

```
log: c:\DI\IN540\log\mlogit.log
log type: text
opened on: 2 May 2006, 13:52:36
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. u keane, clear
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```
. tab status
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sch=1,home= 2,work=3	Freq.	Percent	Cum.
1	2,473	19.53	19.53
2	3,233	25.53	45.05
3	6,959	54.95	100.00
Total	12,665	100.00	

```
. mlogit status educ exper expersq black
```

```
Iteration 0: log likelihood = -12620.959
Iteration 1: log likelihood = -9833.8173
Iteration 2: log likelihood = -9637.1459
Iteration 3: log likelihood = -9614.3442
Iteration 4: log likelihood = -9613.3558
Iteration 5: log likelihood = -9613.3495
```

```
Multinomial logistic regression
```

Number of obs	=	12665
LR chi2(8)	=	6015.22
Prob > chi2	=	0.0000
Pseudo R2	=	0.2383

Log likelihood = -9613.3495

status	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
1					
educ	.0753913	.0135241	5.57	0.000	.0488847 .101898
exper	-2.07251	.0548751	-37.77	0.000	-2.180063 -1.964956
expersq	.2031146	.0092658	21.92	0.000	.184954 .2212752
black	-.4374037	.0614975	-7.11	0.000	-.5579365 -.3168709
_cons	-.3861733	.1809858	-2.13	0.033	-.7408991 -.0314476
2					
educ	-.2814784	.0125901	-22.36	0.000	-.3061545 -.2568023
exper	-.9865727	.0362782	-27.19	0.000	-1.057677 -.9154688
expersq	.0792283	.0063641	12.45	0.000	.0667548 .0917017
black	.5697132	.049183	11.58	0.000	.4733163 .6661101
_cons	3.413881	.159229	21.44	0.000	3.101798 3.725965

(Outcome status==3 is the comparison group)

```
. mfx compute, predict(outcome(2))
```

```
Marginal effects after mlogit
y = Pr(status==2) (predict, outcome(2))
= .25990818
```

variable	dy/dx	Std. Err.	z	P> z	[95% C.I.]	X
educ	-.0562911	.00224	-25.08	0.000	-.06069 -.051892	12.0652
exper	-.1307496	.0069	-18.94	0.000	-.144278 -.117221	1.6503
expersq	.0094555	.00123	7.72	0.000	.007054 .011856	6.45156
black*	.125544	.00942	13.32	0.000	.107073 .144015	.373865

(*) dy/dx is for discrete change of dummy variable from 0 to 1

```
. tab choice status
```

	sch=1, home=2, wc=3, bc=4, serv=5			
	1	2	3	Total
1	2,473	0	0	2,473
2	0	3,233	0	3,233
3	0	0	2,091	2,091
4	0	0	3,908	3,908
5	0	0	960	960
Total	2,473	3,233	6,959	12,665

```
. mlogit choice lwage educ exper expersq black if status==3
```

```
Iteration 0: log likelihood = -5784.1917
Iteration 1: log likelihood = -5015.5319
Iteration 2: log likelihood = -4989.6715
Iteration 3: log likelihood = -4989.5238
Iteration 4: log likelihood = -4989.5238
```

```
Multinomial logistic regression      Number of obs   =      6033
LR chi2(10)                        =     1589.34
Prob > chi2                         =      0.0000
Pseudo R2                          =      0.1374

Log likelihood = -4989.5238
```

choice	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
3						
lwage	.0609272	.0722885	0.84	0.399	-.0807557	.2026101
educ	.5596368	.0209622	26.70	0.000	.5185516	.600722
exper	.0258656	.0498828	0.52	0.604	-.0719029	.1236341
expersq	.0002453	.0071417	0.03	0.973	-.0137521	.0142427
black	-.1386919	.0725236	-1.91	0.056	-.2808355	.0034518
_cons	-8.177026	.6575663	-12.44	0.000	-9.465832	-6.88822
5						
lwage	-1.108679	.0912939	-12.14	0.000	-1.287612	-.9297467
educ	.1431516	.0246623	5.80	0.000	.0948144	.1914889
exper	-.1507481	.0584002	-2.58	0.010	-.2652104	-.0362859
expersq	.0200124	.0086011	2.33	0.020	.0031546	.0368702
black	.6316725	.0822496	7.68	0.000	.4704662	.7928788
_cons	7.284011	.8312372	8.76	0.000	5.654816	8.913206

(Outcome choice==4 is the comparison group)

```
. mlogit choice educ exper expersq black
```

```
Iteration 0: log likelihood = -19291.742
Iteration 1: log likelihood = -15710.194
Iteration 2: log likelihood = -15491.743
Iteration 3: log likelihood = -15472.438
Iteration 4: log likelihood = -15471.744
Iteration 5: log likelihood = -15471.74
```

```
Multinomial logistic regression      Number of obs   =     12665
LR chi2(16)                        =     7640.00
Prob > chi2                         =      0.0000
Pseudo R2                          =      0.1980

Log likelihood = -15471.74
```

choice	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
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1							
	educ	.2829615	.0162659	17.40	0.000	.2510809	.314842
	exper	-2.111597	.0576377	-36.64	0.000	-2.224564	-1.998629
	expersq	.207515	.009625	21.56	0.000	.1886504	.2263796
	black	-.3624083	.0669432	-5.41	0.000	-.4936145	-.2312021
	_cons	-2.223496	.2089785	-10.64	0.000	-2.633086	-1.813906
2							
	educ	-.1155371	.0145848	-7.92	0.000	-.1441228	-.0869515
	exper	-1.034112	.0391923	-26.39	0.000	-1.110927	-.9572962
	expersq	.0843059	.0066949	12.59	0.000	.0711841	.0974277
	black	.6471107	.0543091	11.92	0.000	.5406668	.7535546
	_cons	2.078827	.1790055	11.61	0.000	1.727982	2.429671
3							
	educ	.5644059	.0173528	32.53	0.000	.530395	.5984168
	exper	.0189311	.0433542	0.44	0.662	-.0660416	.1039038
	expersq	.0020891	.0065398	0.32	0.749	-.0107287	.0149069
	black	-.1587882	.0652201	-2.43	0.015	-.2866172	-.0309592
	_cons	-7.660339	.2413815	-31.74	0.000	-8.133438	-7.18724
5							
	educ	.0739616	.0205994	3.59	0.000	.0335876	.1143357
	exper	-.2447753	.0519344	-4.71	0.000	-.3465648	-.1429858
	expersq	.0188886	.0081802	2.31	0.021	.0028557	.0349215
	black	.6983971	.0741445	9.42	0.000	.5530766	.8437176
	_cons	-2.149819	.2622714	-8.20	0.000	-2.663861	-1.635776

(Outcome choice==4 is the comparison group)

. mfx compute, predict(outcome(2))

Marginal effects after mlogit

y = Pr(choice==2) (predict, outcome(2))
= .27957992

variable	dy/dx	Std. Err.	z	P> z	[95% C.I.]	X
educ	-.0582254	.00239	-24.40	0.000	-.062903	-.053548		12.0652
exper	-.1321382	.00722	-18.31	0.000	-.146286	-.11799		1.6503
expersq	.009475	.00129	7.36	0.000	.006953	.011997		6.45156
black*	.1302181	.0097	13.43	0.000	.111216	.149221		.373865

(*) dy/dx is for discrete change of dummy variable from 0 to 1

. log close
log: c:\DI\IN540\log\mlogit.log
log type: text
closed on: 2 May 2006, 13:54:51