

# Feb 2, 2020 EV Stata HPC Kernel

February 3, 2020

## 0.0.1 Download package

- cap ssc install package\_name

```
[1]: # cap ssc install estout
```

## 0.0.2 Load data

- use "data.dta", clear

```
[2]: use "2019_12_04_ev184.dta", clear
```

```
[3]: sum
```

Variable	Obs	Mean	Std. Dev.	Min	Max
y	184	.6413043	.4809263	0	1
age	184	2.326087	.8246038	1	5
gender	184	.798913	.4019065	0	1
marriage	184	.3967391	.4905559	0	1
student1	184	.0543478	.2273213	0	1
company_man2	184	.0271739	.1630336	0	1
public_off~3	184	.4836957	.5010976	0	1
profession4	184	.2771739	.4488244	0	1
researcher5	184	.0923913	.2903677	0	1
learn	184	3.217391	.5084228	2	4
income	184	2.298913	1.486845	1	6
avg_distance	184	3.293478	1.511617	1	6
freq_use_ev	184	3.119565	1.325186	1	6
club_kepco2	184	.5217391	.5008902	0	1
club_jeju3	184	.2771739	.4488244	0	1
ev_owner	184	.0978261	.2978899	0	1
saving_free	184	.8913043	.3121062	0	1
a_cons_sho~s	184	3.733696	1.09632	1	5
a_cons_as	184	3.315217	1.209519	1	5

a_cons_cha~e		184	2.771739	1.174439	1	5
-----						
a_cons_num~k		184	4.108696	1.029154	1	5
a_cons_lon~e		184	3.913043	1.015209	1	5
a_cons_hil~e		184	2.717391	1.244231	1	5
a_cons_hac		184	3.184783	1.288277	1	5
num_car		184	.9130435	.6385122	0	3
-----						
cost_reuse		184	.8967391	.3051296	0	1
a_cons_bat~f		184	3.440217	1.094802	1	5
a_cons_rea~n		184	2.766304	1.194137	1	5
b_cons_sho~s		184	4	.9750998	1	5
b_cons_bat~f		184	3.711957	.8923895	1	5
-----						
b_cons_as		184	3.586957	1.057393	1	5
b_cons_rea~n		184	3.048913	1.057267	1	5
b_cons_cha~e		184	3.163043	1.11891	1	5
b_cons_num~k		184	4.304348	.865099	1	5
b_cons_lon~e		184	4.119565	.9034529	1	5
-----						
b_cons_hil~e		184	3.25	1.229199	1	5
b_cons_hac		184	3.445652	1.143899	1	5
g_cons_sho~s		184	-.2663043	1.060856	-3	3
g_cons_bat~f		184	-.2717391	1.097471	-3	3
g_cons_as		184	-.2717391	1.155677	-3	3
-----						
g_cons_rea~n		184	-.2826087	1.089704	-3	3
g_cons_cha~e		184	-.3913043	1.075881	-4	3
g_cons_num~k		184	-.1956522	.960864	-3	3
g_cons_lon~e		184	-.2065217	1.03002	-3	4
g_cons_hil~e		184	-.5326087	1.209716	-4	4
-----						
g_cons_hac		184	-.2608696	1.248996	-4	4
inc_b_con~is		184	9.184783	6.713382	1	30
inc_b_cons~f		184	8.451087	5.953169	1	30
inc_b_con~as		184	8.320652	6.402732	1	30
inc_b_cons~n		184	6.75	4.918183	1	30
-----						
inc_b_con~ee		184	7.092391	5.206883	1	30
inc_b_cons~k		184	10.03261	7.176085	1	30
inc_b_con~me		184	9.5	6.780718	1	30
inc_b_con~de		184	7.26087	5.758092	1	30
inc_b_cons~c		184	7.836957	6.116853	1	30
-----						
age1		184	.1304348	.3377001	0	1
age2		184	.5054348	.5013346	0	1
age3		184	.2771739	.4488244	0	1
age4		184	.0815217	.2743813	0	1

```

undergrad |      184      .6956522      .4613861      0      1
-----+-----
graduate |      184      .2608696      .440307      0      1
own_mine |      184      .0978261      .2978899      0      1
own_job |      184      .1467391      .3548111      0      1
own_state |      184      .173913      .3800689      0      1
own_rent |      184      .0054348      .073721      0      1
-----+-----
own_carsha~g |      184      .5054348      .5013346      0      1
mot_new_car |      184      .0815217      .2743813      0      1
mot_new_tech |      184      .0652174      .2475828      0      1
mot_fuel_c~t |      184      .1467391      .3548111      0      1
mot_subsidy |      184      .0163043      .1269888      0      1
-----+-----
mot_tax_re~n |      184      .0163043      .1269888      0      1
mot_ride_c~t |      184      .1086957      .3121062      0      1
mot_enviro~t |      184      .2228261      .417278      0      1
mot_pr |      184      .0652174      .2475828      0      1
mot_business |      184      .2119565      .4098093      0      1
-----+-----
mot_research |      184      .0217391      .1462284      0      1
use_shopping |      184      .0923913      .2903677      0      1
use_school |      184      .0108696      .103972      0      1
use_commute |      184      .0597826      .2377305      0      1
use_task |      184      .4673913      .5002969      0      1
-----+-----
use_leisure |      184      .2771739      .4488244      0      1
--more--

