
```

    name: <unnamed>
    log: /Users/connorbrennan/Library/CloudStorage/OneDrive-TheUniversityo
> fChicago/mmb/output/stepwise_regressions/piq_timing_max_properties.smcl
    log type: smcl
    opened on: 10 Jan 2025, 11:33:28
    - capture ! rm ./output/stepwise_regressions/`depvar'`type'.pdf
    = capture ! rm ./output/stepwise_regressions/piq_timing_max_properties.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: properties"
Independent Variable set: properties
    - di "*****"
> *****"
*****
> **
    - ${reg_`depvar'`type'}
    = nbreg piq_timing_max ln_neq cb_authors_ext estimated est_late est_early
> 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 if piq_timing_max<60 , vc
> e(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 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 if piq_timing_max<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 if piq_timing_max<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  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  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  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'.dumptions'
}
- local 0 ``AFTER'
= local 0 `` piq_timing_max ln_neq cb_authors_ext estimated est_late e
> st_early 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 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
> ispersion(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' `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 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' `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 [, 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 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 "`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' `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) TRAc 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 TRACEDIffs 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 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' `crittype'
= 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(Cluster) opt(Robust oim opg) old: [`weight'`exp'],
> `vce' `clopt' `robust'
    = _vce_parse, argopt(Cluster) opt(Robust oim opg) old: [], vce(r)


---


> 

---

 begin _vce_parse 

---


    - version 10
    - _on_colon_parse `0'
    = _on_colon_parse , argopt(Cluster) 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(Cluster) 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(CLuster) 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(CLuster) 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 CCluster


---


> 

---

 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 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 CCluster(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 CCluster(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 `"CLuster"'
- class exit ```optlist''
= class exit `"CLuster"'

```

```

> ----- end _optlist.dumpoptions -----
= local OPTSPECS `"Robust oim opg CLuster"'
- 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", "cluster")
> 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 [] 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
    - _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 [] if __000000, nodisplay 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 [] if __000000, nodi
> splay 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 [] if __000000, n
> odisplay 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 [] 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 [] 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 [] if __000000, nodisplay 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 [] if __000000, nodisplay    robust''
    - 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 [] if __000000, nodisplay    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(passth
> 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' `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 " "
}

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 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' `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 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 "`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
> evels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `coefle
> gend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compare' `
> fvwrap' `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 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 CITYTYPE(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 "`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, `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 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 TRACEDiffs 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) DIFFficult 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 TRACEDiffs 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) DIFFficult 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 TRACEDiffs 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) DIFFficult 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' `crittype'
= 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 [] if __000002,
- local xvars `r(varlist)'
= local xvars ln_neq cb_authors_ext estimated est_late o.est_early
- 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 [] 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 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 [, 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 fwraon `word' `width'
= local fwraon
- if `:length local fwraon' {
= if 0 {
    c_local fwraon fwraon(`fwraon')
}

> ----- end _get_diopts.Wrapon -----
- if "`fwrap'" != "" {
= if "fwrap(1)" != "" {
- FWWrap, `fwrap'
= FWWrap, 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' `fwrap' `fwraon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'

= 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 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')
}
- Wraapon , `fvwraapon'
= Wraapon ,

> ----- begin _get_diopts.Wraapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwraapon() option;"
  syntax [, WOrd 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, `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' `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' `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 ) fvwrap(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 Plus 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 ("`nocl`"!=" & "`norowcl`"!=") {
= if ("!=" & "!=") {
    di as err "{bf:norowcl} is not allowed with {bf:`nocl`}"
    exit 198
    }
    - if "`standardized`" != "" & "`bstdmatrix`" != "" {
= if "" != "" & "" != "" {
        local beta beta
        local standardized
    }
    - if `:length local type' == 0 {
= if 0 == 0 {
        - local type `beta' `nocl' `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 ) fvwrap(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 ``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' `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 

---


- 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' `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'" 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 "" != "" {
        FVWrap, `fwrap'
    }
    - 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 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 FW
> 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'" 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 "" != "" {
  FVWrap, `fwrap'
}
- 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 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, 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 aserr "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' `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 [, 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' `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'" 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 "" != "" {
        FVWrap, `fwrap'
    }
    - 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 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
    - }
    - 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'')==`'', ``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 `''' == "" & ``140''' != "" {
- capture confirm integer number `e(df_r)'
= capture confirm integer number 140
- if !c(rc) {
- local gdof dof(`e(df_r)')
= local gdof dof(140)
- }
- 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, `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 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 [, 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(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 FW
> 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) 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')
}
- Wraapon , `fvwraapon'
= Wraapon ,

> ----- begin _get_diopts.Wraapon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
  di as err "invalid fvwraapon() option;"
  syntax [, WOrd 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, `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 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 lnf1c
    - 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 [aw=exp(__000006+__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) 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' `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 fwwrapon `word' `width'
        = local fwwrapon
        - if `:length local fwwrapon' {
        = if 0 {
            c_local fwwrapon fwwrapon(`fwwrapon')
        }
    > ----- end _get_diopts.Wrapon -----
        - if "`fwwrap'" != "" {
        = if "fwwrap(1)" != "" {
        - FWWrap, `fwwrap'
        = FWWrap, fwwrap(1)
    > ----- begin _get_diopts.FVWrap -----
        - syntax, fwwrap(integer)
        - if `fwwrap' < 0 {
        = if 1 < 0 {
            di as err "{p}invalid option {bf:fwwrap(`fwwrap')}"; " "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' `fwwrap' `fwwrapon' `fvlabel' `nocl' `nopvalues' `markdown' `citype' `abb
> rev'
        = c_local diopts                fwwrap(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(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' `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'" fwwrapon
= opts_exclusive " " fwwrapon

