

> ----- end fvnab -----
- }
- if inlist("noconstant", "`noconstant'", "`constant'") {
= if inlist("noconstant", "", "") {
    if `INDEPVARs' == "" & !`.nocons_ignore' {
        di as err "independent variables are required when option no
> constant is specified"

```

```

exit 102
}
if "`NOCONS'" != "" {
  local options `options' noconstant
}
local NOCONS 1
}
- else local NOCONS 0
- if ``offset'`exposure'"" != "" {
= if `""' != "" {
  . _check_offset, `offset' `exposure'
  local OFFSET ``s(offset)''
  local EXPOSURE = (`exposure' != "")
  local OTHER `s(offset)'
}
- else local EXPOSURE 0
- local FREEARM = ``freeparm'"" != ""
= local FREEARM = `""' != ""
- local OPTIONS
- local SPACE
- foreach OPTNAME of local OPTNAMES {
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``OPTNAME'"" != "" {
= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'""
  local SPACE " "
}
- }
- if ``options'"" != "" {

```



```

= if `""' != "" {
  local OPTIONS ``OPTIONS'`SPACE'`options'``
}
- .name = ``NAME'``
= .name = `piq_timing_max'
- .depvars = ``DEPVARs'``
= .depvars = `piq_timing_max'
- .hasequal = `hasequal'
= .hasequal = 1
- .indepvars = ``:list retok INDEPVARs'``
= .indepvars = `ln_neq cb_authors_ext estimated est_late o.es
> t_early stky_pr_rottemberg stky_pr_calvo'
- .other_markvars = ``:list retok OTHER'``
= .other_markvars = `""'
- .nocons = `NOCONS'
= .nocons = 0
- .if = ``HOLDIF'``
= .if = `""'
- .in = ``HOLDIN'``
= .in = `""'
- .wgt = ``HOLDWGT'``
= .wgt = `""'
- .offset = ``OFFSET'``
= .offset = `""'
- .exposure = `EXPOSURE'
= .exposure = 0
- .freeparm = `FREEPARM'
= .freeparm = 0
- .options = ``OPTIONS'``
= .options = `""'

> _____ end _eqspec.parse _____
- }
- if `i' <= `.n_depvars.arnels' {
= if 2 <= 1 {
  local ndep = `.n_depvars['i']'
}
- .eq_list['i'] = ._eqspec.new, numdepvars(`ndep') `needequal'
> `.noneedvarlist' wtypes(`.wtypes') `nocons_ignore'
= .eq_list[2] = ._eqspec.new, numdepvars(0) needequal noneedvarl
> ist wtypes()

> _____ begin _eqspec.new _____
- version 9.2
- syntax [, NUMDEPvars(numlist integer >=0 max=1) NEEDEQUAL no
> NEEDVARLIST WTYPES(string) IGNORENOCONS ]

```

```

- .n_depvars = 1
- if `:list sizeof numdepvars' {
= if 1 {
- .n_depvars = `numdepvars'
= .n_depvars = 0
- }
- .needequal = ("`needequal'" != "")
= .needequal = ("needequal" != "")
- .needvarlist = ("`needvarlist'" == "")
= .needvarlist = ("noneedvarlist" == "")
- .nocons_ignore = ("`ignorenocons'" != "")
= .nocons_ignore = (" " != "")
- .wtypes = "`wtypes'"
= .wtypes = ""

> ----- end _eqspec.new -----
- .eq_list['i'].parse `.eq_opts_allowed.objkey':`EQ_`i''
= .eq_list[2].parse __key(60000255b000):"lnalpha":, freeparm

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(60000255b000):"lnalpha":, freeparm

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quot

> es
- if "`par'" != "" {
= if "" != "" {
  local before ``(`before')''
}
- if ```before'"" == ":" {
= if ``__key(60000255b000)"" == ":" {
  sreturn local after ```after'""
  exit
}
- while ```COLON'"" != ":" & ```after'"" != "" {
= while `"" != ":" & ``":lnalpha":, freeparm"" != "" {
- gettoken COLON after : after, parse(":") bind match(par) q

> uotes
- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')

```

```

        local COLON
    }
- else if ``COLON''' != ":" {
= else if `":'" != ":" {
    local before ``before' `COLON'''
    local COLON
    }
- }
- while ``COLON''' != ":" & ``after''' != "" {
= while `":'" != ":" & `""lnalpha":, freeparm"' != "" {
    gettoken COLON after : after, parse(":") bind match(par) q

> uotes

    if ``par''' != "" {
        local before `before' (`COLON')
        local COLON
    }
    else if ``COLON''' != ":" {
        local before ``before' `COLON'''
        local COLON
    }
}
- if ``COLON''' != ":" {
= if `":'" != ":" {
    di as err "" found where ':' expected"
    exit 198
}
- sreturn local before ``before'''
= sreturn local before `__key(60000255b000)''
- sreturn local after ``after'''
= sreturn local after `""lnalpha":, freeparm''

-----
> ----- end _on_colon_parse -----

- local ol `s(before)'
= local ol __key(60000255b000)
- if `:list sizeof ol' {
= if 1 {
- local OPTLIST ```.ol'.dumpoptions'''

-----
> ----- begin _optlist.dumpoptions -----

- version 9
- forval i = 1/`.options.arrnels' {
= forval i = 1/4 {
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant
- }
- local optlist `optlist' `.options['i']'

```

```

= local optlist NOCONSTant FREEParam
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParam OFFset(passthru)
- }
- local optlist `optlist' `.options['i']'
= local optlist NOCONSTant FREEParam OFFset(passthru) EXPosur
> e(passthru)
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist ``NOCONSTant FREEParam OFFset(passthru)
> u) EXPosure(passthru)''
- class exit ```optlist'''
= class exit ``NOCONSTant FREEParam OFFset(passthru) EXPosure
> (passthru)''

> ----- end _optlist.dumpoptions -----
= local OPTLIST ``NOCONSTant FREEParam OFFset(passthru) EXPosur
> e(passthru)''
- local OPTNAMES ```.ol'.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/4 {
- local namelist `namelist' `.names['i']'
= local namelist noconstant
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset
- }
- local namelist `namelist' `.names['i']'
= local namelist noconstant freeparm offset exposure
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist ``noconstant freeparm offset exposu
> re''
- class exit ```namelist'''
= class exit ``noconstant freeparm offset exposure''

> ----- end _optlist.dumpnames -----

```

```

= local OPTNAMES `"noconstant freeparm offset exposure"'
- local NOCONS constant noconstant
- if ```:list NOCONS & OPTNAMES'' == "" {
= if `"noconstant" == "" {
    local NOCONS noCONSTant
    }
- else local NOCONS
- }
- local 0 ``s(after)''
= local 0 ``lnalpha":, freeparm"'
- if ``.wtypes'' != "" {
= if ``'' != "" {
    local wgt "['.wtypes']"
    }
- syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST' `NOC
> ONS' *]
= syntax [anything(equalok)] [if] [in] [, NOCONSTant FREEParM
> OFFset(passthru) EXPosure(passthru) *]
- local HOLDIF ``if''
= local HOLDIF ``''
- local HOLDIN ``in''
= local HOLDIN ``''
- if "wgt" != "" & "weight" != "" {
= if "" != "" & "" != "" {
    local HOLDWGT ``['weight'`exp']"
    }
- gettoken NAME REST : anything, parse(":")
- if trim("`NAME'") == ":" {
= if trim("lnalpha") == ":" {
    di as err "nothing found where equation name expected"
    exit 198
    }
- if `:list sizeof REST' {
= if 1 {
- if strpos("`NAME'", ":") {
= if strpos("lnalpha", ":") {
    capture _msparse `NAME'
    if c(rc) {
    di as err "{bf:`NAME'} invalid equation specification"
    exit 198
    }
    }
- else {
- . _confirm_eqname `NAME'
= . _confirm_eqname lnalpha

```

```

> ----- begin _eqspec._confirm_eqname -----
    - version 9.2
    - capture confirm number `0'
    = capture confirm number lnalpha
    - if (! c(rc)) exit
    - local hasdot = strpos(`"0"',".")
    = local hasdot = strpos(`"lnalpha"',".")
    - if `hasdot' {
    = if 0 {
        syntax varname(ts)
        exit
    }
    - capture syntax name(id="equation name")
    - if (! c(rc)) exit

> ----- end _eqspec._confirm_eqname -----
    - }
    - local NAME : list retok NAME
    - gettoken COLON anything : REST, parse(":")
    - }
    - else {
        local NAME
    }
    - gettoken DEPVARs REST : anything, parse("=") bind
    - if "`DEPVARs'" == "=" {
    = if "" == "=" {
        local REST : copy local anything
        local DEPVARs
    }
    - if (`:length local DEPVARs' == 0 & `.n_depvars') {
    = if (0 == 0 & 0) {
        di as err "nothing found where depvar expected"
        exit 198
    }
    - if ``"REST"' == "" {
    = if `"' == "" {
        - if 0`.needequal' {
        = if 01 {
            - if `.needvarlist' | (`:length local DEPVARs' != 0 & `.n_depvars') {
> ars') {
            = if 0 | (0 != 0 & 0) {
                di as err "equal sign required to separate depvars from inde
> pvars"
                exit 198
            }
        - }

```

```

- local DEPVARs
- local n_deps : list sizeof anything
- if `n_deps' != 0 | `.needvarlist' {
= if 0 != 0 | 0 {
    if `n_deps' < `.n_depvars' {
        error 102
    }
    forval j = 1/`.n_depvars' {
        gettoken YY anything : anything
        local DEPVARs `DEPVARs' `YY'
    }
    local INDEPVARs : list retok anything
}
- loca hasequal 0
- }
- else {
    gettoken EQ INDEPVARs : REST, parse("=") bind
    local hasequal 1
}
- if `:list sizeof DEPVARs' {
= if 0 {
    _fv_check_depvar `DEPVARs'
    tsunab DEPVARs : `DEPVARs'
}
- if `:list sizeof INDEPVARs' {
= if 0 {
    fvnab INDEPVARs : `INDEPVARs'
}
- if inlist("noconstant", "`noconstant'", "`constant'") {
= if inlist("noconstant", "", "") {
    if "`INDEPVARs'" == "" & !`.nocons_ignore' {
        di as err "independent variables are required when option no
> constant is specified"
        exit 102
    }
    if "`NOCONS'" != "" {
        local options `options' noconstant
    }
    local NOCONS 1
}
- else local NOCONS 0
- if ``offset'`exposure'"" != "" {
= if `""' != "" {
    .check_offset, `offset' `exposure'
    local OFFSET ``s(offset)''
    local EXPOSURE = (`exposure' != "")

```

```

    local OTHER `s(offset)'
  }
- else local EXPOSURE 0
- local FREEPARM = ``freeparm''' != ""
= local FREEPARM = `freeparm' != ""
- local OPTIONS
- local SPACE
- foreach OPTNAME of local OPTNAMES {
- if ``OPTNAME''' != "" {
= if `''' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'''
    local SPACE " "
  }
- }
- if ``OPTNAME''' != "" {
= if `freeparm' != "" {
- local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'''
= local OPTIONS `freeparm'
- local SPACE " "
- }
- }
- if ``OPTNAME''' != "" {
= if `''' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'''
    local SPACE " "
  }
- }
- if ``OPTNAME''' != "" {
= if `''' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`OPTNAME'''
    local SPACE " "
  }
- }
- if ``options''' != "" {
= if `''' != "" {
    local OPTIONS ``OPTIONS'`SPACE'`options'''
  }
- .name = ``NAME'''
= .name = `lnalpha'
- .depvars = ``DEPVARs'''
= .depvars = `'''
- .hasequal = `hasequal'
= .hasequal = 0
- .indepvars = ``:list retok INDEPVARs'''
= .indepvars = `'''
- .other_markvars = ``:list retok OTHER'''

```



```

= .other_markvars = `""`
- .nocons = `NOCONS`
= .nocons = 0
- .if = ``HOLDIF``
= .if = `""`
- .in = ``HOLDIN``
= .in = `""`
- .wgt = ``HOLDWGT``
= .wgt = `""`
- .offset = ``OFFSET``
= .offset = `""`
- .exposure = `EXPOSURE`
= .exposure = 0
- .freeparm = `FREEPARM`
= .freeparm = 1
- .options = ``OPTIONS``
= .options = `freeparm`

> ----- end _eqspec.parse -----
- }
- local MARKOPTLIST ``.mark_opts.dumpoptions``

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels` {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']`
}
- local optlist : list uniq optlist
- sreturn local optlist ``optlist``
= sreturn local optlist `""`
- class exit ``optlist``
= class exit `""`

> ----- end _optlist.dumpoptions -----
= local MARKOPTLIST `""`
- local MARKOPTNAMES ``.mark_opts.dumpnames``

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels` {
= forval i = 1/0 {
    local namelist `namelist' `.names['i']`
}
- local namelist : list uniq namelist
- sreturn local namelist ``namelist``

```

```

        = sreturn local namelist `""`
        - class exit ``"namelist""`
        = class exit `""`
    _____
> _____ end _optlist.dumpnames _____
        = local MARKOPTNAMES `""`
        - local OPTLIST1 : subinstr local MARKOPTLIST "(passthru)" "(str
> ing asis)", all
        - local SMARKOPTLIST ``".smark_opts.dumpoptions""`
    _____
> _____ begin _optlist.dumpoptions _____
        - version 9
        - forval i = 1/`.options.arnels' {
        = forval i = 1/0 {
            local optlist `optlist' `.options['i']`
        }
        - local optlist : list uniq optlist
        - sreturn local optlist ``"optlist""`
        = sreturn local optlist `""`
        - class exit ``"optlist""`
        = class exit `""`
    _____
> _____ end _optlist.dumpoptions _____
        = local SMARKOPTLIST `""`
        - local SMARKOPTNAMES ``".smark_opts.dumpnames""`
    _____
> _____ begin _optlist.dumpnames _____
        - version 9
        - forval i = 1/`.names.arnels' {
        = forval i = 1/0 {
            local namelist `namelist' `.names['i']`
        }
        - local namelist : list uniq namelist
        - sreturn local namelist ``"namelist""`
        = sreturn local namelist `""`
        - class exit ``"namelist""`
        = class exit `""`
    _____
> _____ end _optlist.dumpnames _____
        = local SMARKOPTNAMES `""`
        - local OPTLIST1s : subinstr local SMARKOPTLIST "(passthru)" "(s
> tring asis)", all
        - local RMCOLLOPTLIST ``".rmcoll_opts.dumpoptions""`
    _____
> _____ begin _optlist.dumpoptions _____
        - version 9

```

```

- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `""'
- class exit ```optlist'''
= class exit `""'

> ----- end _optlist.dumpoptions -----
= local RMCOLLOPTLIST `""'
- local RMCOLLOPTNAMES ```.rmcoll_opts.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/0 {
    local namelist `namelist' `.names['i']'
    }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `""'
- class exit ```namelist'''
= class exit `""'

> ----- end _optlist.dumpnames -----
= local RMCOLLOPTNAMES `""'
- local OPTLIST2 : substr local RMCOLLOPTLIST "(passthru)" "(s
> tring asis)", all
- local RMDCOLLOPTLIST ```.rmdcoll_opts.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arnels' {
= forval i = 1/0 {
    local optlist `optlist' `.options['i']'
    }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `""'
- class exit ```optlist'''
= class exit `""'

> ----- end _optlist.dumpoptions -----
= local RMDCOLLOPTLIST `""'

```

```

- local RMDCOLLOPTNAMES ```.rmdcoll_opts.dumpnames'''
> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arrnels' {
= forval i = 1/0 {
    local namelist `namelist' `'.names[`i']'
    }
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist `'''
- class exit ``namelist'''
= class exit `'''
> ----- end _optlist.dumpnames -----
= local RMDCOLLOPTNAMES `'''
- local OPTLIST3 : substr local RMDCOLLOPTLIST "(passthru)" "(
> string asis)", all
- local 0 `", `GL_op'''
= local 0 `", ""
- syntax [, `OPTLIST1' `OPTLIST1s' `OPTLIST2' `OPTLIST3' COLLline
> ar noCONSTant * ]
= syntax [, COLLlinear noCONSTant * ]
- local GL_op ``options'''
= local GL_op `'''
- if ``collinear''' != "" {
= if `''' != "" {
    local GL_op ``GL_op' `collinear'''
    .collinear = ``collinear'
    }
- if ``constant''' != "" {
= if `''' != "" {
    local GL_op ``GL_op' `constant'''
    .nocons = ``constant'
    }
- local I 0
- foreach OPT of local MARKOPTNAMES {
    if `:list sizeof `OPT'' {
        .mark_list[`++I'] = .eqspec.new, numdep(0) wtypes(`.wtypes')
        .mark_list[`I'].parse "" : ``OPT''
        .mark_name.Arrpush ``OPT''
    }
}
- local I 0
- foreach OPT of local SMARKOPTNAMES {
    if `:list sizeof `OPT'' {

```

```

        .smark_list['++I'] = ._eqspec.new, numdep(0) wtypes(`.wtypes')
        .smark_list['I'].parse "" : ``OPT''
        .smark_name.Arrpush ``OPT''
    }
}
- local I 0
- foreach OPT of local RMCOLLOPTNAMES {
    if `:list sizeof `OPT'' {
        .rmcoll_list['++I'] = ._eqspec.new, numdep(0) wtypes(`.wtypes')
> )

        .rmcoll_list['I'].parse "" : ``OPT''
        .rmcoll_name.Arrpush ``OPT''
    }
}
- local I 0
- foreach OPT of local RMDCOLLOPTNAMES {
    if `:list sizeof `OPT'' {
        .rmdcoll_list['++I'] = ._eqspec.new, wtypes(`.wtypes')
        .rmdcoll_list['I'].parse "" : ``OPT''
        .rmdcoll_name.Arrpush ``OPT''
    }
}
- .n_eq = `EQ_n'
= .n_eq = 2
- .gl_if = ``GL_if'''
= .gl_if = `'''
- .gl_in = ``GL_in'''
= .gl_in = `'''
- .gl_wgt = ``GL_wt'''
= .gl_wgt = `'''
- .gl_options = ``:list retok GL_op'''
= .gl_options = `'''

> ----- end _eqlist.parse -----
- if ``subpop'' != "" & ``missing'' == "" {
= if "" != "" & "missing" == "" {
    if `interactive' {
        SetGlobalVar ML_samp : _MLtu
    }
    else {
        global ML_samp : tempvar
        if ``moptobj''' != "" {
            global ML_samp `moptobj'$ML_samp
        }
    }
    tempvar markuse

```

```

        _svy_setup $ML_sample $ML_samp, svy subpop(`subpop')
        quietly gen byte `markuse' = $ML_samp
    }
- else global ML_samp $ML_sample
= else global ML_samp __000006
- if "`collinear'" == "" {
= if "collinear" == "" {
    .`eqlist'.rmcoll $ML_samp, replace `missing'
}
- else if "`missing'" == "" {
= else if "missing" == "" {
    .`eqlist'.markout $ML_samp, replace
}
- if "$ML_samp" != "$ML_sample" {
= if "__000006" != "__000006" {
    `vv' quietly replace $ML_sample = 0 if `markuse' & !$ML_samp
    drop `markuse'
}
- local eq_n = `.`eqlist'.eq count'

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "`item'" == "count" {
= if "count" == "count" {
- sreturn local value ```.n_eq'''
= sreturn local value `2'''
- class exit ``s(value)'''
= class exit `2'''

```

```

> ----- end _eqlist.eq -----
= local eq_n = 2
- global ML_n : copy local eq_n
- global ML_dim = `.`eqlist'.dim'

```

```

> ----- begin _eqlist.dim -----
- version 9.2
- syntax
- local neq = `.`eq count'

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "`item'" == "count" {
= if "count" == "count" {
- sreturn local value ```.n_eq'''

```

```

= sreturn local value `2'
- class exit ``s(value)''
= class exit `2'

> ----- end _eqlist.eq -----

= local neq = 2
- forval i = 1/`neq' {
= forval i = 1/2 {
- local xvarsi ``.eq indepvars `i'```

> ----- begin _eqlist.eq -----

- version 9.2
- args item idx
- if ``item' == "count" {
= if "indepvars" == "count" {
sreturn local value ``.n_eq'
class exit ``s(value)''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item indepvars

> ----- begin _eqspec.item -----

- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars

> ----- begin _eqspec._check_eq_item_name -----

- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'

```

```

        = c_local item indepvars
    _____
> _____ end _eqspec._check_eq_item_name _____
    - local value ```.item'''
    = local value `"\n_neq cb_authors_ext estimated est_late o.e
> st_early stky_pr_rotemberg stky_pr_calvo''
    - sreturn local value ```.value'''
    = sreturn local value `"\n_neq cb_authors_ext estimated est_
> late o.est_early stky_pr_rotemberg stky_pr_calvo''
    - class exit ```.value'''
    = class exit `"\n_neq cb_authors_ext estimated est_late o.es
> t_early stky_pr_rotemberg stky_pr_calvo''
    _____

> _____ end _eqspec.item _____
    - class exit `""s(value)'''
    = class exit `"\n_neq cb_authors_ext estimated est_late o.est_
> early stky_pr_rotemberg stky_pr_calvo''
    _____

> _____ end _eqlist.eq _____
    = local xvarsi `"\n_neq cb_authors_ext estimated est_late o.est_
> early stky_pr_rotemberg stky_pr_calvo''
    - local noconsi `""eq nocons `i'''
    _____

> _____ begin _eqlist.eq _____
    - version 9.2
    - args item idx
    - if ``.item' == "count" {
    = if "nocons" == "count" {
        sreturn local value ```.n_eq'''
        class exit `""s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
        - .eq_list[`idx'].item `item'
        = .eq_list[1].item nocons
    _____

> _____ begin _eqspec.item _____
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, nocons
    _____

> _____ begin _eqspec._check_eq_item_name _____
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPosure FREEParm OPTions ]

```



```

- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item nocons

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.item'''
= local value `0''
- sreturn local value ```.value'''
= sreturn local value `0''
- class exit ```.value'''
= class exit `0''

```

```

> ----- end _eqspec.item -----
- class exit ```.s(value)'''
= class exit `0''

```

```

> ----- end _eqlist.eq -----
= local noconsi `0''
- local dim = `dim' + `:list sizeof xvarsi'
= local dim = + 7
- if ``noconsi' == "0" {
= if "0" == "0" {
- local ++dim
- }
- }
- local xvarsi ```.eq indepvars `i'''

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "indepvars" == "count" {
  sreturn local value ```.n_eq'''
  class exit ```.s(value)'''
}

```

```

- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item indepvars

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item indepvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item indepvars

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'```
= local value ````
- sreturn local value ```.value```
= sreturn local value ````
- class exit ```.value```
= class exit ````

```

```

> ----- end _eqspec.item -----
- class exit ```.s(value)```
= class exit ````

```

```

> ----- end _eqlist.eq -----
= local xvarsi ````
- local noconsi ```.eq nocons `i'```

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "nocons" == "count" {
  sreturn local value ``.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item nocons
-----

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, nocons
-----

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPva
> rs IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt'
> `other' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item nocons
-----

> ----- end _eqspec._check_eq_item_name -----
- local value ``.item'''
= local value ``0''
- sreturn local value ``value'''
= sreturn local value ``0''
- class exit ``value'''
= class exit ``0''
-----

```

```

> ----- end _eqspec.item -----
    - class exit ``s(value)''
    = class exit ``0''

> ----- end _eqlist.eq -----
    = local noconsi ``0''
    - local dim = `dim' + `:list sizeof xvarsi'
    = local dim = 8 + 0
    - if ``noconsi'' == "0" {
    = if "0" == "0" {
    - local ++dim
    - }
    - }
    - sreturn local value ``dim''
    = sreturn local value ``9''
    - class exit ``s(value)''
    = class exit ``9''

> ----- end _eqlist.dim -----
    = global ML_dim = 9
    - forval i = 1/`eq_n' {
    = forval i = 1/2 {
    - local depvars `.`eqlist'.eq depvars `i''

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'' == "count" {
    = if "depvars" == "count" {
        sreturn local value ``.n_eq''
        class exit ``s(value)''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
    - .eq_list[`idx'].item `item'
    = .eq_list[1].item depvars

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - .check_eq_item_name item, `item'
    = .check_eq_item_name item, depvars

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars

```

```

> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item depvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item depvars

> _____ end _eqspec._check_eq_item_name _____
    - local value ```.`item'```
    = local value `piq_timing_max'
    - sreturn local value ```.`value'```
    = sreturn local value `piq_timing_max'
    - class exit ```.`value'```
    = class exit `piq_timing_max'

> _____ end _eqspec.item _____
    - class exit ```.s(value)```
    = class exit `piq_timing_max'

> _____ end _eqlist.eq _____
    = local depvars piq_timing_max
    - local eq `.`eqlist'.eq name `i'

> _____ begin _eqlist.eq _____
    - version 9.2
    - args item idx
    - if ``.item' == "count" {
    = if "name" == "count" {
        sreturn local value ```.n_eq'```
        class exit ```.s(value)```
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
        - .eq_list[`idx'].item `item'
    = .eq_list[1].item name

> _____ begin _eqspec.item _____

```

```

- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, name

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item name
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item name

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'"""
= local value `"piq_timing_max"
- sreturn local value ```.`value'"""
= sreturn local value `"piq_timing_max"
- class exit ```.`value'"""
= class exit `"piq_timing_max"

```

```

> ----- end _eqspec.item -----
- class exit ```.s(value)"""
= class exit `"piq_timing_max"

```

```

> ----- end _eqlist.eq -----
= local eq piq_timing_max
- if !`:length local eq' {
= if !14 {
local eq eq`i'
}
- if `:list eq in eqnames' {
= if 0 {
di as err "equation ``eq'' multiply defined"
exit 110

```

```

    }
    - local eqnames `eqnames' `eq'
    = local eqnames piq_timing_max
    - fvexpand `.'.eqlist'.eq indepvars `i'' if $ML_samp
  }
}

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'' == "count" {
    = if "indepvars" == "count" {
      sreturn local value ``'.n_eq'''
      class exit ``'s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
      - .eq_list[`idx'].item `item'
    = .eq_list[1].item indepvars
  }

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - .check_eq_item_name item, `item'
    = .check_eq_item_name item, indepvars
  }

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
      local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item indepvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
      error 198
    }
    - c_local `c_item' `item'
    = c_local item indepvars
  }

> ----- end _eqspec._check_eq_item_name -----
    - local value ``'.`item''''
    = local value ``ln_eq cb_authors_ext estimated est_late o.est

```

```

> _early stky_pr_rottemberg stky_pr_calvo''
    - sreturn local value ``value'''
    = sreturn local value ``ln_neq cb_authors_ext estimated est_la
> te o.est_early stky_pr_rottemberg stky_pr_calvo''
    - class exit ``value'''
    = class exit ``ln_neq cb_authors_ext estimated est_late o.est_
> early stky_pr_rottemberg stky_pr_calvo''
    _____
> _____ end _eqspec.item _____
    - class exit ``s(value)'''
    = class exit ``ln_neq cb_authors_ext estimated est_late o.est_ea
> rly stky_pr_rottemberg stky_pr_calvo''
    _____
> _____ end _eqlist.eq _____
    = fvexpand ln_neq cb_authors_ext estimated est_late o.est_early st
> ky_pr_rottemberg stky_pr_calvo if __000006
    - if ``r(tsops)'' == "true" {
    = if "" == "true" {
      global ML_preserve no
    }
    - local eq_rhs`i' ``r(varlist)'''
    = local eq_rhs1 ``ln_neq cb_authors_ext estimated est_late o.est_e
> arly stky_pr_rottemberg stky_pr_calvo''
    - local eq_nocons`i' ``.eqlist'.eq nocons `i''
    _____
> _____ begin _eqlist.eq _____
    - version 9.2
    - args item idx
    - if ``item'' == "count" {
    = if "nocons" == "count" {
      sreturn local value ``.n_eq'''
      class exit ``s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 1 & 1 <= 2 {
      - .eq_list[`idx'].item `item'
      = .eq_list[1].item nocons
    _____
> _____ begin _eqspec.item _____
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, nocons
    _____
> _____ begin _eqspec._check_eq_item_name _____
    - version 9.2

```



```

- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTIONS ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
    }
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
    }
- c_local `c_item' `item'
= c_local item nocons

> ----- end _eqspec._check_eq_item_name -----
- local value ```.item'''
= local value ``0''
- sreturn local value ``value'''
= sreturn local value ``0''
- class exit ``value'''
= class exit ``0''

> ----- end _eqspec.item -----
- class exit ``s(value)'''
= class exit ``0''

> ----- end _eqlist.eq -----
= local eq_nocons1 0
- local eq_offset`i' `.`eqlist'.eq offset `i''

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "offset" == "count" {
    sreturn local value ``.n_eq'''
    class exit ``s(value)'''
    }
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
    - .eq_list[`idx'].item `item'
    = .eq_list[1].item offset

```

```

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, offset
    -----

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item      offset
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item offset
    -----

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.`item'```
    = local value ````
    - sreturn local value ```.value```
    = sreturn local value ````
    - class exit ```.value```
    = class exit ````
    -----

> ----- end _eqspec.item -----
    - class exit ```.s(value)```
    = class exit ````
    -----

> ----- end _eqlist.eq -----
    = local eq_offset1
    - local eq_exposure`i' `.`eqlist'.eq exposure `i'
    -----

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item' == "count" {
    = if "exposure" == "count" {

```

```

        sreturn local value ```.n_eq'''
        class exit ```s(value)'''
    }
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item exposure
}

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, exposure
}

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEArm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
    local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freearm' `options'
= local item exposure
- if `:list sizeof item' != 1 {
= if 1 != 1 {
    error 198
}
- c_local `c_item' `item'
= c_local item exposure
}

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'
= local value ``0''
- sreturn local value ```value'''
= sreturn local value ``0'''
- class exit ```value'''
= class exit ``0'''
}

> ----- end _eqspec.item -----
- class exit ```s(value)'''
= class exit ``0'''
}

> ----- end _eqlist.eq -----

```

```

= local eq_exposure1 0
- local eq_freeparm`i' ``.eqlist'.eq freeparm `i''

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if "`item'" == "count" {
= if "freeparm" == "count" {
  sreturn local value ```.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 1 & 1 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[1].item freeparm

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, freeparm

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item freeparm
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item freeparm

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.item'''
= local value ``0''
- sreturn local value ``value'''
= sreturn local value ``0''

```

```

        - class exit ``value''
        = class exit ``0''
    _____
> _____ end _eqspec.item _____
        - class exit ``s(value)''
        = class exit ``0''
    _____
> _____ end _eqlist.eq _____
    = local eq_freeparm1 0
    - local lhs `lhs' `depvars'
    = local lhs piq_timing_max
    - local eq_names `eq_names' `eq'
    = local eq_names piq_timing_max
    - local nxvars :list sizeof eq_rhs`i'
    = local nxvars :list sizeof eq_rhs1
    - local TMP : copy local eq_rhs`i'
    = local TMP : copy local eq_rhs1
    - forval j = 1/`nxvars' {
    = forval j = 1/7 {
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''
    = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_ear
> ly''
    - }
    - gettoken xvar TMP : TMP
    - local colna ``colna' `eq':`xvar''

```

```

        = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_ear
> ly piq_timing_max:stky_pr_rotemberg''
- }
- gettoken xvar TMP : TMP
- local colna ``colna' `eq':`xvar'''
= local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_ear
> ly piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo''
- }
- if `eq_freeparm`i'' {
= if 0 {
  if `nxvars' {
    di as err "{it:xvars} not allowed with option {bf:freeparm}"
    exit 198
  }
  if strpos(`"`eq''', ":") {
    local colna ``colna' /`eq'''
  }
  else {
    local colna ``colna' /:`eq'''
  }
}
- else if !`eq_nocons`i'' {
= else if !0 {
  - local colna ``colna' `eq':_cons''
  = local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_ear
> ly piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timing_
> max:_cons''
- }
- if "`moptobj'" != "" {
= if "" != "" {
  if "`eq_offset`i'" != "" {
    if usubstr("`eq_offset`i'",1,2)=="__" {
      capture clonevar `moptobj'`eq_offset`i' = `eq_offset`i'
      local dropmetoo `dropmetoo' `moptobj'`eq_offset`i'
    }
  }
}
- }
- local depvars `.`eqlist'.eq depvars `i''

----- begin _eqlist.eq -----
- version 9.2
- args item idx

```

```

- if "`item'" == "count" {
= if "depvars" == "count" {
  sreturn local value ```.n_eq'''
  class exit ```s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item depvars
}

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, depvars
}

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item depvars
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item depvars
}

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item''''
= local value `'''
- sreturn local value ```.value'''
= sreturn local value `'''
- class exit ```.value'''
= class exit `'''

> ----- end _eqspec.item -----
- class exit ```s(value)'''
= class exit `'''

```

```

> ----- end _eqlist.eq -----
= local depvars
- local eq ``.eqlist'.eq name `i''

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item' == "count" {
= if "name" == "count" {
  sreturn local value ``.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item name

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, name

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPOsure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item name
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item name

> ----- end _eqspec._check_eq_item_name -----
- local value ``.item'''
= local value ``lnalpha''

```



```

- sreturn local value ``value'''
= sreturn local value ``lnalpha''
- class exit ``value'''
= class exit ``lnalpha''

```

```

> ----- end _eqspec.item -----
- class exit ``s(value)'''
= class exit ``lnalpha''

```

```

> ----- end _eqlist.eq -----
= local eq lnalpha
- if !':length local eq' {
= if !7 {
  local eq eq`i'
}
- if `:list eq in eqnames' {
= if 0 {
  di as err "equation ``eq'' multiply defined"
  exit 110
}
- local eqnames `eqnames' `eq'
= local eqnames piq_timing_max lnalpha
- fvexpand `.`eqlist'.eq indepvars `i'' if $ML_samp

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "indepvars" == "count" {
  sreturn local value ``.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item indepvars

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, indepvars

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars

```

```

> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParam OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item indepvars
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item indepvars