```

```
[4]: %head 5
```

```

+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
1. | y | age | gender | marriage | student1 | compan~2 | public~3 | profes~4 | resear~5 | lea
   | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 0 |
   +-----+-----+-----+-----+-----+-----+-----+-----+
   | num_car | cost_r~e | a_cons~f | a_cons~n | b_con~is | b_cons~f | b_con~as | b_cons~n | l
   | 0 | 1 | 2 | 2 | 5 | 5 | 3 | 3 |
   +-----+-----+-----+-----+-----+-----+-----+-----+
   | inc_b~is | inc_b~f | inc_b~as | inc_b~n | inc_b~ee | inc_b~k | inc_b~me | inc_b~de |
   | 5 | 5 | 3 | 3 | 1 | 5 | 4 | 4 |
   +-----+-----+-----+-----+-----+-----+-----+-----+
   | mot_ta~n | mot_ri~t | mot_en~t | mot_pr | mot_bu~s | mot_re~h | use_sh~g | use_sc~l | us
   | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
   +-----+-----+-----+-----+-----+-----+-----+-----+
   | inc_st~t | inc_co~n | inc_pu~r | inc_pr~n | inc_re~r | inc_le~n | inc_av~s | inc_fr~e |
   | 0 | 0 | 1 | 0 | 0 | 3 | 6 | 3 |
   +-----+-----+-----+-----+-----+-----+-----+-----+
   | int_av.. | i~num~e | int_a~ee | int_a~as | int_a~is |

```

		18		30		6		30		30		
2.	y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea		
	0	2	1	1	0	0	1	0	0			
	num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n				
	1	1	5	1	5	5	4	2				
	inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de				
	5	5	4	2	2	5	5	1				
	mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l				
	0	0	1	0	0	0	1	0				
	inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e				
	0	0	1	0	0	3	3	3				
	int_av..	i~num~e	int_a~ee	int_a~as	int_a~is							
	15	15	3	15	15							
3.	y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea		
	0	2	1	0	0	0	1	0	0			
	num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n				
	1	1	2	1	3	3	4	1				
	inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de				
	9	9	12	3	3	3	3	3				
	mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l				
	0	0	0	0	1	0	0	0				
	inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e				
	0	0	3	0	0	9	15	15				
	int_av..	i~num~e	int_a~ee	int_a~as	int_a~is							
	5	5	5	10	10							
4.	y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea		
	1	3	1	0	0	0	1	0	0			
	num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n				

	1	1	4	5	5	3	5	5
inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de	
5	3	5	5	3	5	5	1	
mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us
0	0	0	0	0	0	0	0	
inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e	
0	0	1	0	0	4	6	6	
int_av..	i~num~e	int_a~ee	int_a~as	int_a~is				
30	30	12	24	24				

  

5.

y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
1	4	1	0	0	0	0	0	1	
num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n		
1	1	5	3	5	5	3	3		
inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de		
20	20	12	12	12	20	20	12		
mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us	
0	0	0	0	1	0	0	0		
inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e		
0	0	0	0	4	16	16	12		
int_av..	i~num~e	int_a~ee	int_a~as	int_a~is					
20	20	12	20	20					

[5]: %browse 5

1.	y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
	1	2	1	0	0	0	1	0	0	
	num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n		
	0	1	2	2	5	5	3	3		
	inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de		

	5	5	3	3	1	5	4	4	
mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us	
0	0	0	1	0	0	0	0	0	
inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e		
0	0	1	0	0	3	6	3		
int_av..	i~num_~e	int_a~ee	int_a~as	int_a~is					
18	30	6	30	30					

2.

y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
0	2	1	1	0	0	1	0	0	
num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n		
1	1	5	1	5	5	4	2		
inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de		
5	5	4	2	2	5	5	1		
mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us	
0	0	1	0	0	0	1	0		
inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e		
0	0	1	0	0	3	3	3		
int_av..	i~num_~e	int_a~ee	int_a~as	int_a~is					
15	15	3	15	15					

3.

y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
0	2	1	0	0	0	1	0	0	
num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n		
1	1	2	1	3	3	4	1		
inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de		
9	9	12	3	3	3	3	3		
mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us	
0	0	0	0	1	0	0	0		
inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e		
0	0	3	0	0	9	15	15		

	int_av..	i~num_~e	int_a~ee	int_a~as	int_a~is	
	5	5	5	10	10	

---

4.

y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
1	3	1	0	0	0	1	0	0	

---

num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n	
1	1	4	5	5	3	5	5	

---

inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de	
5	3	5	5	3	5	5	1	

---

mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us
0	0	0	0	0	0	0	0	

---

inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e	
0	0	1	0	0	4	6	6	

---

int_av..	i~num_~e	int_a~ee	int_a~as	int_a~is	
30	30	12	24	24	

---

5.

y	age	gender	marriage	student1	compan~2	public~3	profes~4	resear~5	lea
1	4	1	0	0	0	0	0	1	

---

num_car	cost_r~e	a_cons~f	a_cons~n	b_con~is	b_cons~f	b_con~as	b_cons~n	
1	1	5	3	5	5	3	3	

---

inc_b~is	inc_b~f	inc_b~as	inc_b~n	inc_b~ee	inc_b~k	inc_b~me	inc_b~de	
20	20	12	12	12	20	20	12	