```

```

> ----- begin opts_exclusive -----
    - version 8.2
    - args opts optname errcode optslab
    - local opts `opts'
    = local opts
    - 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 fwwrapon `word' `width'
    = local fwwrapon
    - if `:length local fwwrapon' {
    = if 0 {
        c_local fwwrapon fwwrapon(`fwwrapon')
    }

```

```

> ----- end _get_diopts.Wrapon -----
    - if ""`fwwrap'" != "" {
    = if "" != "" {
        FWWrap, `fwwrap'
    }
    - c_local `c_diopts' `levelopt' `vsquish' `allbaselevels' `b
> aselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `co
> eflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `compar
> e' `fwwrap' `fwwrapon' `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' `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')
}
- Wraon , `fvwraon'
= Wraon ,

```

```

> ----- begin _get_diopts.Wraon -----
- 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) 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 ) fvwrap(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' `nocl' `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 ) fvwrap(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' `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 -----
    - }
    - 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 sname : 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' `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' `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''
- }
- 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, 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 "`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' `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 -----

        - 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' `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
- }
- 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'"!="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'"=="", ``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 `''' == "" & ``140''' != "" {
    - capture confirm integer number `e(df_r)'
    = capture confirm integer number 140
    - if !c(rc) {
    - local gdof dof(`e(df_r)')
    = local gdof dof(140)
    - }
    - 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, `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 ++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 "`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(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 __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' `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 ``' == "" {
    - 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'" 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 "" != "" {
        FVWrap, `fwrap'
    }
    - 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 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 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 `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, ) [] if __0
> 00002, collinear missing max nooutput nopreserve title(Poisson regression)
> robust init(__000006) search(off) lf0(1 -401.5531151051299) 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, ) [] if __000002, collinear
> missing max nooutput nopreserve title(Poisson regression) robust init(__0
> 00006) 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, ) [] i
> f __000002, collinear missing max nooutput nopreserve title(Poisson regress
> ion) 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) SRSubpop 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(pasthr
> 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 `''' == "" & ``140''' != "" {
- capture confirm integer number `e(df_r)'
= capture confirm integer number 140
- if !c(rc) {
- local gdof dof(`e(df_r)')
= local gdof dof(140)
- }
- 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 94 {
- 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,  )"),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, )"')
- 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, )" ,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, )" == "()" {
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 FREEParM) eqargo
> pts(OFFset EXPosure) noneedvarlist numdepvars(0) needequal
= __000008 = _eqlist.new, eqopts(NOCONSTant FREEParM) 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 _eqtlist._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 [, EQARGopts(namelist) EQARGopts(namelist) noNEEDVAR
> LIST COMMONopts(string asis) MARKopts(namelist) SMARKopts(namelist) RMCOLLop
> ts(namelist) RMDCOLLOpts(namelist) NUMDEPvars(numlist integer >=0) NEEDEQUAL

```

```

> WTYPES(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'
    = .__000008.parse (piq_timing_max: piq_timing_max = ln_neq cb
> _authors_ext estimated est_late o.est_early, ) []
> _____ 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, ) []'', parse(",()[]")
- local rebind = ```1''' != "(" & ```2''' == "("
= local rebind = ``( "' != "(" & "piq_timing_max: piq_timing
> _max = ln_neq cb_authors_ext estimated est_late o.est_early" == "("
- }
- 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 `"ZER0' (`tok')"'
        }
        else {
        local ZERO `"(ZER0') (`tok') `0"'
        local 0
        }
        }
        else if inlist("`tok'", "if", "in", ",",) {
        local ZERO `"(ZER0') `tok' `0"'
        local 0
        }
        else if inlist(substr("`tok'",1,1), "#", "|") {
        local ZERO `"ZER0'`tok'"
        }
        else {
        local ZERO `"ZER0' `tok'"
        }
        }
        _parse expand EQ GL : ZERO, gweight common( `MARKOPTLIST'
> `SMARKOPTLIST' `RMCOLLOPTLIST' `RMDCOLLOPTLIST' COLLlinear )
        }
        - forval i = 1/`EQ_n' {
        = forval i = 1/1 {
        - if `i' <= `.n_depvars.arnels' {
        = 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 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[1].parse __key(600002b58800):piq_timing_max: piq_
> timing_max = ln_neq cb_authors_ext estimated est_late o.est_early