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.item'''
    = local value `'''
    - sreturn local value ```.value'''
    = sreturn local value `'''
    - class exit ```.value'''
    = class exit `'''

> ----- end _eqspec.item -----
    - class exit ```.s(value)'''
    = class exit `'''

> ----- end _eqlist.eq -----
    = fvexpand if __000006
    - if ``r(tsops)''' == "true" {
    = if "" == "true" {
        global ML_preserve no
    }
    - local eq_rhs`i' ``r(varlist)'''
    = local eq_rhs2 `'''
    - local eq_nocons`i' ``.eqlist'.eq nocons `i''

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item''' == "count" {
    = if "nocons" == "count" {
        sreturn local value ```.n_eq'''
        class exit ```.s(value)'''
    }

```

```

- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item nocons

```

```

> ----- begin _eqspec.item -----
- version 9.2
- args item
- .check_eq_item_name item, `item'
= .check_eq_item_name item, nocons

```

```

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item nocons
- if `:list sizeof item' != 1 {
= if 1 != 1 {
error 198
}
- c_local `c_item' `item'
= c_local item nocons

```

```

> ----- end _eqspec._check_eq_item_name -----
- local value ```.`item'```
= local value ``0```
- sreturn local value ```value```
= sreturn local value ``0```
- class exit ```value```
= class exit ``0```

```

```

> ----- end _eqspec.item -----
- class exit ```s(value)```
= class exit ``0```

```

```

> ----- end _eqlist.eq -----
= local eq_nocons2 0
- local eq_offset`i' `.`eqlist'.eq offset `i'

```

```

> ----- begin _eqlist.eq -----
- version 9.2
- args item idx
- if ``item'' == "count" {
= if "offset" == "count" {
  sreturn local value ``.n_eq'''
  class exit ``s(value)'''
}
- else if 0 < `idx' & `idx' <= `.n_eq' {
= else if 0 < 2 & 2 <= 2 {
- .eq_list[`idx'].item `item'
= .eq_list[2].item offset
-----

> ----- begin _eqspec.item -----
- version 9.2
- args item
- ._check_eq_item_name item, `item'
= ._check_eq_item_name item, offset
-----

> ----- begin _eqspec._check_eq_item_name -----
- version 9.2
- capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
- if c(rc) error 198
- if `:list sizeof other' {
= if 0 {
  local other other_markvars
}
- local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
= local item offset
- if `:list sizeof item' != 1 {
= if 1 != 1 {
  error 198
}
- c_local `c_item' `item'
= c_local item offset
-----

> ----- end _eqspec._check_eq_item_name -----
- local value ``.item'''
= local value `'''
- sreturn local value ``value'''
= sreturn local value `'''
- class exit ``value'''
= class exit `'''
-----

```

```

> ----- end _eqspec.item -----
    - class exit ``s(value)''
    = class exit ``''
    -----

> ----- end _eqlist.eq -----
    = local eq_offset2
    - local eq_exposure`i' `.`eqlist'.eq exposure `i'
    -----

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item'' == "count" {
    = if "exposure" == "count" {
        sreturn local value ``.n_eq''
        class exit ``s(value)''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 2 & 2 <= 2 {
        - .eq_list[`idx'].item `item'
    = .eq_list[2].item exposure
    -----

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, exposure
    -----

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEparm OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'
    = local item exposure
    - if `:list sizeof item' != 1 {
    = if 1 != 1 {
        error 198
    }
    - c_local `c_item' `item'
    = c_local item exposure
    -----

```

```

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.item'''
    = local value ``0''
    - sreturn local value ``value'''
    = sreturn local value ``0''
    - class exit ``value'''
    = class exit ``0''

> ----- end _eqspec.item -----
    - class exit ``s(value)'''
    = class exit ``0''

> ----- end _eqlist.eq -----
    = local eq_exposure2 0
    - local eq_freeparm`i' ``.eqlist'.eq freeparm `i''

> ----- begin _eqlist.eq -----
    - version 9.2
    - args item idx
    - if ``item' == "count" {
    = if "freeparm" == "count" {
        sreturn local value ``.n_eq'''
        class exit ``s(value)'''
    }
    - else if 0 < `idx' & `idx' <= `.n_eq' {
    = else if 0 < 2 & 2 <= 2 {
        - .eq_list[`idx'].item `item'
    = .eq_list[2].item freeparm

> ----- begin _eqspec.item -----
    - version 9.2
    - args item
    - ._check_eq_item_name item, `item'
    = ._check_eq_item_name item, freeparm

> ----- begin _eqspec._check_eq_item_name -----
    - version 9.2
    - capture syntax name(name=c_item) [, NAME DEPvars INDEPvars
> IF IN WGT OTHER NOCONS OFFset EXPosure FREEParM OPTions ]
    - if c(rc) error 198
    - if `:list sizeof other' {
    = if 0 {
        local other other_markvars
    }
    - local item `name' `depvars' `indepvars' `if' `in' `wgt' `o
> ther' `nocons' `offset' `exposure' `freeparm' `options'

```

```

        = local item          freeparm
        - if `:list sizeof item' != 1 {
        = if 1 != 1 {
            error 198
        }
        - c_local `c_item' `item'
        = c_local item freeparm
    }
}

> ----- end _eqspec._check_eq_item_name -----
    - local value ```.`item'"""
    = local value `1'
    - sreturn local value ```.value'"""
    = sreturn local value `1'
    - class exit ```.value'"""
    = class exit `1'

> ----- end _eqspec.item -----
    - class exit ```.s(value)"""
    = class exit `1'

> ----- end _eqlist.eq -----
    = local eq_freeparm2 1
    - local lhs `lhs' `depvars'
    = local lhs piq_timing_max
    - local eq_names `eq_names' `eq'
    = local eq_names piq_timing_max lnalpha
    - local nxvars :list sizeof eq_rhs`i'
    = local nxvars :list sizeof eq_rhs2
    - local TMP : copy local eq_rhs`i'
    = local TMP : copy local eq_rhs2
    - forval j = 1/`nxvars' {
    = forval j = 1/0 {
        gettoken xvar TMP : TMP
        local colna ```.colna' `eq':`xvar'"""
    }
    - if `eq_freeparm`i' {
    = if 1 {
        - if `nxvars' {
        = if 0 {
            di as err "{it:nxvars} not allowed with option {bf:freeparm}"
            exit 198
        }
        - if strpos(```.eq'""', ":") {
        = if strpos(```lnalpha'""', ":") {
            local colna ```.colna' /`eq'"""
        }
    }
}

```

```

- else {
- local colna ``colna' /:`eq'""
= local colna `` piq_timing_max:ln_neq piq_timing_max:cb_authors_e
> xt piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_ear
> ly piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timing_
> max:_cons /:lnalpha""
- }
- }
- else if !`eq_nocons`i'' {
= else if !0 {
  local colna ``colna' `eq':_cons""
  }
- if ``moptobj'"" != "" {
= if "" != "" {
  if ``eq_offset`i'"" != "" {
    if usubstr("eq_offset`i'",1,2)=="__" {
      capture clonevar `moptobj'`eq_offset`i' = `eq_offset`i'
      local dropmetoo `dropmetoo' `moptobj'`eq_offset`i'
    }
  }
}
- }
- if ``moptobj'"" != "" {
= if "" != "" {
  foreach y of local lhs {
    if usubstr("`y'",1,2)=="__" {
      capture clonevar `moptobj'`y' = `y'
      local tmp `tmp' `moptobj'`y'
      local dropmetoo `dropmetoo' `moptobj'`y'
    }
    else {
      local tmp `tmp' `y'
    }
  }
  local lhs `tmp'
}
- if `waldtest' > 0 & `:length local lf0' {
= if -1 > 0 & 0 {
  opts_exclusive "waldtest() lf0()"
}
- if `:length local continue' {
= if 8 {
- if !`:length local init' {
= if !8 {
  tempname init
  local ub0 `init'

```



```

    }
    - else tempname ub0
    - mat `ub0' = e(b)
    = mat __000008 = e(b)
    - tempname v0 iv0
    - mat `v0' = e(V)
    = mat __000009 = e(V)
    - mat `iv0' = syminv(`v0')
    = mat __00000A = syminv(__000009)
    - global ML_rank0 = colsof(`v0') - diag0cnt(`iv0')
    = global ML_rank0 = colsof(__000009) - diag0cnt(__00000A)
    - if `!:length local lf0' & !missing(e(ll)) {
    = if !0 & !missing(e(ll)) {
    - local lf0 `=colsof(`ub0')' `e(ll)'
    = local lf0 2 -322.2358665861632
    - }
    - local ub0
    - }
    - if `!:length local init' {
    = if 8 {
    - tempname b0
    - local dim : list sizeof colna
    - matrix `b0' = J(1,`dim',0)
    = matrix __00000B = J(1,9,0)
    - matrix colna `b0' = `colna'
    = matrix colna __00000B = piq_timing_max:ln_neq piq_timing_max:cb
> _authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max
> :o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo p
> iq_timing_max:_cons /:lnalpha
    - `vv' _mkvec `b0', from(`init') update first error("initial vecto
> r")
    = version 18: _mkvec __00000B, from(__000002) update first error("
> initial vector")

> ----- begin _mkvec -----
    - local vv : display "version " string(_caller()) ":"
    - version 6
    - gettoken matout 0 : 0, parse(", ")
    - if "`matout'"==" " | "`matout'"=="", {
    = if "__00000B"==" " | "__00000B"=="", {
    error 198
    }
    - syntax [, FROM(str) UPdate COLnames(str) ERRor(str) FIRST ]
    - if "`update'"!=" " {
    = if "update"!=" " {
    - if "`colname'"!=" " {

```

```

= if ""!=" {
    di in red "update and colnames() cannot both be " "specified"
    exit 198
}
- capture local colname : colfullnames `matout'
= capture local colname : colfullnames __00000B
- if _rc {
    di in red "matrix `matout' not found"
    exit 111
}
- if rowsof(matrix(`matout')) != 1 {
= if rowsof(matrix(__00000B)) != 1 {
    di in red "`matout' matrix to be updated must be " "a row vect

> or"

    exit 503
}
- local matin `matout'
= local matin __00000B
- }
- if ``error'""!=" {
= if ``initial vector'""!=" {
    - local error ``error': ''
= local error ``initial vector: ''
    - }
- tempname mat
- if ``from'""!=" {
= if ``__000002'""!=" {
    - From `from'
= From __000002

> ----- begin _mkvec.From -----
    - gettoken from 0 : 0, parse(",") bind
    - sret clear
    - sret local from `from'
= sret local from __000002
    - if ``0'""!=" {
= if `""'!=" {
        syntax [, COPY SKIP ]
    }
    - sret local copy `copy'
= sret local copy
    - sret local skip `skip'
= sret local skip

> ----- end _mkvec.From -----
    - local copy `s(copy)'

```

```

= local copy
- local skip `s(skip)'
= local skip
- if ""`copy'""!="" {
= if ""!="" {
  CopyMat `mat' ``error'"" `s(from)'
  if ``colname'""!="" {
    local dim : list sizeof colname
    if `dim' != colsof(matrix(`mat')) {
      di in red ``error'matrix must "" `be dimension "" `dim'
      exit 503
    }
    `vv' mat colnames `mat' = `colname'
  }
}
- else {
- `vv' BuildMat `mat' ``error'"" ""skip'"" `s(from)'
= version 18: BuildMat __00000C ``initial vector: "" "" __000002

```

```

> ----- begin _mkvec.BuildMat -----
- local vv : display "version " string(_caller()) ":"
- version 6
- args matall error skip
- macro shift 3
- tokenize ``*'", parse(" =")
= tokenize ``__000002"', parse(" =")
- tempname matadd
- local i 1
- while ""`i'""!="" {
= while "__000002"!=" {
- local k = `i' + 1
= local k = 1 + 1
- if ""`k'""==" {
= if ""==" {
  local j = `i' + 2
  `vv' MkMat `matadd' ``i' ``j' `skip'
  local i = `i' + 3
}
- else {
- ChkMat `matadd' ``i' ``error'""
= ChkMat __00000D __000002 ``initial vector: ""

```

```

> ----- begin _mkvec.ChkMat -----
- args matout matin error
- capture di matrix(`matin'[1,1])
= capture di matrix(__000002[1,1])

```

```

- if _rc {
  capture confirm number `matin'
  if _rc {
    di in red `"'error'matrix `matin' not found"'
    exit 111
  }
  di in red `"'error'list of numbers requires copy option"'
  exit 198
}
- if matrix(rowsof(`matin')!=1 & colsof(`matin')!=1) {
= if matrix(rowsof(__000002)!=1 & colsof(__000002)!=1) {
  di in red `"'matin' " matrix(rowsof(`matin')) " x " matrix(
> colsof(`matin')) " is not a vector"
  exit 503
}
- if matrix(rowsof(`matin')) == 1 {
= if matrix(rowsof(__000002)) == 1 {
  - mat `matout' = `matin'
= mat __00000D = __000002
  - }
  - else mat `matout' = `matin''
= else mat __00000D = __000002'
}

> ----- end _mkvec.ChkMat -----

- local i = `i' + 1
= local i = 1 + 1
- }
- mat `matall' = nullmat(`matall') , `matadd'
= mat __00000C = nullmat(__00000C) , __00000D
- }
- while ``i'!='' {
= while ''!='' {
  local k = `i' + 1
  if ``k'=='' {
    local j = `i' + 2
    `vv' MkMat `matadd' ``i' ``j' `skip'
    local i = `i' + 3
  }
  else {
    ChkMat `matadd' ``i' `"'error'""
    local i = `i' + 1
  }
  mat `matall' = nullmat(`matall') , `matadd'
}

> ----- end _mkvec.BuildMat -----

```

```

- if ``colname''!= "" {
= if "piq_timing_max:ln_neq piq_timing_max:cb_authors_ext piq_t
> iming_max:estimated piq_timing_max:est_late piq_timing_max:o.est_early piq_t
> iming_max:stky_pr_rottemberg piq_timing_max:stky_pr_calvo piq_timing_max:_con
> s /lnalpha''!= "" {
- `vv' ChkNames `mat' ``matin'' ``colname'' ``error'' ``skip
> "" ``first''
= version 18: ChkNames __00000C "__00000B" `piq_timing_max:ln_n
> eq piq_timing_max:cb_authors_ext piq_timing_max:estimated piq_timing_max:est
> _late piq_timing_max:o.est_early piq_timing_max:stky_pr_rottemberg piq_timing
> _max:stky_pr_calvo piq_timing_max:_cons /lnalpha'' `initial vector: "" "" "
> first"

> ----- begin _mkvec.ChkNames -----
- local vv : display "version " string(_caller()) ":"
- version 6
- args mat matin names error skip first
- local dim = colsof(matrix(`mat'))
= local dim = colsof(matrix(__00000C))
- if ``first''!= "" {
= if "first"!= "" {
- gettoken name : names
- local eq1 = bsubstr(```name'',1,index(```name'',":"))
= local eq1 = bsubstr(`piq_timing_max:ln_neq'',1,index(`piq_
> timing_max:ln_neq'',":"))
- }
- tempname new fill x
- local k : list sizeof names
- if ``matin''!= "" {
= if "__00000B"!= "" {
- mat `new' = `matin'
= mat __00000D = __00000B
- }
- else {
mat `new' = J(1,`k',0)
`vv' mat colnames `new' = `names'
}
- mat `fill' = J(1,`k',0)
= mat __00000E = J(1,9,0)
- local i 1
- while `i' <= `dim' {
= while 1 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,1..1]
- local eq : coleq `x'
= local eq : coleq __00000F

```

```

- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
    local spec "/"`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "piq_timing_max:ln_neq"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/piq_timing_max:ln_neq"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse ln_neq, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'"
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`"piq_timing_max:ln_n
> eq'')

- if `j' == . & "`oname'" != "" {
= if 1 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & "`sspec'" != "" {
= if 1 == . & "/piq_timing_max:ln_neq" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
= if 1==. & `"piq_timing_max'""=="_" & `"piq_timing_max:'""!=""
> {

    `vv' local j = colnumb(`new',``eq1``name'')
    if `j' == . & "`oname'" != "" {
      `vv' local j = colnumb(`new',``eq1``oname'')
    }
  }
- if `j'!=. {
= if 1!=. {

```

```

- if `fill'[1,`j'] {
= if __00000E[1,1] {
  _ms_parse_parts `name'
  if !r(omit) {
    if "`eq'"=="_" {
      di in red ``error'duplicate "' `"'entries for `name' found"'
    }
    else di in red ``error'""' `"'duplicate entries for `eq':`nam
> e' found"'

    exit 507
  }
  else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
  }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,1] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,1] = __00000C[1,1]
- }
- else if "`skip'"==" " {
= else if ""==" " {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red ``error'extra parameter "' `"'spec' found"' _n "s
> pecify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 1 + 1
- }
- while `i' <= `dim' {
= while 2 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,2..2]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
  local spec "/"`name'"
}
- else {
- local spec "`eq':`name'"

```

```

= local spec "piq_timing_max:cb_authors_ext"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "/piq_timing_max:cb_authors_ext"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse cb_authors_ext, noomit
- if c(rc) == 0 {
- if r(omit) {
local oname ``r(stripe)''
local ospec ``eq':`oname''
}
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`piq_timing_max:cb_a
> uthors_ext'')
- if `j' == . & ``oname'' != "" {
= if 2 == . & "" != "" {
`vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec'' != "" {
= if 2 == . & "/piq_timing_max:cb_authors_ext" != "" {
`vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq''=="_" & ``eq1''!="" {
= if 2==. & `piq_timing_max'=="_" & `piq_timing_max:'!=""
> {
`vv' local j = colnumb(`new',``eq1``name'')
if `j' == . & ``oname'' != "" {
`vv' local j = colnumb(`new',``eq1``oname'')
}
}
- if `j'!=. {
= if 2!=. {
- if `fill'[1,`j'] {
= if __00000E[1,2] {
_ms_parse_parts `name'
if !r(omit) {
if "`eq'=="_" {
di in red ``error'duplicate '' ``entries for `name' found''
}
else di in red ``error'' ``duplicate entries for `eq':`nam

```



```

> e' found''
    exit 507
    }
    else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
    }
    }
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,2] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,2] = __00000C[1,2]
- }
- else if ``skip'""=="" {
= else if ""=="" {
    if ``eq'""=="_" {
    local spec : copy local name
    }
    di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
    exit 111
    }
- local i = `i' + 1
= local i = 2 + 1
- }
- while `i' <= `dim' {
= while 3 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,3..3]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if ``eq'"" == "/" {
= if "piq_timing_max" == "/" {
    local spec "/"`name'""
    }
- else {
- local spec ``eq':`name'""
= local spec "piq_timing_max:estimated"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/"`eq':`name'""
= local sspec "/"piq_timing_max:estimated"
- }
- }
- local oname

```

```

- local ospec
- capture _msparse `name', noomit
= capture _msparse estimated, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'''
    local ospec ``eq':`oname'''
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`piq_timing_max:esti
> mated'')
- if `j' == . & ``oname''' != "" {
= if 3 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec''' != "" {
= if 3 == . & "/piq_timing_max:estimated" != "" {
  `vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq'''=="_" & ``eq1'''!="" {
= if 3==. & `piq_timing_max'=="_" & `piq_timing_max:'!=""
> {
  `vv' local j = colnumb(`new',``eq1``name'')
  if `j' == . & ``oname''' != "" {
    `vv' local j = colnumb(`new',``eq1``oname'')
  }
}
- if `j'!=. {
= if 3!=. {
- if `fill'[1,`j'] {
= if __00000E[1,3] {
  _ms_parse_parts `name'
  if !r(omit) {
    if ``eq'=="_" {
      di in red ``error'duplicate "'`entries for `name' found"'
    }
    else di in red ``error''''`duplicate entries for `eq':`nam
> e' found''
  exit 507
}
else if !missing(`new'[1,`j']) {
  matrix `mat'[1,`i'] = `new'[1,`j']
}
}
- else mat `fill'[1,`j'] = 1

```

```

= else mat __00000E[1,3] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,3] = __00000C[1,3]
- }
- else if "`skip'"==" {
= else if ""==" {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 3 + 1
- }
- while `i' <= `dim' {
= while 4 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,4..4]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
  local spec "/"`name'
}
- else {
- local spec "`eq':`name'"
= local spec "piq_timing_max:est_late"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/"piq_timing_max:est_late"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse est_late, noomit
- if c(rc) == 0 {
- if r(omit) {
  local oname ``r(stripe)'"
  local ospec "`eq':`oname'"
}
}

```

```

- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`"piq_timing_max:est_
> late'')

- if `j' == . & ``oname' != "" {
= if 4 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & ``sspec' != "" {
= if 4 == . & "/piq_timing_max:est_late" != "" {
  `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'=="_" & ``eq1'!="" {
= if 4==. & `piq_timing_max'=="_" & `piq_timing_max:'!="

> {

  `vv' local j = colnumb(`new',``eq1'`name'')
  if `j' == . & ``oname' != "" {
    `vv' local j = colnumb(`new',``eq1'`oname'')
  }
}

- if `j'!=. {
= if 4!=. {
- if `fill'[1,`j'] {
= if __00000E[1,4] {
  _ms_parse_parts `name'
  if !r(omit) {
    if ``eq'=="_" {
      di in red ``error'duplicate " " `entries for `name' found"
    }
    else di in red ``error'"" `duplicate entries for `eq':`nam

> e' found"

  exit 507
}
else if !missing(`new'[1,`j']) {
  matrix `mat'[1,`i'] = `new'[1,`j']
}
}

- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,4] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,4] = __00000C[1,4]
- }
- else if ``skip'=="" {
= else if ""=="" {
  if ``eq'=="_" {
    local spec : copy local name

```

```

    }
    di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
    exit 111
    }
    - local i = `i' + 1
    = local i = 4 + 1
    - }
    - while `i' <= `dim' {
    = while 5 <= 9 {
    - mat `x' = `mat'[1,`i'..`i']
    = mat __00000F = __00000C[1,5..5]
    - local eq : coleq `x'
    = local eq : coleq __00000F
    - local name : colname `x'
    = local name : colname __00000F
    - if "`eq'" == "/" {
    = if "piq_timing_max" == "/" {
      local spec "/"`name'"
    }
    - else {
    - local spec "`eq':`name'"
    = local spec "piq_timing_max:o.est_early"
    - if (usubstr("`eq'",1,1) != "/") {
    = if (usubstr("piq_timing_max",1,1) != "/") {
    - local sspec "/"`eq':`name'"
    = local sspec "/piq_timing_max:o.est_early"
    - }
    - }
    - local oname
    - local ospec
    - capture _msparse `name', noomit
    = capture _msparse o.est_early, noomit
    - if c(rc) == 0 {
    - if r(omit) {
    - local oname ``r(stripe)'"
    = local oname `est_early'"
    - local ospec "`eq':`oname'"
    = local ospec "piq_timing_max:est_early"
    - }
    - }
    - `vv' local j = colnumb(`new',``spec'')
    = version 18: local j = colnumb(__00000D,`piq_timing_max:o.es
> t_early'')
    - if `j' == . & "`oname'" != "" {
    = if 5 == . & "est_early" != "" {

```

```

        `vv' local j = colnumb(`new',``ospec'')
    }
- if `j' == . & ``sspec' != "" {
= if 5 == . & "/piq_timing_max:o.est_early" != "" {
    `vv' local j = colnumb(`new',``sspec'')
    }
- if `j'==. & ``eq'=="_" & ``eq1'!="" {
= if 5==. & ``piq_timing_max'=="_" & ``piq_timing_max:'!=""
> {

    `vv' local j = colnumb(`new',``eq1'`name'')
    if `j' == . & ``oname' != "" {
        `vv' local j = colnumb(`new',``eq1'`oname'')
    }
    }
- if `j'!=. {
= if 5!=. {
- if `fill'[1,`j'] {
= if __00000E[1,5] {
    _ms_parse_parts `name'
    if !r(omit) {
        if ``eq'=="_" {
            di in red ``error'duplicate "' ``entries for `name' found"'
        }
        else di in red ``error'"" ``duplicate entries for `eq':`nam
> e' found"'

        exit 507
    }
    else if !missing(`new'[1,`j']) {
        matrix `mat'[1,`i'] = `new'[1,`j']
    }
    }
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,5] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,5] = __00000C[1,5]
- }
- else if ``skip'=="" {
= else if ""=="" {
    if ``eq'=="_" {
        local spec : copy local name
    }
    di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
    exit 111
    }
- local i = `i' + 1

```

```

= local i = 5 + 1
- }
- while `i' <= `dim' {
= while 6 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,6..6]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
    local spec "/"`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "piq_timing_max:stky_pr_rottemberg"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/piq_timing_max:stky_pr_rottemberg"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse stky_pr_rottemberg, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)''
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`"piq_timing_max:stky
> _pr_rottemberg"')
- if `j' == . & "`oname'" != "" {
= if 6 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & "sspec'" != "" {
= if 6 == . & "/piq_timing_max:stky_pr_rottemberg" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
= if 6==. & `piq_timing_max'=="_" & `piq_timing_max:'"!=""

```

```

> {
    `vv' local j = colnumb(`new', ``eq1``name'')
    if `j' == . & ``oname'' != "" {
        `vv' local j = colnumb(`new', ``eq1``oname'')
    }
}
- if `j'!=. {
= if 6!=. {
- if `fill'[1,`j'] {
= if __00000E[1,6] {
    _ms_parse_parts `name'
    if !r(omit) {
        if ``eq'""=="_" {
            di in red ``error'duplicate "" ``entries for `name' found''
        }
        else di in red ``error'"" ``duplicate entries for `eq':`nam
> e' found''

        exit 507
    }
    else if !missing(`new'[1,`j']) {
        matrix `mat'[1,`i'] = `new'[1,`j']
    }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,6] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,6] = __00000C[1,6]
- }
- else if ``skip'""=="" {
= else if ""=="" {
    if ``eq'""=="_" {
        local spec : copy local name
    }
    di in red ``error'extra parameter "" ``spec' found'' _n "s
> pecify skip option if necessary"
    exit 111
}
- local i = `i' + 1
= local i = 6 + 1
- }
- while `i' <= `dim' {
= while 7 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,7..7]
- local eq : coleq `x'
= local eq : coleq __00000F

```



```

- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
    local spec "/"`name'"
  }
- else {
- local spec "`eq':`name'"
= local spec "piq_timing_max:stky_pr_calvo"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "/piq_timing_max:stky_pr_calvo"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse stky_pr_calvo, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'"
    local ospec "`eq':`oname'"
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`"piq_timing_max:stky
> _pr_calvo"')
- if `j' == . & "`oname'" != "" {
= if 7 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
- if `j' == . & "`sspec'" != "" {
= if 7 == . & "/piq_timing_max:stky_pr_calvo" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
- if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
= if 7==. & `"piq_timing_max'""=="_" & `"piq_timing_max:'""!=""
> {
    `vv' local j = colnumb(`new',``eq1``name'')
    if `j' == . & "`oname'" != "" {
      `vv' local j = colnumb(`new',``eq1``oname'')
    }
  }
- if `j'!=. {
= if 7!=. {

```

```

- if `fill'[1,`j'] {
= if __00000E[1,7] {
  _ms_parse_parts `name'
  if !r(omit) {
    if "`eq'"=="_" {
      di in red ``error'duplicate "' `"'entries for `name' found"'
    }
    else di in red ``error'""' `"'duplicate entries for `eq':`nam
> e' found"'

    exit 507
  }
  else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
  }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,7] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,7] = __00000C[1,7]
- }
- else if "`skip'"==" " {
= else if ""==" " {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red ``error'extra parameter "' `"'spec' found"' _n "s
> pecify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 7 + 1
- }
- while `i' <= `dim' {
= while 8 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,8..8]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if "`eq'" == "/" {
= if "piq_timing_max" == "/" {
  local spec "/"`name'
}
- else {
- local spec "`eq':`name'"

```

```

= local spec "piq_timing_max:_cons"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("piq_timing_max",1,1) != "/") {
- local sspec "/`eq':`name'"
= local sspec "/piq_timing_max:_cons"
- }
- }
- local oname
- local ospec
- capture _msparse `name', noomit
= capture _msparse _cons, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)''
    local ospec ``eq':`oname''
  }
- }
- `vv' local j = colnumb(`new',``spec'')
= version 18: local j = colnumb(__00000D,`piq_timing_max:_con
> s'')

- if `j' == . & ``oname'' != "" {
= if 8 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & ``sspec'' != "" {
= if 8 == . & "/piq_timing_max:_cons" != "" {
  `vv' local j = colnumb(`new',``sspec'')
}
- if `j'==. & ``eq''=="_" & ``eq1''!= "" {
= if 8==. & `piq_timing_max'=="_" & `piq_timing_max:'!= ""
> {

  `vv' local j = colnumb(`new',``eq1``name'')
  if `j' == . & ``oname'' != "" {
    `vv' local j = colnumb(`new',``eq1``oname'')
  }
}
- if `j'!=. {
= if 8!=. {
- if `fill'[1,`j'] {
= if __00000E[1,8] {
  _ms_parse_parts `name'
  if !r(omit) {
    if ``eq'=="_" {
      di in red ``error'duplicate '' ``entries for `name' found''
    }
    else di in red ``error'' ``duplicate entries for `eq':`nam

```

```

> e' found''
    exit 507
    }
    else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
    }
    }
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,8] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,8] = __00000C[1,8]
- }
- else if ``skip'""=="" {
= else if ""=="" {
    if ``eq'""=="_" {
    local spec : copy local name
    }
    di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
    exit 111
    }
- local i = `i' + 1
= local i = 8 + 1
- }
- while `i' <= `dim' {
= while 9 <= 9 {
- mat `x' = `mat'[1,`i'..`i']
= mat __00000F = __00000C[1,9..9]
- local eq : coleq `x'
= local eq : coleq __00000F
- local name : colname `x'
= local name : colname __00000F
- if ``eq'"" == "/" {
= if "/" == "/" {
- local spec "/"`name'""
= local spec "/"lnalpha"
- }
- else {
    local spec ``eq':`name'""
    if (usubstr("`eq'",1,1) != "/") {
    local sspec "/"`eq':`name'""
    }
    }
- local oname
- local ospec
- capture _msparse `name', noomit

```

```

= capture _msparse lalpha, noomit
- if c(rc) == 0 {
- if r(omit) {
    local oname ``r(stripe)'''
    local ospec ``eq':`oname'''
  }
- }
- `vv' local j = colnumb(`new',``spec''')
= version 18: local j = colnumb(__00000D,`"/lalpha'')
- if `j' == . & ``oname''' != "" {
= if 9 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec''')
  }
- if `j' == . & ``sspec''' != "" {
= if 9 == . & "/piq_timing_max:_cons" != "" {
    `vv' local j = colnumb(`new',``sspec''')
  }
- if `j'==. & ``eq'''=="_" & ``eq1'''!="" {
= if 9==. & `"/'=="_" & `piq_timing_max:'!="" {
    `vv' local j = colnumb(`new',``eq1``name''')
    if `j' == . & ``oname''' != "" {
      `vv' local j = colnumb(`new',``eq1``oname''')
    }
  }
- if `j'!=. {
= if 9!=. {
- if `fill'[1,`j'] {
= if __00000E[1,9] {
    _ms_parse_parts `name'
    if !r(omit) {
      if ``eq'''=="_" {
        di in red ``error'duplicate "'`"entries for `name' found"'
      }
      else di in red ``error''''`duplicate entries for `eq':`nam
> e' found"'

    exit 507
  }
  else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
  }
}
- else mat `fill'[1,`j'] = 1
= else mat __00000E[1,9] = 1
- mat `new'[1,`j'] = `mat'[1,`i']
= mat __00000D[1,9] = __00000C[1,9]
- }

```

```

- else if "`skip'"==" {
= else if ""==" {
  if "`eq'"=="_" {
    local spec : copy local name
  }
  di in red ``error'extra parameter "' ``spec' found"' _n "s
> pecify skip option if necessary"
  exit 111
}
- local i = `i' + 1
= local i = 9 + 1
- }
- while `i' <= `dim' {
= while 10 <= 9 {
  mat `x' = `mat'[1,`i'..`i']
  local eq : coleq `x'
  local name : colname `x'
  if "`eq'" == "/" {
    local spec "/`name'"
  }
  else {
    local spec "`eq':`name'"
    if (usubstr("`eq'",1,1) != "/") {
      local sspec "/`eq':`name'"
    }
  }
  local oname
  local ospec
  capture _msparse `name', noomit
  if c(rc) == 0 {
    if r(omit) {
      local oname ``r(stripe)'"
      local ospec "`eq':`oname'"
    }
  }
  `vv' local j = colnumb(`new',``spec'')
  if `j' == . & "`oname'" != "" {
    `vv' local j = colnumb(`new',``ospec'')
  }
  if `j' == . & "`sspec'" != "" {
    `vv' local j = colnumb(`new',``sspec'')
  }
  if `j'==. & ``eq'""=="_" & ``eq1'""!="" {
    `vv' local j = colnumb(`new',``eq1``name'')
    if `j' == . & "`oname'" != "" {
      `vv' local j = colnumb(`new',``eq1``oname'')
    }
  }

```

```

    }
    }
    if `j'!=. {
    if `fill'[1,`j'] {
    _ms_parse_parts `name'
    if !r(omit) {
    if "`eq'"=="_" {
    di in red `"'error'duplicate "' `"'entries for `name' found"'
    }
    else di in red `"'error'"' `"'duplicate entries for `eq':`nam
> e' found"'

    exit 507
    }
    else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
    }
    }
    else mat `fill'[1,`j'] = 1
    mat `new'[1,`j'] = `mat'[1,`i']
    }
    else if "`skip'"==" " {
    if "`eq'"=="_" {
    local spec : copy local name
    }
    di in red `"'error'extra parameter "' `"'`spec' found"' _n "s
> pecify skip option if necessary"
    exit 111
    }
    local i = `i' + 1
    }
    - mat `fill' = `fill'*`fill'
    = mat __00000E = __00000E*__00000E'
    - sret clear
    - sret local k_fill = `fill'[1,1]
    = sret local k_fill = __00000E[1,1]
    - mat `mat' = `new'
    = mat __00000C = __00000D