---

mot_ta~n	mot_ri~t	mot_en~t	mot_pr	mot_bu~s	mot_re~h	use_sh~g	use_sc~l	us
0	0	0	0	1	0	0	0	

---

inc_st~t	inc_co~n	inc_pu~r	inc_pr~n	inc_re~r	inc_le~n	inc_av~s	inc_fr~e	
0	0	0	0	4	16	16	12	

---

int_av..	i~num_~e	int_a~ee	int_a~as	int_a~is	
20	20	12	20	20	

---

```
[12]: %locals
```

```
[11]: %globals
```

(note: showing first line of global values; run with --verbose)

```
S_E_depv:          y
S_E_cmd:           regress
eststo_counter:    3
eststo:            est1 est2 est3
S_FNDATE:          4 Dec 2019 23:57
S_FN:              2019_12_04_ev184.dta
stata_kernel_graph_counter: 0
S_ADO:             BASE;SITE;.;PERSONAL;PLUS;OLDPLACE;`"/home/jikhan.je
ong/.local/lib/python3.7/site-packages/stata_kernel/ado"'
S_level:           95
F1:                help advice;
F2:                describe;
F7:                save
F8:                use
S_StataMP:         MP
S_StataSE:         SE
S_CONSOLE:         console
S_FLAVOR:          Intercooled
S_OS:              Unix
S_MACH:            PC (64-bit x86-64)
```

```
[15]: corr a_cons_short_dis a_cons_as a_cons_charge_fee a_cons_num_charge_lack_
      ↪ a_cons_long_charge_time a_cons_hill_ride a_cons_hac
```

(obs=184)

	a_con~is	a_con~as	a_con~ee	a_cons~k	a_con~me	a_con~de	a_cons~c
a_cons_sho~s	1.0000						
a_cons_as	0.1296	1.0000					
a_cons_cha~e	0.1265	0.2894	1.0000				
a_cons_num~k	0.4084	0.0470	0.2105	1.0000			
a_cons_lon~e	0.3768	0.2094	0.2033	0.5321	1.0000		
a_cons_hil~e	0.0206	0.3972	0.4044	0.0071	0.1492	1.0000	
a_cons_hac	0.3059	0.3727	0.2989	0.1414	0.2589	0.5032	1.0000

```
[16]: corr b_cons_short_dis b_cons_as b_cons_charge_fee b_cons_num_charge_lack_
      ↪ b_cons_long_charge_time b_cons_hill_ride b_cons_hac
```

(obs=184)

	b_con~is	b_con~as	b_con~ee	b_cons~k	b_con~me	b_con~de	b_cons~c
--	----------	----------	----------	----------	----------	----------	----------





Interval]						
-----+-----						
-						
	age	.274336	.3003699	0.91	0.361	-.3143782
.8630502						
	gender	-.0015722	.5152088	-0.00	0.998	-1.011363
1.008218						
	marriage	-.4590257	.4839329	-0.95	0.343	-1.407517
.4894655						
	student1	.3450083	1.066161	0.32	0.746	-1.744629
2.434646						
	company_man2	-2.067243	1.312036	-1.58	0.115	-4.638787
.5043002						
	public_officer3	-.0315093	.7138255	-0.04	0.965	-1.430582
1.367563						
	profession4	-.0396948	1.013224	-0.04	0.969	-2.025576
1.946187						
	researcher5	2.121919	1.2466	1.70	0.089	-.3213727
4.565211						
	learn	-.054839	.400663	-0.14	0.891	-.840124
.730446						
	income	.0275763	.1579241	0.17	0.861	-.2819493
.3371019						
	avg_distance	.2881821	.1380183	2.09	0.037	.0176711
.558693						
	freq_use_ev	.0333223	.1683942	0.20	0.843	-.2967243
.363369						
	club_kepco2	-.3207556	.4882694	-0.66	0.511	-1.277746
.6362347						
	club_jeju3	-1.519045	.8552378	-1.78	0.076	-3.19528
.1571904						
	ev_owner	.7375384	.6415283	1.15	0.250	-.519834
1.994911						
	saving_free	-1.164929	.649149	-1.79	0.073	-2.437238
.1073795						
	_cons	.7791861	2.013614	0.39	0.699	-3.167424
4.725797						
-----						
-						

[20]: *\* One concern series1. : a short distance*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ ev_owner saving_free a_cons_short_dis
estimates store model1
```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -102.01867
Iteration 2:  log likelihood = -101.2717
Iteration 3:  log likelihood = -101.25563
Iteration 4:  log likelihood = -101.25557
Iteration 5:  log likelihood = -101.25557

```

```

Logistic regression                Number of obs    =      184
                                   LR chi2(17)         =      37.67
                                   Prob > chi2          =      0.0027
Log likelihood = -101.25557        Pseudo R2        =      0.1568