```

```

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002b58800):piq_timing_max: piq_
> timing_max = ln_neq cb_authors_ext estimated est_late o.est_early

```

```

> ----- 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(600002b58800)' == ":" {
  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' != "" {
- 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: piq_timing_max
> = ln_neq cb_authors_ext estimated est_late o.est_early' != "" {
  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(600002b58800)''
- sreturn local after ``after'''
= sreturn local after `piq_timing_max: piq_timing_max =
> ln_neq cb_authors_ext estimated est_late o.est_early''

-----
> ----- end _on_colon_parse -----
- local ol `s(before)'
= local ol __key(600002b58800)
- 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) EXP
> osure(passthru)
- }
- local optlist : list uniq optlist
- sreturn local optlist ``optlist'''
= sreturn local optlist `NOCONSTant FREEParam OFFSET(pas
> sthru) EXPosure(passthru)''
- class exit ``optlist'''
= class exit `NOCONSTant FREEParam OFFSET(passthru) EXPo
> sure(passthru)''

-----
> ----- end _optlist.dumpoptions -----
= local OPTLIST `NOCONSTant FREEParam 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'''
- 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 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 piqu_timing_max
}

> ----- begin _eqspec._confirm_eqname -----
    - version 9.2
    - capture confirm number `0'
= capture confirm number piqu_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 "`DEPVAR'" == "=" {
= if "piq_timing_max " == "=" {
    local REST : copy local anything
    local DEPVAR
  }
- if (`:length local DEPVAR' == 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"" == "" {

    if 0`.needequal' {
    if `.needvarlist' | (`:length local DEPVAR' != 0 & `.n_

> depvars') {

    di as err "equal sign required to separate depvars from

> indepvars"

    exit 198
  }
  }
  local DEPVAR
  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 DEPVAR `DEPVAR' `YY'
  }
  local INDEPVAR : list retok anything
  }
  local hasequal 0
  }
- else {
- gettoken EQ INDEPVAR : REST, parse("=") bind
- local hasequal 1
- }
- if `:list sizeof DEPVAR' {
= if 1 {
- _fv_check_depvar `DEPVAR'
= _fv_check_depvar piq_timing_max
- tsunab DEPVAR : `DEPVAR'
= tsunab DEPVAR : 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 5 {
    - fvunab INDEPVARS : `INDEPVARS'
    = fvunab INDEPVARS : ln_neq cb_authors_ext estimated est_
> late o.est_early
-----
> ----- begin fvunab -----
    - version 11
    - _on_colon_parse `0'
    = _on_colon_parse INDEPVARS : ln_neq cb_authors_ext est
> imated est_late o.est_early
-----
> ----- 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"" != "" {
    - 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"" != "" {
    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""
    _____
> _____ 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""

```

```

- 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
- local n : list sizeof varlist
- if (`min' <= `n' & `n' <= `max') exit
= if (1 <= 5 & 5 <= 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 = `""`DEPVAR`""`
= .depvars = `"piq_timing_max"`
- .hasequal = `hasequal`
= .hasequal = 1
- .indepvars = `""`:list retok INDEPVAR`""`
= .indepvars = `"ln_neq cb_authors_ext estimated est_late
> o.est_early`""`

- .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 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)" "
> (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 : subinstr 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 ```.rmcoll_opts.dumpoptions'''

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

> ----- begin _optlist.dumpnames -----
- version 9
- forval i = 1/`.names.arrnls' {
= 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 FREEParm 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'''
    - sreturn local value ```value'''
= sreturn local value ```ln_neq cb_authors_ext estimated
> est_late o.est_early'''
    - class exit ```value'''
= class exit ```ln_neq cb_authors_ext estimated est_late
> o.est_early'''
}
> ----- end _eqspec.item -----
    - class exit ```s(value)'''

```



```

= class exit `"\n_neq cb_authors_ext estimated est_late o.
> est_early"'
_____
> _____ end _eqlist.eq _____
= local xvarsi `"\n_neq cb_authors_ext estimated est_late o.
> est_early"'
- 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 FREEParm 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 = + 5
    - if ``noconsi' == "0" {
    = if "0" == "0" {
    - local ++dim
    - }
    - }
    - sreturn local value ``dim'''
    = sreturn local value ``6''
    - class exit ``s(value)'''
    = class exit ``6''

> ----- end _eqlist.dim -----
    = global ML_dim = 6
    - 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 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 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 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 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```
    - sreturn local value ```.value```
    = sreturn local value ``ln_neq cb_authors_ext estimated es
> t_late o.est_early```
    - class exit ```.value```
    = class exit ``ln_neq cb_authors_ext estimated est_late o.
> est_early```

```

```

> ----- end _eqspec.item -----
    - class exit ```.s(value)```
    = class exit ``ln_neq cb_authors_ext estimated est_late o.es
> t_early```