_____  

> _____ end _mkvec.ChkNames _____

- local fill `s(k_fill)'
= local fill 9
- }
- }
- }
- else {
local fill 0

```

```

        if "`update'"!="" {
            mat `mat' = `matin'
        }
        else if ``colname'"!="" {
            local dim : list sizeof colname
            mat `mat' = J(1,`dim',0)
            `vv' mat colnames `mat' = `colname'
        }
        else {
            di in red "from() must be specified"
            exit 198
        }
    }

- sret clear
- sret local copy `copy'
= sret local copy
- sret local skip `skip'
= sret local skip
- sret local k = colsof(matrix(`mat'))
= sret local k = colsof(matrix(__00000C))
- if "`fill'"!="" {
= if "9"!="" {
- sret local k_fill `fill'
= sret local k_fill 9
- }
- else sret local k_fill = colsof(matrix(`mat'))
= else sret local k_fill = colsof(matrix(__00000C))
- matrix rename `mat' `matout', replace
= matrix rename __00000C __00000B, replace
}

> ----- end _mkvec -----

- }
- tempname bomit
- matrix `bomit' = J(1,`:list sizeof colna',0)
= matrix __00000C = J(1,9,0)
- matrix colna `bomit' = `colna'
= matrix colna __00000C = piq_timing_max:ln_neq piq_timing_max:cb
> _authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max
> :o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo p
> iq_timing_max:_cons /:lnalpha
- _ms_omit_info `bomit'
= _ms_omit_info __00000C
- if r(k_omit) | `:length local constraints' {
= if r(k_omit) | 0 {
- nobreak {
- capture noisily break {

```



```

- _b_post0 `colna'
= _b_post0 piq_timing_max:ln_neq piq_timing_max:cb_authors_ext pi
> q_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_early pi
> q_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timing_max:_
> cons /:lnalpha

-----
> ----- begin _b_post0 -----
- version 11
- tempname b V
- local dim : list sizeof 0
- matrix `b' = J( 1,`dim',0)
= matrix __00000D = J( 1,9,0)
- matrix `V' = J(`dim',`dim',0)
= matrix __00000E = J(9,9,0)
- matrix colnames `b' = `0'
= matrix colnames __00000D = piq_timing_max:ln_neq piq_timing_ma
> x:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing
> _max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_cal
> vo piq_timing_max:_cons /:lnalpha
- matrix colnames `V' = `0'
= matrix colnames __00000E = piq_timing_max:ln_neq piq_timing_ma
> x:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing
> _max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_cal
> vo piq_timing_max:_cons /:lnalpha
- matrix rownames `V' = `0'
= matrix rownames __00000E = piq_timing_max:ln_neq piq_timing_ma
> x:cb_authors_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing
> _max:o.est_early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_cal
> vo piq_timing_max:_cons /:lnalpha
- ereturn post `b' `V'
= ereturn post __00000D __00000E

-----
> ----- end _b_post0 -----
- local clist : subinstr local constraints "," " ", all
- `vv' makecns `clist', `cnsnotes'
= version 18: makecns ,

-----
> ----- begin makecns -----
- if _caller() < 11 {
  MakeCns `0'
  exit
}
- _makecns `0'
= _makecns ,

-----
> ----- end makecns -----

```

```

- local constraints ``r(clist)'''
= local constraints `'''
- local k_autoCns = e(k_autoCns)
- tempname C
- capture matrix `C' = e(Cns)
= capture matrix __00000D = e(Cns)
- local rcc = c(rc)
- }
- local rc = c(rc)
- ereturn clear
- }
- if (`rc') exit `rc'
= if (0) exit 0
- if (`rcc') {
= if (0) {
    local C
    local k_autoCns
  }
- }
- if `:length local constraints' {
= if 0 {
    local lf0
  }
- local vce `vce' `robust' `cluster'
= local vce vce(robust) robust
- if `:length local vce' {
= if 18 {
- _vce_parse, argoptlist(CList) optlist(OIM OPG Robust) old : `w
> t', `vce'
    = _vce_parse, argoptlist(CList) optlist(OIM OPG Robust) old : ,
> vce(robust) robust


---


> 

---

 begin _vce_parse 

---


    - version 10
    - _on_colon_parse `0'
    = _on_colon_parse , argoptlist(CList) optlist(OIM OPG Robust)
> old : , vce(robust) robust


---


> 

---

 begin _on_colon_parse 

---


    - version 8.2
    - sreturn local before ""
    - sreturn local after ""
    - gettoken before after : 0, parse(":") bind match(par) quotes
    - if ``par'' != "" {
    = if "" != "" {
        local before ``(`before')''

```

```

    }
    - if ``before''' == ":" {
= if `", argoptlist(CLister) optlist(OIM OPG Robust) old "' ==
> ":" {
    sreturn local after ``after'''
    exit
    }
    - while ``COLON''' != ":" & ``after''' != "" {
= while `''' != ":" & `": , vce(robust) robust''' != "" {
    - gettoken COLON after : after, parse(":") bind match(par) quo
> tes
    - if "`par'" != "" {
= if "" != "" {
    local before `before' (`COLON')
    local COLON
    }
    - else if ``COLON''' != ":" {
= else if `":'" != ":" {
    local before ``before' `COLON'''
    local COLON
    }
    - }
    - while ``COLON''' != ":" & ``after''' != "" {
= while `":'" != ":" & `", vce(robust) robust''' != "" {
    gettoken COLON after : after, parse(":") bind match(par) quo
> tes
    if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
    }
    else if ``COLON''' != ":" {
    local before ``before' `COLON'''
    local COLON
    }
    }
    - if ``COLON''' != ":" {
= if `":'" != ":" {
    di as err "" found where ':' expected"
    exit 198
    }
    - sreturn local before ``before'''
= sreturn local before `", argoptlist(CLister) optlist(OIM OPG
> Robust) old "'
    - sreturn local after ``after'''
= sreturn local after `", vce(robust) robust'''

```

```

> ----- end _on_colon_parse -----
    - local 0 ``s(before)'''
    = local 0 `", argoptlist(CLuster) optlist(OIM OPG Robust) old ""
    - local user ``s(after)'''
    = local user `", vce(robust) robust""
    - syntax [varname(default=none)], [ OPTlist(namelist) ARGOPTlist
> (namelist) PWallowed(namelist) OLD_is_ok NOARGOPT_is_ok ]
    - local touse `varlist'
    = local touse
    - tempname o a
    - .`o' = ._optlist.new
    = .__00000E = ._optlist.new
    - local optlist : list uniq optlist
    - foreach name of local optlist {
    - .`o'.addopt `name'
    = .__00000E.addopt OIM
    -----

> ----- begin _optlist.addopt -----
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("OIM")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
    }
    - .options.Arrpush "`optspec'"
    = .options.Arrpush "OIM"
    - .names.Arrpush "`mname'"
    = .names.Arrpush "oim"
    -----

> ----- end _optlist.addopt -----
    - }
    - .`o'.addopt `name'
    = .__00000E.addopt OPG
    -----

> ----- begin _optlist.addopt -----
    - version 9
    - syntax name(name=optspec) [, PASSthru]
    - local mname = lower("`optspec'")
    = local mname = lower("OPG")
    - if "`passthru'" != "" {
    = if "" != "" {
        local optspec `optspec'(passthru)
    }
    - .options.Arrpush "`optspec'"

```

```

= .options.Arrpush "OPG"
- .names.Arrpush "`mname'"
= .names.Arrpush "opg"

```

```

> ----- end _optlist.adopt -----
- }
- .`o'.adopt `name'
= .__00000E.adopt Robust

```

```

> ----- begin _optlist.adopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("Robust")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "Robust"
- .names.Arrpush "`mname'"
= .names.Arrpush "robust"

```

```

> ----- end _optlist.adopt -----
- }
- .`a' = ._optlist.new
= .__00000F = ._optlist.new
- local argoptlist : list uniq argoptlist
- foreach name of local argoptlist {
- .`a'.adopt `name'
= .__00000F.adopt CLuster

```

```

> ----- begin _optlist.adopt -----
- version 9
- syntax name(name=optspec) [, PASSthru]
- local mname = lower("`optspec'")
= local mname = lower("CLuster")
- if "`passthru'" != "" {
= if "" != "" {
    local optspec `optspec'(passthru)
  }
- .options.Arrpush "`optspec'"
= .options.Arrpush "CLuster"
- .names.Arrpush "`mname'"
= .names.Arrpush "cluster"

```

```

> ----- end _optlist.addopt -----
- }
- local OPTNAMES ```.`o'.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/3 {
- local namelist `namelist' `'.names['i']'
= local namelist oim
- }
- local namelist `namelist' `'.names['i']'
= local namelist oim opg
- }
- local namelist `namelist' `'.names['i']'
= local namelist oim opg robust
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `oim opg robust'
- class exit ```namelist'''
= class exit `oim opg robust'

> ----- end _optlist.dumpnames -----
= local OPTNAMES `oim opg robust'
- local ARGOPTNAMES ```.`a'.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arnels' {
= forval i = 1/1 {
- local namelist `namelist' `'.names['i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist `cluster'
- class exit ```namelist'''
= class exit `cluster'

> ----- end _optlist.dumpnames -----
= local ARGOPTNAMES `cluster'
- local AND : list OPTNAMES & ARGOPTNAMES
- if `:list sizeof AND' {
= if 0 {
di as err "vctype ``:word 1 of `AND'' specified twice"

```

```

        exit 198
    }
    - local pwallowed : list uniq pwallowed
    - local pwlist robust cluster
    - foreach n of local pwallowed {
        local lc = lower("`n'")
        local pwlist `pwlist' `lc'
    }
    - if "`old_is_ok'" != "" {
= if "old_is_ok" != "" {
    - local ROBUST robust
    - if `:list ROBUST in OPTNAMES' {
= if 1 {
    - local robust Robust
    - }
    - local CLUSTER cluster
    - if `:list CLUSTER in ARGOPTNAMES' {
= if 1 {
    - local cluster CLuster(varname)
    - }
    - }
    - local 0 ``user'''
= local 0 `` , vce(robust) robust'''
    - syntax [fw aw pw iw] [, VCE(string asis) `robust' `cluster' ]
= syntax [fw aw pw iw] [, VCE(string asis) Robust CLuster(varnam

> e) ]

    - if ``vce''' != "" {
= if ``robust''' != "" {
    - gettoken name args : vce, parse(" ,")
    - local args : list retok args
    - capture ParseVCE `o' `a' , `name'
= capture ParseVCE __00000E __00000F , robust

> ----- begin _vce_parse.ParseVCE -----
    - gettoken 0 0 : 0, parse(" ,")
    - gettoken A 0 : 0, parse(" ,")
    - local OPTSPECS ```. `0'.dumpoptions' `.`A'.dumpoptions'''

> ----- begin _optlist.dumpoptions -----
    - version 9
    - forval i = 1/`.options.arnels' {
= forval i = 1/3 {
    - local optlist `optlist' `.options[`i']'
= local optlist OIM
    - }
    - local optlist `optlist' `.options[`i']'

```

```

= local optlist OIM OPG
- }
- local optlist `optlist' `.options['i']'
= local optlist OIM OPG Robust
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist ``OIM OPG Robust'''
- class exit ```optlist'''
= class exit ``OIM OPG Robust'''

> ----- end _optlist.dumpoptions -----

> ----- begin _optlist.dumpoptions -----
- version 9
- forval i = 1/`.options.arrnells' {
= forval i = 1/1 {
- local optlist `optlist' `.options['i']'
= local optlist CCluster
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist ``CCluster'''
- class exit ```optlist'''
= class exit ``CCluster'''

> ----- end _optlist.dumpoptions -----
= local OPTSPECS ``OIM OPG Robust CCluster'''
- local OPTNAMES ```.`0'.dumpnames' `.`A'.dumpnames'''

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arrnells' {
= forval i = 1/3 {
- local namelist `namelist' `.names['i']'
= local namelist oim
- }
- local namelist `namelist' `.names['i']'
= local namelist oim opg
- }
- local namelist `namelist' `.names['i']'
= local namelist oim opg robust
- }
- local namelist : list uniq namelist
- sreturn local namelist ```namelist'''
= sreturn local namelist ``oim opg robust'''

```



```

- class exit ``namelist'''
= class exit "oim opg robust"


---


> 

---

 end _optlist.dumpnames 

---




---


> 

---

 begin _optlist.dumpnames 

---


- version 9
- forval i = 1/`.names.arrnells' {
= forval i = 1/1 {
- local namelist `namelist' `.names[`i']'
= local namelist cluster
- }
- local namelist : list uniq namelist
- sreturn local namelist ``namelist'''
= sreturn local namelist "cluster"
- class exit ``namelist'''
= class exit "cluster"


---


> 

---

 end _optlist.dumpnames 

---


= local OPTNAMES "oim opg robust cluster"
- syntax [, `OPTSPECS']
= syntax [, OIM OPG Robust CLuster]
- foreach OPT of local OPTNAMES {
- if ````OPT'''' != "" {
= if ``'' != "" {
return local vce `OPT'
continue, break
}
- }
- if ````OPT'''' != "" {
= if ``'' != "" {
return local vce `OPT'
continue, break
}
- }
- if ````OPT'''' != "" {
= if "robust" != "" {
- return local vce `OPT'
= return local vce robust
- continue, break
}
}


---


> 

---

 end _vce_parse.ParseVCE 

---


- if c(rc) {
di as err "vcetype {bf:`name'} not allowed"

```

```

        exit 198
    }
    - local name `r(vce)'
    = local name robust
    - if "`weight'" == "pweight" & !`:list name in pwlist' {
    = if "" == "pweight" & !1 {
        di as err "pweights are not allowed with vce(`name')"
        exit 198
    }
    - return add
    - if ``"robust"' != "" & !inlist("`name'", "", "robust", "eim", "oi
> m", "cluster") {
    = if `"robust"' != "" & !inlist("robust", "", "robust", "eim", "oim"
> , "cluster") {
        opts_exclusive ``robust' vce(`name')"
    }
    - if "`name'" == "cluster" {
    = if "robust" == "cluster" {
        if ``"args"' == "" {
            di as err "invalid vce(cluster) option"
            exit 198
        }
        confirm var `args'
        unab args : `args'
        local markout `args'
        if "`cluster'" != "" {
            if !`:list args == cluster' {
                di as err "options cluster() and vce(cluster) are in conflict"
                exit 100
            }
        }
    }
    - else if "`cluster'" != "" & !inlist("`name'", "eim", "oim") {
    = else if "" != "" & !inlist("robust", "eim", "oim") {
        opts_exclusive "cluster() vce(`name')"
    }
    - if ``"args"' != "" {
    = if `""' != "" {
        if !`:list name in ARGOPTNAMES' {
            di as err "invalid vce() option"
            exit 198
        }
        if "`name'" == "hc2" {
            confirm var `args'
            unab args : `args'
            local markout `args'

```

```

    }
    return local vceargs ```:list retok args'''
  }
- else if `:list name in ARGOPTNAMES' {
= else if 0 {
  if ``noargopt_is_ok' == "" {
    di as err "invalid vce() option"
    exit 198
  }
}
- }
- else {
  if ``weight' == "pweight" | ``robust' != "" {
    local vce robust
  }
  if ``cluster' != "" {
    local vce cluster
    local args `cluster'
    local markout `cluster'
  }
  return local vce ``vce'''
  return local vceargs ``args'''
}
- if ``return(vce)' != "" {
= if "robust" != "" {
- if ``return(vceargs)''' != "" {
= if `''' != "" {
  local ss " "
}
- return local vceopt `"vce(`return(vce)''ss'`return(vceargs)')'"

> '

= return local vceopt `"vce(robust)'"
- }
- if ``return(vce)' == "cluster" {
= if "robust" == "cluster" {
  return local cluster `return(vceargs)'
}
- if inlist(`return(vce)', "robust", "cluster") {
= if inlist("robust", "robust", "cluster") {
- return local robust robust
- }
- if ``touse' != "" {
= if "" != "" {
  if ``markout' != "" {
    markout `touse' `markout', strok
  }
}

```

```

    }
}
> ----- end _vce_parse -----
- local vce `r(vce)'
= local vce robust
- }
- else if "`weight'" == "pweight" {
= else if "" == "pweight" {
    local vce robust
}
- if `:length local svy' {
= if 0 {
    local vce svy
}
- if ``"vce"' == "cluster" {
= if `"robust"' == "cluster" {
    local cluster `r(cluster)'
    markout $ML_sample `cluster', strok
}
- if `:length local group' {
= if 0 {
    markout $ML_sample `group', strok
    global ML_group : copy local group
    if bsubstr("`type `group'",1,3) == "str" {
        if `interactive' {
            SetGlobalVar ML_grp : _MLgr
        }
        else {
            global ML_grp : tempvar
            if ``"moptobj"' != "" {
                global ML_grp `moptobj'$ML_grp
            }
        }
        quietly egen $ML_grp = group(`group')
        if ! `:length local cluster' {
            local cluster : copy global ML_grp
        }
    }
    else {
        if ! `:length local cluster' {
            local cluster : copy global ML_group
        }
    }
}
- if "$ML_samp" != "$ML_sample" {
= if "__000006" != "__000006" {

```

```

        quietly replace $ML_samp = 0 if $ML_samp & $ML_sample == 0
    }
    - if `:length local vce' == 0 {
= if 6 == 0 {
    if ``technique''' == "bhhh" {
        local vce opg
    }
    else local vce oim
    }
    - if inlist("`vce'", "robust", "cluster") & bsubstr("`evaltype'",1
> ,1) == "d" {
= if inlist("robust", "robust", "cluster") & bsubstr("e2",1,1) ==
> "d" {
        local optname = cond("`svy'"=="" ,"vce(`vce')","svy")
        di as err "option `optname' is not allowed with evaltype `evalty
> pe'"
        exit 198
    }
    - if `:length local crittype' == 0 {
= if 0 == 0 {
    - if inlist("`vce'", "cluster", "robust", "svy") {
= if inlist("robust", "cluster", "robust", "svy") {
    - local crittype "log pseudolikelihood"
    - }
    - else local crittype "log likelihood"
    - }
    - global ML_waldtest `waldtest'
= global ML_waldtest -1
    - if `:length local svy' | `:length local weight' {
= if 0 | 0 {
        if `interactive' {
            SetGlobalVar ML_w : _MLw
        }
        else {
            global ML_w : tempvar
            if ``moptobj''' != "" {
                global ML_w `moptobj'$ML_w
            }
        }
    }
    - if `:length local weight' {
= if 0 {
        if ``moptobj''' != "" {
            cap drop $ML_w
        }
        quietly gen double $ML_w `exp' if $ML_samp

```

```

local wtype ``weight'''
local wexp ``exp'''
global ML_wtyp : copy local wtype
global ML_wexp : copy local wexp
if ``wtype' == "iweight" | ``svy' != "" {
  local zeroweight zeroweight
}
}
- if inlist("`vce'", "svy", "cluster") {
= if inlist("robust", "svy", "cluster") {
  if `interactive' {
    SetGlobalVar ML_subv : _MLsu
  }
  else {
    global ML_subv : tempvar
    if ``moptobj''' != "" {
      global ML_subv `moptobj'$ML_subv
    }
  }
}
- quietly count if $ML_sample
= quietly count if __000006
- if r(N) == 0 {
  error 2000
}
- if ``weight''' != "" {
= if `''' != "" {
  quietly count if $ML_sample & $ML_w != 0
  if r(N) == 0 {
    di in gr "all observation have zero weights"
    exit 2000
  }
}
- if `:length local lf0' {
= if 20 {
- if `:list sizeof lf0' != 2 {
= if 2 != 2 {
  di as err "lf0(`lf0') invalid"
  exit 198
}
- global ML_k0 : word 1 of `lf0'
= global ML_k0 : word 1 of 2 -322.2358665861632
- global ML_ll_0 : word 2 of `lf0'
= global ML_ll_0 : word 2 of 2 -322.2358665861632
- confirm integer number $ML_k0
= confirm integer number 2

```

```

- confirm number $ML_ll_0
= confirm number -322.2358665861632
- if $ML_k0 < 0 {
= if 2 < 0 {
  di as err "lf0(`lf0') invalid"
  exit 198
}
- }
- if "`obs'" == "" {
= if "" == "" {
- if "`wtype'" != "fweight" {
= if "" != "fweight" {
- quietly count if $ML_sample
= quietly count if __000006
- local obs = r(N)
- }
- else {
  sum $ML_w if $ML_sample, mean
  local obs = r(sum)
}
- }
- if `:length local iterid' {
= if 0 {
  local iterid = trim(bsubstr("`iterid'",1,32))
}
- if `:length local crittype' {
= if 20 {
- local crittype = trim(bsubstr("`crittype'",1,32))
= local crittype = trim(bsubstr("`log pseudolikelihood'",1,32))
- }
- if `:length local derivscale' {
= if 0 {
  confirm matrix `derivscale'
}
- if `:length local derivh' {
= if 0 {
  confirm matrix `derivh'
}
- local l : strlen local deriv
- ParseUsemin, `deriv' len(`l')
= ParseUsemin, len(0)

```

```

> ----- begin mopt.ParseUsemin -----
- syntax [, LEN(integer 0) MIN1(string) NOMIN MIN]
- if ``min1'' != "" & ``nomin'' != "" {
= if `'' != "" & `'' != "" {

```

```

    di as err "options min() and nomin are mutually exclusive"
    exit 198
  }
- if ``min'' != "" & ``nomin'' != "" {
= if ``'' != "" & ``'' != "" {
    di as err "options min and nomin are mutually exclusive"
    exit 198
  }
- if (``min1'' != "") {
= if (``'' != "") {
    confirm matrix `min1'
    local deriv `min1'
  }
- else if (``min'' != "") {
= else if (``'' != "") {
    if (`len' > length(``min'')) {
      di as err "must specify a matrix of 2 columns in option min()"
      exit 198
    }
    local deriv 1
  }
- else {
- if (`len' > 0) {
= if (0 > 0) {
    if (``nomin' == "") {
      di as err "must specify a matrix of 2 columns in option min()"
      exit 198
    }
    else if (`len' > length(``nomin'')) {
      di as err "options min() and nomin are mutually exclusive"
      exit 198
    }
    else {
      local deriv 0
    }
  }
- else {
- local deriv 0
- }
- }
- sreturn local deriv `deriv'
= sreturn local deriv 0

```

> _____ end mopt.ParseUsemin _____

```

- local deriv = s(deriv)
- if `:length local gnwmatrix' {

```



```

= if 0 {
  confirm matrix `gnwmatrix'
}
- `vv' mata: Mopt_model()
= version 18: mata: Mopt_model()

> ----- begin mopt_check_program -----
  - version 10
  - args name
  - capture confirm name `name'
  = capture confirm name nbreg_lf
  - if c(rc) {
    di as err "unrecognized command:  `name' invalid command name
> "
    exit 199
  }
  - capture which `name'
  = capture which nbreg_lf
  - if !c(rc) {
  - exit

> ----- end mopt_check_program -----
  - global ML_stat model
  - if !`interactive' {
  = if !0 {
  - `vv' MaxMin `maxmin', nooutput `score' `options' moptobj(`moptob
> j')
  = version 18: MaxMin maximize, nooutput  search(off) moptobj()

> ----- begin mopt.MaxMin -----
  - local vv : di "version " string(_caller()) ":"
  - version 12
  - ChkMacros

> ----- begin mopt.ChkMacros -----
  - if "$ML_stat" != "model" {
  = if "model" != "model" {
    di as err "you must issue -ml model- first"
    exit 198
  }
  - capture confirm var $ML_samp $ML_w $ML_subv
  = capture confirm var __000006 __000006
  - if c(rc) {
    di as err "Since issuing the -ml model- statement, you have
> done something to drop" _n "temporary variables ml added to your data. You
> must start again."

```

```

        Clear
        exit 111
    }
}

> ----- end mopt.ChkMacros -----
    - syntax name(name=maxmin) [, NEGH TOLerance(numlist max=1 >=0)
> LTOLerance(numlist max=1 >=0) NONRTOLerance NRTOLerance(numlist max=1 >=0) Q
> TOLerance(numlist max=1 >=0) GTOLerance(numlist max=1 >=0) ITERate(numlist m
> ax=1 >=0) NOTCONCAVE(numlist max=1 >=0) ndami DIFficult HALFSTEPonly DOOPT S
> EArch(name) Repeat(passthru) Bounds(string) SCore(string) noWARNing noCLEAR
> NOLOg LOg DOTs SHOWTOLerance SHOWNRtolerance SHOWSTEP TRace COEFDIffs GRADie
> nt HESSian noSKIpline noOUTput Level(cilevel) moptobj(string) * ]
    - if `:length local nrtolerance' {
= if 0 {
    opts_exclusive "nrtolerance() `nonrtolerance'"
}
    - if `:length local qtolerance' {
= if 0 {
    opts_exclusive "qtolerance() `nonrtolerance'"
}
    - opts_exclusive "`nonrtolerance' `shownrtolerance'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while `""`opts`"" != "" {
    = while `""` != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - if `:length local shownrtolerance' {
= if 0 {
    local showtolerance showtolerance
}
    - if "$ML_preserve" != "no" {
= if "no" != "no" {
    if `:length local score' {

```

```

        di as smcl as err "May not specify {bf:score()} option unless"
> _n "      a) estimation subsample is the entire data in memory, or" _n "
> _n "      b) you specify option {bf:nopreserve} on {bf:ml model} statement (meaning"
> _n "      your evaluation program explicitly restricts itself to obs" _n
> "      for which {bf:$}" "{bf:ML_samp==1}."
        exit 198
    }
    preserve
    local N = c(N)
    quietly keep if $ML_sample
    if (`N' != c(N)) {
        mata: Mopt_init_regetviews()
    }
}
- if `:length local score' {
= if 0 {
    SetupScore ``$ML_evaltype"' ``score'"' $ML_n $ML_dim
    local scores ``s(scores)'"
}
- _parse_iterlog, `nolog' `log'
= _parse_iterlog,


---


> 

---

 begin _parse_iterlog 

---


    - version 16
    - syntax [, NOLOG LOG]
    - if ``log'`nolog'" != "" {
= if "" != "" {
    opts_exclusive ``log' `nolog'"
    }
    - else if ``c(iterlog)'" == "on" {
= else if "on" == "on" {
    - local log log
    - }
    - else {
        local nolog nolog
    }
    - sreturn local log `log'
= sreturn local log log
    - sreturn local nolog `nolog'
= sreturn local nolog


---


> 

---

 end _parse_iterlog 

---


    - local log ``s(nolog)'"
= local log ""
    - local tropts `log' `dots' `showtolerance' `showstep' `trace' `
> coefdiffs'

```

```

= local tropts
- if "`tropts'" != "nolog" {
= if "" != "nolog" {
- local tropts `tropts' `gradient' `hessian'
= local tropts
- if "`skipline'" == "" {
= if "" == "" {
- if "`iterate'" != "0" | `:length local tropts' {
= if "" != "0" | 0 {
- di

- }
- }
- }
- else {
  local gradient
  local hessian
  local nolog nolog
  }
- if "`search'" != "off" & "`iterate'" != "0" {
= if "off" != "off" & "" != "0" {
  if "`search'" == "quietly" {
    local sopts nolog
  }
  else {
    if `:length local tropts' {
      if "`tropts'" != "nolog" {
        local sopts trace
      }
    }
    else local sopts nolog
  }
  if "`search'" == "norescale" {
    local sopts `sopts' norescale
  }
  Search `bounds', nopreserve `sopts' `repeat' `maxmin'
}
- tempname value b V iV
- `vv' mata: Mopt_maxmin()
= version 18: mata: Mopt_maxmin()

```

> begin nbreg_lf

```

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m

```

```

- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 2 == 0 | __00000P==. { exit }
- tempname alpha
- tempvar mu p
- quietly {
- gen double `mu' = exp(`xb') if $ML_samp
= gen double __00000Z = exp(__00000V) if __000006
- gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
= gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06

- if `lnalpha'<-20 {
= if __00000W<-20 {
    replace `sc1' = `y'-`mu' if $ML_samp
    replace `sc2' = 0 if $ML_samp
  }
- else {
    - replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006

- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
= replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006

- }
- }
- $ML_ec tempname g1 g2

```

```

= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000P = __00000S, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000P = __00000T, eq(2)
- $ML_ec matrix `g' = (`g1', `g2')
= * matrix __00000Q = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000P==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __000011 = exp(__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
  mpmatsum `lnf' `d11' = `mu', eq(1)
  mpmatsum `lnf' `d12' = 0, eq(1,2)
  mpmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mpmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
= mpmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
- mpmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mpmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)
- mpmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p'*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
= mpmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)
- }
- matrix `H' = (`d11', `d12' \ `d12'', `d22')
= matrix __00000R = (__000012, __000013 \ __000013', __000014)

> _____ end nbreg_lf _____
Iteration 0: Log pseudolikelihood = -290.88216

> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m

```

```

- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 0 == 0 | __00000P==. { exit }
}

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)

```

```

> ) - piq_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 0 == 0 | __00000P==. { exit }
    _____
> _____ end nbreg_lf _____
    _____
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000V = __000000, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000W = __000000, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000X = exp(-__00000W)
    - if `lnalpha' < -20 {
    = if __00000W < -20 {
        mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piq_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 2 == 0 | __00000P==. { exit }
    - tempname alpha
    - tempvar mu p
    - quietly {
    - gen double `mu' = exp(`xb') if $ML_samp
    = gen double __00000Z = exp(__00000V) if __000006
    - gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
    = gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06
    - if `lnalpha'<-20 {
    = if __00000W<-20 {
        replace `sc1' = `y'-`mu' if $ML_samp
        replace `sc2' = 0 if $ML_samp
    }

```



```

- else {
- replace `sc1' = `p'*(`y'-'mu') if $ML_samp
= replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006
- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-'mu') if $ML_samp
= replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006
- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000P = __00000S, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000P = __00000T, eq(2)
- $ML_ec matrix `g' = (`g1',`g2')
= * matrix __00000Q = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000P==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __000011 = exp(__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
mlmatsum `lnf' `d11' = `mu', eq(1)
mlmatsum `lnf' `d12' = 0, eq(1,2)
mlmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mlmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-'mu')+1),
> eq(1)
= mlmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
- mlmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-'mu'), eq(1,2
> )
= mlmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)
- mlmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m')
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')))) + `mu'*`p'*(`alpha'*`p'
> *(`y'-'mu')- 1), eq(2)
= mlmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)

```

```

- }
- matrix `H' = (`d11', `d12' \ `d12'', `d22')
= matrix __00000R = (__000012, __000013 \ __000013', __000014)


---


> 

---

 end nbreg_lf 

---


Iteration 1: Log pseudolikelihood = -272.16074


---


> 

---

 begin nbreg_lf 

---


- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
mlsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
- mlsum `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
= mlsum __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }


---


> 

---

 end nbreg_lf 

---




---


> 

---

 begin nbreg_lf 

---


- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"

```

```

= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }
}
}

> ----- end nbreg_lf -----
}
}

> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }
}
}

```

```

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000V = __000000, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000W = __000000, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000X = exp(-__00000W)
    - if `lnalpha' < -20 {
    = if __00000W < -20 {
        mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 2 == 0 | __00000P==. { exit }
    - tempname alpha
    - tempvar mu p
    - quietly {
    - gen double `mu' = exp(`xb') if $ML_samp
    = gen double __00000Z = exp(__00000V) if __000006
    - gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
    = gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06
    - if `lnalpha'<-20 {
    = if __00000W<-20 {
        replace `sc1' = `y'-`mu' if $ML_samp
        replace `sc2' = 0 if $ML_samp
    }
    - else {
    - replace `sc1' = `p'*(`y'-`mu') if $ML_samp
    = replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006
    - replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p

```

```

> ')) + `p*(`y'-`mu') if $ML_samp
      = replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006
      - }
      - }
      - $ML_ec tempname g1 g2
      = * tempname g1 g2
      - $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
      = * mlvecsum __00000P = __00000S, eq(1)
      - $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
      = * mlvecsum __00000P = __00000T, eq(2)
      - $ML_ec matrix `g' = (`g1', `g2')
      = * matrix __00000Q = (,)
      - if `todo' == 1 | `lnf'==. { exit }
      = if 2 == 1 | __00000P==. { exit }
      - tempname alpha d11 d12 d22
      - scalar `alpha' = exp(`lnalpha')
      = scalar __000011 = exp(__00000W)
      - if `lnalpha' < -20 {
      = if __00000W < -20 {
        mmatsum `lnf' `d11' = `mu', eq(1)
        mmatsum `lnf' `d12' = 0, eq(1,2)
        mmatsum `lnf' `d22' = 0, eq(2)
      }
      - else {
      - mmatsum `lnf' `d11' = `mu'*`p*(`alpha'*`p*(`y'-`mu')+1),
> eq(1)
      = mmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 000010*(piq_timing_max-__00000Z)+1), eq(1)
      - mmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
      = mmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)
      - mmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
      = mmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)
      - }
      - matrix `H' = (`d11', `d12' \ `d12'', `d22')
      = matrix __00000R = (__000012, __000013 \ __000013', __000014)
      _____
> _____ end nbreg_lf _____

```

Iteration 2: Log pseudolikelihood = **-268.71412**

```
> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lgamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lgamma(`m'+`y') - lgamma(`y'+1) - lgamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lgamma(__00000X+piq_timing_max) - lgamma(
> piqu_timing_max+1) - lgamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }

> ----- end nbreg_lf -----

> ----- begin nbreg_lf -----
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
```

```

        mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
        = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piq_timing_max*ln1p(exp(-__00000V-__00000W))
        - }
        - if `todo' == 0 | `lnf'==. { exit }
        = if 0 == 0 | __00000P==. { exit }
    }
}
> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piq_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
    - if `todo' == 0 | `lnf'==. { exit }
    = if 2 == 0 | __00000P==. { exit }
    - tempname alpha
    - tempvar mu p
    - quietly {
    - gen double `mu' = exp(`xb') if $ML_samp
    = gen double __00000Z = exp(__00000V) if __000006
    - gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp

```

