

 (R)
 15.1 Copyright 1985-2017 StataCorp LLC
 Statistics/Data Analysis StataCorp
 4905 Lakeway Drive
 Special Edition College Station, Texas 77845 USA
 800-STATA-PC <http://www.stata.com>
 979-696-4600 stata@stata.com
 979-696-4601 (fax)

100-student Stata lab perpetual license:

Serial number: 401506209499

Licensed to: Mac 菜鸟软件

Mac 菜鸟软件

Notes:

1. Unicode is supported; see help unicode_advice.
2. Maximum number of variables is set to 5000; see help set_maxvar.

```
. use "/Users/wangzizheng/Desktop/个人信息/学习/究竟哪些因素决定了中国企业的技术创
> 新一/数据.dta"
```

```
. set matsize 11000
```

```
.
```

```
. ta year,gen(yrid)
```

year	Freq.	Percent	Cum.
-----+-----			
2008	399	5.36	5.36
2009	485	6.52	11.88
2010	662	8.90	20.77
2011	812	10.91	31.69
2012	899	12.08	43.77
2013	904	12.15	55.91
2014	959	12.89	68.80
2015	1,082	14.54	83.34
2016	1,240	16.66	100.00
-----+-----			
Total	7,442	100.00	

```
. xtset stkcd year
```

```
panel variable: stkcd (unbalanced)
```

time variable: year, 2008 to 2016, but with gaps
delta: 1 unit

```
. global v0 "size age leverage SOE cash roa topten mancomp board_scale sale exprt
> rdsy nrdsy profit rd_scale tangible tobin indept ins tfp_ols compete compete2 g
> dpr ipp hcap finance mkt gdppc third"
```

```
. global fixeff "yrid2-yrid8"
```

```
.
. *****表 1 *****
```

```
. tabstat patenta_all $v0, stat(N mean sd ) c(s)
```

variable	N	mean	sd
-----+-----			
patenta_all	7442	2.854066	1.580889
size	7442	21.99074	1.29751
age	7442	14.35528	5.207102
leverage	7442	.4046618	.2042446
SOE	7442	.3712712	.4831773
cash	7442	.2097883	.1514881
roa	7442	.0453865	.0491457
topten	7442	.5913635	.1529483
mancomp	7442	14.14685	.6902132
board_scale	7442	2.264905	.1736187
sale	7442	.3016368	3.791734
exprt	7442	.2085777	.230383
rdsy	7442	.0011266	.0025053
nrdsy	7442	.0052651	.0086066
profit	7442	.0896228	.1957773
rd_scale	7442	.0349097	.0514995
tangible	7442	.2273379	.1433365
tobin	7442	2.77306	1.97333
indept	7442	.3724345	.0568164
ins	7442	.0621166	.0925855
tfp_ols	7442	-.0123255	.2622171
compete	7442	.1569916	.1888226
compete2	7442	.0602956	.170495
gdpr	7442	.0938264	.0228832
ipp	7442	.0177113	.0362702
hcap	7442	9.283989	1.012493
finance	7442	1.982132	1.042934

mkt	7442	7.932821	1.644717
gdppc	7442	6.019441	5.15124
third	7442	.4698951	.114779

*****表 2 *****

. * 其他表格类似

. est clear

. global yvar "patenta_all"

. global pva=1

. global pcv=0.05

. global v2 "size age leverage SOE cash roa topten mancomp board_scale sale exprt
> rdsy nrdsy profit rd_scale tangible tobin indept ins tfp_ols compete compete2 g
> dpr ipp hcap finance mkt gdppc third "

. global v1 "\$v2 \$fixeff"

. xtscv \$yvar \$v1 , fe lag(2)

Regression with Driscoll-Kraay standard errors	Number of obs	=	7442
Method: Fixed-effects regression	Number of groups	=	1457
Group variable (i): stkcd	F(36, 8)	=	171.94
maximum lag: 2	Prob > F	=	0.0000
	within R-squared	=	0.1900

	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
patenta_all						
size	.4812955	.0507111	9.49	0.000	.3643555	.5982356
age	.1358261	.0142329	9.54	0.000	.103005	.1686473
leverage	-.0905211	.1219752	-0.74	0.479	-.3717965	.1907543
SOE	.2230931	.1502959	1.48	0.176	-.1234898	.5696761
cash	-.059237	.0895794	-0.66	0.527	-.2658074	.1473334
roa	1.626364	.4172486	3.90	0.005	.664187	2.588541
topten	-.1679834	.0807746	-2.08	0.071	-.3542501	.0182832

