

OAXACA QUANT - QUINTDDEPT

```
-----
name: <unnamed>
log: C:\Users\TA0VLW1\Documents\WORK\Faculty_Salary_Study\PROGRAMS\RegOu
> t\OAXACArob-Bquant_quintDDEPT.log
log type: text
opened on: 10 Mar 2018, 15:27:45
```

```
. **** USE DATA SET WITH DEPT DUMMIES (created 18Sep17) *****
. use C:\Users\TA0VLW1\Documents\WORK\Faculty_Salary_Study\DATA\FSS2015-16C
. describe
```

```
Contains data from C:\Users\TA0VLW1\Documents\WORK\Faculty_Salary_Study\DATA\FSS
> 2015-16C.dta
obs: 575
vars: 87 9 Mar 2018 16:55
size: 120,750
```

```
-----
```

variable name	storage type	display format	value label	variable label
control	long	%12.0g		
college	byte	%8.0g		
dept	byte	%8.0g		
age	double	%12.0g		
female	byte	%8.0g		
minority	byte	%8.0g		
asian	byte	%8.0g		
black	byte	%8.0g		
hispanic	byte	%8.0g		
morate	double	%12.0g		
full	byte	%8.0g		
assoc	byte	%8.0g		
rkyrs	double	%12.0g		
yrsniu	double	%12.0g		
yrsoth	float	%9.0g		
merit	double	%12.0g		
saladj	byte	%8.0g		
seadj	byte	%8.0g		
profship	byte	%8.0g		
RKST_FULL	byte	%8.0g		
RKST_ASSOC	byte	%8.0g		
CUPA_NAT	double	%12.0g		
CUPA_NIU	double	%12.0g		
CUPA_NATR	double	%12.0g		
yearstart	int	%8.0g		
quint	float	%9.0g		
quintTOP	float	%9.0g		
quint2ND	float	%9.0g		
quintMID	float	%9.0g		
quint4TH	float	%9.0g		
quintBOT	float	%9.0g		
lmorate	float	%9.0g		
cupa000	float	%9.0g		
whmale	float	%9.0g		
RKST_ASSIST	float	%9.0g		
assist	float	%9.0g		
salstart	float	%9.0g		
yrsniu2	float	%9.0g		
yrsoth2	float	%9.0g		
dept1	byte	%8.0g		dept== 1.0000
dept2	byte	%8.0g		dept== 2.0000