```

= gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06
- if `lnalpha'<-20 {
= if __00000W<-20 {
  replace `sc1' = `y'-`mu' if $ML_samp
  replace `sc2' = 0 if $ML_samp
}
- else {
- replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006
- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
= replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006
- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000P = __00000S, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000P = __00000T, eq(2)
- $ML_ec matrix `g' = (`g1',`g2')
= * matrix __00000Q = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000P==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __000011 = exp(__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
  mlmatsum `lnf' `d11' = `mu', eq(1)
  mlmatsum `lnf' `d12' = 0, eq(1,2)
  mlmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mlmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
= mlmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
- mlmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mlmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)

```



```

- mllmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
= mllmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)
- }
- matrix `H' = (`d11',`d12' \ `d12'',`d22')
= matrix __00000R = (__000012,__000013 \ __000013',__000014)
_____
> _____ end nbreg_lf _____
Iteration 3: Log pseudolikelihood = -268.48351
_____
> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
mllsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
- mllsum `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
= mllsum __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piq_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piq_timing_max*ln1p(exp(-__00000V-__00000W))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }
_____
> _____ end nbreg_lf _____
_____
> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2

```

```

- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }
}

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))

```

```

= mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 2 == 0 | __00000P==. { exit }
- tempname alpha
- tempvar mu p
- quietly {
- gen double `mu' = exp(`xb') if $ML_samp
= gen double __00000Z = exp(__00000V) if __000006
- gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
= gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06
- if `lnalpha'<-20 {
= if __00000W<-20 {
replace `sc1' = `y'-`mu' if $ML_samp
replace `sc2' = 0 if $ML_samp
}
- else {
- replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006
- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
= replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006
- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000P = __00000S, eq(1)
- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000P = __00000T, eq(2)
- $ML_ec matrix `g' = (`g1', `g2')
= * matrix __00000Q = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000P==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __000011 = exp(__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
mlmatsum `lnf' `d11' = `mu', eq(1)

```

```

        mllmatsum `lnf' `d12' = 0, eq(1,2)
        mllmatsum `lnf' `d22' = 0, eq(2)
    }
    - else {
    - mllmatsum `lnf' `d11' = `mu'*`p*(`alpha'*`p*(`y'-`mu')+1),
> eq(1)
        = mllmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
        - mllmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
        = mllmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)
        - mllmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
        = mllmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)
        - }
        - matrix `H' = (`d11', `d12' \ `d12'', `d22')
        = matrix __00000R = (__000012, __000013 \ __000013', __000014)
    }
> ----- end nbreg_lf -----
Iteration 4:  Log pseudolikelihood = -268.48258
> ----- begin nbreg_lf -----
    - version 6.0
    - args todo b lnf g H sc1 sc2
    - tempvar xb
    - tempname lnalpha m
    - mlevel `xb' = `b', eq(1)
    = mlevel __00000V = __000000, eq(1)
    - mlevel `lnalpha' = `b', eq(2) scalar
    = mlevel __00000W = __000000, eq(2) scalar
    - local y "$ML_y1"
    = local y "piq_timing_max"
    - scalar `m' = exp(-`lnalpha')
    = scalar __00000X = exp(-__00000W)
    - if `lnalpha' < -20 {
    = if __00000W < -20 {
        mllsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
    }
    - else {
        - mllsum `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))

```

```

= mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
mlsum `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
- mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
= mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
- }
- if `todo' == 0 | `lnf'==. { exit }
= if 0 == 0 | __00000P==. { exit }

> _____ end nbreg_lf _____
> _____ begin nbreg_lf _____

- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalpha m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalpha' = `b', eq(2) scalar

```

```

= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalpha')
= scalar __00000X = exp(-__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mlsun `lnf' = -lngamma(`y'+1) - exp(`xb') + `y'*`xb'
  }
- else {
    - mlsun `lnf' = lngamma(`m'+`y') - lngamma(`y'+1) - lngamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalpha')) - `y'*ln1p(exp(-`xb'-`lnalpha'))
    = mlsun __00000P = lngamma(__00000X+piq_timing_max) - lngamma(
> piqu_timing_max+1) - lngamma(__00000X) - __00000X*ln1p(exp(__00000V+__00000W)
> ) - piqu_timing_max*ln1p(exp(-__00000V-__00000W))
    - }
- if `todo' == 0 | `lnf'==. { exit }
= if 2 == 0 | __00000P==. { exit }
- tempname alpha
- tempvar mu p
- quietly {
- gen double `mu' = exp(`xb') if $ML_samp
= gen double __00000Z = exp(__00000V) if __000006
- gen double `p' = 1/(1+exp(`xb'+`lnalpha')) if $ML_samp
= gen double __000010 = 1/(1+exp(__00000V+__00000W)) if __0000
> 06

- if `lnalpha'<-20 {
= if __00000W<-20 {
    replace `sc1' = `y'-`mu' if $ML_samp
    replace `sc2' = 0 if $ML_samp
  }
- else {
- replace `sc1' = `p'*(`y'-`mu') if $ML_samp
= replace __00000S = __000010*(piq_timing_max-__00000Z) if __0
> 00006

- replace `sc2' = `m'*(digamma(`m') - digamma(`y'+`m') - ln(`p
> ')) + `p'*(`y'-`mu') if $ML_samp
= replace __00000T = __00000X*(digamma(__00000X) - digamma(piq
> _timing_max+__00000X) - ln(__000010)) + __000010*(piq_timing_max-__00000Z) i
> f __000006

- }
- }
- $ML_ec tempname g1 g2
= * tempname g1 g2
- $ML_ec mlvecsum `lnf' `g1' = `sc1', eq(1)
= * mlvecsum __00000P = __00000S, eq(1)

```

```

- $ML_ec mlvecsum `lnf' `g2' = `sc2', eq(2)
= * mlvecsum __00000P = __00000T, eq(2)
- $ML_ec matrix `g' = (`g1', `g2')
= * matrix __00000Q = (,)
- if `todo' == 1 | `lnf'==. { exit }
= if 2 == 1 | __00000P==. { exit }
- tempname alpha d11 d12 d22
- scalar `alpha' = exp(`lnalpha')
= scalar __000011 = exp(__00000W)
- if `lnalpha' < -20 {
= if __00000W < -20 {
    mmatsum `lnf' `d11' = `mu', eq(1)
    mmatsum `lnf' `d12' = 0, eq(1,2)
    mmatsum `lnf' `d22' = 0, eq(2)
}
- else {
- mmatsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
    = mmatsum __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
    - mmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
    = mmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), eq(1,2)
    - mmatsum `lnf' `d22' = `m'*(digamma(`m') - digamma(`y'+`m'))
> - ln(`p') - `m'*(trigamma(`y'+`m') - trigamma(`m')) + `mu'*`p'*(`alpha'*`p'
> *(`y'-`mu')- 1), eq(2)
    = mmatsum __00000P __000014 = __00000X*(digamma(__00000X) - d
> igamma(piq_timing_max+__00000X) - ln(__000010) - __00000X*(trigamma(piq_timi
> ng_max+__00000X) - trigamma(__00000X))) + __00000Z*__000010*(__000011*__0000
> 10*(piq_timing_max-__00000Z)- 1), eq(2)
    - }
    - matrix `H' = (`d11', `d12' \ `d12'', `d22')
    = matrix __00000R = (__000012, __000013 \ __000013', __000014)

> _____ end nbreg_lf _____
Iteration 5: Log pseudolikelihood = -268.48258
> _____ begin mopt_post _____
- args b V C wgt touse depvar
- if `:length local touse' {
= if 8 {
- tempname esamp
- quietly gen byte `esamp' = `touse'
= quietly gen byte __00000Y = __000006
- }

```

```

- ereturn post `b' `V' `C' `wgt', esample(`esamp') depname(`de
> pvar') buildfvinfo
- ereturn post __00000V __00000W __00000X [], esample(__00000Y
> ) depname(piq_timing_max) buildfvinfo


---


> 

---

 end mopt_post 

---


- ereturn scalar k_eq_model = abs($ML_waldtest)
= ereturn scalar k_eq_model = abs(-1)
- if `:length global ML_ll_0' {
= if 18 {
- ereturn scalar ll_0 = $ML_ll_0
= ereturn scalar ll_0 = -322.2358665861632
- if `:length global ML_rank0' {
= if 1 {
- ereturn scalar rank0 = $ML_rank0
= ereturn scalar rank0 = 2
- ereturn scalar df_m = e(rank) - $ML_rank0
= ereturn scalar df_m = e(rank) - 2
- }
- else ereturn scalar df_m = e(rank) - $ML_k0
= else ereturn scalar df_m = e(rank) - 2
- }
- if !`:length global ML_ll_0' | inlist(e(vce), "robust", "clust
> er", "linearized") {
= if !18 | inlist(e(vce), "robust", "cluster", "linearized") {
- if "$ML_svy" == "" {
= if "" == "" {
- _prefix_model_test, minimum


---


> 

---

 begin _prefix_model_test 

---


- version 9
- syntax [name(name=cmd)] [, svy noADJust noSVYadjust MINimum
> ]
- if (inlist("`cmd'", "asmixlogit", "cmmixlogit", "cmxtmixlogit"))
> ) {
= if (inlist("", "asmixlogit", "cmmixlogit", "cmxtmixlogit")) {
_asmixtest, `svy' `adjust' `svyadjust'
exit
}
- local K = 1
- if "`e(k_eq_model)'" != "" {
= if "1" != "" {
- capture confirm integer number `e(k_eq_model)'
= capture confirm integer number 1
- if ! c(rc) {
- local K = e(k_eq_model)

```



```

- }
- }
- if "`e(k_eq_model_skip)'" != "" {
= if "" != "" {
    capture confirm integer number `e(k_eq_model_skip)'
    if ! c(rc) {
        local skip = e(k_eq_model_skip)
    }
}
- ereturn local df_m
- ereturn local F
- ereturn local chi2
- ereturn local chi2type
- ereturn local p
- if (`K' == 0) {
= if (1 == 0) {
    exit
}
- forval i = 1/`K' {
= forval i = 1/1 {
- if !`:list i in skip' {
= if !0 {
- local spec "`spec' ([#`i'])"
= local spec " ([#1])"
- }
- }
- tempname cns omit
- capture matrix `cns' = get(Cns)
= capture matrix __00000Y = get(Cns)
- if (c(rc)) local cns
- if "`cns'" != "" {
= if "__00000Y" != "" {
- local k_autoCns = e(k_autoCns)
- if missing(`k_autoCns') {
= if missing(1) {
    local k_autoCns 0
}
- if rowsof(`cns') == `k_autoCns' {
= if rowsof(__00000Y) == 1 {
- local cns
- }
- }
- if "`svy'" != "" & "`adjust'`svyadjust'" != "" {
= if "" != "" & "" != "" {
    local adjust nosvyadjust
}

```

```

- else local adjust
- _ms_omit_info e(b), nocons
- matrix `omit' = r(omit)
= matrix __00000Z = r(omit)
- capture test `spec', `adjust'
= capture test ([#1]),

> ----- begin test -----
- if "`e(cmd)'" == "anova" | "`e(cmd)'" == "manova" {
= if "mopt" == "anova" | "mopt" == "manova" {
  AnovaTestChooser `0'
  return add
  exit
}
- if "`e(cmd)'" == "mixed" {
= if "mopt" == "mixed" {
  MixedTestChooser `0'
  return add
  exit
}
- if _caller() < 8 {
  _test `0'
  return add
  exit
}
- is_svy

> ----- begin is_svy -----
- version 8
- syntax [, Regression]
- if `"'e(prefix)'"' == "svy" {
= if `""' == "svy" {
  return scalar is_svy = 1
}
- else if "`regression'" == "" {
= else if "" == "" {
- return scalar is_svy = ("`e(N_psu)'" != "")
= return scalar is_svy = (" != ")
- }
- else {
  capt mat list e(b)
  local rc = _rc
  return scalar is_svy = ("`e(N_psu)'" != "") & (`rc' == 0

> )

}

```

```

> ----- end is_svy -----
- local is_svy = r(is_svy)
- if replay() & `is_svy' == 0 {
= if replay() & 0 == 0 {
  _test `0'
  return add
  exit
}
- version 8
- WaldTest `is_svy' `0'
= WaldTest 0 ([#1]),

> ----- begin test.WaldTest -----
- gettoken is_svy 0 : 0
- if ``is_svy' == "1" {
= if "0" == "1" {
  if ``e(complete)' == "available" {
    di as err ``must run svy command with "complete" "' "opt
> ion before using this command"
    exit 301
  }
}
- gettoken tok : 0, parse(" (,) bind
- local single single
- local zero ``0'
= local zero `` ([#1]), "'
- if ``tok' == "(" {
= if ``('' == "(" {
- local single
- while ``tok' == "(" {
= while ``('' == "(" {
- gettoken tok 0 : 0, parse(" (,) match(paren) bind
- local eqns ``eqns' ``tok'
= local eqns `` ``[#1]'
- gettoken tok : 0, parse(" (,) bind
- }
- while ``tok' == "(" {
= while ``",'' == "(" {
  gettoken tok 0 : 0, parse(" (,) match(paren) bind
  local eqns ``eqns' ``tok'
  gettoken tok : 0, parse(" (,) bind
}
- if ``tok' != "," & ``tok' != "" {
= if ``",'' != "," & ``",'' != "" {
  local single single
}

```

```

- }
- if "`single'"=="single" {
= if ""=="single" {
  local eqns
  local 0 ``zero'''
  while ``tok''' != "" & ``tok''' != "," {
    gettoken tok 0 : 0, parse(" ,") bind
    local eqns ``eqns' `tok'''
    gettoken tok : 0, parse(" ,") bind
  }
  local eqns ``eqns'eqns''''
}
- syntax [, Accumulate noSVYadjust common CONStant MINimum
> Mtest Mtest2(passthru) noTest COEF matvlg(passthru) DF(numlist max=1 >0) ]
- if "`df'" != "" {
= if "" != "" {
  local dof = `df'
}
- else if "`e(df_r)'" != "" {
= else if "" != "" {
  local dof = e(df_r)
}
- else {
- local dof = .
- }
- if ``mtest'`mtest2''' != "" {
= if `''' != "" {
  if inlist("`e(cmd)'", "svymean", "svytotal", "svyratio")

> {

  di as err ``mtest option not allowed after `e(cmd)'''
  exit 301
}
  _mtest syntax, `mtest' `mtest2'
  local mtmethod `r(method)'
}
- if "`mtmethod'" != "" {
= if "" != "" {
  if "`test'" != "" {
    di as err "options mtest and notest may not be combined"
    exit 198
  }
  if "`accumulate'" != "" {
    di as err "options mtest and accumulate may not be combi

> ned"

  exit 198
}

```

```

    }
- if `is_svy' {
= if 0 {
    if ``e(cmd)''' == "margins" {
    local vce ``e(model_vce)'''
    }
    else local vce ``e(vce)'''
    if inlist(```vce'''', "bootstrap", "sdr") {
    if missing(`dof') {
    local svyadjust nosvyadjust
    }
    }
    }
- if !`is_svy' & ``svyadjust' != "" {
= if !0 & "" != "" {
    di as err "option nosvyadjust is allowed only with svy d
> ata"

    exit 198
    }
- local svy_adjust = `is_svy' & ``svyadjust' == ""
= local svy_adjust = 0 & "" == ""
- if `svy_adjust' & missing(`dof') & (missing(e(N_psu)) |
> missing(e(N_strata))) {
= if 0 & missing(.) & (missing(e(N_psu)) | missing(e(N_str
> ata))) {

    di as err "impossible to adjust p-values"
    exit 198
    }
- if `is_svy' & ``test''' == "" {
= if 0 & ``''' == "" {
    if ``svyadjust' == "" {
    di _n as txt "Adjusted Wald test"
    }
    else di _n as txt "Unadjusted Wald test"
    }
- local tmp : subinstr local eqns "==" "", all count(loca
> l nch)

- if `nch' > 0 {
= if 0 > 0 {
    di as err "==" invalid operator"
    exit 198
    }
- local eqns : subinstr local eqns "==" "=", all
- ExpandExpns ``eqns''' ``common' ``constant'
= ExpandExpns ``#[#1]''' "" ""

```

```

> ----- begin test.ExpandExpns -----
    - args expns common constant
    - gettoken exp expns : expns
    - while ``exp'' != "" {
= while ``[#1]'' != "" {
    - Expand ``exp'' ``common'' ``constant''
= Expand ``[#1]'' "" ""

> ----- begin test.Expand -----
    - args exp common constant
    - local junk : substr local exp "=" "=", count(local
> nch) all
    - if `nch' <= 1 {
= if 0 <= 1 {
    - return local explist ``exp''
= return local explist ``[#1]''
    - return local nexp 1
    - exit

> ----- end test.Expand -----
    - local explist ``explist' `r(explist)''
= local explist ``[#1]''
    - local nexp = `nexp' + `r(nexp)'
= local nexp =  + 1
    - gettoken exp expns : expns
    - }
    - while ``exp'' != "" {
= while ``'' != "" {
        Expand ``exp'' ``common'' ``constant''
        local explist ``explist' `r(explist)''
        local nexp = `nexp' + `r(nexp)'
        gettoken exp expns : expns
    }
    - return local explist ``explist''
= return local explist ``[#1]''
    - return local nexp `nexp'
= return local nexp 1

> ----- end test.ExpandExpns -----
    - local explist ``r(explist)''
= local explist ``[#1]''
    - local nexp `r(nexp)'
= local nexp 1
    - local acc `accumulate'
= local acc
    - foreach exp of local explist {

```

```

- quietly _test `exp' , `acc' `common' `constant' notest
= quietly _test [#1] , notest
- local acc acc
- }
- if "`test'" == "notest" {
= if "" == "notest" {
    _test , notest
    exit
    }
- quietly _test , `matvlc'
= quietly _test ,
- if `dof' < . {
= if . < . {
    local testtype F
    tempname F df1 df2 p drop
    if "`r(F)'" != "" {
        scalar `F' = r(F)
    }
    else {
        scalar `F' = r(chi2)/r(df)
    }
    scalar `df1' = r(df)
    scalar `df2' = `dof'
    scalar `p' = Ftail(`df1', `df2', `F')
    scalar `drop' = r(drop)
    }
- else {
- local testtype chi2
- tempname chi2 df1 p drop
- scalar `chi2' = r(chi2)
= scalar __000010 = r(chi2)
- scalar `df1' = r(df)
= scalar __000011 = r(df)
- scalar `p' = r(p)
= scalar __000012 = r(p)
- scalar `drop' = r(drop)
= scalar __000013 = r(drop)
- }
- local i 1
- while "`r(dropped_`i')'" != "" {
= while "5" != "" {
- local dropped_`i' `r(dropped_`i')'
= local dropped_1 5
- local ++i
- }
- while "`r(dropped_`i')'" != "" {

```

```

= while "" != "" {
    local dropped_`i' `r(dropped_`i')'
    local ++i
}
- if `svy_adjust' {
= if 0 {
    if "`df'" != "" {
        local svy_d = `df'
    }
    else if !missing(e(df_r)) {
        local svy_d = e(df_r)
    }
    else local svy_d = e(N_psu)-e(N_strata)
    if missing(`svy_d') {
        di as err "internal error in adjustment for svy"
        exit 10001
    }
    if "`testtype'" == "F" {
        scalar `F' = ((`svy_d'-`df1'+1)/`svy_d') * `F'
    }
    else {
        tempname F df2
        scalar `F' = ((`svy_d'-`df1'+1)/(`svy_d'*`df1')) * `chi2

> '

    }
    scalar `df2' = `svy_d' - `df1' + 1
    if `df2' < 0 {
        scalar `F' = .
    }
    scalar `p' = Ftail(`df1', `df2', `F')
    local testtype F
}
- if "`mtmethod'" != "" {
= if "" != "" {
    tempname R r Rr V b VR tm Wald
    mat `V' = e(V)
    mat `b' = e(b)
    mat `Rr' = get(Rr)
    local nb = rowsof(`V')
    local nr = rowsof(`Rr')
    mat `R' = `Rr'[1...,1..`nb']
    mat `VR' = `R'*`V'*`R''
    mat `r' = `R'*`b'' - `Rr'[1...,`=nb'+1']
    mat `Wald' = `r'*syminv(`VR')*`r'
    mat `tm' = J(`nr', 3, .)
    mat colnames `tm' = `testtype' df p

```



```

forvalues it = 1 / `nr' {
  mat `Wald' = `r'[`it',1]^2 / `VR'[`it',`it']
  mat `tm'[`it',1] = `Wald'[1,1]
  mat `tm'[`it',2] = 1
  if `svy_adjust' {
    mat `tm'[`it',3] = Ftail(1,`svy_d',`tm'[`it',1])
  }
  else if "`testtype'" == "chi2" {
    mat `tm'[`it',3] = chi2tail(1,`tm'[`it',1])
  }
  else {
    mat `tm'[`it',3] = Ftail(1,`df2',`tm'[`it',1])
  }
}
if "`mtmethod'" != "noadjust" {
  _mtest adjust `tm', mtest(`mtmethod') pindex(3) append
  mat `tm' = r(result)
  local pindex 4
}
else local pindex 3
}
- _test, notest
- local i 1
- while "`dropped_`i'" != "" {
= while "5" != "" {
- di as txt "          Constraint `dropped_`i' dropped"
= di as txt "          Constraint 5 dropped"
- local ++i
- }
- while "`dropped_`i'" != "" {
= while "" != "" {
  di as txt "          Constraint `dropped_`i' dropped"
  local ++i
}
- if "`mtmethod'" == "" {
= if "" == "" {
- di
- if "`testtype'" == "chi2" {
= if "chi2" == "chi2" {
- di as txt _col(12) "chi2(" %3.0f `df1' ") =" as res %8.2
> f `chi2'
= di as txt _col(12) "chi2(" %3.0f __000011 ") =" as res %
> 8.2f __000010
- di as txt _col(10) "Prob > chi2 = " as res %8.4f `p'
= di as txt _col(10) "Prob > chi2 = " as res %8.4f __0000
> 12

```

```

- }
- else {
  di as txt "          F(" %3.0f `df1' ", " %6.0f `df2' ") ="
> as res %8.2f `F'
    di as txt _col(13) "Prob > F =" as res %10.4f `p'
    }
- }
- else {
  local nexpt = rowsof(`tm')
  local ncol = colsof(`tm')
  if "`testtype'" == "F" {
    local d "F(df,`= `df2'')"
    local dip "p > F"
  }
  else {
    local d chi2
    local dip "p > chi2"
  }
  di
  di as txt "{hline 7}{c TT}{hline 30}"
  di as txt "          {c |}{ralign 12:`d'}          df{ralign 11:
> `dip'}"
    di as txt "{hline 7}{c +}{hline 30}"
    forvalues it = 1 / `nexpt' {
      di as txt "    (`it') {c |}" as res _col(12) %9.2f `tm'['`
> it',1] _col(22) %6.0f `tm'['`it',2] _col(33) %6.4f `tm'['`it',`pindex'] as txt
> "*"
    }
    di as txt "{hline 7}{c +}{hline 30}"
    di as txt "    All {c |}" as res _col(12) %9.2f ``testtyp
> e'' _col(22) %6.0f `df1' _col(33) %6.4f `p'
    di as txt "{hline 7}{c BT}{hline 30}"
    _mtest footer 1 "`mtmethod'" "*"
  }
- if "`coef'" != "" {
= if "" != "" {
  Table
}
- return scalar p = `p'
= return scalar p = __000012
- return scalar df = `df1'
= return scalar df = __000011
- if "`testtype'" == "F" {
= if "chi2" == "F" {
  return scalar F = `F'
  return scalar df_r = `df2'

```

```

    }
    - else return scalar chi2 = `chi2'
= else return scalar chi2 = __000010
    - return scalar drop = `drop'
= return scalar drop = __000013
    - local i 1
    - while "`dropped_`i'" != "" {
= while "5" != "" {
    - return scalar dropped_`i' = `dropped_`i''
= return scalar dropped_1 = 5
    - local ++i
    - }
    - while "`dropped_`i'" != "" {
= while "" != "" {
        return scalar dropped_`i' = `dropped_`i''
        local ++i
    }
    - if "`mtmethod'" != "" {
= if "" != "" {
        return matrix mtest `tm'
        return local mtmethod `mtmethod'
    }
}

> ----- end test.WaldTest -----
    - return add

> ----- end test -----
    - if !c(rc) {
    - if `:length local minimum' {
= if 7 {
    - quietly test, min

> ----- begin test -----
    - if "`e(cmd)'" == "anova" | "`e(cmd)'" == "manova" {
= if "mopt" == "anova" | "mopt" == "manova" {
        AnovaTestChooser `0'
        return add
        exit
    }
    - if "`e(cmd)'" == "mixed" {
= if "mopt" == "mixed" {
        MixedTestChooser `0'
        return add
        exit
    }
    - if _caller() < 8 {

```

```

        _test `0'
        return add
        exit
    }
- is_svy

```

```

> ----- begin is_svy -----
    - version 8
    - syntax [, Regression]
    - if ``e(prefix)'' == "svy" {
= if `""' == "svy" {
        return scalar is_svy = 1
    }
    - else if ""regression"" == "" {
= else if "" == "" {
    - return scalar is_svy = ("`e(N_psu)'" != "")
= return scalar is_svy = (""" != "")
    - }
    - else {
        capt mat list e(b)
        local rc = _rc
        return scalar is_svy = ("`e(N_psu)'" != "") & (`rc' == 0
> )
    }

```

```

> ----- end is_svy -----
    - local is_svy = r(is_svy)
    - if replay() & `is_svy' == 0 {
= if replay() & 0 == 0 {
    - _test `0'
= _test , min
    - return add
    - exit

```

```

> ----- end test -----
    - }
    - ereturn scalar df_m = r(df)
    - local drop = r(drop)
    - if `drop' {
= if 1 {
    - local drop 0
    - local i 1
    - local idrop ``r(dropped_`i')'''
= local idrop ``5'''
    - while ""idrop"" != "" {
= while "5" != "" {

```

```

- if !`omit'[1,`idrop'] {
= if !__00000Z[1,5] {
    local ++drop
  }
- local ++i
- local idrop ``r(dropped_`i')''''
= local idrop `''''
- }
- while ``idrop' != "" {
= while "" != "" {
    if !`omit'[1,`idrop'] {
      local ++drop
    }
    local ++i
    local idrop ``r(dropped_`i')''''
  }
- }
- if `drop' == 0 | ``cns' != "" {
= if 0 == 0 | "" != "" {
- if !missing(e(df_r)) {
  ereturn scalar F = r(F)
}
- else {
- ereturn scalar chi2 = r(chi2)
- ereturn local chi2type Wald
- }
- ereturn scalar p = r(p)
- }
- else {
  if !missing(e(df_r)) {
    ereturn scalar F = .
  }
  else {
    ereturn scalar chi2 = .
    ereturn local chi2type Wald
  }
  ereturn scalar p = .
}
- }
- else {
  if missing(e(df_r)) {
    ereturn local chi2type Wald
  }
  ereturn scalar df_m = 0
}

```

```

> ----- end _prefix_model_test -----
- }
- else {
  _prefix_model_test, $ML_svy $ML_noadj
}
- }
- else if `:length global ML_ll_0' {
= else if 18 {
  if ``maxmin''' == "minimize" {
    ereturn scalar chi2 = -2*(e(ll)-e(ll_0))
  }
  else {
    ereturn scalar chi2 = 2*(e(ll)-e(ll_0))
  }
  ereturn scalar p = chi2tail(e(df_m), e(chi2))
  ereturn local chi2type "LR"
}
- if `:length global ML_wexp' {
= if 0 {
  ereturn local wtype ``$ML_wtyp''
  ereturn local wexp ``$ML_wexp''
}
- if `:length global ML_group' {
= if 0 {
  ereturn local group ``$ML_group''
  if ``e(clustvar)''' == "$ML_grp" & "$ML_grp" != "" {
    ereturn local clustvar ``$ML_group''
  }
}
- ereturn local cmd "ml"
- if `:length local score' {
= if 0 {
  mata: Mopt_score(0)
  ereturn local scorevars `scores'
}
- if "$ML_preserve" != "no" {
= if "no" != "no" {
  restore
  if ``e(prefix)''' == "svy" & e(N_strata_omit) {
    tempname v
    quietly _svy2 $ML_sample if $ML_sample, type(total) svy v(`v')
> subpop(`e(subpop)') touse($ML_sample)
  }
  ereturn repost, esample($ML_sample)
}
- if ``moptobj''' != "" {

```

```

= if `""' != "" {
    local clear noclear
    }
- if !`:length local clear' {
= if !0 {
- Clear
}

> ----- begin mopt.Clear -----
- syntax [, NOTANOPTION]
- capture drop $ML_w
= capture drop __000006
- capture drop $ML_samp
= capture drop __000006
- capture drop $ML_sample
= capture drop __000006
- capture drop $ML_subv
= capture drop
- capture drop $ML_grp
= capture drop
- mata: Mopt_drop_external()
- macro drop ML_*

> ----- end mopt.Clear -----
- }
- else {
    capture confirm var $ML_sample
    if c(rc) {
        quietly gen byte $ML_sample = e(sample)
    }
}
- if `:length local output' == 0 {
= if 8 == 0 {
    Display, level(`level') `options'
}

> ----- end mopt.MaxMin -----
- }

> ----- end mopt.Model -----
- if c(rc) {
    local rc = c(rc)
    Clear
    exit `rc'
}
- exit

```

```

> _____ end mopt _____
    - exit
    _____

> _____ end ml _____
    - est local cmd
    - if "`score'"!=" " {
= if ""!=" " {
    label var `scvar1' "Score index for x*b from nbreg"
    rename `scvar1' `sname1'
    label var `scvar2' "Score index for /ln`parm' from nbreg"
    rename `scvar2' `sname2'
    est local scorevars `sname1' `sname2'
    }
    - _b_pclass PCDEF : default
    _____

> _____ begin _b_pclass _____
    - version 15
    - args c_value COLON key
    - _on_colon_parse `0'
    = _on_colon_parse PCDEF : default
    _____

> _____ begin _on_colon_parse _____
    - version 8.2
    - sreturn local before ""
    - sreturn local after ""
    - gettoken before after : 0, parse(":") bind match(par) quotes
    - if "`par'" != "" {
= if "" != "" {
    local before `("`before')"'
    }
    - if `""before'"" == ":" {
= if `PCDEF "" == ":" {
    sreturn local after `""after'""
    exit
    }
    - while `""COLON'"" != ":" & `""after'"" != "" {
= while `"" != ":" & `": default'"" != "" {
    - gettoken COLON after : after, parse(":") bind match(par) quotes
    - if "`par'" != "" {
= if "" != "" {
    local before `before' (`COLON')
    local COLON
    }
    - else if `""COLON'"" != ":" {
= else if `":'"" != ":" {
    local before `""before' `COLON'""

```



```

        local COLON
        }
    - }
    - while ``COLON''' != ":" & ``after''' != "" {
= while ``:"' != ":" & `` default"' != "" {
    gettoken COLON after : after, parse(":") bind match(par) quotes
    if ``par''' != "" {
        local before `before' (`COLON')
        local COLON
        }
    else if ``COLON''' != ":" {
        local before ``before' `COLON'''
        local COLON
        }
    }
- if ``COLON''' != ":" {
= if ``:"' != ":" {
    di as err "" found where ':' expected"
    exit 198
    }
- sreturn local before ``before'''
= sreturn local before `PCDEF "'
- sreturn local after ``after'''
= sreturn local after `` default"'
}

> ----- end _on_colon_parse -----

- local c_value ``s(before)'''
= local c_value `PCDEF "'
- local key ``s(after)'''
= local key `` default"'
- confirm name `c_value'
= confirm name PCDEF
- mata: st_b_pclass("`:list retok key'")
= mata: st_b_pclass("default")
- c_local `c_value' `value'
= c_local PCDEF 0

> ----- end _b_pclass -----

- _b_pclass PCAUX : aux

> ----- begin _b_pclass -----

- version 15
- args c_value COLON key
- _on_colon_parse `0'
= _on_colon_parse PCAUX : aux

```

```

> ----- begin _on_colon_parse -----
- version 8.2
- sreturn local before ""
- sreturn local after ""
- gettoken before after : 0, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before `("before")'
}
- if `"'before'" == ":" {
= if `"'PCAUX "' == ":" {
  sreturn local after `"'after'"
  exit
}
- while `"'COLON'" != ":" & `"'after'" != "" {
= while `"' != ":" & `": aux"' != "" {
- gettoken COLON after : after, parse(":") bind match(par) quotes
- if "`par'" != "" {
= if "" != "" {
  local before `before' (`COLON')
  local COLON
}
- else if `"'COLON'" != ":" {
= else if `":'" != ":" {
  local before `"'before' `COLON'"
  local COLON
}
- }
- while `"'COLON'" != ":" & `"'after'" != "" {
= while `":'" != ":" & `"' aux"' != "" {
  gettoken COLON after : after, parse(":") bind match(par) quotes
  if "`par'" != "" {
    local before `before' (`COLON')
    local COLON
  }
  else if `"'COLON'" != ":" {
    local before `"'before' `COLON'"
    local COLON
  }
}
- if `"'COLON'" != ":" {
= if `":'" != ":" {
  di as err ""' found where ':' expected"
  exit 198
}
- sreturn local before `"'before'"

```

```

= sreturn local before `PCAUX '`
- sreturn local after ``after'''
= sreturn local after `` aux''

> ----- end _on_colon_parse -----
- local c_value ``s(before)'''
= local c_value `PCAUX '`
- local key ``s(after)'''
= local key `` aux''
- confirm name `c_value'
= confirm name PCAUX
- mata: st_b_pclass("`list retok key'")
= mata: st_b_pclass("aux")
- c_local `c_value' `value'
= c_local PCAUX 2