```

```

> ----- end _eqlist.eq -----
    = fvexpand ln_neq cb_authors_ext estimated est_late o.est_earl
> y 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```
    - 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 ``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 <= 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 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      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 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 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 = 1/5 {
        - 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''
- }
- 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:_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(1,6,0)
- 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:_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: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: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(1,6,0)
- local i 1
- while `i' <= `dim' {
= while 1 <= 6 {
- 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 `filll'[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 `filll'[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 <= 6 {
- 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_ext
> 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 <= 6 {
- 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 <= 6 {
- 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 `fill'[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'''
    }
  }
  else if !missing(`new'[1,`j']) {
    matrix `mat'[1,`i'] = `new'[1,`j']
  }
}
- else mat `fill'[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 <= 6 {
- 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 "_.est_early"
- if (usubstr("`eq'",1,1) != "/") {
= if (usubstr("_",1,1) != "/") {
- local sspec "/"`eq':`name'"
= local sspec "_.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 <= 6 {
- 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 ":_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 6 == . & "" != "" {
    `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & "`sspec'" != "" {
= if 6 == . & "/_:_cons" != "" {

```

```

        `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 <= 6 {

```

```

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 6
- }
- }
- }
- 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 "6"!=" " {
- sret local k_fill `fill'
= sret local k_fill 6
- }
- 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(1,6,0)
- 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:_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:_cons

```

```

> ----- begin _b_post0 -----
- version 11
- tempname b V
- local dim : list sizeof 0
- matrix `b' = J( 1,`dim',0)
= matrix __00000B = J( 1,6,0)
- matrix `V' = J(`dim',`dim',0)
= matrix __00000C = J(6,6,0)
- 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:_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:_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:_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(Cluster) 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 "vctype ``:word 1 of `AND'' specified twice"
exit 198
}
- local pswallowed : list uniq pswallowed
- local pwlist robust cluster
- foreach n of local pswallowed {
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 _____

```

```
> _____ end _vce_parse _____
```



```

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 ``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 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
    - mlsum `lnf' = -exp(`xb') + `xb'*$ML_y1 - lngamma($ML_y1+
> 1)
        = mlsum __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 = -304.63497

> ----- 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 1:  Log pseudolikelihood = -304.60328

```

```

> _____ 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
- $ML_ec mlevelsum `lnf' `g' = `score'
= * mlevelsum __00000M __00000N = __00000P
- if `todo' == 1 | `lnf'==. {
= if 2 == 1 | __00000M==. {
exit
}
- mlevelsum `lnf' `H' = exp(`xb')
= mlevelsum __00000M __00000O = exp(__00000R)
_____
> _____ end poiss_lf _____
Iteration 2: Log pseudolikelihood = -304.60326
_____
> _____ begin mopt_post _____
- args b V C wgt touse depvar
- if `:length local touse' {
= if 8 {
- tempname esamp
- quietly gen byte `esamp' = `touse'
= quietly gen byte __00000U = __000007
- }
- ereturn post `b' `V' `C' `wgt', esample(`esamp') depname
> (`depvar') buildfvinfo
= ereturn post __00000R __00000S __00000T [], esample(__00
> 000U) depname(piq_timing_max) buildfvinfo
_____
> _____ end mopt_post _____
- ereturn scalar k_eq_model = abs($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 matvlc(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(1
> 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 nexp = rowsof(`tm')
    local nc = 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 / `nexp' {
        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 .241437181440043
- 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 [] if __000000, nodisplay rob
> ust"

> ----- 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: piqu_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: piqu_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: piq_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: piq_timing_max=,  )'")
- if bsubstr("`p2'",1,1) == "," {
= if bsubstr("piq_timing_max: piq_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 : substr 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 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'
    = __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.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 SMARKOPTLIST `'''
    - local RMCOLLOPTLIST ```.rmcoll_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 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(600002ace780):piq_timing_max: piq_timi
> ng_max=
-----
> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002ace780):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(600002ace780)' == ":" {
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: piq_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(600002ace780)'
- sreturn local after ``after'
= sreturn local after `piq_timing_max: piq_timing_max="

<----- end _on_colon_parse ----->

- local ol `s(before)'
= local ol __key(600002ace780)
- 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) EXPosur
> 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.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="
- 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
    }
    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) 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 {

```

```

    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 = `""' != ""
  - 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(600002ace780):"lnalpha":, freeparm
> ----- begin _eqspec.parse -----
    - version 9.2
    - _on_colon_parse `0'
    = _on_colon_parse __key(600002ace780):"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(600002ace780)"" == ":" {
      sreturn local after ```after'""
      exit
    }
    - while ```COLON'"" != ":" & ```after'"" != "" {

```



```

= while `"" != ":" & `":\nalpha":, 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 `":'" != ":" & `""\nalpha":, 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(600002ace780)'"
- sreturn local after `""after'"
= sreturn local after `""\nalpha":, freeparm""

-----
> ----- end _on_colon_parse -----

- local ol `s(before)'
= local ol __key(600002ace780)
- 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 {
        - 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
}
- 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 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 : 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 : 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 : subinstr 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 __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 INDEPvars
> 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 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 `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 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_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 `"\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 __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 `matall' = nullmat(`matall') , `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 `matall' = nullmat(`matall') , `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 ``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 __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(
> 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)
            = * 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)