```

```

-----
--
              y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .2673993   .2997544     0.89   0.372    - .3201085
.854907
        gender |   .0343578   .5179634     0.07   0.947    - .9808319
1.049547
       marriage |  -.4436063   .4837573    -0.92   0.359    -1.391753
.5045407
      student1 |   .294405    1.074795     0.27   0.784    -1.812155
2.400965
   company_man2 |  -2.107942   1.32887    -1.59   0.113    -4.712479
.4965959
 public_officer3 |  -.0045423   .7170763    -0.01   0.995    -1.409986
1.400901
   profession4 |  -.0792351   1.017968    -0.08   0.938    -2.074416
1.915946
   researcher5 |   2.167235   1.250159     1.73   0.083    - .2830308
4.617501
         learn |  -.0173995   .4039873    -0.04   0.966     - .8092
.774401
        income |   .0303581   .1585919     0.19   0.848    - .2804764
.3411926
   avg_distance |   .3039271   .1399026     2.17   0.030     .029723
.5781313
   freq_use_ev |   .0151274   .1704129     0.09   0.929    - .3188756
.3491305
   club_kepco2 |  -.3057562   .4894718    -0.62   0.532    -1.265103
.653591
   club_jeju3 |  -1.356277   .8783945    -1.54   0.123    -3.077898
.365345

```

```

          ev_owner |   .7795892   .640207   1.22   0.223   -.4751935
2.034372
          saving_free | -1.161025   .6513306  -1.78   0.075   -2.43761
.1155597
a_cons_short_dis |  -.1411553   .1680249  -0.84   0.401   -.470478
.1881674
          _cons |    1.104046   2.053533   0.54   0.591   -2.920806
5.128897
-----
--

```

[21]: *\* One concern series1. : a AS*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free a_cons_as
estimates store model2

```

```

Iteration 0:   log likelihood = -120.09018
Iteration 1:   log likelihood = -101.37215
Iteration 2:   log likelihood = -100.60531
Iteration 3:   log likelihood = -100.5888
Iteration 4:   log likelihood = -100.58874
Iteration 5:   log likelihood = -100.58874

```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	39.00
	Prob > chi2	=	0.0018
Log likelihood = -100.58874	Pseudo R2	=	0.1624

```

-----
-
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-
          age |   .2662433   .3047536     0.87   0.382    -.3310628
.8635493
          gender |  -.065283   .5183349    -0.13   0.900    -1.081201
.9506347
          marriage |  -.4820754   .4882324    -0.99   0.323    -1.438993
.4748425
          student1 |   .3615878   1.069187     0.34   0.735    -1.733981
2.457157
          company_man2 | -2.035798   1.311882    -1.55   0.121    -4.607039

```

```

.5354441
public_officer3 | -.0850944 .7237774 -0.12 0.906 -1.503672
1.333483
profession4 | -.2633835 1.03614 -0.25 0.799 -2.294182
1.767414
researcher5 | 2.243134 1.254721 1.79 0.074 -.2160736
4.702342
learn | .0008935 .4072194 0.00 0.998 -.7972418
.7990288
income | .037714 .1600784 0.24 0.814 -.2760339
.3514619
avg_distance | .3008049 .1385413 2.17 0.030 .0292689
.5723408
freq_use_ev | .0399151 .169913 0.23 0.814 -.2931083
.3729385
club_kepco2 | -.3729845 .4996408 -0.75 0.455 -1.352262
.6062934
club_jeju3 | -1.182718 .8939657 -1.32 0.186 -2.934859
.5694225
ev_owner | .7975408 .645375 1.24 0.217 -.467371
2.062453
saving_free | -1.196859 .6497054 -1.84 0.065 -2.470258
.0765406
a_cons_as | -.2383365 .1683464 -1.42 0.157 -.5682895
.0916164
_cons | 1.425887 2.078001 0.69 0.493 -2.64692
5.498695
-----
-

```

[22]: *\* One concern series1. : a charging fee*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4_
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3_
↪ev_owner saving_free a_cons_charge_fee
estimates store model3

```

```

Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -100.99319
Iteration 2: log likelihood = -100.2599
Iteration 3: log likelihood = -100.24425
Iteration 4: log likelihood = -100.24419
Iteration 5: log likelihood = -100.24419

```

Logistic regression                      Number of obs        =        184

Log likelihood = -100.24419

LR chi2(17)	=	39.69
Prob > chi2	=	0.0014
Pseudo R2	=	0.1653

-----						
	y	Coef.	Std. Err.	z	P> z	[95% Conf.
Interval]	-----					
-----						
	age	.2982889	.3031536	0.98	0.325	-.2958813
.8924591						
	gender	.0059393	.5170989	0.01	0.991	-1.007556
1.019434						
	marriage	-.3982194	.4896476	-0.81	0.416	-1.357911
.5614722						
	student1	.5094608	1.074319	0.47	0.635	-1.596166
2.615087						
	company_man2	-1.930638	1.326	-1.46	0.145	-4.529551
.6682748						
	public_officer3	.0364136	.7203661	0.05	0.960	-1.375478
1.448305						
	profession4	-.0936705	1.020448	-0.09	0.927	-2.093712
1.906371						
	researcher5	2.340176	1.260437	1.86	0.063	-.130234
4.810587						
	learn	-.0722941	.4063608	-0.18	0.859	-.8687467
.7241584						
	income	.0513213	.1604433	0.32	0.749	-.2631418
.3657844						
	avg_distance	.2304477	.1435685	1.61	0.108	-.0509413
.5118368						
	freq_use_ev	.0750722	.1722499	0.44	0.663	-.2625314
.4126758						
	club_kepco2	-.3282674	.4903228	-0.67	0.503	-1.289282
.6327476						
	club_jeju3	-1.344986	.8611556	-1.56	0.118	-3.03282
.3428481						
	ev_owner	.850658	.6487059	1.31	0.190	-.4207823
2.122098						
	saving_free	-1.275526	.6561369	-1.94	0.052	-2.561531
.0104785						
	a_cons_charge_fee	-.2806707	.1719769	-1.63	0.103	-.6177393
.0563979						
	_cons	1.529611	2.083289	0.73	0.463	-2.553561
5.612783						
-----						
---						