> ----- end _b_pclass -----
- tempname pclass
- matrix `pclass' = e(b)
= matrix __000006 = e(b)
- local dim = colsof(`pclass')
= local dim = colsof(__000006)
- matrix `pclass'[1,1] = J(1,`dim',`PCDEF')
= matrix __000006[1,1] = J(1,9,0)
- matrix `pclass'[1,`dim'] = `PCAUX'
= matrix __000006[1,9] = 2
- est hidden matrix b_pclass `pclass'
= est hidden matrix b_pclass __000006
- if ``llp'!='' {
= if ""!='' {
  est local chi2_ct "LR"
  est scalar ll_c = `llp'
  if (e(ll) < e(ll_c)) | (_b[/ln`parm'] < -20) {
    est scalar chi2_c = 0
  }
  else est scalar chi2_c = 2*(e(ll)-e(ll_c))
}
- est scalar r2_p = 1 - e(ll)/e(ll_0)
- est scalar k_aux = 1
- est hidden local diparm_opt2 noprob
- est scalar `parm' = exp(_b[/ln`parm'])
= est scalar alpha = exp(_b[/lnalpha])
- est local dispers ``dispers''
= est local dispers "mean"
- est local offset ``offvar''
= est local offset ""

```

```

- est local offset1
- est hidden local marginsderiv default N IR
- est local predict "nbreg_p"
- est local cmd "nbreg"
- global S_E_ll = e(ll)
- global S_E_ll0 `e(ll_0)'
= global S_E_ll0 -322.2358665861632
- global S_E_llc `e(ll_c)'
= global S_E_llc
- global S_1 `e(chi2_c)'
= global S_1
- global S_E_chi2 = e(chi2)
- global S_E_mdf = e(df_m)
- global S_E_pr2 `e(r2_p)'
= global S_E_pr2 .1668134686269713
- global S_E_nobs = e(N)
- global S_E_tdf = e(N)
- global S_E_off `e(offset)'
= global S_E_off
- global S_E_depv `e(depvar)'
= global S_E_depv piq_timing_max
- global S_E_cmd `e(cmd)'
= global S_E_cmd nbreg
- if "`display'"==" " {
= if ""==" " {
- Display, `irr' level(`level') `diopts'
= Display, level(95)

```

```

> ----- begin nbreg.Display -----
- syntax [, Level(cilevel) IRr *]
- _get_diopts diopts, `options'
= _get_diopts diopts,

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevel
> s NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells
> NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(string) sf
> ormat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAP0

```

```

> N(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBRE
> V ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels
> ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcell
> s EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cform
> at(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pass
> thru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pass
> thru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'` != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'` != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev` `noabbrev`"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local allbaselevels `allbaselevels` `noallbaselevels`
= local allbaselevels
- local baselevels `baselevels` `nobaselevels`
= local baselevels
- local emptycells `emptycells` `noemptycells`
= local emptycells
- local omitted `omitted` `noomitted`
= local omitted
- local lstretch `lstretch` `nolstretch`
= local lstretch
- local fvlabel `fvlabel` `nofvlabel`
= local fvlabel
- local abbrev `abbrev` `noabbrev`
= local abbrev
- if "`allbaselevels`baselevels" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels

```

```

    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'

```

```

        if fmtwidth("`pformat'") > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
        }
        sreturn local pformat "`pformat'"
        local pformat `pformat(`pformat')'
    }
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon

```

```

- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}
}

> ----- end _get_diopts.Wrapon -----

- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselev
> els' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflege
> nd' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fv
> wrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
= c_local diopts
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options'
= c_local options `''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> ----- end _get_diopts.GetDiopts -----

- c_local `name1' ``diopts'
= c_local diopts `''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_after = s(after)
- }
- local S_`sname' = s(`sname')
= local S_before = s(before)
- }
- local S_`sname' = s(`sname')
= local S_log = s(log)
- }

```

```

- local S_`sname' = s(`sname')
= local S_deriv = s(deriv)
- }
- local S_`sname' = s(`sname')
= local S_namelist = s(namelist)
- }
- local S_`sname' = s(`sname')
= local S_optlist = s(optlist)
- }
- local S_`sname' = s(`sname')
= local S_k_fill = s(k_fill)
- }
- local S_`sname' = s(`sname')
= local S_k = s(k)
- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevel
> s NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells
> NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(string) sf
> ormat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAP0
> N(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBRE
> V ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels
> ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcell
> s EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cform
> at(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pass
> thru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pass
> thru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
local ++n
gettoken item`n' opts : opts, bind
}

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`omitted' `noomitted'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```



```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }

```

```

- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth(`""cformat'""') > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat `""cformat'""'
  local cformat `"cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth(`""sformat'""') > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat `""sformat'""'
  local sformat `"sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth(`""pformat'""') > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat `""pformat'""'
  local pformat `"pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, W0rd WIdth]

```

```

        exit 198
    }
    - opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon


---


> 

---

 begin opts_exclusive 

---


    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit


---


> 

---

 end opts_exclusive 

---


    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }


---


> 

---

 end _get_diopts.Wrapon 

---


    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselev
> els' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflege
> nd' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fv
> wrap' `fvwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `abbrev'
    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options'
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus

```

```

- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- if ``name2''' == "" {
= if `''' == "" {
- GetDiopts DUPS, `options'
= GetDiopts DUPS,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBASElevel
> s NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTYcells
> NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(string) sf
> ormat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) FVWRAP0
> N(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) NOABBRE
> V ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASElevels
> ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcell
> s EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cform
> at(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(pass
> thru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(pass
> thru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```



```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel` `nofvlabel`"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`omitted` `noomitted`"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""`opts`"" != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`nocl' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'`` != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'`` != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels

```

```

- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
    }
    di "{txt}note: invalid cformat(), using default"
  }
}

```

```

    sreturn local cformat ``cformat'''
    local cformat `cformat(`cformat')'''
}
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth(`sformat') > 8 {
        local sformat "%8.2f"
        di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat ``sformat'''
    local sformat `sformat(`sformat')'''
}
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth(`pformat') > 5 {
        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat ``pformat'''
    local pformat `pformat(`pformat')'''
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
    - capture syntax [, W0rd WIdth]
    - if c(rc) {
        di as err "invalid fvwrapon() option;"
        syntax [, W0rd WIdth]
        exit 198
    }
    - opts_exclusive ``word' `width'" fvwrapon
    = opts_exclusive " " fvwrapon

```

```

> _____ begin opts_exclusive _____
    - version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----

- if "`fvwrap'" != "" {
= if "" != "" {
    FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `baselev
> els' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coeflege
> nd' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `fv
> wrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abbrev'
= c_local DUPS
- if `K' == 2 {
= if 1 == 2 {
    c_local `c_opts' ``options'
}
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> ----- end _get_diopts.GetDiopts -----

- }

```

```

- else {
  GetDiopTs DUPS options, `options'
  c_local `name2' ``options'
}
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS' != "" {
= if ``' != "" {
  if (strpos(`DUPS', "(")) {
    gettoken DUPS : DUPS, parse("(")
    local DUPS ``DUPS'()'
  }
  di as err "duplicate {bf:`DUPS'} option not allowed"
  exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname'
= sreturn local level = ``95'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local after = ``aux'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local before = ``PCAUX '
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local log = ``log'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local deriv = ``0'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local namelist = ``cluster'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local optlist = ``CLuster'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local k_fill = ``9'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local k = ``9'
- }

```

> _____ end _get_diopTs _____


```

- if "`irr'"!="" {
= if ""!="" {
  local eopt "eform(IRR)"
}
- if "`e(dispers)'"=="mean" {
= if "mean"=="mean" {
- local parm alpha
- }
- else local parm delta
- version 9: ml di, level(`level') `eopt' nofootnote `diopts'
= version 9: ml di, level(95) nofootnote

```

```

> ----- begin ml -----
- if _caller()>=11 {
  mopt `0'
  exit
}
- version 8.2, missing
- version 6, missing
- if _caller()<6 {
  ml_5 `0'
  exit
}
- local caller : display string(_caller())
- gettoken cmd 0: 0, parse(" ,")
- local l = length("`cmd'")
= local l = length("`di'")
- if "`cmd'" == "technique" {
= if "`di'" == "technique" {
  ml_technique `0'
  exit
}
- if "`cmd'" == "clear" {
= if "`di'" == "clear" {
  ml_clear `0'
  exit
}
- if "`cmd'" == "hold" {
= if "`di'" == "hold" {
  ml_hold `0'
  exit
}
- if "`cmd'" == "unhold" {
= if "`di'" == "unhold" {
  ml_unhold `0'
  exit
}

```

```

    }
- if ``"cmd" == "score" {
= if ``"di" == "score" {
    if ``"e(opt)" == "moptimize" {
        mopt score `0'
        exit
    }
    ml_score `0'
    exit
}
- if ``"cmd"=="count" {
= if ``"di"=="count" {
    ml_c_d count `0'
    exit
}
- if ``"cmd" == "trace" {
= if ``"di" == "trace" {
    ml_c_d trace `0'
    exit
}
- if ``"cmd"==bsubstr("graph",1,max(2,`l')) {
= if ``"di"==bsubstr("graph",1,max(2,2)) {
    ml_graph `0'
    exit
}
- if ``"cmd" == "init" {
= if ``"di" == "init" {
    ml_init `0'
    exit
}
- if ``"cmd" == bsubstr("maximize",1,max(3,`l')) {
= if ``"di" == bsubstr("maximize",1,max(3,2)) {
    version `caller', missing: AllowEv ml_max `0'
    exit
}
- if ``"cmd" == bsubstr("display",1,max(2,`l')) | ``"cmd" == bsu
> bstr("mlout", 1,max(3,`l')) {
    = if ``"di" == bsubstr("display",1,max(2,2)) | ``"di" == bsubstr("ml
> out", 1,max(3,2)) {
        - if ``"e(opt)" == "moptimize" {
        = if "moptimize" == "moptimize" {
        - mopt display `0'
        = mopt display , level(95) nofootnote

> ----- begin mopt -----
    - local vv : di "version " string(_caller()) ":"

```

```

- version 12
- gettoken subcmd 0 : 0, parse(" ,")
- local lcmd : length local subcmd
- if "`subcmd'" == "clear" {
= if "display" == "clear" {
  Clear
  exit
}
- if ``"subcmd"' == "hold" {
= if ``display"' == "hold" {
  ml_hold `0'
  exit
}
- if ``"subcmd"' == "unhold" {
= if ``display"' == "unhold" {
  ml_unhold `0'
  exit
}
- if "`subcmd'" == "score" {
= if "display" == "score" {
  if _caller() > 12 {
    `vv' Score `0'
  }
  else {
    Score `0'
  }
  exit
}
- if "`subcmd'" == "count" {
= if "display" == "count" {
  Count `0'
  exit
}
- if "`subcmd'" == "trace" {
= if "display" == "trace" {
  Trace `0'
  exit
}
- if "`subcmd'" == bsubstr("graph",1,max(2,`lcmd')) {
= if "display" == bsubstr("graph",1,max(2,7)) {
  Graph `0'
  exit
}
- if "`subcmd'" == "init" {
= if "display" == "init" {
  Interactive 0

```

```

        `vv' Init `0'
        exit
    }
    - if "`subcmd'" == bsubstr("maximize",1,max(3,`lcmd')) {
= if "display" == bsubstr("maximize",1,max(3,7)) {
    Interactive 1
    `vv' MaxMin maximize `0'
    exit
    }
    - if "`subcmd'" == bsubstr("minimize",1,max(3,`lcmd')) {
= if "display" == bsubstr("minimize",1,max(3,7)) {
    Interactive 1
    `vv' MaxMin minimize `0'
    exit
    }
    - if "`subcmd'" == bsubstr("display",1,max(2,`lcmd')) {
= if "display" == bsubstr("display",1,max(2,7)) {
    - Display `0'
= Display , level(95) nofootnote
}

> ----- begin mopt.Display -----
    - if !inlist("`e(opt)'", "ml", "moptimize") {
= if !inlist("moptimize", "ml", "moptimize") {
        error 301
    }
    - if "`e(svyml)'" != "" | "`e(prefix)'" == "svy" {
= if "" != "" | "" == "svy" {
        _prefix_display `0'
        exit
    }
    - syntax [, Level(cilevel) Plus noHeader First SHOWEQns NEQ(inte
> ger -1) noFOOTnote NOSKIP Title(passthru) NOTEST * ]
    - if "`plus'" != "" {
= if "" != "" {
        local footnote nofootnote
    }
    - if `neq' >= 0 {
= if -1 >= 0 {
        local neqopt neq(`neq')
    }
    - _get_diopts diopts options, `options'
= _get_diopts diopts options,
}

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]

```

```

- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```



```

        }
        - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----

```

```

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted

```

```

- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'

```

```

if fmtwidth("`sformat'") > 8 {
local sformat "%8.2f"
di "{txt}note: invalid sformat(), using default"
}
sreturn local sformat "`sformat'"
local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
confirm numeric format `pformat'
if fmtwidth("`pformat'") > 5 {
local pformat "%5.3f"
di "{txt}note: invalid pformat(), using default"
}
sreturn local pformat "`pformat'"
local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
di as err "invalid fvwrapon() option;"
syntax [, WOrd WIdth]
exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
}


---


> 

---

 end opts_exclusive 

---


    - local fvwrapon `word' `width'
    = local fvwrapon
    - if `:length local fvwrapon' {
    = if 0 {
        c_local fvwrapon fvwrapon(`fvwrapon')
    }
}


---


> 

---

 end _get_diopts.Wrapon 

---


    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

    = c_local diopts
    - if `K' == 2 {
    = if 2 == 2 {
    - c_local `c_opts' ``options''
    = c_local options ``''
    - }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
}


---


> 

---

 end _get_diopts.GetDiopts 

---


    - c_local `name1' ``diopts''
    = c_local diopts ``''
    - local snames : s(macros)
    - foreach sname of local snames {
    - local S_`sname' = s(`sname')
}

```

```

= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_k = s(k)
- }
- local S_`sname' = s(`sname')
= local S_k_fill = s(k_fill)
- }
- local S_`sname' = s(`sname')
= local S_optlist = s(optlist)
- }
- local S_`sname' = s(`sname')
= local S_namelist = s(namelist)
- }
- local S_`sname' = s(`sname')
= local S_deriv = s(deriv)
- }
- local S_`sname' = s(`sname')
= local S_log = s(log)
- }
- local S_`sname' = s(`sname')
= local S_before = s(before)
- }
- local S_`sname' = s(`sname')
= local S_after = s(after)
- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`baselevels' `nbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```



```

- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit


---


> 

---

 end opts_exclusive 

---


- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive ``versus' `compare'
= opts_exclusive " "


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- opts_exclusive ``abbrev' `noabbrev'
= opts_exclusive " "


---



```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ```opts'"" != "" {
    = while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
    = local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
    = local baselevels
    - local emptycells `emptycells' `noemptycells'
    = local emptycells
    - local omitted `omitted' `noomitted'
    = local omitted
    - local lstretch `lstretch' `nolstretch'
    = local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
    = local fvlabel
    - local abbrev `abbrev' `noabbrev'
    = local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
    = if "" == "" {
    - if c(showbaselevels) == "all" {
        local allbaselevels allbaselevels
    }
    - else if c(showbaselevels) == "on" {
        local baselevels baselevels
    }
    - }
    - if "`emptycells'" == "" {
    = if "" == "" {
    - if c(showemptycells) == "off" {
        local emptycells noemptycells
    }
    - }
    - if "`omitted'" == "" {

```

```

= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {

```

```

= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co

```

```

> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
    - if ``name2'' == "" {
    = if "options" == "" {
        GetDiopts DUPS, `options'
    }
    - else {
    - GetDiopts DUPS options, `options'
    = GetDiopts DUPS options,

```

```

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLBAS
> Elevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMPTY
> cells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(stri
> ng) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru) F
> VWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru) N
> OABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBASE
> levels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMP
> TYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND
> cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRA
> P(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYP
> E(passthru) NOABBREV ABBREV *]
    - opts_exclusive ``allbaselevels' `noallbaselevels''
    = opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}

```



```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`lstretch' `nolstretch'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`cnsreport' `fullcnsreport'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``versus' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``abbrev' `noabbrev'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
  }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
  }
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted

```

```

    }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat)'"
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat)'"
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat "`pformat'"
    local pformat `pformat(`pformat)'"
  }
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
  }
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
  }
}

```

```

- Wraupon , `fvwraupon'
= Wraupon ,

```

```

> ----- begin _get_diopts.Wraupon -----
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwraupon() option;"
  syntax [, W0rd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwraupon
= opts_exclusive " " fvwraupon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local fvwraupon `word' `width'
= local fvwraupon
- if `:length local fvwraupon' {
= if 0 {
  c_local fvwraupon fvwraupon(`fvwraupon')
}

```

```

> ----- end _get_diopts.Wraupon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fvwrap' `fvwraupon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `abb
> rev'

```

```

= c_local DUPS
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options'''
= c_local options `'''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> _____ end _get_diopts.GetDiopts _____
- c_local `name2' ``options'''
= c_local options `'''
- }
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS''' != "" {
= if `''' != "" {
  if (strpos(`DUPS'', "(")) {
    gettoken DUPS : DUPS, parse("(")
    local DUPS ``DUPS'()'
  }
  di as err "duplicate {bf:`DUPS'} option not allowed"
  exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname''''
= sreturn local level = `95''
- }
- sreturn local `sname' = ``S_`sname''''
= sreturn local k = `9''
- }
- sreturn local `sname' = ``S_`sname''''
= sreturn local k_fill = `9''
- }
- sreturn local `sname' = ``S_`sname''''
= sreturn local optlist = `CLuster''
- }
- sreturn local `sname' = ``S_`sname''''
= sreturn local namelist = `cluster''

```



```

- }
- sreturn local `sname' = ``S_`sname'`
= sreturn local deriv = ``0'
- }
- sreturn local `sname' = ``S_`sname'`
= sreturn local log = ``log'
- }
- sreturn local `sname' = ``S_`sname'`
= sreturn local before = ``PCAUX '
- }
- sreturn local `sname' = ``S_`sname'`
= sreturn local after = ``aux'
- }

```

```

> ----- end _get_diopts -----
- _get_eformopts , eformopts(`options') soptions allowed(__all__
> )
= _get_eformopts , eformopts() soptions allowed(__all__)

```

```

> ----- begin _get_eformopts -----
- version 8.0
- syntax [, eformopts(string asis) soptions ALLOWed(string) ]
- local 0 , `eformopts'
= local 0 ,
- local EFALL NOHR hr NOSHR shr or IRr RRr tr TRatio
- if "`soptions'" != "" {
= if "soptions" != "" {
- syntax [, EForm1(passthru) EForm `EFALL' * ]
= syntax [, EForm1(passthru) EForm NOHR hr NOSHR shr or IRr RR
> r tr TRatio * ]
- local opts ``options'`
= local opts ``'
- local 0 , `eform1' `eform' `nohr' `hr' `noshr' `shr' `or' `i
> rr' `rrr' `tr' `tratio'
= local 0 ,
- }
- if "`allowed'" == "__all__" {
= if "__all__" == "__all__" {
- local allowed `EFALL'
= local allowed NOHR hr NOSHR shr or IRr RRr tr TRatio
- }
- foreach ef of local allowed {
- capture confirm name `ef'
= capture confirm name NOHR
- if _rc {
di as err "`ef' is not a valid name"

```

```

    exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr
- }
- capture confirm name `ef'
= capture confirm name hr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr
- }
- capture confirm name `ef'
= capture confirm name NOSHR
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr
- }
- capture confirm name `ef'
= capture confirm name shr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr
- }
- capture confirm name `ef'
= capture confirm name or
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or
- }
- capture confirm name `ef'
= capture confirm name IRr
- if _rc {
    di as err "`ef' is not a valid name"
    exit 198
}

```



```

= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- local eform `eform' ``ef''
= local eform
- }
- if ```eform1''`'=="Odds ratio" {
= if ``''`'=="Odds ratio" {
    local eform_cons_ti = "Odds"
    local eform_cons_note = "odds ratios"
}
- else if ```eform1''`'=="Haz. ratio" {
= else if ``''`'=="Haz. ratio" {
    local eform_cons_ti = "Hazard"
    local eform_cons_note = "hazard ratios"
}
- else if ```eform1''`'=="Time ratio" {
= else if ``''`'=="Time ratio" {
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
}
- else if ```eform1''`'=="IRR" {
= else if ``''`'=="IRR" {
    local eform_cons_ti = "Inc. rate"
    local eform_cons_note = "incidence-rate ratios"
    local eform_cons_ti2 = "incidence rate"
}
- else if ```eform1''`'=="Risk ratio" {
= else if ``''`'=="Risk ratio" {
    local eform_cons_ti = "Risk"
    local eform_cons_note = "risk ratios"
}
- else if ```eform1''`'=="Hlth ratio" {
= else if ``''`'=="Hlth ratio" {
    local eform_cons_ti = "Health"

```

```

        local eform_cons_note = "health ratios"
    }
- local k : list sizeof eform
- if `k' {
= if 0 {
    opts_exclusive "`eform'"
    if `:length local eform1' {
        opts_exclusive "eform() `eform'"
    }
}
- if `k' {
= if 0 {
    if ("`eform'"=="eform") local eform1 = "exp(b)"
    else if ("`eform'"=="hr") {
        local eform1 = "Haz. ratio"
        local eform_cons_ti = "Hazard"
        local eform_cons_note = "hazard ratios"
    }
    else if ("`eform'"=="shr") {
        local eform1 = "SHR"
        local eform_cons_ti = "Subhazard"
        local eform_cons_note = "subhazard ratios"
    }
    else if ("`eform'"=="tr") {
        local eform1 = "Time ratio"
        local eform_cons_ti = "Time"
        local eform_cons_note = "time ratios"
    }
    else if ("`eform'"=="tratio") {
        local eform1 = "Time ratio"
        local eform_cons_ti = "Time"
        local eform_cons_note = "time ratios"
    }
    else if ("`eform'"=="or") {
        local eform1 = "Odds ratio"
        if ("`e(cmd)'"=="asclogit" | "`e(cmd)'"=="cmclogit" | "`e(cm
> d)'"=="cmmixlogit" | "`e(cmd)'"=="cmxtmixlogit" ) {
        local eform_cons_ti = "Rel. risk"
        local eform_cons_note = "relative-risk ratios"
        local eform_cons_ti2 = "relative risk"
    }
    else {
        local eform_cons_ti = "Odds"
        local eform_cons_note = "odds ratios"
    }
}
}

```

```

else if ("`eform`"=="irr") {
  local eform1 = "IRR"
  local eform_cons_ti = "Inc. rate"
  local eform_cons_note = "incidence-rate ratios"
  local eform_cons_ti2 = "incidence rate"
}
else if ("`eform`"=="rrr") {
  local eform1 = "RRR"
  local eform_cons_ti = "Rel. risk"
  local eform_cons_note = "relative-risk ratios"
  local eform_cons_ti2 = "relative risk"
}
else if ("`eform`"!="nohr") & ("`eform`"!="noshr") {
  local eform1 = upper("`eform`")
}
}

- sreturn clear
- sreturn local options ```opts`''
= sreturn local options `''`
- sreturn local opt `eform'
= sreturn local opt
- sreturn local str `eform1'
= sreturn local str
- if ```eform1`'' != "" {
= if `''` != "" {
  sreturn local eform eform("`eform1`")
}
- else sreturn local eform ""
- sreturn local eform_cons_ti `eform_cons_ti'
= sreturn local eform_cons_ti
- sreturn local eform_cons_note `eform_cons_note'
= sreturn local eform_cons_note
- sreturn local eform_cons_ti2 `eform_cons_ti2'
= sreturn local eform_cons_ti2



---


> 

---

 end _get_eformopts 

---



- local eform `s(eform)'
= local eform
- local diparm `s(options)'
= local diparm
- _get_diparmopts , diparmopts(`diparm') level(`level')
= _get_diparmopts , diparmopts() level(95)



---


> 

---

 begin _get_diparmopts 

---



- if _caller() < 8.2 {
  _get_diparmopts_8 `0'

```

```

        exit
    }
    - version 9
    - local version : di "version " string(_caller()) ":"
    - syntax [, diparmopts(string asis) EXECute soptions bottom pl
> us SYNTAXonly * ]
    - local goptions `options'
    = local goptions level(95)
    - SpliceGlobals junk , `goptions'
    = SpliceGlobals junk , level(95)

> ----- begin _get_diparmopts.SpliceGlobals -----
    - syntax name(id="macro name" name=c_diparm) [, diparm(strin
> g asis) Level(cilevel) dof(passthru) syntaxonly ]
    - if ``dof''' == "" & ``e(df_r)''' != "" {
    = if `''' == "" & `''' != "" {
        capture confirm integer number `e(df_r)'
        if !c(rc) {
            local gdof dof(`e(df_r)')
        }
        capture
    }
    - else local gdof ``dof'''
    = else local gdof `'''
    - local glevel `level'
    = local glevel 95
    - local lopt level(`glevel')
    = local lopt level(95)
    - if (``diparm''' == "") exit
    = if (``''' == "") exit

> ----- end _get_diparmopts.SpliceGlobals -----
    - local 0 `", `diparmopts'''
    = local 0 `", ""
    - local diparmopts
    - local k 0
    - syntax [, diparm(string asis) * ]
    - while ``diparm''' != "" {
    = while `''' != "" {
        local ++k
        local single 1
        local after
        capture _on_colon_parse `diparm'
        if !c(rc) {
            local single 0
            local diparm ``s(before)'''

```

```

        local after ``s(after)''
    }
    capture
    SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `goptio

> ns'

    local diparm`k' ``diparm''
    local diparmopts ``diparmopts' : `diparm''
    if `single' | ``:list retok after'' == "" {
        local 0 `", `options''
        syntax [, diparm(string asis) * ]
    }
    else {
        local diparm ``after''
    }
}

- if ``soptions'' == "" {
= if ``'' == "" {
- syntax [, diparm(string asis) ]
- }
- if ("`execute" == "") {
= if (" == ") {
- sreturn clear
- sreturn local options ``options''
= sreturn local options ``''
- sreturn local diparm ``diparmopts''
= sreturn local diparm ``''
- forval i = 1/`k' {
= forval i = 1/0 {
    sreturn local diparm`i' ``diparm`i''
}
- sreturn local k `k'
= sreturn local k 0
- exit

-----
> ----- end _get_diparmopts -----

- if "`header'"==" " {
= if ""==" " {
- _coef_table_header, `title'
= _coef_table_header,

-----
> ----- begin _coef_table_header -----

- version 9
- if !c(noisily) {
    exit
}
- syntax [, rclass noHeader obj(string) head1left(numlist max=

```



```

> 1 integer >=0) head1right(numlist max=1 integer >=0) head2left(numlist max=1
> integer >=0) head2right(numlist max=1 integer >=0) head2start(numlist max=1
> integer >=1) width(numlist max=1 integer >=1) * ]
- if ("`header'" != "") exit
= if ("'" != "") exit
- if ("`head2start'" != "" & "`width'" != "") {
= if ("'" != "" & "'" != "") {
  opts_exclusive "head2start() width()"
  exit 198
}
- local has_obj = (`"`obj'"'" != "")
= local has_obj = (`""'" != "")
- if (`has_obj' == 0) {
= if (0 == 0) {
- tempname obj
- }
- if ("`rclass'" != "") {
= if ("'" != "") {
  tempname rhold
  _return hold `rhold'
}
- `.obj' = .__coef_table__header.new, `rclass' `options'
= .__000007 = .__coef_table__header.new,
- class __coef_table__header {
-   string result = "e"
-   string newline = "display"
-   double opt_dvheader = 0
-   double opt_modeltest = 0
-   double opt_cluster = 0
-   double opt_rules = 0
-   double opt_tvar = 0
-   double opt_septitle = 0
-   double linesize = 0
-   string title = ""
-   string title2 = ""
-   string groupvar = ""
-   string intmethod = ""
-   double intpoints = -1
-   string cmd = ""
-   string cmd2 = ""
-   string prefix = ""
-   double is_prefix = 0
-   double is_svy = 0
-   double is_margins = 0
-   double is_gsem = 0
-   double is_gsem_group = 0

```

```

-      double is_sem          = 0
-      double is_areg         = 0
-      double is_demand       = 0
-      double is_demandn      = 0
-      double is_bacon        = 0
-      double is_htedid       = 0
-      double is_sum          = 0
-      double is_tab          = 0
-      double is_r2_p         = 1
-      double is_multclust    = 0
-      double is_stintcox     = 0
-      double is_bmareg       = 0
-      double prop_pushtitle  = 0
-      double prop_groupvar   = 0
-      double prop_censlimits = 0
-      double prop_censored   = 0
-      double prop_nouncensored = 0
-      double prop_iselected = 0
-      double prop_selected   = 0
-      double prop_groups     = 0
-      double prop_balance    = 0
-      double ablen           = 16
-      double width           = 78
-      double c1              = 1
-      double c2              = 16
-      double c2a             = 16
-      double c3              = 49
-      double c4              = 67
-      double c2wfmt          = 10
-      double c4wfmt          = 10
-      string  scheme         = "ml"
-      double lalignr         = 0
-      double ralignr         = 0
-      double lalignl         = 0
-      double ralignl         = 0
-      double lalignla        = 0
-      double ralignla        = 0
-      array   left
-      array   right
-}

```

```

> ----- begin _coef_table__header.new -----
- version 16
- syntax [, rclass noDVHeader noMODELtest TITL(string asis)
> nocluster noRULES noTVAR SEPTITLE linesize(int 0) ]
- if "`rclass'" != "" {

```

```

= if "" != "" {
    .result = "r"
}
- if "`dvheader'" == "" {
= if "" == "" {
- .opt_dvheader = 1
- }
- if "`modeltest'" == "" {
= if "" == "" {
- .opt_modeltest = 1
- }
- if "`cluster'" == "" {
= if "" == "" {
- .opt_cluster = 1
- }
- if "`rules'" == "" {
= if "" == "" {
- .opt_rules = 1
- }
- if "`tvar'" == "" {
= if "" == "" {
- .opt_tvar = 1
- }
- if "`septitle'" != "" {
= if "" != "" {
    .opt_septitle = 1
}
- .linesize = `linesize'
= .linesize = 0
- .title = ``title''
= .title = `''
- if ```.result''' == "e" {
= if `e' == "e" {
- .New4e

```

> begin _coef_table__header.New4e

```

- version 16
- .cmd = ``e(cmd)''
= .cmd = "nbreg"
- .cmd2 = ``e(cmd2)''
= .cmd2 = ""
- .prefix = ``e(prefix)''
= .prefix = ""
- if ```.prefix''' != "" {
= if `''' != "" {
    .is_prefix = 1

```

```

    }
- if "`prefix'" == "svy" {
= if "" == "svy" {
    .is_svy = 1
    }
- if "`cmd'" == "margins" {
= if "nbreg" == "margins" {
    .is_margins = 1
    }
- if inlist("`cmd'", "contrast", "pwcompare") {
= if inlist("nbreg", "contrast", "pwcompare") {
    if "`cmd2'" == "margins" {
        .is_margins = 1
    }
    }
- if "`cmd'" == "gsem" | "`cmd2'" == "gsem" {
= if "nbreg" == "gsem" | "" == "gsem" {
    .is_gsem = 1
    }
- if "`cmd'" == "sem" {
= if "nbreg" == "sem" {
    .is_sem = 1
    }
- if "`cmd'" == "areg" {
= if "nbreg" == "areg" {
    .is_areg = 1
    }
- if ("`cmd'" == "demandsys" & ``e(doheader)'"=="yes")

> {

= if ("nbreg" == "demandsys" & `""'"=="yes") {
    .is_demand = 1
    }
- if ("`cmd'" == "demandsys") {
= if ("nbreg" == "demandsys") {
    .is_demandn = 1
    }
- if ("`cmd'" == "xthdidregress" & ``e(inestat)'"=="") {
= if ("nbreg" == "xthdidregress" & ""=="") {
    .is_htedid = 1
    }
- if "`cmd'" == "stintcox" {
= if "nbreg" == "stintcox" {
    .is_stintcox = 1
    }
- if "`cmd'" == "bdecomp" {
= if "nbreg" == "bdecomp" {

```

```

        .is_bacon = 1
    }
- if "`cmd'" == "bmaregress" {
= if "nbreg" == "bmaregress" {
    .is_bmareg = 1
    }
- is_svysum `cmd'
= is_svysum nbreg
}

> ----- begin is_svysum -----
- version 9
- local SvySum mean prop proportion ratio total
- if `"'0'"' != "" & `:list 0 in SvySum' {
= if `"nbreg"' != "" & 0 {
    return scalar is_svysum = 1
    }
- else return scalar is_svysum = 0
}

> ----- end is_svysum -----
- .is_sum = r(is_svysum)
- if `.is_svy' {
= if 0 {
    if "`cmd'" == "tabulate" {
        .is_tab = 1
    }
    }
- if `.is_gsem' {
= if 0 {
    if `"'e(groupvar)'"' != "" & "`cmd2'" == "" {
        .is_gsem_group = 1
    }
    }
- local clustvars `e(clustvar)'
= local clustvars
- local kclvar : list sizeof clustvars
- .is_multclust = ((`kclvar'>1) & ("`e(kcluster)'"=="matrix"))

> x"))

= .is_multclust = ((0>1) & ("'"=="matrix"))
- if `.is_multclust' {
= if 0 {
    .prop_pushtitle = 1
    }
- local c2pfix 20
- if `.is_sem' | `.is_gsem_group' {
= if 0 | 0 {
    local crlen `"'e(crittype)'"'