```

```

= * mlevelsum __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 {
  mlevelsum `lnf' `d11' = `mu', eq(1)
  mlevelsum `lnf' `d12' = 0, eq(1,2)
  mlevelsum `lnf' `d22' = 0, eq(2)
}
- else {
- mlevelsum `lnf' `d11' = `mu'*`p'*(`alpha'*`p'*(`y'-`mu')+1),
> eq(1)
= mlevelsum __00000K __00000X = __00000U*__00000V*(__00000W*__0
> 00000V*(piq_timing_max-__00000U)+1), eq(1)
- mlevelsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mlevelsum __00000K __00000Y = __00000W*__00000U*__00000V^2*(p
> iq_timing_max-__00000U), eq(1,2)
- mlevelsum `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)
= mlevelsum __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 6 > 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[1,6] = __000002[1,6] + __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_ne
> q cb_authors_ext estimated est_late o.est_early, ) /lnalpha if __000000 [],
> collinear missing max nooutput nopreserve init(__000002) search(off) robu
> st vce(robust) continue title(Negative binomial 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, ) /lnalpha if __000000 [], colline
> ar missing max nooutput nopreserve init(__000002) search(off) robust vce(r
> obust) continue title(Negative binomial regression) diparm(lnalpha, exp labe
> l("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, ) /lnalpha i
> f __000000 [], collinear missing max nooutput nopreserve init(__000002) sear
> ch(off) robust vce(robust) continue title(Negative binomial regression) di
> parm(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 98 {
  - 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,  )"),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,  )'")
  - if bsubstr("`p2'",1,1) == "," {
    = if bsubstr("piq_timing_max: piq_timing_max=ln_neq cb_authors_ext
> estimated est_late o.est_early,  )",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,  )'" == "(" {
      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 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'
= .__000007.parse (piq_timing_max: piq_timing_max=ln_neq cb_autho
> rs_ext estimated est_late o.est_early, ) ("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' COLlinear )
= _parse expand EQ GL : 0, gweight common( COLlinear )
- 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.arnels' {
    = 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 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[1].parse __key(600002acfd40):piq_timing_max: piq_timi
> ng_max=ln_neq cb_authors_ext estimated est_late o.est_early

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002acfd40):piq_timing_max: piq_timi
> ng_max=ln_neq cb_authors_ext estimated est_late o.est_early

> ----- 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(600002acfd40)"" == ":" {
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"" != "" {
- 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'' != "" {
    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(600002acfd40)''
- 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''

----- end _on_colon_parse -----
>
- local ol `s(before)'
= local ol __key(600002acfd40)
- 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 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.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: piq_timing_max=ln_neq cb_authors_e
> xt estimated est_late o.est_early''
- if ``.wtypes'' != "" {
= if `"' != "" {
    local wgt "[.wtypes]"
}
- syntax [anything(equalok)] [if] [in] `wgt' [, `OPTLIST' `NOC
> ONS' *]
= syntax [anything(equalok)] [if] [in] [, NOCONSTant FREEParam
> 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 6 {
- 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"'
> == "" {
    if 0`.needequal' {
    if `.needvarlist' | (`:length local DEPVARs' != 0 & `.n_dep
> 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 5 {
- fvunab INDEPVARs : `INDEPVARs'
= fvunab INDEPVARs : ln_neq cb_authors_ext estimated est_late
> o.est_early

> ----- begin fvunab -----

```

```

- version 11
- _on_colon_parse `0'
= _on_colon_parse INDEPVARs : ln_neq cb_authors_ext estimate
> d est_late o.est_early

> ----- 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' != "" {
- 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' != "" {
  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'

```

```

> ----- 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'
        - 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
        - local n : list sizeof varlist
        - if (`min' <= `n' & `n' <= `max') exit
= if (1 <= 5 & 5 <= 32000) exit

```

```

> ----- end fvunab -----
        - }
        - 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'''
- .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(600002acfd40):"lnalpha":, freeparm

> ----- begin _eqspec.parse -----
- version 9.2
- _on_colon_parse `0'
= _on_colon_parse __key(600002acfd40):"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(600002acfd40)" == ":" {
  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(600002acfd40)'"
- sreturn local after ``after'''
= sreturn local after `""lnalpha":, freeparm'"

----- end _on_colon_parse -----
>
- local ol `s(before)'
= local ol __key(600002acfd40)
- 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.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 FREEParam
> 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_depvar
> 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 {
  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 = `""DEPVAR`""`
= .depvars = `""`
- .hasequal = `hasequal`
= .hasequal = 0
- .indepvars = `"":list retok INDEPVAR`""`
= .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 : subinstr 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' COLline
> ar 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(`.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 RMDCOLLOPTNAMES {
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 ``ln_neq cb_authors_ext estimated est_late o.e
> st_early'''
- sreturn local value ``value'''
= sreturn local value ``ln_neq cb_authors_ext estimated est_