[23]: *\* One concern series1. : a charging facility lack*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4_
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3_
↪ev_owner saving_free a_cons_num_charge_lack
estimates store model4
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -102.16418
Iteration 2: log likelihood = -101.42532
Iteration 3: log likelihood = -101.40946
Iteration 4: log likelihood = -101.4094
Iteration 5: log likelihood = -101.4094
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	37.36
	Prob > chi2	=	0.0030
Log likelihood = -101.4094	Pseudo R2	=	0.1556

```
-----
-----
              y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-----
              age |   .2557972   .3014252     0.85   0.396   -.3349854
.8465798
              gender |   .0351259   .5185778     0.07   0.946   -.9812679
1.05152
              marriage |  -.4729796   .4847745    -0.98   0.329   -1.42312
.477161
              student1 |   .3973528   1.063872     0.37   0.709   -1.687799
2.482504
              company_man2 | -2.011203   1.314944    -1.53   0.126   -4.588446
.5660396
              public_officer3 |   .0070544   .7170536     0.01   0.992   -1.398345
1.412454
              profession4 |  -.0694558   1.015084    -0.07   0.945   -2.058983
1.920071
              researcher5 |   2.210066   1.254856     1.76   0.078   -.2494071
4.66954
              learn |  -.0867721   .4030077    -0.22   0.830   -.8766526
.7031085
              income |   .0312414   .1579029     0.20   0.843   -.2782426
```

```

.3407254
      avg_distance |   .2876624   .1381508    2.08   0.037   .0168918
.5584331
      freq_use_ev  |   .0245579   .1695217    0.14   0.885  -.3076986
.3568144
      club_kepco2  |  -.3117366   .4881995   -0.64   0.523   -1.26859
.645117
      club_jeju3   |  -1.459254   .8590388   -1.70   0.089   -3.142939
.2244306
      ev_owner     |   .7547155   .64567     1.17   0.242   -.5107745
2.020206
      saving_free  |  -1.13521    .6498372   -1.75   0.081   -2.408868
.1384471
a_cons_num_charge_lack | -.1175813   .1854913   -0.63   0.526   -.4811375
.2459749
              _cons |   1.333661   2.187946    0.61   0.542   -2.954634
5.621956
-----
-----

```

[24] : *\* One concern series1. : a charging time*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free a_cons_long_charge_time
estimates store model5

```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -101.76894
Iteration 2:  log likelihood = -100.9994
Iteration 3:  log likelihood = -100.98378
Iteration 4:  log likelihood = -100.98372
Iteration 5:  log likelihood = -100.98372

```

```

Logistic regression              Number of obs   =       184
                                LR chi2(17)       =       38.21
                                Prob > chi2        =       0.0023
Log likelihood = -100.98372      Pseudo R2      =       0.1591

```

```

-----
-----
              y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----

```



.8968903	age		.3026436	.3031927	1.00	0.318	-.2916032
1.006758	gender		-.0065264	.5169915	-0.01	0.990	-1.019811
.441913	marriage		-.5139359	.487687	-1.05	0.292	-1.469785
2.40298	student1		.3170345	1.064278	0.30	0.766	-1.768911
.5493852	company_man2		-2.0489	1.32568	-1.55	0.122	-4.647185
1.359539	public_officer3		-.0528264	.7206077	-0.07	0.942	-1.465192
1.810977	profession4		-.2079473	1.030083	-0.20	0.840	-2.226872
4.511513	researcher5		2.055119	1.253286	1.64	0.101	-.401276
.7299551	learn		-.0599452	.4030178	-0.15	0.882	-.8498455
.3514886	income		.0392579	.1593043	0.25	0.805	-.2729728
.5591315	avg_distance		.2864764	.1391123	2.06	0.039	.0138213
.3489044	freq_use_ev		.0151614	.1702802	0.09	0.929	-.3185816
.6531091	club_kepco2		-.3138672	.4933643	-0.64	0.525	-1.280844
.3742516	club_jeju3		-1.332929	.8710264	-1.53	0.126	-3.040109
2.146017	ev_owner		.8547957	.6587985	1.30	0.194	-.4364256
.1884441	saving_free		-1.085098	.6497783	-1.67	0.095	-2.35864
.1645706	a_cons_long_charge_time		-.2129548	.1926185	-1.11	0.269	-.5904802
5.726081	_cons		1.557703	2.126762	0.73	0.464	-2.610674

-----  
-----

[25]: *\* One concern series1. : a concern on hill side*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3 ↪
↪ev_owner saving_free a_cons_hill_ride
estimates store model6
```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -102.22261
Iteration 2:  log likelihood = -101.49875
Iteration 3:  log likelihood = -101.48306
Iteration 4:  log likelihood = -101.48301
Iteration 5:  log likelihood = -101.48301