mancomp	.0251246	.0208263	1.21	0.262	-.0229009	.0731501
board_scale	.14276	.1444085	0.99	0.352	-.1902466	.4757666
sale	.0018676	.0020322	0.92	0.385	-.0028186	.0065538
exprt	.1043996	.0802578	1.30	0.230	-.0806752	.2894744
rdsy	9.514551	6.356903	1.50	0.173	-5.144494	24.1736
nrdsy	2.024466	1.258734	1.61	0.146	-.8781798	4.927113
proft	-.4616192	.0756387	-6.10	0.000	-.6360424	-.287196
rd_scale	.0300261	.1388998	0.22	0.834	-.2902774	.3503296
tangible	.2204429	.1942743	1.13	0.289	-.2275545	.6684402
tobin	-.0293679	.0075999	-3.86	0.005	-.0468932	-.0118426
indept	.1396242	.2630313	0.53	0.610	-.4669272	.7461755
ins	-.0956156	.2000489	-0.48	0.645	-.5569291	.3656978
tfp_ols	-.0763776	.0912993	-0.84	0.427	-.2869141	.1341589
compete	-.8373437	.4295976	-1.95	0.087	-1.827997	.15331
compete2	.9077769	.3782938	2.40	0.043	.0354299	1.780124
gdpr	-2.671934	1.213156	-2.20	0.059	-5.469478	.1256094
ipp	5.161975	1.254428	4.12	0.003	2.269259	8.05469
hcap	.0648766	.0832191	0.78	0.458	-.127027	.2567802
finance	-.296599	.0433933	-6.84	0.000	-.3966642	-.1965339
mkt	-.0591337	.0140091	-4.22	0.003	-.0914389	-.0268286
gdppc	-.0280058	.003191	-8.78	0.000	-.0353643	-.0206473
third	-3.089185	.6184425	-5.00	0.001	-4.515316	-1.663054
yrid2	.3014691	.0182934	16.48	0.000	.2592843	.3436538
yrid3	.1559241	.0295212	5.28	0.001	.0878481	.224
yrid4	.2357868	.0266437	8.85	0.000	.1743463	.2972273
yrid5	.2107711	.020631	10.22	0.000	.1631959	.2583463
yrid6	.1216003	.0219593	5.54	0.001	.0709622	.1722384
yrid7	.1257085	.0083513	15.05	0.000	.1064503	.1449667
yrid8	.1911134	.0142186	13.44	0.000	.1583252	.2239016
_cons	-8.218503	1.415201	-5.81	0.000	-11.48196	-4.955043

.
. *****

. quietly {
. mat yyy=e(b)
. global NM=e(N)
. global NP=colsof(yyy)
. tempvar esamp
. gen `esamp'=e(sample)
. eststo
.

```

. mat stdtp=J(1,$NP,0)
.
. mat sxsx=r(table)
. forvalues i=1/$NP{
.   mat stdtp[1,`i']=sxsx[4,`i']
. }
.
. cap drop res_m
. predict res_m,res
. qui su res_m
. local var_res=r(sd)*r(sd)
.
. mat rq=yyy
. local i=1
. local mname ""
. foreach var of varlist $v1 {
.   tempvar t_`var'
.   gen `t_`var'=_b[`var']*`var'
.   qui su `t_`var' if `esamp'==1
.   mat rq[1,`i']=r(sd)*r(sd)
.   if $pva ==1&stdtp[1,`i']>$pcv{
.     mat rq[1,`i']= 0
.   }
.   local i=`i'+1
.   local mname "`mname' `var'"
. }
. mat rq[1,$NP] =`var_res'
. local var_sum=0
. forvalues i=1/$NP{
.   local var_sum=`var_sum'+rq[1,`i']
. }
. mat rq= rq/`var_sum'*100
. matrix colnames rq=`mname' Residual
. mat m_var= rq
. eststo:ereturn post rq
.
.
.
. mat rwq=yyy
. local i=1
. foreach var of varlist $v1 {
.   qui su `var' if `esamp'==1
.   mat rwq[1,`i']= abs(_b[`var']*r(mean))
.   if $pva ==1&stdtp[1,`i']>$pcv{
.     mat rwq[1,`i']= 0
.   }
. }

```

```

.    }
.    local i=`i'+1
.}
. mat rwq[1,$NP] =abs(yyy[1,$NP])
. local var_sum=0
. forvalues i=1/$NP{
.    local var_sum=`var_sum'+rwq[1,`i']
.}
. mat rwq= rwq/`var_sum'*100
. mat m_level=rwq
. eststo:ereturn post rwq
.
.
. mat rqm=J(1,$NP+1,0)
. local i=1
. local mname ""
. foreach var of varlist $v1 {
.    qui su `var'
.    mat rqm[1,`i'] = (m_var[1,`i'] + m_level[1,`i'])/2
.    local i=`i'+1
.    local mname "`mname' `var'"
.}
. mat rqm[1,$NP] = m_level[1,$NP]/2
. mat rqm[1,$NP+1] = m_var[1,$NP]/2
. matrix colnames rqm=`mname' _cons Residual
. eststo:ereturn post rqm
.}

.
. esttab using Table.rtf , scalar(r2) star( ** 0.05 *** 0.01) compress b(3) se(2)
> mtitles(reg variance level average) nogap onecell replace
(output written to Table.rtf)
.

```