```

```

> late o.est_early'''
    - class exit `"'`value'"""
    = class exit `"'ln_neq cb_authors_ext estimated est_late o.es
> t_early'''
    _____
> _____ end _eqspec.item _____
    - class exit `"'`s(value)'"'"'
    = class exit `"'ln_neq cb_authors_ext estimated est_late o.est_
> early'''
    _____
> _____ end _eqlist.eq _____
    = local xvarsi `"'ln_neq cb_authors_ext estimated est_late o.est_
> early'''
    - 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 = + 5
- 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 = 6 + 0

```

```

- if "`noconsi'" == "0" {
= if "0" == "0" {
- local ++dim
- }
- }
- sreturn local value ``dim'''
= sreturn local value `7'''
- class exit ``s(value)'''
= class exit `7'''

```

```

> ----- end _eqlist.dim -----

= global ML_dim = 7
- 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 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 ``ln_neq cb_authors_ext estimated est_late o.est
> _early'''
- sreturn local value ``value'''
= sreturn local value ``ln_neq cb_authors_ext estimated est_la
> te o.est_early'''
- class exit ``value'''
= class exit ``ln_neq cb_authors_ext estimated est_late o.est_
> early'''

```

```

> ----- end _eqspec.item -----
    - class exit ``s(value)''
    = class exit ``ln_neq cb_authors_ext estimated est_late o.est_ea
> rly''

> ----- end _eqlist.eq -----
    = fvexpand ln_neq cb_authors_ext estimated est_late o.est_early 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''
    - 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 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 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 = 1/5 {
- 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''
- }
- 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:_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 `"\lalpha"
- sreturn local value ```.`value'```
= sreturn local value `"\lalpha"
- class exit ```.`value'```
= class exit `"\lalpha"

```

```

> ----- end _eqspec.item -----
- class exit ```.s(value)```
= class exit `"\lalpha"

```

```

> ----- end _eqlist.eq -----
= local eq \lalpha
- 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 __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 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_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 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 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 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 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: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:_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(1,7,0)
- 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:_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:_cons /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:_cons /lnalpha' `initial v
> ector: ' ' `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(1,7,0)
- local i 1
- while `i' <= `dim' {
= while 1 <= 7 {
- 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 <= 7 {
- 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 <= 7 {
- 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 <= 7 {
- 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 <= 7 {
        - 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 <= 7 {
- 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:_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 6 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec''')
}
- if `j' == . & ``sspec''' != "" {
= if 6 == . & "/piq_timing_max:_cons" != "" {
  `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 <= 7 {
- 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 "/" == "/" {
- 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 lnalpha, 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,`"/lnalpha'')

```

```

- if `j' == . & "`oname'" != "" {
= if 7 == . & "" != "" {
  `vv' local j = colnumb(`new',``ospec'')
}
- if `j' == . & "`sspec'" != "" {
= if 7 == . & "/piq_timing_max:_cons" != "" {
  `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 __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 <= 7 {
    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 7
- }
- }
- }
- 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 "7"!="" {
- sret local k_fill `fill'
= sret local k_fill 7
- }
- 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(1,7,0)
- 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:_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:_cons /:lnalpha
}
> ----- begin _b_post0 -----
- version 11
- tempname b V
- local dim : list sizeof 0
- matrix `b' = J( 1,`dim',0)

```

```

= matrix __00000D = J( 1,7,0)
- matrix `V' = J(`dim',`dim',0)
= matrix __00000E = J(7,7,0)
- 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:_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:_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:_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(Cluster) optlist(OIM OPG Robust) old : `w
> t', `vce'
= _vce_parse, argoptlist(Cluster) optlist(OIM OPG Robust) old : ,
> vce(robust) robust
_____
> _____ begin _vce_parse _____
    - version 10
    - _on_colon_parse `0'
    = _on_colon_parse , argoptlist(Cluster) 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(Cluster) 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(CLister) 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.addopt -----
- }
- .`o'.addopt `name'
= .__00000E.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
= __00000F = ._optlist.new
- local argoptlist : list uniq argoptlist
- foreach name of local argoptlist {
- .`a'.addopt `name'
= __00000F.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.arrnels' {
= 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 `` , 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.arrnells' {
= 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.arnels' {
= forval i = 1/1 {
- local optlist `optlist' `.options[`i']'
= local optlist CLuster
- }
- local optlist : list uniq optlist
- sreturn local optlist ```optlist'''
= sreturn local optlist `CLuster'
- class exit ```optlist'''
= class exit `CLuster'

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

= local OPTSPECS `OIM OPG Robust CLuster'
- 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 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.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 `"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 ``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(`""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 "$ML_preserve" != "no" {
= if "no" != "no" {
    if `:length local score' {
      di as smcl as err "May not specify {bf:score()} option unless"
> _n "    a) estimation subsample is the entire data in memory, or" _n "
> b) you specify option {bf:nopreserve} on {bf:ml model} statement (meaning"
> _n "    your evaluation program explicitly restricts itself to obs" _n
> "    for which {bf:$}" "{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 {
  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 __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 {
  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 __00000P __000012 = __00000Z*__000010*(__000011*__0
> 00010*(piq_timing_max-__00000Z)+1), eq(1)
- mlfmatsum `lnf' `d12' = `alpha'*`mu'*`p'^2*(`y'-`mu'), eq(1,2
> )
= mlfmatsum __00000P __000013 = __000011*__00000Z*__000010^2*(p
> iq_timing_max-__00000Z), 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 __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 = -300.86658
_____
> _____ 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 {
  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 __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 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)
  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 = -287.70905
_____
> _____ 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(