```

```

local crlen : smcllength local crlen
if `crlen' >= `c2pfix' {
  local c2pfix = `crlen' + 2
}
}
- if `.is_sum' {
= if 0 {
  if `.linesize' > 62 {
    local offset = `.linesize' - 62
  }
  else local offset 0
  .width = 62 + `offset'
  .c2 = 18
  .c3 = 35 + `offset'
  .c4 = 51 + `offset'
  .c2wfmt = 7
  .c4wfmt = 10
  .scheme = "compact"
}
- else if `.is_prefix' | `.is_sem' | `.is_gsem_group' {
= else if 0 | 0 | 0 {
  .width = 78
  .c2 = `c2pfix'
  .c3 = 49
  .c4 = 67
  .c2wfmt = 9
  .c4wfmt = 10
  .scheme = "svy"
}
- if `.is_svy' {
= if 0 {
  local maxlen = `.width' - `.c2' - (`c2wfmt' + 2) - 2 - (`c4' - `.c
> 3') - 2

  if `maxlen' > 19 {
    local maxlen 19
  }
  local len : display %`maxlen'.0fc e(N_pop)
  local len : list retok len
  local len : length local len
  local ++maxlen
  local ++len
  if `.c4wfmt' <= `len' & `len' <= `maxlen' {
    .c3 = `.c3' + `.c4wfmt' - `len'
    .c4 = `.c4' + `.c4wfmt' - `len'
    .c4wfmt = `len'
  }
}

```

```

    }
}

> ----- end _coef_table__header.New4e -----
- }
- else {
  .New4r
}
- local props ```.Macro _coef_table_props'''

> ----- begin _coef_table__header.Macro -----
- version 16
- class exit ```.result'(`0')'''
= class exit `'''

> ----- end _coef_table__header.Macro -----
= local props `'''
- if `'.is_sem' | `'.is_gsem_group' | `':list posof "pushtitle"
> in props' {
= if 0 | 0 | 0 {
  .prop_pushtitle = 1
}
- if (`'.is_demand' | `'.is_htedid') {
= if (0 | 0) {
  .prop_pushtitle = 1
}
- if (`'.is_bmareg') {
= if (0) {
  .prop_pushtitle = 1
}
- if `'.is_sem' | `'.is_gsem_group' | `':list posof "groupvar"
> in props' {
= if 0 | 0 | 0 {
  .prop_groupvar = 1
}
- local list tobit cpoisson ivtobit metobit xttobit
- local list2 metobit
- if `':list posof ``.cmd''' in list' | `':list posof ``.cmd2'''
> in list2' | `':list posof "censlimits" in props' {
= if 0 | 0 | 0 {
  .prop_censlimits = !missing(e(N_unc))
}
- local list intreg tobit cpoisson ivtobit eintreg xtintreg
> xttobit
- local list2 meintreg metobit stintreg
- if `':list posof ``.cmd''' in list' | `':list posof ``.cmd2'''
> in list2' | `':list posof "censored" in props' {

```

```

= if 0 | 0 | 0 {
    .prop_censored = !missing(e(N_unc))
}
- if `:list posof "nuncensored" in props' {
= if 0 {
    .prop_nuncensored = 1
}
- local list eintreg
- if `:list posof "`cmd'" in list' | `:list posof "iselecte
> d" in props' {
= if 0 | 0 {
    .prop_iselect = 1
}
- local list eregress eprobit eoprobit
- if `:list posof "`cmd'" in list' | `:list posof "selected
> " in props' {
= if 0 | 0 {
    .prop_selected = 1
}
- if `:list posof "groups" in props' {
= if 0 {
    .prop_groups = 1
    .groupvar = "`e(repanvar)'"
    .intmethod = "`e(reintmethod)'"
    .intpoints = e(reintpoints)
}
- local list xtreg xtprobit xtlogit xtcloglog xtfrontier xti
> ntreg xtnbreg
- local list `list' xtpoisson xttobit xtmlogit xtrc
= local list xtreg xtprobit xtlogit xtcloglog xtfrontier xti
> ntreg xtnbreg xtpoisson xttobit xtmlogit xtrc
- local list2 xtlogit xtprobit xtologit xtmlogit
- if `:list posof "`cmd'" in list' | `:list posof "`cmd2'"
> in list2' {
= if 0 | 0 {
    .prop_groups = 1
    .groupvar = "`e(ivar)'"
    .intmethod = "`e(intmethod)'"
    .intpoints = e(n_quad)
}
- if "`cmd'" == "xtreg" | "`cmd2'" == "xtlogit" {
= if "nbreg" == "xtreg" | "" == "xtlogit" {
    .is_r2_p = 0
}
- if `:list posof "balance" in props' {
= if 0 {

```



```

        .prop_balance = 1
    }
    - .left = {}
    - .right = {}

```

```

> ----- end _coef_table__header.new -----
    - if ("`rclass'" != "") {
= if ("'" != "") {
    _return restore `rhold'
    .`obj'.New4r
    }
    - if ("`head1left'" != "") {
= if ("'" != "") {
    .`obj'.lalignla = `head1left'
    }
    - if ("`head1right'" != "") {
= if ("'" != "") {
    .`obj'.ralignla = `head1right'
    }
    - if ("`head2left'" != "") {
= if ("'" != "") {
    .`obj'.lalignr = `head2left'
    }
    - if ("`head2right'" != "") {
= if ("'" != "") {
    .`obj'.ralignr = `head2right'
    }
    - if ("`width'" != "") {
= if ("'" != "") {
    .`obj'.width = `width'
    }
    - .`obj'.build
    = .__000007.build

```

```

> ----- begin _coef_table__header.build -----
    - version 16
    - if "`".title'" == "" {
= if `""' == "" {
    - .title = "`".Macro title'"

```

```

> ----- begin _coef_table__header.Macro -----
    - version 16
    - class exit `""`.result'(`0')'"
= class exit `Negative binomial regression'"

```

```

> ----- end _coef_table__header.Macro -----

```

```

= .title = `"Negative binomial regression"
- .title2 = `""Macro title2""

> ----- begin _coef_table__header.Macro -----
- version 16
- class exit `""`.result'(`0')""
= class exit `""

> ----- end _coef_table__header.Macro -----
= .title2 = `""
- }
- if `.is_areg' {
= if 0 {
    local absvar = abbrev("`e(absvar)'", 22)
    .title2 = "Absorbed variable: {res:`absvar'}"
}
- if `.prop_pushtitle' {
= if 0 {
    if `.is_svy' & (``.cmd'" == "clogit" | `".cmd'" == "xtmlog
> it" | `".cmd2'" == "xtmlogit") {
    }
    else if `.is_stintcox' | `.is_bmareg' {
    .PushLeft `""`.title""
    .PushLeft `""`.title2""
    .title = ""
    .title2 = ""
    }
    else {
    .PushLeft `""`.title""
    if `.is_areg' {
    .PushLeft `""`.title2""
    }
    .title = ""
    .title2 = ""
    }
    }
- if `.prop_groupvar' | `.is_gsem_group' {
= if 0 | 0 {
    local groupvar `""Macro groupvar""
    if (`""groupvar"" != "" & `.is_stintcox') {
    local s = cond(`:word count `groupvar'>1, "s", "")
    local grpvar = abbrev("`groupvar'", `.ablen')
    .PushLeft "Strata variable`s': {res}`grpvar'"
    }
    else if `""groupvar"" != "" {
    local grpvar = abbrev("`groupvar'", `.ablen')

```

```

        .PushLeft "Grouping variable: {res}`grpvar'"
    }
}
- if (`.is_stintcox') {
= if (0) {
    .PushLeft ""
    local ndep = e(k_dv)
    if (`ndep'==2) {
        tokenize `e(depvar)'
        local ltime `1'
        local rtime `2'
        .PushLeft "Event-time interval:"
        .PushLeft "  Lower endpoint: {res}`ltime'"
        .PushLeft "  Upper endpoint: {res}`rtime'"
        if "`e(strata)'" != "" {
            .PushLeft ""
        }
    }
    else {
        .PushLeft "ID variable: {res}`e(id)'"
        .PushLeft "Examination time: {res}`e(depvar)'"
        .PushLeft "Status indicator: {res}`e(status)'"
    }
}
- if `.is_svy' {
= if 0 {
    .BuildLeft4svy
}
- else if `.is_prefix' {
= else if 0 {
    if !`.is_margins' {
        .Build4strata
    }
}
- if (`.is_tab' | `.is_sum') & !missing(`.result'(N_stdize))
> {
    = if (0 | 0) & !missing(e(N_stdize)) {
        .PushLeft "N. of std strata" " = " "as res" %`.c2wfmt'.0fc
> `.result'(N_stdize)
    }
    - .Build4tvar
}
> ----- begin _coef_table__header.Build4tvar -----
    - version 16
    - if `.opt_tvar' == 0 {
    = if 1 == 0 {

```

```

        exit
    }
    - if "`'.Macro tvar'" == "" {
        _____
> _____ begin _coef_table__header.Macro _____
        - version 16
        - class exit `"'`.result'(`0')'"'
        = class exit `"'
        _____
> _____ end _coef_table__header.Macro _____
        = if "" == "" {
        - exit
        _____
> _____ end _coef_table__header.Build4tvar _____
        - if (!missing(`.Scalar N') & `.is_demandn'==0 & !`.is_bmare
> g') {
        _____
> _____ begin _coef_table__header.Scalar _____
        - version 16
        - class exit `"'= `.result'(`0')'"'
        = class exit `"145"'
        _____
> _____ end _coef_table__header.Scalar _____
        = if (!missing(145) & 0==0 & !0) {
        - .PushRight "Number of obs" " = " "as res" %`.c4wfmt'.0fc `
> .Scalar N'
        _____
> _____ begin _coef_table__header.Scalar _____
        - version 16
        - class exit `"'= `.result'(`0')'"'
        = class exit `"145"'
        _____
> _____ end _coef_table__header.Scalar _____
        = .PushRight "Number of obs" " = " "as res" %10.0fc 145
        _____
> _____ begin _coef_table__header.PushRight _____
        - version 16
        - gettoken tok rest : 0
        - gettoken eq rest : rest
        - gettoken dias rest : rest
        - if `:length local rest' {
        = if 12 {
        - local direst = ustrltrim("` : di `rest'")
        = local direst = ustrltrim("          145")
        - .ralignr = max(`.ralignr', udstrlen("`direst'"))
        = .ralignr = max(0, udstrlen("145"))

```

```

- local len : di ``tok'''
= local len : di ``Number of obs'''
- local len : smcllength local len
- .lalignr = max(`.lalignr', `len')
= .lalignr = max(0, 13)
- .right.Arrpush \`.C3' ``{lalign \`.lalignr':`tok'}'' \`.
> C4' ``eq''' `dias' "{ralign \`.ralignr':`direst'}"
= .right.Arrpush \`.C3' ``{lalign \`.lalignr':Number of obs}
> "' \.C4' " = " as res "{ralign \`.ralignr':145}"
- }
- else if `:length local tok' {
= else if 13 {
    .right.Arrpush \`.C3' ``tok'''
    }
- else {
    .right.Arrpush
    }
}

> _____ end _coef_table__header.PushRight _____
- }
- if `.is_demandn' {
= if 0 {
    if (e(N_estat_dsys)==.|``e(N_estat_dsys)''==''') {
    .PushRight "Number of obs" " = " "as res" %`.c4wfmt'.0fc `
> .Scalar N'
    }
    else {
    .PushRight "Number of obs" " = " "as res" %`.c4wfmt'.0fc e
> (N_estat_dsys)
    }
    }
- if `.is_demand' {
= if 0 {
    .PushRight "Number of goods" " = " "as res" %`.c4wfmt'.0fc
> e(n_goods)
    .PushLeft "Expenditure variable: {result:`e(expenditures)'"
> }"
    }
- if `.is_demand' {
= if 0 {
    if (``e(piconstant)''!=``') {
    .PushRight "Price index constant" " = " "as res" %`.c2wfmt
> '.4gc e(piconstant)
    .PushLeft ""
    }
    if (e(n_demos)>0) {

```

```

        local scaling = strproper("`e(demo_type)'"')
        .PushLeft `"Demographic method: {text:`scaling'}"'
        .PushRight "Number of demographics" " = " "as res" %`.c2wf
> mt'.0fc e(n_demos)
    }
    .PushLeft ""
    local rsquare = strproper("`e(r2_type)'"')
    .PushLeft `""rsquare' R2 of model for"'
    local kdem = e(k_eq_old) + 1
    local labels ``"e(labels)'"'
    forvalues i=1/`kdem' {
    if (``"labels'"'==") {
    .PushLeft "   Good `i'" " = " "as res" %`.c2wfmt'.4f e(r2_`
> i')
    }
    else {
    local xdm: word `i' of `labels'
    .PushLeft "   `xdm'" " = " "as res" %`.c2wfmt'.4f e(r2_`i')
    }
    }
    .PushLeft ""
    }
    - if `.is_bacon' {
    = if 0 {
    .PushLeft "ATET" " = " "as res" %`.c2wfmt'.0g `e(atet)'
    .PushRight "Number of groups" " = " "as res" %`.c4wfmt'.0f
> c `e(N_groups)'
    .PushRight "Number of cohorts" " = " "as res" %`.c4wfmt'.0
> fc `e(N_timing)'
    }
    - if `.is_bmareg' {
    = if 0 {
    local heredlab = proper("`e(heredity)'"')
    .PushLeft ``e(sampling_lab)'"
    if ``heredlab'" != "" {
    .PushLeft "Heredity: {txt}`heredlab'"
    if !missing(e(burnin)) {
    .PushLeft ""
    }
    }
    else if !missing(e(burnin)) {
    .PushLeft ""
    .PushLeft ""
    }
    .PushLeft ""
    .PushLeft "Priors:"

```

```

        .PushLeft "    Models: {txt}`e(mprior_lab)'"
        .PushLeft "    Cons.: Noninformative"
        .PushLeft "    Coef.: Zellner's g"
        .PushLeft "        g: {txt}`e(gprior_lab)'"
        .PushLeft "    sigma2: Noninformative"
        if !missing(e(burnin)) {
            .PushLeft
            .PushLeftRalign "{help j_bmaregress_sampcorr:Sampling corr
> elation}" " = " "as res" %`.c4wfmt'.4f e(sampcorr)
            }
            .PushRight "No. of obs" " = " "as res" %`.c4wfmt'.0fc `.Sc
> alar N'
            .PushRight "No. of predictors" " = " "as res" %`.c4wfmt'.0
> fc e(p)
            .PushRightRalign "Groups" " = " "as res" %`.c4wfmt'.0fc e(
> p_groups)
            .PushRightRalign "Always" " = " "as res" %`.c4wfmt'.0fc e(
> p_always)
            .PushRight "No. of models" " = " "as res" %`.c4wfmt'.0fc e
> (k_models)
            .PushRightRalign "For CPMP >= .9" " = " "as res" %`.c4wfmt
> '.0fc e(k_models_cpmp)
            .PushRight "Mean model size" " = " "as res" %`.c4wfmt'.3f
> e(msize_mean)
            if !missing(e(burnin)) {
                .PushRight "Burn-in" " = " "as res" %`.c4wfmt'.0fc e(burni
> n)
                .PushRight "MCMC sample size" " = " "as res" %`.c4wfmt'.0f
> c e(mcmcsz)
                .PushRight "Acceptance rate" " = " "as res" %`.c4wfmt'.4f
> e(arate)
            }
            else {
                if "`heredlab'" != "" {
                    .PushRight
                }
                .PushRight
            }
            if !missing(e(shrinkage)) {
                .PushRight "Shrinkage, g/(1+g)" " = " "as res" %`.c4wfmt'.
> 4f e(shrinkage)
            }
            else {
                .PushRight ""
            }
            if (e(sigma2) < 1e-3) {

```

```

        local sigfmt 8.4g
    }
    else {
        local sigfmt `.c4wfmt'.3f
    }
    .PushRight "Mean sigma2" " = " "as res" %`sigfmt' e(sigma2
> )

    }
    - if `.is_htedid' {
    = if 0 {
        .PushRight "Number of panels" " = " "as res" %`.c4wfmt'.0f
> c e(N_panels)
    }
    - if !missing(`.Scalar N_sub') & `.is_stintcox' {
        _____
> _____ begin _coef_table__header.Scalar _____
        - version 16
        - class exit ```= `.result'(`0')''
        = class exit ``.``
        _____
> _____ end _coef_table__header.Scalar _____
    = if !missing(.) & 0 {
        .PushRight "Number of subjects" " = " "as res" %`.c4wfmt'.
> 0fc `.Scalar N_sub'
    }
    - if `.is_areg' {
    = if 0 {
        .PushRight "No. of categories" " = " "as res" %`.c4wfmt'.0
> fc e(k_absorb)
    }
    - if `.is_sem' | `.is_gsem_group' {
    = if 0 | 0 {
        if ```.Macro groupvar''' != "" {
            .PushRight "Number of groups" " = " "as res" %`.c4wfmt'.0f
> c `.Scalar N_groups'
        }
        }
    - if `.is_sem' & !`.is_svy' {
    = if 0 & !0 {
        .PushLeft ``"Estimation method: {res:`.Macro method'}""
        }
    - if `.prop_selected' {
    = if 0 {
        .Build4selected
        }
    - if `.is_svy' {

```



```

= if 0 {
  .BuildRight4svy
  if `.prop_censored' {
    .PushRight
    .Build4censobs "header"
    .PushRight
  }
}
- else {
- if `.is_margins' {
= if 0 {
  .Build4subpop
}
- if `.prop_iselected' {
= if 0 {
  .Build4title
  .Build4iselected
}
- if `.prop_censored' {
= if 0 {
  .Build4title
  .Build4censobs
  if !`.is_prefix' {
    .PushRight
  }
}
- .Build4cluster
}

> ----- begin _coef_table__header.Build4cluster -----
- version 16
- if `.is_multclust' {
= if 0 {
  .Build4mclust
  exit
}
- if missing(`.Scalar N_clust') {

> ----- begin _coef_table__header.Scalar -----
- version 16
- class exit ```= `.result'(`0')'''
= class exit `".'"

> ----- end _coef_table__header.Scalar -----
= if missing(.) {
- exit
}

```

```

> ----- end _coef_table__header.Build4cluster -----
- .Build4reps
-----

> ----- begin _coef_table__header.Build4reps -----
- version 16
- if !missing(`.Scalar N_reps') {
-----

> ----- begin _coef_table__header.Scalar -----
- version 16
- class exit ```= `.result'(`0')'''
= class exit `",."'
-----

> ----- end _coef_table__header.Scalar -----
= if !missing(.) {
  .PushRight "Replications" " = " "as res" %`.c4wfmt'.0fc
> `.Scalar N_reps'
  if `.prop_censored' & !`.is_svy' {
    .PushRight
  }
}
-----

> ----- end _coef_table__header.Build4reps -----
- }
- if `.prop_groups' {
= if 0 {
  .Build4groups
}
- if `.is_stintcox' & ``e(strata)'' != "" {
= if 0 & "" != "" {
  if `ndep' == 2 {
    .PushRight
  }
}
- .Build4modeltest
-----

> ----- begin _coef_table__header.Build4modeltest -----
- version 16
- if ``.result'' != "e" {
= if "e" != "e" {
  exit
}
- if `.opt_modeltest' == 0 {
= if 1 == 0 {
  exit
}
- if ```.Macro k_eq_model'''' == "0" {

```

```

> ----- begin _coef_table__header.Macro -----
- version 16
- class exit ```.result'(`0')'''
= class exit `1'''

> ----- end _coef_table__header.Macro -----
= if `1' == "0" {
  exit
}
- if missing(`.Scalar df_m') {

> ----- begin _coef_table__header.Scalar -----
- version 16
- class exit ```.result'(`0')'''
= class exit `6'''

> ----- end _coef_table__header.Scalar -----
= if missing(6) {
  exit
}
- if ``.Macro chi2''' != "" | ``.Macro df_r''' == "" {

> ----- begin _coef_table__header.Macro -----
- version 16
- class exit ```.result'(`0')'''
= class exit `296.0402534658286'''

> ----- end _coef_table__header.Macro -----

> ----- begin _coef_table__header.Macro -----
- version 16
- class exit ```.result'(`0')'''
= class exit `'''

> ----- end _coef_table__header.Macro -----
= if `296.0402534658286' != "" | `''' == "" {
- .Build4chi2test

> ----- begin _coef_table__header.Build4chi2test -----
- version 16
- local type `e(chi2type)'
= local type Wald
- if `type''' == "" {
= if `Wald''' == "" {
  local type Wald

```

```

    }
    - local didf = strtrim("` : di e(df_m)`)
    = local didf = strtrim("6")
    - if !missing(e(chi2)) {
    - .PushRight "`type' chi2({res:`didf'})" " = " "as res"
> %`.c4wfmt'.2f e(chi2)
    = .PushRight "Wald chi2({res:6})" " = " "as res" %10.2f
> e(chi2)

> ----- begin _coef_table__header.PushRight -----
    - version 16
    - gettoken tok rest : 0
    - gettoken eq rest : rest
    - gettoken dias rest : rest
    - if `:length local rest' {
    = if 15 {
    - local direst = ustrltrim("` : di `rest'")
    = local direst = ustrltrim("    296.04")
    - .ralignr = max(`.ralignr', udstrlen("`direst'"))
    = .ralignr = max(3, udstrlen("296.04"))
    - local len : di ``tok'`
    = local len : di ``Wald chi2({res:6})"
    - local len : smcllength local len
    - .lalignr = max(`.lalignr', `len')
    = .lalignr = max(13, 12)
    - .right.Arrpush `C3' ``{lalign `lalignr':`tok'})"
> `C4' ``eq' `dias' "{ralign `lalignr':`direst'"
    = .right.Arrpush `C3' ``{lalign `lalignr':Wald chi2(
> {res:6})})" `C4' " = " as res "{ralign `lalignr':296.04}"
    - }
    - else if `:length local tok' {
    = else if 18 {
    .right.Arrpush `C3' ``tok'`
    }
    - else {
    .right.Arrpush
    }

> ----- end _coef_table__header.PushRight -----
    - .PushRight "Prob > chi2" " = " "as res" %`.c4wfmt'.4f
> chi2tail(e(df_m),e(chi2))
    = .PushRight "Prob > chi2" " = " "as res" %10.4f chi2tai
> l(e(df_m),e(chi2))

> ----- begin _coef_table__header.PushRight -----
    - version 16

```

```

- gettoken tok rest : 0
- gettoken eq rest : rest
- gettoken dias rest : rest
- if `:length local rest' {
= if 33 {
- local direst = ustrltrim("` : di `rest'")
= local direst = ustrltrim(" 0.0000")
- .ralignr = max(`.ralignr', udstrlen("`direst'"))
= .ralignr = max(6, udstrlen("0.0000"))
- local len : di ``tok'""
= local len : di ``Prob > chi2'""
- local len : smcllength local len
- .lalignr = max(`.lalignr', `len')
= .lalignr = max(13, 11)
- .right.Arrpush `C3' ``{lalign `lalignr':`tok'}""
> ``C4' ``eq'"" `dias' "{ralign `ralignr':`direst'}""
= .right.Arrpush `C3' ``{lalign `lalignr':Prob > chi
> 2}"" `C4' " = " as res "{ralign `ralignr':0.0000}"
- }
- else if `:length local tok' {
= else if 11 {
. right.Arrpush `C3' ``tok'""
}
- else {
. right.Arrpush
}
}

> ----- end _coef_table__header.PushRight -----
- }
- else {
local j_robust "{help j_robustsingular##|_new:`type' c
> hi2(`didf'))}"
. PushRight ``j_robust'"" " = " "as res" %`.c4wfmt's ".
. PushRight "Prob > chi2" " = " "as res" %`.c4wfmt's ".
> "
}

> ----- end _coef_table__header.Build4chi2test -----
- }
- else {
. Build4Ftest
}

> ----- end _coef_table__header.Build4modeltest -----
- . Build4r2

```

```

> ----- begin _coef_table__header.Build4r2 -----
    - version 16
    - if ``.result'' != "e" {
    = if "e" != "e" {
        exit
    }
    - if !missing(e(r2)) {
    .PushRight "R-squared" " = " "as res" %`.c4wfmt'.4f e(r2
> )
    }
    - if !missing(e(r2_p)) & `.is_r2_p' {
    = if !missing(e(r2_p)) & 1 {
    - .PushRight "Pseudo R2" " = " "as res" %`.c4wfmt'.4f e(r2
> _p)
    = .PushRight "Pseudo R2" " = " "as res" %10.4f e(r2_p)
    -----
> ----- begin _coef_table__header.PushRight -----
    - version 16
    - gettoken tok rest : 0
    - gettoken eq rest : rest
    - gettoken dias rest : rest
    - if `:length local rest' {
    = if 15 {
    - local direst = ustrltrim("` : di `rest'")
    = local direst = ustrltrim("    0.1668")
    - .ralignr = max(`.ralignr', udstrlen("`direst"))
    = .ralignr = max(6, udstrlen("0.1668"))
    - local len : di ``tok'""
    = local len : di ``Pseudo R2""
    - local len : smcllength local len
    - .lalignr = max(`.lalignr', `len')
    = .lalignr = max(13, 9)
    - .right.Arrpush `\.C3' ``{lalign `\.lalignr':`tok'}"" \
> `\.C4' ``eq'"" `dias' "{ralign `\.ralignr':`direst'}"
    = .right.Arrpush `\.C3' ``{lalign `\.lalignr':Pseudo R2}""
> `\.C4' " = " as res "{ralign `\.ralignr':0.1668}"
    - }
    - else if `:length local tok' {
    = else if 9 {
    .right.Arrpush `\.C3' ``tok'""
    }
    - else {
    .right.Arrpush
    }
    -----
> ----- end _coef_table__header.PushRight -----

```

```

- }
- if !missing(e(r2_a)) {
  .PushRight "Adj R-squared" " = " "as res" %`.c4wfmt'.4f
> e(r2_a)
  }
- if !missing(e(rmse)) {
  .PushRight "Root MSE" " = " "as res" %`.c4wfmt'.4f e(rms
> e)
  }
}
}
> ----- end _coef_table__header.Build4r2 -----
- .Build4title
}
> ----- begin _coef_table__header.Build4title -----
- version 16
- if `.opt_septitle' {
= if 0 {
  exit
}
- if `""`.title' == "" {
= if `"Negative binomial regression"' == "" {
  exit
}
- if `.left.arrnls' {
= if 0 {
  exit
}
- local title `.title'
= local title Negative binomial regression
- local title2 `.title2'
= local title2
- local len : smcllength local title
- local len2 : smcllength local title2
- if `len2' > `len' {
= if 0 > 28 {
  local len = `len2'
}
- if `len' < (`c3' - 2) - (`c1' - 1) {
= if 28 < (49 - 2) - (1 - 1) {
- PushLeft `""`.title'
= PushLeft `"Negative binomial regression"'
}
}
> ----- begin _coef_table__header.PushLeft -----
- version 16
- gettoken tok rest : 0
- gettoken eq rest : rest

```

```

- gettoken dias rest : rest
- if `:length local rest' {
= if 0 {
  local direst : di `rest'
  local direst = strtrim("`direst'")
  local len : smcllength local direst
  .ralignl = max(`.ralignl', `len')
  local len : di ``tok'""
  local len : smcllength local len
  .lalignl = max(`.lalignl', `len')
  .left.Arrpush ``.C1' ``{lalign ``.lalignl':`tok'}"" \`
> .C2' ``eq'"" `dias' "{ralign ``.ralignl':`direst'}"
  }
- else if `:length local tok' {
= else if 28 {
- .left.Arrpush ``.C1' ``tok'""
= .left.Arrpush ``.C1' ``Negative binomial regression""
- }
- else {
  .left.Arrpush
  }
}

> ----- end _coef_table__header.PushLeft -----
- .title = ""
- if `len2' {
= if 0 {
  PushLeft ``.title2'""
  .title2 = ""
}
- }
- .opt_septitle = 1

> ----- end _coef_table__header.Build4title -----
- if `.prop_censlimits' {
= if 0 {
  .Build4censlimits 1
}
- .c2 = `.lalignl' + 1
= .c2 = 0 + 1
- .c3 = `.width'-`.lalignr'-`.ralignr'-3+1
= .c3 = 78-13-6-3+1
- .c4 = `.c3' + `.lalignr'
= .c4 = 57 + 13
- if `.is_gsem' {
= if 0 {
  if `.opt_dvheader' {

```



```

gsem_depvar_header, left(`.left.objkey') right(`.right.obj
> key') c3(`.c3') c4(`.c4') c4wfmt(`.c4wfmt')
}
}
- .Build4crit
-----
> ----- begin _coef_table__header.Build4crit -----
- version 16
- if "`result'" != "e" {
= if "e" != "e" {
exit
}
- local offset 1
- local hascrit = !missing("`e(ll)'"') & !missing("`e(cr
> ittype)'"')
= local hascrit = !missing("`-268.4825839649073'"') & !miss
> ing("`log pseudolikelihood'"')
- if inlist("`e(dispers)'", "mean", "constant") {
= if inlist("mean", "mean", "constant") {
- if `hascrit' {
= if 1 {
- local ++offset
- local crtype "`e(crittype)'"
= local crtype "`log pseudolikelihood'"
- local clen : length local crtype
- .c2 = `clen' + 2
= .c2 = 20 + 2
- }
- local didisp = strtrim("` : di e(dispers)'"')
= local didisp = strtrim("mean")
- local DISPERS `""Dispersion: {res:`didisp'}""'
= local DISPERS `""Dispersion: {res:mean}""'
- }
- .FillLeft `offset'
= .FillLeft 2
-----
> ----- begin _coef_table__header.FillLeft -----
- version 16
- args offset
- local kr = `.right.arnels'
= local kr = 4
- local kl = `.left.arnels'
= local kl = 1
- local diff = `kr' - `kl' - 0`offset'
= local diff = 4 - 1 - 02
- forval i = 1/`diff' {

```

```

= forval i = 1/1 {
- .left.Arrpush ""
- }
}

> ----- end _coef_table_header.FillLeft -----
- if `""DISPERS'" != "" {
= if `""Dispersion: {res:mean}"" != "" {
- .PushLeft `DISPERS'
= .PushLeft "Dispersion: {res:mean}"
}

> ----- begin _coef_table_header.PushLeft -----
- version 16
- gettoken tok rest : 0
- gettoken eq rest : rest
- gettoken dias rest : rest
- if `:length local rest' {
= if 0 {
local direst : di `rest'
local direst = strtrim("`direst'")
local len : smcllength local direst
.ralignl = max(`.ralignl', `len')
local len : di `""tok'"
local len : smcllength local len
.lalignl = max(`.lalignl', `len')
.left.Arrpush \.C1' `{lalign \.lalignl':`tok'}" \
> .C2' "`eq" `dias' "{ralign \.ralignl':`direst'"
}
- else if `:length local tok' {
= else if 22 {
- .left.Arrpush \.C1' `""tok'"
= .left.Arrpush \.C1' ""Dispersion: {res:mean}"
- }
- else {
.left.Arrpush
}
}

> ----- end _coef_table_header.PushLeft -----
- }
- local crtype = upper(bsubstr("`e(crittype)'"',1,1)) + b
> substr("`e(crittype)'"',2,.)
= local crtype = upper(bsubstr("`log pseudolikelihood'",1,
> 1)) + bsubstr("`log pseudolikelihood'",2,.)
- if `.is_sem' & "`e(critvalue)'" != "" & !`.is_svy' {
= if 0 & `"" != "" & !0 {
.PushLeft
.PushLeftRalign "`crtype" " = " "as res" %10.0g e(critv

```

```

> alue)
    }
    - else if `hascrit' {
    = else if 1 {
    - if `.is_gsem_group' {
    = if 0 {
        local dill = strtrim("` : di %10.0g e(ll)'")
        .PushLeft "`crtype" = {res:`dill'}"
    }
    - else {
    - .PushLeftRalign "`crtype" " = " "as res" %10.0g e(ll)
    = .PushLeftRalign "Log pseudolikelihood" " = " "as res" %1
> 0.0g e(ll)
> ----- begin _coef_table__header.PushLeftRalign -----
    - version 16
    - gettoken tok rest : 0
    - gettoken eq rest : rest
    - gettoken dias rest : rest
    - if `:length local rest' {
    = if 13 {
    - local direst : di `rest'
    = local direst : di %10.0g e(ll)
    - local direst = strtrim("`direst'")
    = local direst = strtrim("-268.48258")
    - local len : smcllength local direst
    - .ralignla = max(`.ralignla', `len')
    = .ralignla = max(0, 10)
    - local len : di ``tok'""
    = local len : di `"Log pseudolikelihood"
    - local len : smcllength local len
    - .lalignla = max(`.lalignla', `len')
    = .lalignla = max(0, 20)
    - .left.Arrpush `C1' ``{lalign `lalignla':`tok'}" \
> `.C2a' ""eq"" `dias' "{ralign `ralignla':`direst'}"
    = .left.Arrpush `C1' ``{lalign `lalignla':Log pseudoli
> kelihood}" `C2a' " = " as res "{ralign `ralignla':-268.48258}"
    - }
    - else if `:length local tok' {
    = else if 20 {
        .left.Arrpush `C1' ``tok'""
    }
    - else {
        .left.Arrpush
    }

```

```

> ----- end _coef_table__header.PushLeftRalign -----
    - }
    - }
    -----

> ----- end _coef_table__header.Build4crit -----
    - .c2 = `.lalignl' + 1
    = .c2 = 0 + 1
    - .c2a = `.lalignla' + 1
    = .c2a = 20 + 1
    - .c3 = `.width' - `.lalignr' - `.ralignr' - 3 + 1
    = .c3 = 78 - 13 - 6 - 3 + 1
    - .c4 = `.c3' + `.lalignr'
    = .c4 = 57 + 13
    -----

> ----- end _coef_table__header.build -----
    - if ("`head2start'" != "") {
    = if ("'" != "") {
      .`obj'.c3 = `head2start'
      .`obj'.c4 = `head2start' + `.`obj'.lalignr'
      .`obj'.width = `head2start' + `.`obj'.lalignr' + `.`obj'.ral
> ignr' + 2
    }
    - if (`has_obj' == 0) {
    = if (0 == 0) {
      - .`obj'.display
      = .__000007.display
    -----

> ----- begin _coef_table__header.display -----
    - version 16
    - .ShowRules
    -----

> ----- begin _coef_table__header.ShowRules -----
    - version 16
    - if "`.result'" != "e" {
    = if "e" != "e" {
      exit
    }
    - if `.`opt_rules' == 0 {
    = if 1 == 0 {
      exit
    }
    - if !inlist("`cmd'", "logistic", "logit", "probit") {
    = if !inlist("nbreg", "logistic", "logit", "probit") {
      - exit
    -----

> ----- end _coef_table__header.ShowRules -----