```

```

Logistic regression              Number of obs   =       184
                                LR chi2(17)      =       37.21
                                Prob > chi2       =       0.0031
Log likelihood = -101.48301      Pseudo R2      =       0.1549

```

```

-----
--

```

	y	Coef.	Std. Err.	z	P> z	[95% Conf.
Interval]						
	age	.277949	.3010369	0.92	0.356	-.3120724
.8679704						
	gender	-.0063814	.5152963	-0.01	0.990	-1.016344
1.003581						
	marriage	-.460164	.485303	-0.95	0.343	-1.41134
.4910124						
	student1	.3102345	1.072735	0.29	0.772	-1.792288
2.412757						
	company_man2	-2.152784	1.323405	-1.63	0.104	-4.746609
.4410416						
	public_officer3	-.0595862	.7173035	-0.08	0.934	-1.465475
1.346303						
	profession4	-.07668	1.021788	-0.08	0.940	-2.079347
1.925987						
	researcher5	2.11988	1.246592	1.70	0.089	-.3233942
4.563155						
	learn	-.0759357	.4034406	-0.19	0.851	-.8666648
.7147933						
	income	.0243712	.1583261	0.15	0.878	-.2859423
.3346847						
	avg_distance	.269894	.1421987	1.90	0.058	-.0088104
.5485983						
	freq_use_ev	.0387733	.1690091	0.23	0.819	-.2924784
.370025						
	club_kepco2	-.3399383	.4898558	-0.69	0.488	-1.300038
.6201614						
	club_jeju3	-1.501003	.8586952	-1.75	0.080	-3.184015
.1820085						
	ev_owner	.7342183	.6435513	1.14	0.254	-.527119

```

1.995556
    saving_free | -1.195601   .6502226   -1.84   0.066   -2.470014
.078812
a_cons_hill_ride | -.0813312   .1587898   -0.51   0.609   -.3925535
.2298911
    _cons |      1.17424   2.158124     0.54   0.586   -3.055605
5.404085
-----
--

```

```

[26]: * One concern series1. : a concern on hvac

logit y age gender marriage student1 company_man2 public_officer3 profession4_
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3 _
↪ev_owner saving_free a_cons_hac
estimates store model7

```

```

Iteration 0:   log likelihood = -120.09018
Iteration 1:   log likelihood = -98.854311
Iteration 2:   log likelihood = -98.019475
Iteration 3:   log likelihood = -98.003121
Iteration 4:   log likelihood = -98.003071
Iteration 5:   log likelihood = -98.003071

```

```

Logistic regression                                Number of obs   =       184
                                                    LR chi2(17)    =       44.17
                                                    Prob > chi2    =       0.0003
Log likelihood = -98.003071                      Pseudo R2      =       0.1839

```

```

-----
-
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-
          age |   .2936117   .3050118     0.96   0.336    - .3042004
.8914237
          gender |   .0624131   .5232952     0.12   0.905    - .9632267
1.088053
          marriage |  -.4979675   .4932641    -1.01   0.313    -1.464747
.4688124
          student1 |  -.1022286    1.1082    -0.09   0.927    -2.27426
2.069803
          company_man2 | -2.409298   1.384081    -1.74   0.082    -5.122046
.3034505

```

public_officer3		-.0733315	.7412948	-0.10	0.921	-1.526243
1.37958						
profession4		-.3963433	1.054605	-0.38	0.707	-2.46333
1.670644						
researcher5		2.114685	1.263534	1.67	0.094	-.3617958
4.591166						
learn		.0249292	.4090062	0.06	0.951	-.7767082
.8265666						
income		.0170092	.1624343	0.10	0.917	-.3013562
.3353746						
avg_distance		.2787791	.1409119	1.98	0.048	.0025969
.5549614						
freq_use_ev		.0557655	.1709891	0.33	0.744	-.279367
.390898						
club_kepco2		-.4960503	.5072543	-0.98	0.328	-1.490251
.4981499						
club_jeu3		-1.287947	.8793248	-1.46	0.143	-3.011392
.4354981						
ev_owner		.6676909	.6511358	1.03	0.305	-.6085117
1.943894						
saving_free		-1.455907	.6652331	-2.19	0.029	-2.75974
-.1520738						
a_cons_hac		-.3958109	.152026	-2.60	0.009	-.6937763
-.0978455						
_cons		2.151752	2.098018	1.03	0.305	-1.960288
6.263791						

-----  
-

```
[27]: * After Concern:
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeu3
↪ ev_owner saving_free a_cons_short_dis a_cons_as a_cons_charge_fee
↪ a_cons_num_charge_lack a_cons_long_charge_time a_cons_hill Ride a_cons_hac
estimates store model8
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -97.26324
Iteration 2: log likelihood = -96.309043
Iteration 3: log likelihood = -96.295424
Iteration 4: log likelihood = -96.295387
Iteration 5: log likelihood = -96.295387
```