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dept3      byte      %8.0g      dept== 3.0000
dept4      byte      %8.0g      dept== 4.0000
dept5      byte      %8.0g      dept== 5.0000
dept6      byte      %8.0g      dept== 6.0000
dept7      byte      %8.0g      dept== 7.0000
dept8      byte      %8.0g      dept== 8.0000
dept9      byte      %8.0g      dept== 9.0000
dept10     byte      %8.0g      dept== 10.0000
dept11     byte      %8.0g      dept== 11.0000
dept12     byte      %8.0g      dept== 13.0000
dept13     byte      %8.0g      dept== 14.0000
dept14     byte      %8.0g      dept== 15.0000
dept15     byte      %8.0g      dept== 16.0000
dept16     byte      %8.0g      dept== 17.0000
dept17     byte      %8.0g      dept== 18.0000
dept18     byte      %8.0g      dept== 19.0000
dept19     byte      %8.0g      dept== 20.0000
dept20     byte      %8.0g      dept== 21.0000
dept21     byte      %8.0g      dept== 22.0000
dept22     byte      %8.0g      dept== 23.0000
dept23     byte      %8.0g      dept== 24.0000
dept24     byte      %8.0g      dept== 25.0000
dept25     byte      %8.0g      dept== 26.0000
dept26     byte      %8.0g      dept== 27.0000
dept27     byte      %8.0g      dept== 28.0000
dept28     byte      %8.0g      dept== 29.0000
dept29     byte      %8.0g      dept== 30.0000
dept30     byte      %8.0g      dept== 31.0000
dept31     byte      %8.0g      dept== 32.0000
dept32     byte      %8.0g      dept== 34.0000
dept33     byte      %8.0g      dept== 35.0000
dept34     byte      %8.0g      dept== 36.0000
dept35     byte      %8.0g      dept== 38.0000
dept36     byte      %8.0g      dept== 39.0000
dept37     byte      %8.0g      dept== 40.0000
dept38     byte      %8.0g      dept== 41.0000
dept39     byte      %8.0g      dept== 42.0000
dept40     byte      %8.0g      dept== 43.0000
dept41     byte      %8.0g      dept== 44.0000
dept42     byte      %8.0g      dept== 45.0000
qui ntD    float     %9.0g
qui ntDTOP float     %9.0g
qui ntD2ND float     %9.0g
qui ntDMI D float     %9.0g
qui ntD4TH float     %9.0g
qui ntDBOT float     %9.0g

```

Sorted by: qui ntD

. summarize

Variabl e	Obs	Mean	Std. Dev.	Min	Max
control	575	121888.3	12709.46	102101	148139
col lege	575	4.537391	1.950139	1	8
dept	575	25.37391	13.00138	1	45
age	575	50.00178	10.10232	27.26575	80.11507
femal e	575	.4313043	.4956896	0	1
mi nori ty	575	.2295652	.4209194	0	1
asi an	575	.1513043	.3586573	0	1
bl ack	575	.0417391	.2001666	0	1
hi sp	575	.0330435	.1789058	0	1

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morate	575	8754.981	2560.947	4084	19444.46
full	575	.333913	.4720197	0	1
assoc	575	.4452174	.4974225	0	1
rkyrs	575	4.71827	4.919266	0	29
yrsniu	575	13.03161	8.601392	0	46.96986
yrsoth	575	2.29913	4.026816	0	33
merit	575	4.56711	1.324462	1.636667	9.666667
saladj	575	.0313043	.1742906	0	1
seadj	575	.0886957	.2845515	0	1
profship	575	.08	.2715294	0	1
RKST_FULL	575	.026087	.1595327	0	1
RKST_ASSOC	575	.0765217	.2660625	0	1
CUPA_NAT	575	9410.338	2287.929	6129.519	16705.33
CUPA_NIU	575	9516.085	2291.557	6348.247	16693
CUPA_NATR	575	9625.953	2622.314	5818.849	18179.78
yearstart	575	2003.031	8.594974	1969	2016
quint	575	2.963478	1.415588	1	5
quintTOP	575	.1930435	.3950305	0	1
quint2ND	575	.1982609	.3990369	0	1
quintMID	575	.1930435	.3950305	0	1
quint4TH	575	.2104348	.4079724	0	1
quintBOT	575	.2052174	.404212	0	1
lmorate	575	9.040346	.2650569	8.314832	9.875318
cupa000	575	9.516085	2.291557	6.348247	16.693
whmale	575	.4434783	.4972276	0	1
RKST_ASSIST	575	.8973913	.3037113	0	1
assist	575	.2208696	.4151939	0	1
salstart	570	8147.535	3902.547	1199.88	32521.98
yrsniu2	575	243.6781	281.4372	0	2206.168
yrsoth2	575	21.47304	72.00897	0	1089
dept1	575	.0295652	.169532	0	1
dept2	575	.0121739	.1097573	0	1
dept3	575	.0191304	.1371027	0	1
dept4	575	.013913	.1172321	0	1
dept5	575	.0121739	.1097573	0	1
dept6	575	.013913	.1172321	0	1
dept7	575	.0208696	.1430721	0	1
dept8	575	.0191304	.1371027	0	1
dept9	575	.0226087	.1487819	0	1
dept10	575	.0191304	.1371027	0	1
dept11	575	.0191304	.1371027	0	1
dept12	575	.0156522	.1242338	0	1
dept13	575	.0173913	.1308381	0	1
dept14	575	.0086957	.092925	0	1
dept15	575	.0156522	.1242338	0	1
dept16	575	.0295652	.169532	0	1
dept17	575	.026087	.1595327	0	1
dept18	575	.0173913	.1308381	0	1
dept19	575	.0243478	.1542608	0	1
dept20	575	.0156522	.1242338	0	1
dept21	575	.0365217	.1877477	0	1
dept22	575	.0208696	.1430721	0	1

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dept23	575	.0347826	.1833883	0	1	
dept24	575	.0156522	.1242338	0	1	
dept25	575	.0156522	.1242338	0	1	
dept26	575	.0434783	.2041087	0	1	

dept27	575	.026087	.1595327	0	1	
dept28	575	.0191304	.1371027	0	1	
dept29	575	.0191304	.1371027	0	1	
dept30	575	.0434783	.2041087	0	1	
dept31	575	.0382609	.1919924	0	1	

dept32	575	.0173913	.1308381	0	1	
dept33	575	.0347826	.1833883	0	1	
dept34	575	.0173913	.1308381	0	1	
dept35	575	.0434783	.2041087	0	1	
dept36	575	.0121739	.1097573	0	1	

dept37	575	.0226087	.1487819	0	1	
dept38	575	.0086957	.092925	0	1	
dept39	575	.0330435	.1789058	0	1	
dept40	575	.053913	.2260427	0	1	
dept41	575	.0469565	.2117299	0	1	

dept42	575	.0243478	.1542608	0	1	
qui ntD	575	2.85913	1.396605	1	5	
qui ntD TOP	575	.16	.3669253	0	1	
qui ntD2ND	575	.2034783	.4029357	0	1	
qui ntDMI D	575	.2017391	.4016479	0	1	

qui ntD4TH	575	.2052174	.404212	0	1	
qui ntDBOT	575	.2295652	.4209194	0	1	