```



```

> 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 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)

```

```

= * mlvectsum __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 2: Log pseudolikelihood = -286.80287
> _____ 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(
> 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 3:  Log pseudolikelihood = -286.79888
_____

> _____ begin nbreg_lf _____
- version 6.0
- args todo b lnf g H sc1 sc2
- tempvar xb
- tempname lnalp m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalp' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalp')
= scalar __00000X = exp(-__00000W)
- if `lnalp' < -20 {
= if __00000W < -20 {
mlsum `lnf' = -lgamma(`y'+1) - exp(`xb') + `y'*`xb'
}
- else {
- mlsum `lnf' = lgamma(`m'+`y') - lgamma(`y'+1) - lgamma(`m
> ') - `m'*ln1p(exp(`xb'+`lnalp')) - `y'*ln1p(exp(-`xb'-`lnalp'))
= mlsum __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 lnalp m
- mlevel `xb' = `b', eq(1)
= mlevel __00000V = __000000, eq(1)
- mlevel `lnalp' = `b', eq(2) scalar
= mlevel __00000W = __000000, eq(2) scalar
- local y "$ML_y1"
= local y "piq_timing_max"
- scalar `m' = exp(-`lnalp')
= scalar __00000X = exp(-__00000W)
- if `lnalp' < -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)
  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)
      - mلماتsum `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)
      = mلماتsum __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 = -286.79888


---


> _____ 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' `wtg', 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''''
  }
- syntax [, Accumulate noSVYadjust common CONSTant MINimum
> Mtest Mtest2(passthru) noTest COEF matvlc(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", "svytotat", "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(local
> l nch)
- if `nch' > 0 {
= if 0 > 0 {
    di as err "==" invalid operator"
    exit 198
    }
- local eqns : subinstr local eqns "==" "=", all
- ExpandExpsn ``eqns' ``common' ``constant'
= ExpandExpsn ``#[1]' "" ""

> ----- begin test.ExpandExpsn -----
- 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 : subinstr 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 nexp = rowsof(`tm')
  local nc = 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 / `nexp' {
            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(1,7,0)
- matrix `pclass'[1,`dim'] = `PCAUX'
= matrix __000006[1,7] = 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 .109972189668874
- 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 [, 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 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 [, 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 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(pas

```

```

> thru) FVWRAPON(string) NOFVLABEL FVLABEL NOCI NOPVALUES MARKDOWN CITYTYPE(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 "`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 [, 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 = `"7"'
- }
- sreturn local `sname' = `"'S_`sname'""'
= sreturn local k = `"7"'
- }

```

```

> ----- 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) PPlus noHeader First SHOWEQns NEQ(inte
> ger -1) noFOOTnote NOSKIP TTitle(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' `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' `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' `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 [, 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' `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' `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 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 = `7'
    - }
    - sreturn local `sname' = `""S_`sname'""'
    = sreturn local k_fill = `7'
    - }
    - 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 ""options"" != "" {
= if "options" != "" {
- 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 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'

```



```

= 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_htededid     = 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 TTitle(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 "`septime'" != "" {
= if "" != "" {
  .opt_septime = 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" & `"'e(doheader)'"=="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)'"=="matri

> 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_iselecte = 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 xtffrontier xti
> ntreg xtnbreg
    - local list `list' xtpoisson xttobit xtmlogit xtrc
    = local list xtreg xtprobit xtlogit xtcloglog xtffrontier 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_cpm)
  .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(mcmcsiz)
    .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_htededid' {
    = 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 `4''

> ----- end _coef_table__header.Scalar -----
= if missing(4) {
  exit
}
- if ```.Macro chi2'''' != "" | ```.Macro df_r'''' == "" {
}

```

```

> ----- begin _coef_table__header.Macro -----
      - version 16
      - class exit ```.result'(`0')'''
      = class exit `"135.2726042817276"'
-----

> ----- end _coef_table__header.Macro -----
-----

> ----- begin _coef_table__header.Macro -----
      - version 16
      - class exit ```.result'(`0')'''
      = class exit `'''
-----

> ----- end _coef_table__header.Macro -----
      = if `"135.2726042817276"' != "" | `''' == "" {
      - .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("4")
      - if !missing(e(chi2)) {
      - .PushRight ``type' chi2({res:`didf'})" " = " "as res"
> %`.c4wfmt'.2f e(chi2)
      = .PushRight "Wald chi2({res:4})" " = " "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("      135.27")
      - .ralignr = max(`.ralignr', udstrlen("`direst'))
      = .ralignr = max(3, udstrlen("135.27"))
      - local len : di ``tok'''
      = local len : di `"Wald chi2({res:4})"'
      - local len : smcllength local len