Logistic regression	Number of obs	=	184
	LR chi2(23)	=	47.59

Log likelihood = -96.295387      Prob > chi2 = 0.0019  
Pseudo R2 = 0.1981

	y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
	age	.340944	.3180583	1.07	0.284	-.2824388
.9643269	gender	.0115895	.5351584	0.02	0.983	-1.037302
1.060481	marriage	-.4731386	.4996831	-0.95	0.344	-1.452499
.5062223	student1	.1166542	1.120729	0.10	0.917	-2.079933
2.313242	company_man2	-2.112767	1.411894	-1.50	0.135	-4.880028
.6544936	public_officer3	-.0025686	.7516279	-0.00	0.997	-1.475732
1.470595	profession4	-.520584	1.069439	-0.49	0.626	-2.616645
1.575477	researcher5	2.272473	1.291175	1.76	0.078	-.2581835
4.80313	learn	.1202316	.433195	0.28	0.781	-.728815
.9692782	income	.0560364	.1671956	0.34	0.738	-.271661
.3837337	avg_distance	.2824614	.1544296	1.83	0.067	-.0202151
.5851378	freq_use_ev	.0867176	.178098	0.49	0.626	-.262348
.4357833	club_kepco2	-.4882705	.5157204	-0.95	0.344	-1.499064
.522523	club_jeju3	-.9796557	.9396015	-1.04	0.297	-2.821241
.8619294	ev_owner	.8611399	.6671271	1.29	0.197	-.4464051
2.168685	saving_free	-1.482165	.687508	-2.16	0.031	-2.829655
-.1346737	a_cons_short_dis	.0198509	.1982233	0.10	0.920	-.3686596
.4083613	a_cons_as	-.1223494	.1858711	-0.66	0.510	-.4866501
.2419513	a_cons_charge_fee	-.2700268	.1906273	-1.42	0.157	-.6436495
.1035958	a_cons_num_charge_lack	.0900837	.2353209	0.38	0.702	-.3711367

```
.5513041
a_cons_long_charge_time | -.116316 .2351984 -0.49 0.621 -.5772963
.3446644
a_cons_hill_ride | .2417624 .1926053 1.26 0.209 -.1357371
.6192618
a_cons_hac | -.4172223 .1806337 -2.31 0.021 -.7712579
-.0631867
_cons | 2.038912 2.379605 0.86 0.392 -2.625028
6.702852
```

```
[28]: * Model1 total tabel: se and star cannot be together
estimates table base model1 model2 model3 model4 model5 model6 model7 model8,
b(%9.3f) star(0.01, 0.05, 0.1) eq(1) stats(11)
```

```
-----
-----
Variable | base model1 model2 model3
model4 model5 model6 model7 model8
-----+-----
age | 0.274 0.267 0.266 0.298
0.256 0.303 0.278 0.294 0.341
gender | -0.002 0.034 -0.065 0.006
0.035 -0.007 -0.006 0.062 0.012
marriage | -0.459 -0.444 -0.482 -0.398
-0.473 -0.514 -0.460 -0.498 -0.473
student1 | 0.345 0.294 0.362 0.509
0.397 0.317 0.310 -0.102 0.117
company_man2 | -2.067 -2.108 -2.036 -1.931
-2.011 -2.049 -2.153 -2.409* -2.113
public_off~3 | -0.032 -0.005 -0.085 0.036
0.007 -0.053 -0.060 -0.073 -0.003
profession4 | -0.040 -0.079 -0.263 -0.094
-0.069 -0.208 -0.077 -0.396 -0.521
researcher5 | 2.122* 2.167* 2.243* 2.340*
2.210* 2.055 2.120* 2.115* 2.272*
learn | -0.055 -0.017 0.001 -0.072
-0.087 -0.060 -0.076 0.025 0.120
income | 0.028 0.030 0.038 0.051
0.031 0.039 0.024 0.017 0.056
avg_distance | 0.288** 0.304** 0.301** 0.230
0.288** 0.286** 0.270* 0.279** 0.282*
freq_use_ev | 0.033 0.015 0.040 0.075
0.025 0.015 0.039 0.056 0.087
```

club_kepco2	-0.321	-0.306	-0.373	-0.328
-0.312	-0.314	-0.340	-0.496	-0.488
club_jeju3	-1.519*	-1.356	-1.183	-1.345
-1.459*	-1.333	-1.501*	-1.288	-0.980
ev_owner	0.738	0.780	0.798	0.851
0.755	0.855	0.734	0.668	0.861
saving_free	-1.165*	-1.161*	-1.197*	-1.276*
-1.135*	-1.085*	-1.196*	-1.456**	-1.482**
a_cons_sho~s		-0.141		
0.020				
a_cons_as			-0.238	
-0.122				
a_cons_cha~e				-0.281
-0.270				
a_cons_num~k				
-0.118				0.090
a_cons_lon~e				
-0.213			-0.116	
a_cons_hil~e				
-0.081		0.242		
a_cons_hac				
-0.396***	-0.417**			
_cons	0.779	1.104	1.426	1.530
1.334	1.558	1.174	2.152	2.039

---

ll	-101.614	-101.256	-100.589	-100.244
-101.409	-100.984	-101.483	-98.003	-96.295

---

legend: \* p<.1; \*\* p<.05; \*\*\* p<.01

```
[29]: estimates table base model1 model2 model3 model4 model5 model6 model7 model8,
      ↪ b(%9.3f) se(%9.3f) eq(1) stats(ll)
```