```

. * OAXACA DECOMP - WHITE MALES VS. FEMALES
. keep if whmale==1 | female==1
(72 observations deleted)

```

```

. rqdecomp morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntD TOP qui ntD2ND qui ntDMI D profship saladj seadj ///
>      , by(female) quantile(.1) vce(boot) reps(100)
Fitting base model
(bootstrapping ..... )
> ..... )

```

Decomposition of differences in distribution using quantile regression

Total number of observations	503
Number of observations in group 0	255
Number of observations in group 1	248
Number of quantile regressions estimated	100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]	

Quantile .1						
Raw difference	-.057939	.020471	-2.83	0.005	-.098061	-.017818
Characteristics	-.083248	.02412	-3.45	0.000	-.130524	-.035973
Coefficients	.025309	.02018	1.25	0.210	-.014243	.06486

OAXACA QUANT - QUINTDDEPT

```
. rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMID profship sal adj seadj ///
>      , by(female) quantile(.25) vce(boot) reps(100)
Fitting base model
(bootstrapping .....
> .....)
```

Decomposition of differences in distribution using quantile regression
 Total number of observations 503
 Number of observations in group 0 255
 Number of observations in group 1 248
 Number of quantile regressions estimated 100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .25					
Raw difference	-.065129	.012662	-5.14	0.000	-.089946 -.040311
Characteristics	-.110903	.018293	-6.06	0.000	-.146756 -.075051
Coefficients	.045775	.017187	2.66	0.008	.012089 .079461

```
. rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMID profship sal adj seadj ///
>      , by(female) quantile(.5) vce(boot) reps(100)
Fitting base model
(bootstrapping .....
> *.....)
```

Decomposition of differences in distribution using quantile regression
 Total number of observations 503
 Number of observations in group 0 255
 Number of observations in group 1 248
 Number of quantile regressions estimated 100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .5					
Raw difference	-.097149	.014357	-6.77	0.000	-.125289 -.06901
Characteristics	-.131305	.01991	-6.59	0.000	-.170329 -.092282
Coefficients	.034156	.020526	1.66	0.096	-.006074 .074386

```
. rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMID profship sal adj seadj ///
>      , by(female) quantile(.75) vce(boot) reps(100)
Fitting base model
(bootstrapping .....
> .....)
```

Decomposition of differences in distribution using quantile regression
 Total number of observations 503
 Number of observations in group 0 255

OAXACA QUANT - QUINTDDEPT
 Number of observations in group 1 248
 Number of quantile regressions estimated 100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .75					
Raw difference	-.122983	.020921	-5.88	0.000	-.163987 -.081978
Characteristics	-.136002	.024525	-5.55	0.000	-.184069 -.087934
Coefficients	.013019	.019207	0.68	0.498	-.024627 .050665

```
. rqdeco l morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMI D profshi p sal adj seadj ///
>      , by(female) quantile(.9) vce(boot) reps(100)
Fitting base model
(bootstrapping .....
> .....)
```

Decomposition of differences in distribution using quantile regression

Total number of observations 503
 Number of observations in group 0 255
 Number of observations in group 1 248
 Number of quantile regressions estimated 100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .9					
Raw difference	-.09923	.065161	-1.52	0.128	-.226942 .028482
Characteristics	-.109113	.03935	-2.77	0.001	-.186236 -.031989
Coefficients	.009883	.033405	0.30	0.767	-.05559 .075356

```
. clear all

. * OAXACA DECOMP - WHITE MALES VS. ASIANS
. use C:\Users\TAOVLW1\Documents\WORK\Faculty_Salary_Study\DATA\FSS2015-16C

. keep if whmale==1 | asian==1
(233 observations deleted)