```

```

        - .lalignr = max(`.lalignr', `len')
        = .lalignr = max(13, 12)
        - .right.Arrpush `'.C3' ``{lalign `'.lalignr':`tok'}`''
> `'.C4' ``eq'`` `dias' "{ralign `'.ralignr':`direst'}`"
        = .right.Arrpush `'.C3' ``{lalign `'.lalignr':Wald chi2(
> {res:4})}`'' `'.C4' " = " as res "{ralign `'.ralignr':135.27}"
        - }
        - 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(" 0.1100")
- .ralignr = max(`.ralignr', ustrlen("`direst'"))
= .ralignr = max(6, ustrlen("0.1100"))
- 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':0.1100}"
- }
- 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.arnels' {
= 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(`"-286.7988827478356''') & !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("-286.79888")
- 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':-286.79888}"
- }
- 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:4})}"' _col(70) " = " as res "{ralign 6:135.27}"
                                                                Wald chi2(4) = 135.27
      - }
      - 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:-286.79888}" as txt _col(57) `{
> lalign 13:Pseudo R2}' _col(70) " = " as res "{ralign 6:0.1100}"
Log pseudolikelihood = -286.79888 Pseudo R2 = 0.1100
    - }
> _____ 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 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) 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 PPlus 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 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' `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) 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 fwwrapon `word' `width'
= local fwwrapon
- if `:length local fwwrapon' {
= if 0 {
    c_local fwwrapon fwwrapon(`fwwrapon')
}

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

- if "`fwwrap'" != "" {
= if "" != "" {
    FWWrap, `fwwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fwwrap' `fwwrapon' `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' `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 "`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 [, 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' `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' `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 fwwrapon `word' `width'
= local fwwrapon
- if `:length local fwwrapon' {
= if 0 {
    c_local fwwrapon fwwrapon(`fwwrapon')
}

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

- if "`fwwrap'" != "" {
= if "" != "" {
    FWWrap, `fwwrap'
}
- c_local `c_diopts' `levelopt' `vsquish' `allbaselevels'
> `baselevels' `cnsreport' `fullcnsreport' `emptycells' `omitted' `lstretch' `
> coeflegend' `selegend' `cformat' `sformat' `pformat' `coding' `versus' `comp
> are' `fwwrap' `fwwrapon' `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 "`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 fwrapon `word' `width'
    = local fwrapon
    - if `:length local fwrapon' {
    = if 0 {
        c_local fwrapon fwrapon(`fwrapon')
    }

> ----- end _get_diopts.Wrapon -----
    - if "`fwrap'" != "" {
    = if "" != "" {
        FVWrap, `fwrap'
    }
    - 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
    - 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' `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 [, 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 [, 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 {
            GetDioptsDUPS 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 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'"!="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' `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, `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 __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' `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 " "
}

```

```

= opts_exclusive " "
> ----- begin opts_exclusive -----
- version 8.2
- args opts optname errcode optslab
- local opts `opts'
= local opts
- local n 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.Wraon -----
- capture syntax [, WOrd WIdth]
- if c(rc) {
    di as err "invalid fvwrapon() option;"
    syntax [, WOrd 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 "" != "" {
        FVWrap, `fwrap'
    }
    - 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 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 _____
> _____ 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:_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(`"7"', "", ".") {
  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 -----

```

	Coefficient	Robust std. err.	z	P> z	[95% conf. interval]	
piq_timing_max > 1]						
> --						
ln_neq	-.4328859	.1320515	-3.28	0.001	-.691702	-.17406
> 97						
cb_authors_ext	.8424166	.1323927	6.36	0.000	.5829317	1.1019
> 01						
estimated	1.128082	.1299264	8.68	0.000	.8734312	1.3827
> 33						
est_late	-.1985705	.1308416	-1.52	0.129	-.4550154	.05787
> 44						
est_early	0 (omitted)					
_cons	.6331755	.3834525	1.65	0.099	-.1183775	1.3847
> 28						
> --						
/lnalpha	-1.499158	.2450301			-1.979408	-1.0189
> 08						
> --						
alpha	.2233181	.0547196			.138151	.36098
> 89						

```

> --
- 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 if piq_timing_max<60 , vce(r)"
-----

> ----- end nbreg -----
- log close
  name: <unnamed>
  log: /Users/connorbrennan/Library/CloudStorage/OneDrive-TheUniversityo
> fChicago/mmb/output/stepwise_regressions/piq_timing_max_properties.smcl
  log type: smcl
closed on: 10 Jan 2025, 11:33:28
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```