```

```

- local nl = `.left.arnels'
= local nl = 4
- local nr = `.right.arnels'
= local nr = 4
- local K = max(`nl',`nr')
= local K = max(4,4)
- `.newline'
= display

- if ``.title''' != "" {
= if `''' != "" {
  display as txt ``.title'''
  if ``.title2''' != "" {
    display as txt ``.title2'''
  }
  if `K' {
    display
  }
}
- forval i = 1/`K' {
= forval i = 1/4 {
- display as smcl as txt `.left['i']' as txt `.right['i']'
}

> ----- begin _coef_table__header.C1 -----
- version 16
- class exit `"_col(`.c1')"'
= class exit `"_col(1)"'

> ----- end _coef_table__header.C1 -----

> ----- begin _coef_table__header.C3 -----
- version 16
- class exit `"_col(`.c3')"'
= class exit `"_col(57)"'

> ----- end _coef_table__header.C3 -----

> ----- begin _coef_table__header.C4 -----
- version 16
- class exit `"_col(`.c4')"'
= class exit `"_col(70)"'

> ----- end _coef_table__header.C4 -----
= display as smcl as txt _col(1) `Negative binomial regress
> ion"' as txt _col(57) `{lalign 13: Number of obs}' _col(70) " = " as res "{
> ralign 6:145}"

```

Negative binomial regression

Number of obs = 145

```
- }
- display as smcl as txt `'.left['i']' as txt `'.right['i']'

> ----- begin _coef_table__header.C3 -----
- version 16
- class exit `"_col(`.c3')"'
= class exit `"_col(57)"'

> ----- end _coef_table__header.C3 -----

> ----- begin _coef_table__header.C4 -----
- version 16
- class exit `"_col(`.c4')"'
= class exit `"_col(70)"'

> ----- end _coef_table__header.C4 -----
= display as smcl as txt as txt _col(57) ``{lalign 13:Wald
> chi2({res:6})}"" _col(70) " = " as res "{ralign 6:296.04}"
Wald chi2(6) = 296.04
- }
- display as smcl as txt `'.left['i']' as txt `'.right['i']'

> ----- begin _coef_table__header.C1 -----
- version 16
- class exit `"_col(`.c1')"'
= class exit `"_col(1)"'

> ----- end _coef_table__header.C1 -----

> ----- begin _coef_table__header.C3 -----
- version 16
- class exit `"_col(`.c3')"'
= class exit `"_col(57)"'

> ----- end _coef_table__header.C3 -----

> ----- begin _coef_table__header.C4 -----
- version 16
- class exit `"_col(`.c4')"'
= class exit `"_col(70)"'

> ----- end _coef_table__header.C4 -----
= display as smcl as txt _col(1) ``"Dispersion: {res:mean}"'
> as txt _col(57) ``{lalign 13:Prob > chi2}"" _col(70) " = " as res "{ralign 6
> :0.0000}"
```

```

Dispersion: mean                                Prob > chi2    = 0.0000
- }
- display as smcl as txt `'.left['i']' as txt `'.right['i']'
_____
> _____ begin _coef_table__header.C1 _____
- version 16
- class exit `"_col(`.c1')"'
= class exit `"_col(1)"'
_____
> _____ end _coef_table__header.C1 _____
_____
> _____ begin _coef_table__header.C2a _____
- version 16
- class exit `"_col(`.c2a')"'
= class exit `"_col(21)"'
_____
> _____ end _coef_table__header.C2a _____
_____
> _____ begin _coef_table__header.C3 _____
- version 16
- class exit `"_col(`.c3')"'
= class exit `"_col(57)"'
_____
> _____ end _coef_table__header.C3 _____
_____
> _____ begin _coef_table__header.C4 _____
- version 16
- class exit `"_col(`.c4')"'
= class exit `"_col(70)"'
_____
> _____ end _coef_table__header.C4 _____
= display as smcl as txt _col(1) `{lalign 20:Log pseudolike
> lihood}' _col(21) " = " as res "{ralign 10:-268.48258}" as txt _col(57) `{
> lalign 13:Pseudo R2}' _col(70) " = " as res "{ralign 6:0.1668}"
Log pseudolikelihood = -268.48258                Pseudo R2    = 0.1668
- }
_____
> _____ end _coef_table__header.display _____
- }
- sreturn local width_header `.'.obj'.width'
= sreturn local width_header 78
- sreturn local head2_right `.'.obj'.ralignr'
= sreturn local head2_right 6
- sreturn local head2_left `.'.obj'.lalignr'
= sreturn local head2_left 13
- sreturn local head2_start `.'.obj'.c3'

```

```

= sreturn local head2_start 57
- sreturn local head1_right `.`obj'.ralignla'
= sreturn local head1_right 10
- sreturn local head1_left `.`obj'.lalignla'
= sreturn local head1_left 20
- sreturn local head1_start `.`obj'.c1'
= sreturn local head1_start 1
_____
> _____ end _coef_table_header _____
- di

- }
- _coef_table, `first' level(`level') `neqopt' `plus' `noskip' `
> showeqns' `diopts' `options' `notest'
= _coef_table, level(95)
_____

> _____ begin _coef_table _____
- version 11
- local vv : di "version " string(max(11,_caller())) ", missin
> g:"
- if (!c(noisily) & c(coeftabresults) == "off") {
exit
}
- _check_eclass
- syntax [, BMATrix(passthru) VMATrix(passthru) * ]
- if "`e(b)'" == "" & "`e(V)'" == "" & "`bmatrix'`vmatrix'"=="
> " {
= if "matrix" == "" & "matrix" == "" & ""==" {
exit
}
- local mc_cmds contrast margins pwcompare pwmean
- local cmd "`e(cmd)'"
= local cmd "nbreg"
- local keepmc : list cmd in mc_cmds
- if inlist("`cmd'", "pwcompare", "pwmean") {
= if inlist("nbreg", "pwcompare", "pwmean") {
local groups GROUPS
}
- if "`cmd'" == "regress" {
= if "nbreg" == "regress" {
local beta Beta
}
- if "`cmd'" == "gsem" {
= if "nbreg" == "gsem" {
local fvignore fvignore(int 0)
local flignore flignore

```



```

    }
    - if "`cmd'" == "sem" {
= if "nbreg" == "sem" {
    local standardized STANDARDIZED
    local showginvariant SHOWGINvariant
    local nolabel NOLABel LABel NOFVLABel FVLABel
    local nofootnote NOFOOTnote
    local wrap wrap(numlist max=1) fvwrap(passthru)
    }
    - if "`e(mi)'"=="mi" {
= if ""=="mi" {
    local dftable DFTable
    local dfonly DFONLY
    local noclustreport NOCLUSTReport
    local pisematrix PISEMATrix(string)
    }
    - syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st
> ring asis) `beta' `standardized' NOCI NOPValues `dftable' `dfonly' dfci DFPV
> alues dfmissing `groups' COEFLegend selegend `fvignore' `flignore' `showginv
> ariant' `nolabel' `nofootnote' `wrap' sort `pisematrix' depname(string) COEF
> Title(string) coeftitle2(string) ptitle(string) cititle(string) NOMCLEgend n
> oCNSReport FULLCNSReport `noclustreport' cformat(passthru) sformat(passthru)
> pformat(passthru) NOFirst First SHOWEQns neq(integer -1) NODIPARM NOTEST SE
> Parator(integer 0) NOSKIP OFFSETONLY1 Plus NOEQCHECK EFORMALL CITYPE(string)
> eqselect(string) noEFORMNOTE * ]
    = syntax [, cmdextras BMATrix(string) VMATrix(string) EMATrix(
> string) DFMATrix(string) EQMATrix(string) ROWMATrix(string) CIMATrix(string)
> ROWCFormat(string) ROWPFormat(string) ROWSFormat(string) NOROWCI MMATrix(st
> ring) MVMATrix(string) MEMATrix(string) BSTDMATrix(string) CNSMATrix(string)
> PCLASSMATrix(string) Level(cilevel) prefix(name) suffix(name) OFFSETlist(st
> ring asis) NOCI NOPValues dfci DFPValues dfmissing COEFLegend selegend
> sort depname(string) COEFTitle(string) coeftitle2(string) ptitle(stri
> ng) cititle(string) NOMCLEgend noCNSReport FULLCNSReport cformat(passthru)
> sformat(passthru) pformat(passthru) NOFirst First SHOWEQns neq(integer -1) N
> ODIPARM NOTEST SEParator(integer 0) NOSKIP OFFSETONLY1 Plus NOEQCHECK EFORMA
> LL CITYPE(string) eqselect(string) noEFORMNOTE * ]
    - if "`wrap'" != "" {
= if "" != "" {
    opts_exclusive `wrap(`wrap') `fvwrap'
    local fvwrap fvwrap(`wrap')
    }
    - if "`nolabel'"`label'" != "" {

```

```

= if "" != "" {
  opts_exclusive "`nolabel' `label'"
  opts_exclusive "`nofvlabel' `fvlabel'"
  opts_exclusive "`nolabel' `fvlabel'"
  opts_exclusive "`nofvlabel' `label'"
  if "`nolabel'" != "" {
    local fvlabel nofvlabel
  }
  else {
    local fvlabel fvlabel
  }
}
- else local fvlabel `nofvlabel' `fvlabel'
= else local fvlabel
- local type `coeflegend' `selegend'
= local type
- opts_exclusive "`type' `standardized'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- if (```rowmatrix'""=="" & ``norowci'""!="") {
= if (`""'=="" & ""!="") {
  di as err "{bf:norowci} requires {bf:rowmatrix()}"
  exit 198
}
- if (``dftable'""!="" & ``norowci'""!="") {
= if (""!="" & ""!="") {
  di as err "{bf:norowci} is not allowed with {bf:`dftable'}"
  exit 198
}
- if (``dfonly'""!="" & ``norowci'""!="") {

```

```

= if ("!" & "!=") {
  di as err "{bf:norowci} is not allowed with {bf:`dfonly'}"
  exit 198
}
- if ("`noci"!=" & "`norowci"!=") {
= if ("!" & "!=") {
  di as err "{bf:norowci} is not allowed with {bf:`noci'}"
  exit 198
}
- if "`standardized'" != "" & "`bstdmatrix'" != "" {
= if "" != "" & "" != "" {
  local beta beta
  local standardized
}
- if `:length local type' == 0 {
= if 0 == 0 {
- local type `beta' `noci' `nopvalues' `dftable' `dfonly' `gro
> ups' `dfci' `dfpvalues'
= local type
- }
- opts_exclusive "`type'"
= opts_exclusive ""

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`first' `nofirst'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`first' `showeqns'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local cnsreport `cnsreport' `fullcnsreport'
= local cnsreport
- opts_exclusive "`cnsreport'"
= opts_exclusive ""

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - if ``showeqns''' != "" {
= if `''' != "" {
    local nofirst nofirst
    }
    - if ``ematrix'\`noeqcheck''' == "" {
= if `''' == "" {
    - if ``e(error)''' == "matrix" {
= if `''' == "matrix" {
    local ematrix e(error)
    }
    - }
    - _get_mcompare, `options'
= _get_mcompare,

> ----- begin _get_mcompare -----

    - version 11
    - local cmd ``e(cmd)'''
= local cmd ``nbreg'''
    - syntax [name(name=caller)] [, *]
    - local is_pwc = inlist("pwcompare", ``cmd'", ``caller'") |
> inlist("pwmean", ``cmd'", ``caller'")
    = local is_pwc = inlist("pwcompare", "nbreg", "") | inlist("
> pwmean", "nbreg", "")
    - local is_marg = inlist("margins", ``cmd'", ``e(cmd2)'", ``
> caller'")
    = local is_marg = inlist("margins", "nbreg", "", "")
    - local OPTIONS NOADJust BONferroni DUNCAn DUNNett SCHeffe S
> IDak SNK TUKey ADJJustall
    - if `is_pwc' {
= if 0 {
    syntax [name] [, `OPTIONS' MCOMPare(string) *]
    }
    - else {
    - syntax [name] [, MCOMPare(string) *]
    - local suboption mcompare()
    - }
    - sreturn clear
    - sreturn local options ``options'''
= sreturn local options `'''
    - if `is_pwc' {

```

```

= if 0 {
    local METHOD `noadjust' `bonferroni' `duncan' `dunnett' `s
> cheffe' `sidak' `snk' `tukey'
    local METHOD : list uniq METHOD
    opts_exclusive ``METHOD''
    local ALL `adjustall'
    opts_exclusive ``noadjust' `ALL''
}
- local 0 `", `mcompare''
= local 0 `", ''
- capture syntax [, `OPTIONS']
= capture syntax [, NOADJUST BONferroni DUNCan DUNNett SCHeff
> fe SIDak SNK TUKey ADJustall]
- if c(rc) {
    di as err "invalid mcompare() option;"
    di as err "method ``mcompare'' not allowed"
    error 198
}
- local METHOD `METHOD' `noadjust' `bonferroni' `duncan' `du
> nnett' `scheffe' `sidak' `snk' `tukey'
= local METHOD
- local METHOD : list uniq METHOD
- local ALL `ALL' `adjustall'
= local ALL
- local ALL : list uniq ALL
- opts_exclusive ``METHOD'' `suboption'
= opts_exclusive "" mcompare()

-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'' != "" {
= while ``'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- if ``METHOD'' == "" {
= if "" == "" {

```

```

- if "`ALL'" != "" {
= if "" != "" {
  di as err "multiple comparison method required with the ad
> justall option"
  exit 198
}
- local METHOD noadjust
- local noadjust noadjust
- }
- opts_exclusive "`ALL' `noadjust'" `suboption'
= opts_exclusive " noadjust" mcompare()

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0
- while ``opts'" != "" {
= while `"noadjust'" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts'" != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {
- exit

> ----- end opts_exclusive -----
- local EXCLUDE duncan dunnett snk tukey
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if `is_pwc' {
    local opt : copy local METHOD
  }
  else {
    local opt "mcompare(`METHOD')"
  }
  local cmdlist anova manova regress mvreg pwmean
  if "`cmd'" == "pwcompare" {
    local cmd ``e(cmd_est)'"

```

```

    }
    if `is_marg' {
        local cmd margins
    }
    if !`:list cmd in cmdlist' | !`is_pwc' {
        di as err `"method `opt' is not allowed with results from
> `cmd'"

        exit 322
    }
    if ``e(prefix)'"' == "svy" {
        di as err `"method `opt' is not allowed with results using
> the svy prefix"

        exit 322
    }
    local vce ``e(vce)'"'
    if !inlist("`vce'", "", "ols") {
        di as err `"method `opt' is not allowed with results using
> vce(`vce')'"

        exit 322
    }
    - local EXCLUDE duncan dunnett snk tukey scheffe
    - if `:list METHOD in EXCLUDE' {
    = if 0 {
        if "`ALL'" != "" {
            di as err `"option adjustall is not allowed with method `M
> ETHOD'"

            exit 198
        }
    }
    - sreturn local method ``METHOD'"'
    = sreturn local method "noadjust"
    - sreturn local adjustall ``ALL'"'
    = sreturn local adjustall `"'

> ----- end _get_mcompare -----

- local method ``s(method)'"'
= local method "noadjust"
- local all ``s(adjustall)'"'
= local all `"'
- local options ``s(options)'"'
= local options `"'
- if "`method'" != "noadjust" {
= if "noadjust" != "noadjust" {
    local keepmc 1
}

```



```

- opts_exclusive "`all' `groups'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- if "`method'" == "dunnett" {
= if "noadjust" == "dunnett" {
  opts_exclusive "`method' `groups'"
}
- _get_diopts diopts options, `options' `fvwrap' `fvlabel'
= _get_diopts diopts options,

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPvalues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW

```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```

```

- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}

```



```

- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

        = c_local diopts
        - if `K' == 2 {
        = if 2 == 2 {
        - c_local `c_opts' ``options''
        = c_local options ``''
        - }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95
    }

> ----- end _get_diopts.GetDiopts -----
        - c_local `name1' ``diopts''
        = c_local diopts ``''
        - local snames : s(macros)
        - foreach sname of local snames {
        - local S_`sname' = s(`sname')
        = local S_level = s(level)
        - }
        - local S_`sname' = s(`sname')
        = local S_method = s(method)
        - }
        - sreturn clear
        - GetDiopts DEFAULT
    }

> ----- begin _get_diopts.GetDiopts -----
        - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
        - syntax namelist(max=2) [, `DIOPTS' *]
        = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA

```

```

> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    -----

> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"
    = opts_exclusive " "
    -----

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    -----

> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
    = opts_exclusive " "
    -----

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive ``versus' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
}

```



```

- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
  }

```

```

        sreturn local pformat ``pformat'''
        local pformat `pformat(pformat)'''
    }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `''' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

```

```

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
    FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DEFAULT
- if `K' == 2 {
= if 1 == 2 {
    c_local `c_opts' ``options''
}
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
- if ``name2'' == "" {
= if ``options'' == "" {
    GetDiopts DUPS, `options'
}
- else {
- GetDiopts DUPS options, `options'
= GetDiopts DUPS options,

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV

- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW

```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

```



```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {

```

```

- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}

```

```

- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

= if "" != "" {
    FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

```

```

= c_local DUPS
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options''
= c_local options `''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- c_local `name2' ``options''
= c_local options `''
- }
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS'' != "" {
= if `'' != "" {
    if (strpos(`DUPS', "(")) {
        gettoken DUPS : DUPS, parse("(")
        local DUPS `DUPS'()'
    }
    di as err "duplicate {bf:`DUPS'} option not allowed"
    exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname''
= sreturn local level = `95'
- }
- sreturn local `sname' = ``S_`sname''
= sreturn local method = `noadjust'
- }

```

```

> ----- end _get_diopts -----
    - local legend coeflegend selegend
    - local legend : list legend & diopts
    - local diopts : list diopts - legend
    - local lstretch lstretch nolstretch
    - local lstretch : list lstretch & diopts
    - local diopts : list diopts - lstretch
    - local markdown markdown
    - local markdown : list markdown & diopts
    - local diopts : list diopts - markdown
    - _get_diopts ignore, `diopts' `cformat' `sformat' `pformat'
    = _get_diopts ignore,

> ----- begin _get_diopts -----
    - version 11
    - syntax namelist(max=2) [, *]
    - gettoken name1 namelist : namelist
    - gettoken name2 namelist : namelist
    - GetDiopts diopts options, `options'
    = GetDiopts diopts options,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels` `nobaselevels`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels` `nobaselevels`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive ``emptycells' `noemptycells'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``fvlabel' `nofvlabel'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``omitted' `noomitted'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {

```



```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {

```

```

- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS' ]
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

> _____ begin _get_diopts.Wrapon _____

```

- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}

```

```

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local diopts
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options'

```

```

= c_local options `""`
- }
- sreturn local coding `coding`
= sreturn local coding
- sreturn local versus `versus`
= sreturn local versus
- sreturn local compare `compare`
= sreturn local compare
- sreturn local level `level`
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- c_local `name1` ``diopts``
= c_local ignore `""`
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname` = s(`sname`)
= local S_level = s(level)
- }
- local S_`sname` = s(`sname`)
= local S_method = s(method)
- }
- sreturn clear
- GetDiopts DEFAULT

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS` *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels` `noallbaselevels`"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nbaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while "`opts'" != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n

```

```

        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
}
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
        - exit
    }
}
> ----- end opts_exclusive -----
    - local K : list sizeof namelist

```

```

- gettoken c_diopts c_opts : namelist
- opts_exclusive ""`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ""`opts'" != "" {
= while "" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive ""`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ""`opts'" != "" {
= while "" != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive ""`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'

```

```

= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if ``allbaselevels'`baselevels' == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
    }
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
    }
- }
- if ``emptycells' == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
    }
- }
- if ``omitted' == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
    }
}

```

```

- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')'
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wraon , `fvwraon'

```

```

= Wrapon ,


---


> 

---

 begin _get_diopts.Wrapon 

---


- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"
  syntax [, WOrd WIdth]
  exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
  c_local fvwrapon fvwrapon(`fvwrapon')
}


---


> 

---

 end _get_diopts.Wrapon 

---


- if "`fvwrap'" != "" {
= if "" != "" {
  FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DEFAULT

```

```

- if `K' == 2 {
= if 1 == 2 {
    c_local `c_opts' ``options'
  }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts.GetDiopts -----
- if ``name2' == "" {
= if `'' == "" {
- GetDiopts DUPS, `options'
= GetDiopts DUPS,

```

```

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGENd cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
- opts_exclusive "`allbaselevels' `noallbaselevels'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

        }
        - if `n' < 2 {
        = if 0 < 2 {
        - exit
    }
}

> ----- end opts_exclusive -----
- opts_exclusive "`allbaselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

```



```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {

```

```

= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch` `nolstretch`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport` `fullcnsreport`"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts`
= local opts
- local n 0
- while `""opts` != "" {
= while `""` != "" {
    local ++n
    gettoken item`n` opts : opts, bind
}
- if `n` < 2 {
= if 0 < 2 {
- exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive ``coeflegend' `selegend'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- opts_exclusive ``noci' `nopvalues'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive ``coding' `compare'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while `"'`opts'"" != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind

```

```

    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
}

```

```

- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth(`"'cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat `"'cformat'"
  local cformat `"'cformat(`cformat')'"
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth(`"'sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat `"'sformat'"
  local sformat `"'sformat(`sformat')'"
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth(`"'pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat `"'pformat'"
  local pformat `"'pformat(`pformat')'"
}
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
  syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
  local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

```

```

> _____ begin _get_diopts.Wrapon _____
- capture syntax [, W0rd WIdth]
- if c(rc) {
  di as err "invalid fvwrapon() option;"

```

```

syntax [, W0rd WIdth]
exit 198
}
- opts_exclusive "`word' `width'" fvwraon
= opts_exclusive " " fvwraon


---


> 

---

 begin opts_exclusive 

---


- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'"" != "" {
= while `""' != "" {
local ++n
gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit


---


> 

---

 end opts_exclusive 

---


- local fvwraon `word' `width'
= local fvwraon
- if `:length local fvwraon' {
= if 0 {
c_local fvwraon fvwraon(`fvwraon')
}


---


> 

---

 end _get_diopts.Wraon 

---


- if "`fvwrap'" != "" {
= if "" != "" {
FVWrap, `fvwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwraon' `fvlabel' `noci' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local DUPS
- if `K' == 2 {
= if 1 == 2 {
c_local `c_opts' ```options'""
}
- sreturn local coding `coding'
= sreturn local coding

```

```

- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

```

```

> ----- end _get_diopts -----
- }
- else {
  GetDiopts DUPS options, `options'
  c_local `name2' ``options'
}
- local DUPS : list DUPS - DEFAULT
- gettoken DUPS : DUPS
- if ``DUPS' != "" {
= if `"' != "" {
  if (strpos(`DUPS', "(")) {
    gettoken DUPS : DUPS, parse("(")
    local DUPS `DUPS'()'
  }
  di as err "duplicate {bf:`DUPS'} option not allowed"
  exit 198
}
- sreturn clear
- foreach sname of local snames {
- sreturn local `sname' = ``S_`sname'
= sreturn local level = `95'
- }
- sreturn local `sname' = ``S_`sname'
= sreturn local method = `noadjust'
- }

```

```

> ----- end _get_diopts -----
- local cformat ``s(cformat)'
= local cformat `"'
- local sformat ``s(sformat)'
= local sformat `"'
- local pformat ``s(pformat)'
= local pformat `"'
- _get_eformopts , eformopts(`options') allowed(__all__) sopti
> ons
= _get_eformopts , eformopts() allowed(__all__) soptions

```

```

> ----- begin _get_eformopts -----
- version 8.0

```



```

- syntax [, eformopts(string asis) soptions ALLOWed(string)
> ]
- local 0 , `eformopts'
= local 0 ,
- local EFALL NOHR hr NOSHR shr or IRr RRr tr TRatio
- if "`soptions'" != "" {
= if "soptions" != "" {
- syntax [, EForm1(passthru) EForm `EFALL' * ]
= syntax [, EForm1(passthru) EForm NOHR hr NOSHR shr or IRr
> RRr tr TRatio * ]
- local opts ``options'
= local opts `''
- local 0 , `eform1' `eform' `nohr' `hr' `noshr' `shr' `or'
> `irr' `rrr' `tr' `tratio'
= local 0 ,
- }
- if "`allowed'" == "__all__" {
= if "__all__" == "__all__" {
- local allowed `EFALL'
= local allowed NOHR hr NOSHR shr or IRr RRr tr TRatio
- }
- foreach ef of local allowed {
- capture confirm name `ef'
= capture confirm name NOHR
- if _rc {
di as err "`ef' is not a valid name"
exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr
- }
- capture confirm name `ef'
= capture confirm name hr
- if _rc {
di as err "`ef' is not a valid name"
exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr
- }
- capture confirm name `ef'
= capture confirm name NOSHR
- if _rc {
di as err "`ef' is not a valid name"
exit 198
}
}

```

```

- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr
- }
- capture confirm name `ef'
= capture confirm name shr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr
- }
- capture confirm name `ef'
= capture confirm name or
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or
- }
- capture confirm name `ef'
= capture confirm name IRr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr
- }
- capture confirm name `ef'
= capture confirm name RRr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'
= local efopts nohr hr noshr shr or irr rrr
- }
- capture confirm name `ef'
= capture confirm name tr
- if _rc {
  di as err "`ef' is not a valid name"
  exit 198
}
- local efopts `efopts' `=lower("`ef'")'

```



```

    local eform_cons_note = "odds ratios"
  }
- else if ``eform1``=="Haz. ratio" {
= else if ``""=="Haz. ratio" {
    local eform_cons_ti = "Hazard"
    local eform_cons_note = "hazard ratios"
  }
- else if ``eform1``=="Time ratio" {
= else if ``""=="Time ratio" {
    local eform_cons_ti = "Time"
    local eform_cons_note = "time ratios"
  }
- else if ``eform1``=="IRR" {
= else if ``""=="IRR" {
    local eform_cons_ti = "Inc. rate"
    local eform_cons_note = "incidence-rate ratios"
    local eform_cons_ti2 = "incidence rate"
  }
- else if ``eform1``=="Risk ratio" {
= else if ``""=="Risk ratio" {
    local eform_cons_ti = "Risk"
    local eform_cons_note = "risk ratios"
  }
- else if ``eform1``=="Hlth ratio" {
= else if ``""=="Hlth ratio" {
    local eform_cons_ti = "Health"
    local eform_cons_note = "health ratios"
  }
- local k : list sizeof eform
- if `k' {
= if 0 {
    opts_exclusive ``eform''
    if `:length local eform1' {
      opts_exclusive "eform()" `eform''
    }
  }
- if `k' {
= if 0 {
    if (``eform'=="eform") local eform1 = "exp(b)"
    else if (``eform'=="hr") {
      local eform1 = "Haz. ratio"
      local eform_cons_ti = "Hazard"
      local eform_cons_note = "hazard ratios"
    }
    else if (``eform'=="shr") {
      local eform1 = "SHR"
    }
  }
}

```

```

local eform_cons_ti = "Subhazard"
local eform_cons_note = "subhazard ratios"
}
else if ("`eform'"=="tr") {
local eform1 = "Time ratio"
local eform_cons_ti = "Time"
local eform_cons_note = "time ratios"
}
else if ("`eform'"=="tratio") {
local eform1 = "Time ratio"
local eform_cons_ti = "Time"
local eform_cons_note = "time ratios"
}
else if ("`eform'"=="or") {
local eform1 = "Odds ratio"
if ("`e(cmd)'"=="asclogit" | "`e(cmd)'"=="cmclogit" | "`e(
> cmd)'"=="cmmixlogit" | "`e(cmd)'"=="cmxtmixlogit" ) {
local eform_cons_ti = "Rel. risk"
local eform_cons_note = "relative-risk ratios"
local eform_cons_ti2 = "relative risk"
}
else {
local eform_cons_ti = "Odds"
local eform_cons_note = "odds ratios"
}
}
else if ("`eform'"=="irr") {
local eform1 = "IRR"
local eform_cons_ti = "Inc. rate"
local eform_cons_note = "incidence-rate ratios"
local eform_cons_ti2 = "incidence rate"
}
else if ("`eform'"=="rrr") {
local eform1 = "RRR"
local eform_cons_ti = "Rel. risk"
local eform_cons_note = "relative-risk ratios"
local eform_cons_ti2 = "relative risk"
}
else if ("`eform'"!="nohr") & ("`eform'"!="noshr") {
local eform1 = upper("`eform'")
}
}
- sreturn clear
- sreturn local options ``opts'''
= sreturn local options `'''
- sreturn local opt `eform'

```

```

= sreturn local opt
- sreturn local str `eform1'
= sreturn local str
- if ``eform1''' != "" {
= if `''' != "" {
    sreturn local eform eform(`eform1'')
  }
- else sreturn local eform ""
- sreturn local eform_cons_ti `eform_cons_ti'
= sreturn local eform_cons_ti
- sreturn local eform_cons_note `eform_cons_note'
= sreturn local eform_cons_note
- sreturn local eform_cons_ti2 `eform_cons_ti2'
= sreturn local eform_cons_ti2

```

```

> ----- end _get_eformopts -----
- local tr_item = ``s(eform_cons_note)'''
= local tr_item = `'''
- if inlist("`bmatrix'", "", "e(b)") & "e(k_eform)'" == "0" {
= if inlist("", "", "e(b)") & "" == "0" {
    local eform
  }
- else local eform ``s(str)'''
= else local eform `'''
- local eform_cons_ti ``s(eform_cons_ti)'''
= local eform_cons_ti `'''
- local eform_cons_ti2 ``s(eform_cons_ti2)'''
= local eform_cons_ti2 `'''
- if ("e(consonly)'"!="1" | ``eform_cons_ti'')=="" ) {
= if ("0"!="1" | `''')=="" ) {
- local eformdi ``s(str)'''
= local eformdi `'''
- }
- else {
    local eformdi ``eform_cons_ti'''
    local tr_item = cond(missing("`eform_cons_ti2'"), strlower(`
> "`eform_cons_ti''), ``eform_cons_ti2''))
  }
- local coefttl = cond(`eform'')==`'', ``coeftitle'', ``
> eformdi'')
= local coefttl = cond(`''')==`'', `'', `')
- local options ``s(options)'''
= local options `'''
- _get_diparmopts, diparmopts(`options') level(`level')
= _get_diparmopts, diparmopts() level(95)

```

```

> ----- begin _get_diparmopts -----
    - if _caller() < 8.2 {
      _get_diparmopts_8 `0'
      exit
    }
    - version 9
    - local version : di "version " string(_caller()) ":"
    - syntax [, diparmopts(string asis) EXECute soptions bottom
> plus SYNTAXonly * ]
    - local goptions `options'
    = local goptions level(95)
    - SpliceGlobals junk , `goptions'
    = SpliceGlobals junk , level(95)
-----

> ----- begin _get_diparmopts.SpliceGlobals -----
    - syntax name(id="macro name" name=c_diparm) [, diparm(str
> ing asis) Level(cilevel) dof(passthru) syntaxonly ]
    - if ``dof''' == "" & ``e(df_r)''' != "" {
    = if `''' == "" & `''' != "" {
      capture confirm integer number `e(df_r)'
      if !c(rc) {
        local gdof dof(`e(df_r)')
      }
      capture
    }
    - else local gdof ``dof'''
    = else local gdof `'''
    - local glevel `level'
    = local glevel 95
    - local lopt level(`glevel')
    = local lopt level(95)
    - if (``diparm''' == "") exit
    = if (``''' == "") exit
-----

> ----- end _get_diparmopts.SpliceGlobals -----
    - local 0 `", `diparmopts'''
    = local 0 `", ""
    - local diparmopts
    - local k 0
    - syntax [, diparm(string asis) * ]
    - while ``diparm''' != "" {
    = while `''' != "" {
      local ++k
      local single 1
      local after
      capture _on_colon_parse `diparm'

```

```

        if !c(rc) {
            local single 0
            local diparm ``s(before)''
            local after ``s(after)''
        }
        capture
        SpliceGlobals diparm , diparm(`diparm') `syntaxonly' `gopt

> ions'

        local diparm`k' ``diparm''
        local diparmopts ``diparmopts' : `diparm''
        if `single' | ``:list retok after'' == '' {
            local 0 `", `options''
            syntax [, diparm(string asis) * ]
        }
        else {
            local diparm ``after''
        }
    }
- if ``soptions'' == '' {
= if ``'' == '' {
- syntax [, diparm(string asis) ]
- }
- if ("`execute'" == "") {
= if (" == ") {
- sreturn clear
- sreturn local options ``options''
= sreturn local options ``''
- sreturn local diparm ``diparmopts''
= sreturn local diparm ``''
- forval i = 1/`k' {
= forval i = 1/0 {
    sreturn local diparm`i' ``diparm`i''
}
- sreturn local k `k'
= sreturn local k 0
- exit
}

> ----- end _get_diparmopts -----
- local NODIPARM : length local nodiparm
- if `NODIPARM' {
= if 0 {
    local options
}
- local GTOPTS parse(":") bind quotes
- local k 0
- if !`NODIPARM' {