. rqdeco l morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMI D profshi p sal adj seadj ///
>      , by(asian) quantile(.1) vce(boot) reps(100)
Fitting base model
(bootstrapping .....
> .....)
```

Decomposition of differences in distribution using quantile regression

Total number of observations 342
 Number of observations in group 0 255
 Number of observations in group 1 87

OAXACA QUANT - QUINTDDEPT

```

-----
. rqdeco l morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMI D profship sal adj seadj ///
>      , by(asian) quantile(.75) vce(boot) reps(100)
Fitting base model
(bootstrapping *...*...*...*...*...*...*...*...*...*...*...*...*)
> *...*...*...*...*...*...*...*...*...*...*...*...*)

```

Decomposition of differences in distribution using quantile regression

Total number of observations	342
Number of observations in group 0	255
Number of observations in group 1	87
Number of quantile regressions estimated	100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .75					
Raw difference	-.023109	.049313	-0.47	0.639	-.11976 .073543
Characteristics	-.041428	.049067	-0.84	0.028	-.137598 .054741
Coefficients	.01832	.018805	0.97	0.330	-.018537 .055177

```

-----
. rqdeco l morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMI D profship sal adj seadj ///
>      , by(asian) quantile(.9) vce(boot) reps(100)
Fitting base model
(bootstrapping *...*...*...*...*...*...*...*...*...*...*...*...*)
> *...*...*...*...*...*...*...*...*...*...*...*...*)

```

Decomposition of differences in distribution using quantile regression

Total number of observations	342
Number of observations in group 0	255
Number of observations in group 1	87
Number of quantile regressions estimated	100

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .9					
Raw difference	.073145	.077631	0.94	0.346	-.079009 .225299
Characteristics	.003312	.060694	0.05	0.916	-.115647 .12227
Coefficients	.069833	.031406	2.22	0.026	.008278 .131389

```

. clear all

```

```

. * OAXACA DECOMP - WHITE MALES VS. BLACKS (TOO FEW TO RUN PROGRAM)
. *use C:\Users\TAOVLW1\Desktop\WORKING\DATA\FINAL\FSS2015-16C
. *keep if whmale==1 | black==1
. *rqdeco l morate cupa000 full assoc yrsniu yrsniu2 yrsoth yrsoth2 ///
>      qui ntDTOP qui ntD2ND qui ntDMI D profship sal adj seadj ///
>      , by(black) quantile(.1) vce(boot) reps(100)

```



```

OAXACA QUANT - QUI NT DDEPT
. *rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ack) quanti le(. 25) vce(boot) reps(100)
. *rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ack) quanti le(. 5) vce(boot) reps(100)
. *rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ack) quanti le(. 75) vce(boot) reps(100)
. *rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ack) quanti le(. 9) vce(boot) reps(100)
. *clear all

. * OAXACA DECOMP - WHITE MALES VS. HISPANICS AND BLACKS
. * The analysis of HISP alone will not run... Instead, run an analysis of BLACK
> & HISP combined.
. use C:\Users\TAOVLW1\Documents\WORK\Facul ty_Sal ary_Study\DATA\FSS2015-16C

. keep if whmale==1 | hisp==1 | black==1
(277 observations deleted)

. gen blackhisps=0

. replace blackhisps=1 if black==1 | hisp==1
(43 real changes made)

. rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ckhisps) quanti le(. 1) vce(boot) reps(100)
Fitting base model
(bootstrapping *****
> *****
> *****
> *****
)

```

Decomposition of differences in distribution using quantile regression

```

Total number of observations          298
Number of observations in group 0     255
Number of observations in group 1      43

Number of quantile regressions estimated 100

```

The variance has been estimated by bootstrapping the results 100 times

Component	Effects	Std. Err.	t	P> t	[95% Conf. Interval]
Quantile .1					
Raw difference	.054289	.023282	2.33	0.020	.008657 .099921
Characteristics	-.060645	.029595	-2.05	0.001	-.11865 -.00264
Coefficients	.114934	.017839	6.44	0.000	.07997 .149898

```

. rqdeco l morate cupa000 full assoc yrsni u yrsni u2 yrsoth yrsoth2 ///
> qui ntDTOP qui ntD2ND qui ntDMID profshi p sal adj seadj ///
> , by(bl ckhisps) quanti le(. 25) vce(boot) reps(100)
Fitting base model
(bootstrapping *****
> *****
> *****
> *****
)

```