```



```

= if !0 {
- if ``e(diparm)'' != "" {
= if `'' != "" {
  local i 0
  local diparm ``e(diparm)''
}
- else if ``e(diparm1)'' != "" {
= else if ``lnalpha, exp label("alpha")'' != "" {
- local i 1
- local diparm ``e(diparm1)''
= local diparm ``lnalpha, exp label("alpha")''
- }
- while `:length local diparm' {
= while 27 {
- gettoken diparm rest : diparm, `GTOPTS'
= gettoken diparm rest : diparm, parse(":") bind quotes
- while `:length local rest' {
= while 0 {
  local ++k
  local diparm`k' : copy local diparm
  gettoken COLON rest : rest, `GTOPTS'
  gettoken diparm rest : rest, `GTOPTS'
}
- local ++k
- local diparm`k' : copy local diparm
= local diparm1 : copy local diparm
- local ++i
- local diparm ``e(diparm`i)''
= local diparm `''
- }
- while `:length local diparm' {
= while 0 {
  gettoken diparm rest : diparm, `GTOPTS'
  while `:length local rest' {
    local ++k
    local diparm`k' : copy local diparm
    gettoken COLON rest : rest, `GTOPTS'
    gettoken diparm rest : rest, `GTOPTS'
  }
  local ++k
  local diparm`k' : copy local diparm
  local ++i
  local diparm ``e(diparm`i)''
}
- }
- if `:length local options' {

```

```

= if 0 {
  local 0 `", `options'""
  syntax [, diparm(string asis) *]
  if `k' & `:length local diparm' {
    local ++k
    local diparm`k' __sep__
  }
  while `:length local diparm' {
    gettoken diparm rest : diparm, `GTOPTS'
    while `:length local rest' {
      local ++k
      local diparm`k' : copy local diparm
      gettoken COLON rest : rest, `GTOPTS'
      gettoken diparm rest : rest, `GTOPTS'
    }
    local ++k
    local diparm`k' : copy local diparm
    local 0 `", `options'""
    syntax [, diparm(string asis) *]
  }
}
- if "`markdown'" != "" {
= if "" != "" {
  local lsize = c(linesize)
  set linesize 255
}
- `vv' mata: _coef_table()
= version 12, missing: mata: _coef_table()

```

```

> ----- begin _get_diopts -----
- version 11
- syntax namelist(max=2) [, *]
- gettoken name1 namelist : namelist
- gettoken name2 namelist : namelist
- GetDiopts diopts options, `options'
= GetDiopts diopts options,
-----

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFlegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPvalues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV
- syntax namelist(max=2) [, `DIOPTS' *]
= syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA

```

```

> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`emptycells' `noemptycells'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`fvlabel' `nofvlabel'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```

```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
    local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
    local baselevels baselevels
}
}

```



```

- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
    local emptycells noemptycells
  }
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
    local omitted noomitted
  }
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
    local lstretch nolstretch
  }
- }
- if `:length local cformat' {
= if 0 {
    confirm numeric format `cformat'
    if fmtwidth("`cformat'") > 9 {
      local cformat "%9.0g"
      di "{txt}note: invalid cformat(), using default"
    }
    sreturn local cformat "`cformat'"
    local cformat `cformat(`cformat')'
  }
- if `:length local sformat' {
= if 0 {
    confirm numeric format `sformat'
    if fmtwidth("`sformat'") > 8 {
      local sformat "%8.2f"
      di "{txt}note: invalid sformat(), using default"
    }
    sreturn local sformat "`sformat'"
    local sformat `sformat(`sformat')'
  }
- if `:length local pformat' {
= if 0 {
    confirm numeric format `pformat'
    if fmtwidth("`pformat'") > 5 {
      local pformat "%5.3f"
      di "{txt}note: invalid pformat(), using default"
    }
  }

```

```

        sreturn local pformat ``pformat'''
        local pformat `pformat(pformat)'''
    }
- if `K' == 1 & `:length local options' {
= if 2 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts''' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

```

```

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {
= if "" != "" {
    FVWrap, `fvwrap'
  }
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

= c_local diopts
- if `K' == 2 {
= if 2 == 2 {
- c_local `c_opts' ``options''
= c_local options ``''
- }
- sreturn local coding `coding'
= sreturn local coding
- sreturn local versus `versus'
= sreturn local versus
- sreturn local compare `compare'
= sreturn local compare
- sreturn local level `level'
= sreturn local level 95

> ----- end _get_diopts.GetDiopts -----
- c_local `name1' ``diopts''
= c_local __000007 ``''
- local snames : s(macros)
- foreach sname of local snames {
- local S_`sname' = s(`sname')
= local S_level = s(level)
- }
- local S_`sname' = s(`sname')
= local S_k = s(k)
- }
- sreturn clear
- GetDiopts DEFAULT

> ----- begin _get_diopts.GetDiopts -----
- local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)

```

```

> NOABBREV ABBREV
    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW
> RAP(passthru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *]
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`allbaselevels' `nobaselevels'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----

```

```

- opts_exclusive "`baselevels' `nobaselevels'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
-----
> ----- end opts_exclusive -----
- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "
-----
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts

```

```

- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {

```

```

- exit
> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`coeflegend' `selegend'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ```opts'`` != "" {
= while `""' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
> ----- end opts_exclusive -----
- opts_exclusive "`noci' `nopvalues'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2

```

```

- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local K : list sizeof namelist
- gettoken c_diopts c_opts : namelist
- opts_exclusive "`coding' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- opts_exclusive "`versus' `compare'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {

```



```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - opts_exclusive "`abbrev' `noabbrev'"
= opts_exclusive " "
> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ``opts' != "" {
= while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}
> ----- end opts_exclusive -----
    - local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
    - local baselevels `baselevels' `nobaselevels'
= local baselevels
    - local emptycells `emptycells' `noemptycells'
= local emptycells
    - local omitted `omitted' `noomitted'
= local omitted
    - local lstretch `lstretch' `nolstretch'
= local lstretch
    - local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
    - local abbrev `abbrev' `noabbrev'
= local abbrev
    - if "`allbaselevels'`baselevels'" == "" {
= if "" == "" {
    - if c(showbaselevels) == "all" {
        local allbaselevels allbaselevels
    }
}

```

```

- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if "`emptycells'" == "" {
= if "" == "" {
- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {

```

```

        local pformat "%5.3f"
        di "{txt}note: invalid pformat(), using default"
    }
    sreturn local pformat ``pformat''
    local pformat `pformat(pformat)''
    }
- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
    }
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
    }
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
    }
- opts_exclusive ``word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while `""' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {

```

```

        = if 0 {
            c_local fvwrapon fvwrapon(`fvwrapon`)
        }
    }
> ----- end _get_diopts.Wrapon -----
    - if "`fvwrap'" != "" {
    = if "" != "" {
        FVWrap, `fvwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

    = c_local DEFAULT
    - if `K' == 2 {
    = if 1 == 2 {
        c_local `c_opts' ``options''
    }
    - sreturn local coding `coding'
    = sreturn local coding
    - sreturn local versus `versus'
    = sreturn local versus
    - sreturn local compare `compare'
    = sreturn local compare
    - sreturn local level `level'
    = sreturn local level 95
    }
> ----- end _get_diopts.GetDiopts -----
    - if ``name2'' == "" {
    = if ``' == "" {
    - GetDiopts DUPS, `options'
    = GetDiopts DUPS,

> ----- begin _get_diopts.GetDiopts -----
    - local DIOPTS Level(cilevel) vsquish NOALLBASElevels ALLB
> ASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOEMPTYcells EMP
> TYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGEND cformat(st
> ring) sformat(string) pformat(string) CODING VERSUS COMPARE FVWRAP(passthru)
> FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CITYPE(passthru)
> NOABBREV ABBREV

    - syntax namelist(max=2) [, `DIOPTS' *]
    = syntax namelist(max=2) [, Level(cilevel) vsquish NOALLBA
> SElevels ALLBASElevels NOBASElevels BASElevels noCNSReport FULLCNSReport NOE
> MPTYcells EMPTYcells NOOMITted OMITted NOLSTRETCH LSTRETCH COEFLegend SELEGE
> ND cformat(string) sformat(string) pformat(string) CODING VERSUS COMPARE FVW

```

```

> RAP(passthru) FWWRAPON(string) NOFVLABEL FVLABEL NOCI NOPValues MARKDOWN CIT
> YPE(passthru) NOABBREV ABBREV *)
    - opts_exclusive "`allbaselevels' `noallbaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts''' != "" {
    = while `''' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit
    _____
> _____ end opts_exclusive _____
    - opts_exclusive "`baselevels' `nobaselevels'"
    = opts_exclusive " "
    _____
> _____ begin opts_exclusive _____
    - version 8.2
    - args opts optname errcode optslab

```

```

- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`emptycells' `noemptycells'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- opts_exclusive "`fvlabel' `nofvlabel'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
    }

```

```

- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`omitted' `noomitted'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`lstretch' `nolstretch'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----
- opts_exclusive "`cnsreport' `fullcnsreport'"
= opts_exclusive " "

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`coeflegend' `selegend'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
    = if 0 < 2 {
    - exit

> ----- end opts_exclusive -----
    - opts_exclusive "`noci' `nopvalues'"
    = opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - local n 0
    - while ``opts' != "" {
    = while `"' != "" {

```



```

        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - local K : list sizeof namelist
    - gettoken c_diopts c_opts : namelist
    - opts_exclusive "`coding' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

> ----- end opts_exclusive -----
    - opts_exclusive "`versus' `compare'"
= opts_exclusive " "

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
= local opts
    - local n 0
    - while ```opts'"" != "" {
= while `""' != "" {
        local ++n
        gettoken item`n' opts : opts, bind
    }
    - if `n' < 2 {
= if 0 < 2 {
    - exit
}

```

```

> ----- end opts_exclusive -----
- opts_exclusive ``abbrev' `noabbrev'
= opts_exclusive " "

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local allbaselevels `allbaselevels' `noallbaselevels'
= local allbaselevels
- local baselevels `baselevels' `nobaselevels'
= local baselevels
- local emptycells `emptycells' `noemptycells'
= local emptycells
- local omitted `omitted' `noomitted'
= local omitted
- local lstretch `lstretch' `nolstretch'
= local lstretch
- local fvlabel `fvlabel' `nofvlabel'
= local fvlabel
- local abbrev `abbrev' `noabbrev'
= local abbrev
- if ``allbaselevels'`baselevels' == "" {
= if "" == "" {
- if c(showbaselevels) == "all" {
  local allbaselevels allbaselevels
}
- else if c(showbaselevels) == "on" {
  local baselevels baselevels
}
- }
- if ``emptycells' == "" {
= if "" == "" {

```

```

- if c(showemptycells) == "off" {
  local emptycells noemptycells
}
- }
- if "`omitted'" == "" {
= if "" == "" {
- if c(showomitted) == "off" {
  local omitted noomitted
}
- }
- if "`lstretch'" == "" {
= if "" == "" {
- if c(lstretch) == "off" {
  local lstretch nolstretch
}
- }
- if `:length local cformat' {
= if 0 {
  confirm numeric format `cformat'
  if fmtwidth("`cformat'") > 9 {
    local cformat "%9.0g"
    di "{txt}note: invalid cformat(), using default"
  }
  sreturn local cformat "`cformat'"
  local cformat `cformat(`cformat')"'
}
- if `:length local sformat' {
= if 0 {
  confirm numeric format `sformat'
  if fmtwidth("`sformat'") > 8 {
    local sformat "%8.2f"
    di "{txt}note: invalid sformat(), using default"
  }
  sreturn local sformat "`sformat'"
  local sformat `sformat(`sformat')"'
}
- if `:length local pformat' {
= if 0 {
  confirm numeric format `pformat'
  if fmtwidth("`pformat'") > 5 {
    local pformat "%5.3f"
    di "{txt}note: invalid pformat(), using default"
  }
  sreturn local pformat "`pformat'"
  local pformat `pformat(`pformat')"'
}

```

```

- if `K' == 1 & `:length local options' {
= if 1 == 1 & 0 {
    syntax namelist(max=2) [, `DIOPTS']
}
- if reldif(`level', c(level)) > 1e-3 {
= if reldif(95, c(level)) > 1e-3 {
    local levelopt level(`level')
}
- Wrapon , `fvwrapon'
= Wrapon ,

> ----- begin _get_diopts.Wrapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd WIdth]
    exit 198
}
- opts_exclusive "`word' `width'" fvwrapon
= opts_exclusive " " fvwrapon

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- local fvwrapon `word' `width'
= local fvwrapon
- if `:length local fvwrapon' {
= if 0 {
    c_local fvwrapon fvwrapon(`fvwrapon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fvwrap'" != "" {

```

```

        = if "" != "" {
            FVWrap, `fvwrap'
        }
        - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fvwrap' `fvwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `a
> bbrev'

```

```

        = c_local DUPS
        - if `K' == 2 {
        = if 1 == 2 {
            c_local `c_opts' ``options''
        }
        - sreturn local coding `coding'
        = sreturn local coding
        - sreturn local versus `versus'
        = sreturn local versus
        - sreturn local compare `compare'
        = sreturn local compare
        - sreturn local level `level'
        = sreturn local level 95

```

```

> _____ end _get_diopts.GetDiopts _____
        - }
        - else {
            GetDiopts DUPS options, `options'
            c_local `name2' ``options''
        }
        - local DUPS : list DUPS - DEFAULT
        - gettoken DUPS : DUPS
        - if ``DUPS'' != "" {
        = if ``'' != "" {
            if (strpos(`DUPS'', "(")) {
                gettoken DUPS : DUPS, parse("(")
                local DUPS `DUPS'()'
            }
            di as err "duplicate {bf:`DUPS'} option not allowed"
            exit 198
        }
        - sreturn clear
        - foreach sname of local snames {
            - sreturn local `sname' = ``S_`sname''
        = sreturn local level = `95'
        - }
        - sreturn local `sname' = ``S_`sname''
        = sreturn local k = `0'

```

```

- }


---


> 

---

 end _get_diopts 

---




---


> 

---

 begin _diparm 

---


- version 11
- if _caller() < 8.2 {
  _diparm_8 `0'
  exit
}
- syntax anything(name=eqs) [, Level(cilevel) NOTAB DOF(pass
> thru) BMATrix(passthru) VMATrix(passthru) DFMATrix(passthru) COEFlegend SELE
> GEND * ]
- tempname T
- if `:length local notab' {
= if 5 {
- `T' = ._b_diparm.new, level(`level') `dof' `bmatrix' `vma
> trix' `dfmatrix' `coeflegend' `selegend'
= ._000008 = ._b_diparm.new, level(95)
-class _b_diparm {
-   string  LEVEL    = ""
-   double  IS_MI    = 0
-   string  BMAT     = ""
-   string  COLNA    = ""
-   string  VMAT     = ""
-   string  DFMAT    = ""
-   string  COLFUL   = ""
-   double  DF       = 0
-   double  DF_HOLD  = 0
-   double  EXTRA    = 1
-   string  METHOD    = ""
-   double  has_b     = 0
-   double  has_v     = 0
-   double  has_df    = 0
-   double  has_Cns   = 0
-}


---


> 

---

 begin _b_diparm.new 

---


- version 11
- .IS_MI = ``e(mi)''' == "mi" & ``e(df_mi)''' == "matrix
> "
= .IS_MI = `''' == "mi" & `''' == "matrix"
- if `IS_MI' {
= if 0 {
  local ALTOPT DFMATrix(string)
}

```

```

- syntax [, Level(cilevel) DOF(real -1) BMATrix(string) VM
> ATrix(string) EXTRA(real 1) MCOMPARE(passthru) `ALTOPT' ]
- syntax [, Level(cilevel) DOF(real -1) BMATrix(string) VM
> ATrix(string) EXTRA(real 1) MCOMPARE(passthru) ]
- _get_mcompare, `mcompare'
= _get_mcompare,

> ----- begin _get_mcompare -----
- version 11
- local cmd ``e(cmd)'''
= local cmd `nbreg'
- syntax [name(name=caller)] [, *]
- local is_pwc = inlist("pwcompare", "`cmd'", "`caller'"
> ) | inlist("pwmean", "`cmd'", "`caller'")
= local is_pwc = inlist("pwcompare", "nbreg", "") | inli
> st("pwmean", "nbreg", "")
- local is_marg = inlist("margins", "`cmd'", "e(cmd2)'"
> , "`caller'")
= local is_marg = inlist("margins", "nbreg", "", "")
- local OPTIONS NOADJust BONferroni DUNCAn DUNNett SCHeff
> fe SIDak SNK TUKey ADJustall
- if `is_pwc' {
= if 0 {
syntax [name] [, `OPTIONS' MCOMPare(string) *]
}
- else {
- syntax [name] [, MCOMPare(string) *]
- local suboption mcompare()
- }
- sreturn clear
- sreturn local options ``options'''
= sreturn local options `'''
- if `is_pwc' {
= if 0 {
local METHOD `noadjust' `bonferroni' `duncan' `dunnett
> ' `scheffe' `sidak' `snk' `tukey'
local METHOD : list uniq METHOD
opts_exclusive ``METHOD'
local ALL `adjustall'
opts_exclusive ``noadjust' `ALL'
}
- local 0 `", `mcompare'''
= local 0 `", ""
- capture syntax [, `OPTIONS']
= capture syntax [, NOADJust BONferroni DUNCAn DUNNett S
> CHeffe SIDak SNK TUKey ADJustall]

```

```

- if c(rc) {
  di as err "invalid mcompare() option;"
  di as err "method ``mcompare'' not allowed"
  error 198
}
- local METHOD `METHOD' `noadjust' `bonferroni' `duncan'
> `dunnett' `scheffe' `sidak' `snk' `tukey'
= local METHOD
- local METHOD : list uniq METHOD
- local ALL `ALL' `adjustall'
= local ALL
- local ALL : list uniq ALL
- opts_exclusive ``METHOD'' `suboption'
= opts_exclusive "" mcompare()

> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts'' != "" {
= while ``'' != "" {
  local ++n
  gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 0 < 2 {
- exit

> ----- end opts_exclusive -----
- if ``METHOD'' == "" {
= if "" == "" {
- if ``ALL'' != "" {
= if "" != "" {
  di as err "multiple comparison method required with th
> e adjustall option"
  exit 198
}
- local METHOD noadjust
- local noadjust noadjust
- }
- opts_exclusive ``ALL' `noadjust'' `suboption'
= opts_exclusive " noadjust" mcompare()

> ----- begin opts_exclusive -----

```



```

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts noadjust
- local n 0
- while ``opts' != "" {
= while ``noadjust' != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }
- while ``opts' != "" {
= while ``' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
  }
- if `n' < 2 {
= if 1 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- local EXCLUDE duncan dunnett snk tukey
- if `:list METHOD in EXCLUDE' {
= if 0 {
  if `is_pwc' {
    local opt : copy local METHOD
  }
  else {
    local opt "mcompare(`METHOD')"
  }
  local cmdlist anova manova regress mvreg pwmean
  if ``cmd' == "pwcompare" {
    local cmd ``e(cmd_est)''
  }
  if `is_marg' {
    local cmd margins
  }
  if !`:list cmd in cmdlist' | !`is_pwc' {
    di as err ``method `opt' is not allowed with results f
> rom `cmd''

    exit 322
  }
  if ``e(prefix)'' == "svy" {
    di as err ``method `opt' is not allowed with results u
> sing the svy prefix''

    exit 322

```

```

    }
    local vce ``e(vce)'''
    if !inlist("`vce'", "", "ols") {
    di as err ``method `opt' is not allowed with results u
> sing vce(`vce')'''
    exit 322
    }
    }
    - local EXCLUDE duncan dunnett snk tukey scheffe
    - if `:list METHOD in EXCLUDE' {
    = if 0 {
    if ""ALL"" != "" {
    di as err ``option adjustall is not allowed with metho
> d `METHOD'''
    exit 198
    }
    }
    - sreturn local method ``METHOD'''
    = sreturn local method `noadjust'
    - sreturn local adjustall ``ALL'''
    = sreturn local adjustall `'''
    _____
> _____ end _get_mcompare _____
    - if !inlist("`s(method)'", "noadjust", "bonferroni", "sid
> ak") {
    = if !inlist("noadjust", "noadjust", "bonferroni", "sidak"
> ) {
    di as err "option `mcompare' not allowed"
    exit 198
    }
    - .METHOD = "`s(method)'"
    = .METHOD = "noadjust"
    - .LEVEL = "`level'"
    = .LEVEL = "95"
    - if "`bmatrix'" == "" {
    = if "" == "" {
    - if `:length local vmatrix' {
    = if 0 {
    di as err "option vmatrix() requires option bmatrix()"
    exit 198
    }
    - }
    - if "`vmatrix'" == "" {
    = if "" == "" {
    - if `:length local dfmatrix' {
    = if 0 {

```

```

        di as err "option dfmatrix() requires option vmatrix()"
        exit 198
    }
- }
- if `'.IS_MI' & "`bmatrix'`vmatrix'`dfmatrix'`e(properties
> )'"==" {
    = if 0 & "b V"==" {
        local bmatrix e(b_mi)
        local vmatrix e(V_mi)
        local dfmatrix e(df_mi)
    }
- if `':length local bmatrix' {
= if 0 {
    .has_b = 1
    .BMAT = "`bmatrix'"
    .COLNA = "`:colful `bmatrix'"
}
- else {
- .COLNA = "`:colful e(b)'"
= .COLNA = "piq_timing_max:ln_neq piq_timing_max:cb_author
> s_ext piq_timing_max:estimated piq_timing_max:est_late piq_timing_max:o.est_
> early piq_timing_max:stky_pr_rotemberg piq_timing_max:stky_pr_calvo piq_timi
> ng_max:_cons /lnalpha"
- .has_Cns = "`e(Cns)'" == "matrix"
= .has_Cns = "matrix" == "matrix"
- }
- if `':length local vmatrix' {
= if 0 {
    .has_v = 1
    .VMAT = "`vmatrix'"
}
- if `':length local dfmatrix' {
= if 0 {
    .has_df = 1
    .DFMAT = "`dfmatrix'"
}
- if `dof' <= 0 {
= if -1 <= 0 {
- local df_r 0
- Chk4PosInt df_r
}

> ----- begin _b_diparm.Chk4PosInt -----
- version 11
- args ename
- if ``e(`ename')' != "" {
= if `""' != "" {

```

```

        capture confirm integer number `e(`ename`)'
        if !c(rc) {
            if `e(`ename`)' > 0 {
                c_local `ename' `e(`ename`)'
            }
        }
    }
}

> ----- end _b_diparm.Chk4PosInt -----

- if `df_r' {
= if 0 {
    .DF = `df_r'
}
- }
- else {
    .DF = `dof'
}
- if `extra' > 1 {
= if 1 > 1 {
    .EXTRA = `extra'
}

> ----- end _b_diparm.new -----

- .`T'.compute `eqs', `options'
= .__000008.compute lnalpha, exp

> ----- begin _b_diparm.compute -----

- version 11
- version 11
- syntax anything(name=EQS id="equation name(s)") [, NOPro
> b Prob EXP TANH ILOGIT INVLOGIT Function(str) Derivative(str) CI(string) ]
- opts_exclusive "`prob' `noprob'"
= opts_exclusive " "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 0
- while ``opts' != "" {
= while `"" != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {

```

```

= if 0 < 2 {
- exit
}

> ----- end opts_exclusive -----

- local prob `prob' `noprob'
= local prob
- if "`ilogit'`invlogit'" != "" {
= if "" != "" {
    local ilogit ilogit
}
- local builtin `exp' `tanh' `ilogit'
= local builtin exp
- local fd 0
- if `:length local function' {
= if 0 {
    local ++fd
}
- if `:length local derivative' {
= if 0 {
    local ++fd
}
- if `fd' == 1 {
= if 0 == 1 {
    di as err "both function() and derivative() must be spec
> ified"

    exit 198
}
- if `fd' {
= if 0 {
    local fopt "function()"
}
- opts_exclusive "`builtin' `fopt'"
= opts_exclusive "exp "

> ----- begin opts_exclusive -----

- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts exp
- local n 0
- while "`opts'" != "" {
= while "exp" != "" {
- local ++n
- gettoken item`n' opts : opts, bind
= gettoken item1 opts : opts, bind
- }

```

```

- while ``opts'' != "" {
= while `'' != "" {
    local ++n
    gettoken item`n' opts : opts, bind
}
- if `n' < 2 {
= if 1 < 2 {
- exit

```

```

> ----- end opts_exclusive -----
- if `.has_b' {
= if 0 {
    local bmat ``.BMAT''
}
- else {
- local bmat `e(b)'
- }
- foreach EQ of local EQS {
- if substr(`EQ',1,1) != "/" {
= if substr(`/lnalpha',1,1) != "/" {
- local eq `"/EQ'
= local eq `/lnalpha'
- }
- else local eq : copy local EQ
- local el : colnumb `bmat' `eq'
= local el : colnumb e(b) "/lnalpha"
- if inlist(`el', "", ".") {
= if inlist(`9', "", ".") {
    di as err "parameter named {bf:`EQ'} not found"
    exit 322
}
- local eqs `eqs' `eq'
= local eqs /lnalpha
- }
- local neq : list sizeof eqs
- if `.has_Cns' {
= if 1 {
- tempname Cns C
- matrix `Cns' = e(Cns)
= matrix __000009 = e(Cns)
- }
- if `neq' != 1 {
= if 1 != 1 {
    local el 0
}
- if `.IS_MI' {

```

```

= if 0 {
  if `.has_df' {
    local df = el(`.DFMAT',1,`el')
  }
  else {
    local df = el(e(df_mi),1,`el')
  }
  if missing(`df') {
    local df 0
  }
}
- else {
- local df = `.DF'
= local df = 0
- }
- tempname z alpha
- scalar `alpha' = (100 - `.LEVEL')/100
= scalar __00000C = (100 - 95)/100
- mata: st_numscalar("`z'", _mc_crit("`METHOD'", `df' ==
> 0 ? . : `df', st_numscalar("`alpha'", ., `.EXTRA')))
= mata: st_numscalar("__00000B", _mc_crit("noadjust", 0 ==
> 0 ? . : 0, st_numscalar("__00000C"), ., 1))
- local isCns 0
- if `neq' == 1 {
= if 1 == 1 {
- tempname b se
- if `.has_b' {
= if 0 {
  scalar `b' = el(`.BMAT',1,`el')
  if `.has_v' {
    scalar `se' = sqrt(el(`.VMAT',`el',`el'))
  }
  else {
    scalar `se' = 0
  }
}
- else {
- scalar `b' = _b[`eqs']
= scalar __00000D = _b[/lnalpha]
- if "`e(V)'" == "matrix" {
= if "matrix" == "matrix" {
- scalar `se' = _se[`eqs']
= scalar __00000E = _se[/lnalpha]
- }
- else {
  scalar `se' = 0
}

```

```

    }
- if `.has_Cns' & `se' == 0 {
= if 1 & __00000E == 0 {
    matrix `C' = `Cns'[1...,`el']
    matrix `C' = `C'*`C'
    local isCns = `C'[1,1] != 0
    }
- }
- if `se' == 0 {
= if __00000E == 0 {
    scalar `se' = .
    }
- if "`function'" != "" {
= if "" != "" {
    .Function `b' `se' `z' "`function'" "`derivative'"
    }
- else if "`builtin'" != "" {
= else if "exp" != "" {
- .`builtin' `b' `se' `z'
= .exp __00000D __00000E __00000B
}

> ----- begin _b_diparm.exp -----

- version 11
- args b se z
- return scalar est = exp(`b')
= return scalar est = exp(__00000D)
- return scalar se = return(est)*`se'
= return scalar se = return(est)*__00000E
- return scalar lb = exp(`b'-`z'*`se')
= return scalar lb = exp(__00000D-__00000B*__00000E)
- return scalar ub = exp(`b'+`z'*`se')
= return scalar ub = exp(__00000D+__00000B*__00000E)
- return scalar i = 0
}

> ----- end _b_diparm.exp -----

- }
- else {
    if ("`prob'" != "noprob") local prob prob
    .identity `b' `se' `z' `el' "`ci'"
    }
- }
- else {
    .Multiple "`eqs'" `z' "`function'" "`derivative'" "`ci'"
    local isCns = r(cns)
    }
- .AddTest `df', `prob'

```



```

= .AddTest 0,
> ----- begin _b_diparm.AddTest -----
- version 11
- syntax anything(name=df) [, Prob]
- return add
- if "`prob'" == "" {
= if "" == "" {
- return scalar p = .
- return scalar z = .
- exit
> ----- end _b_diparm.AddTest -----
- return add
- if `df' == 0 {
= if 0 == 0 {
- return scalar df = .
- }
- else return scalar df = `df'
= else return scalar df = 0
- return scalar crit = `z'
= return scalar crit = __00000B
- return scalar cns = `isCns'
= return scalar cns = 0
> ----- end _b_diparm.compute -----
- exit
> ----- end _diparm -----
> -----
piq_timing_max | Coefficient Robust
> rval]         | std. err.      z    P>|z|    [95% conf. inte
-----
> -----
ln_neq | -.2663556 .0898856 -2.96 0.003 -.4425281 -.09
> 01831
cb_authors_ext | .6553627 .1360793 4.82 0.000 .3886521 .92
> 20732
estimated | .9659895 .1194631 8.09 0.000 .7318462 1.2
> 00133
est_late | -.326219 .1113063 -2.93 0.003 -.5443754 -.10
> 80627
est_early | 0 (omitted)
stky_pr_rottemberg | -1.24964 .2828896 -4.42 0.000 -1.804094 -.69

```

```

> 51868
      stky_pr_calvo |  -0.7959666   0.1584279   -5.02   0.000   -1.10648   -0.48
> 54536
      _cons |    1.089774   0.2513327    4.34   0.000   0.5971705    1.5
> 82377
-----|-----
> -----
      /lnalpha |  -2.160191   0.4121479                   -2.967986   -1.3
> 52396
-----|-----
> -----
      alpha |    0.1153031   0.0475219                   0.0514067    0.25
> 86198
-----|-----
> -----

```

```

- if "`markdown'" != "" {
= if "" != "" {
  set linesize `lsize'
}
- if "`eqselect'" == "" & "`eformnote'" != "noeformnote" {
= if "" == "" & "" != "noeformnote" {
- if ``"eformdi"" != "" & ("`e(cmd)'" != "gnbreg" | "`e(prefix)'"
> == "svy") {
= if ``"" != "" & ("nbreg" != "gnbreg" | "" == "svy") {
  local k_eform `e(k_eform)'
  if ("`k_eform'" == "") {
    local k_eform = 1
  }
  local k_eq `e(k_eq)'
  if ("`k_eq'" == "") {
    local k_eq = 1
  }
  if (`k_eform' < `k_eq' & `k_eform') {
    if ("`e(cmd2)'" == "stintreg" | "`e(cmd2)'" == "streg") & ("
> `e(cmd)'" == "weibull" | "`e(cmd)'" == "gompertz") {
    }
    else {
      _eform_multeq_note efnote : `k_eform' ``tr_item'''
      di as txt "`efnote'"
    }
  }
}
- if (``"eformdi"" != "" & "`e(noconstant)'" == "0" & ``"eform_co
> ns_ti"" != "" & "`e(consonly)'" != "1") {
= if (``"" != "" & "0" == "0" & ``"" != "" & "0" != "1") {
  if ("`e(cmd)'" == "asclogit" | "`e(cmd)'" == "cmclogit" | "`e(cm

```

```

> d) ""=="cmmixlogit" | ``e(cmd)""=="cmxtmixlogit" ) {
    local asvar = ``e(ranvars)``e(fixvars)``e(indvars)"" != ""
    if ``e(casevars)"" != "" & `asvar' {
    local note1 "Exponentiated coefficients represent odds ratio
> s for "
    local note2 "alternative-specific variables (first equation)
> and "
    local note3 "{help j_cmrisk##|_new:relative-risk ratios} "
    local note4 "for case-specific variables."
    di as txt "{p 0 6 2}Note: `note1'`note2'`note3'`note4'{p_end
> }"

    }
    }
    if ``eform_cons_ti' == "Inc. rate" {
    local eform_cons_note "incidence rate"
    }
    else if ``eform_cons_ti' == "Rel. risk" {
    local eform_cons_note "relative risk"
    }
    else if ``eform_cons_ti' == "Health" {
    local eform_cons_note "health (probability of no disease)"
    }
    else {
    local eform_cons_note = strlower(``eform_cons_ti'')
    }
    local eform_cons_note "baseline `eform_cons_note'"
    if (``e(cmd2)""=="") {
    local cmd `e(cmd)'
    }
    else {
    local cmd `e(cmd2)'
    }
    local f2 = udsustr(``cmd'',1,2)
    local is_re = (``f2'""=="xt" | ``f2'""=="me")
    if `is_re' {
    local extranote " (conditional on zero random effects)"
    }
    di as txt "{p 0 6 2}Note: {bf:_cons} estimates " ``eform_con
> s_note'`extranote'`_c
    if (``e(cmd)""=="mlogit" | ``e(cmd)""=="asclogit" | ``e(cmd)
> ""=="cmclogit" | ``e(cmd)""=="cmmixlogit" | ``e(cmd)""=="cmxtmixlogit" ) {
    di as txt " for each outcome" _c
    }
    di as txt ".{p_end}"
    }
- }

```

```

- return add
- if !`keepmc' {
= if !0 {
- return local mcmethod
- return local mctitle
- }
}

> ----- end _coef_table -----

- if "`footnote'" == "" {
= if "nofootnote" == "" {
ml_footnote
}

> ----- end mopt.Display -----

- exit

> ----- end mopt -----

- exit

> ----- end ml -----

- if "`e(chi2_ct)'"!="LR" { exit }
= if ""!="LR" { exit }

> ----- end nbreg.Display -----

- }
- error `e(rc)'
= error 0

> ----- end nbreg.Estimate -----

- version 10: ereturn local cmdline `"nbreg `0'"
= version 10: ereturn local cmdline `"nbreg piq_timing_max ln_neq cb_aut
> hors_ext estimated est_late est_early stky_pr_rotemberg stky_pr_calvo if
> piq_timing_max<60 , vce(r)'"

> ----- end nbreg -----

- log close
name: <unnamed>
log: /Users/connorbrennan/Library/CloudStorage/OneDrive-TheUniversityof
> fChicago/mmb/output/stepwise_regressions/piq_timing_max_all_sim.smcl
log type: smcl
closed on: 10 Jan 2025, 11:33:22

```