Variable	base	model1	model2	model3	model4
model5	model6	model7	model8		

---

age	0.274	0.267	0.266	0.298	0.256
0.303	0.278	0.294	0.341		
	0.300	0.300	0.305	0.303	0.301
0.303	0.301	0.305	0.318		
gender	-0.002	0.034	-0.065	0.006	0.035
-0.007	-0.006	0.062	0.012		

		0.515	0.518	0.518	0.517	0.519
0.517	0.515	0.523	0.535			
marriage		-0.459	-0.444	-0.482	-0.398	-0.473
-0.514	-0.460	-0.498	-0.473			
		0.484	0.484	0.488	0.490	0.485
0.488	0.485	0.493	0.500			
student1		0.345	0.294	0.362	0.509	0.397
0.317	0.310	-0.102	0.117			
		1.066	1.075	1.069	1.074	1.064
1.064	1.073	1.108	1.121			
company_man2		-2.067	-2.108	-2.036	-1.931	-2.011
-2.049	-2.153	-2.409	-2.113			
		1.312	1.329	1.312	1.326	1.315
1.326	1.323	1.384	1.412			
public_off-3		-0.032	-0.005	-0.085	0.036	0.007
-0.053	-0.060	-0.073	-0.003			
		0.714	0.717	0.724	0.720	0.717
0.721	0.717	0.741	0.752			
profession4		-0.040	-0.079	-0.263	-0.094	-0.069
-0.208	-0.077	-0.396	-0.521			
		1.013	1.018	1.036	1.020	1.015
1.030	1.022	1.055	1.069			
researcher5		2.122	2.167	2.243	2.340	2.210
2.055	2.120	2.115	2.272			
		1.247	1.250	1.255	1.260	1.255
1.253	1.247	1.264	1.291			
learn		-0.055	-0.017	0.001	-0.072	-0.087
-0.060	-0.076	0.025	0.120			
		0.401	0.404	0.407	0.406	0.403
0.403	0.403	0.409	0.433			
income		0.028	0.030	0.038	0.051	0.031
0.039	0.024	0.017	0.056			
		0.158	0.159	0.160	0.160	0.158
0.159	0.158	0.162	0.167			
avg_distance		0.288	0.304	0.301	0.230	0.288
0.286	0.270	0.279	0.282			
		0.138	0.140	0.139	0.144	0.138
0.139	0.142	0.141	0.154			
freq_use_ev		0.033	0.015	0.040	0.075	0.025
0.015	0.039	0.056	0.087			
		0.168	0.170	0.170	0.172	0.170
0.170	0.169	0.171	0.178			
club_kepco2		-0.321	-0.306	-0.373	-0.328	-0.312
-0.314	-0.340	-0.496	-0.488			
		0.488	0.489	0.500	0.490	0.488
0.493	0.490	0.507	0.516			
club_jeju3		-1.519	-1.356	-1.183	-1.345	-1.459
-1.333	-1.501	-1.288	-0.980			



		0.855	0.878	0.894	0.861	0.859
0.871	0.859	0.879	0.940			
ev_owner		0.738	0.780	0.798	0.851	0.755
0.855	0.734	0.668	0.861			
		0.642	0.640	0.645	0.649	0.646
0.659	0.644	0.651	0.667			
saving_free		-1.165	-1.161	-1.197	-1.276	-1.135
-1.085	-1.196	-1.456	-1.482			
		0.649	0.651	0.650	0.656	0.650
0.650	0.650	0.665	0.688			
a_cons_sho~s			-0.141			
0.020						
			0.168			
0.198						
a_cons_as				-0.238		
-0.122						
				0.168		
0.186						
a_cons_cha~e					-0.281	
-0.270						
					0.172	
0.191						
a_cons_num~k						-0.118
0.090						
						0.185
0.235						
a_cons_lon~e						
-0.213			-0.116			
0.193			0.235			
a_cons_hil~e						
-0.081		0.242				
0.159		0.193				
a_cons_hac						
-0.396	-0.417					
0.152	0.181					
_cons		0.779	1.104	1.426	1.530	1.334
1.558	1.174	2.152	2.039			
		2.014	2.054	2.078	2.083	2.188
2.127	2.158	2.098	2.380			
-----						
-----						
11		-101.614	-101.256	-100.589	-100.244	-101.409
-100.984	-101.483	-98.003	-96.295			
-----						
-----						

legend: b/se

[30]: \* One concern series1. : b short distance

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↳researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
      ↳ev_owner saving_free b_cons_short_dis
estimates store model1b
```

```
Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -99.796949
Iteration 2:  log likelihood = -98.892396
Iteration 3:  log likelihood = -98.8766
Iteration 4:  log likelihood = -98.876549
Iteration 5:  log likelihood = -98.876549
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	42.43
	Prob > chi2	=	0.0006
Log likelihood = -98.876549	Pseudo R2	=	0.1766

```
-----
--
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .218625   .303361     0.72   0.471   - .3759517
.8132017
          gender |   .0622405   .5267541     0.12   0.906   - .9701784
1.09466
          marriage |  -.4679636   .4900693    -0.95   0.340   -1.428482
.4925547
          student1 |   .2191285   1.085342     0.20   0.840   -1.908104
2.34636
          company_man2 | -2.284139   1.350393    -1.69   0.091   -4.93086
.3625818
          public_officer3 |   -.00008   .7357184     -0.00   1.000   -1.442062
1.441902
          profession4 |  -.1441224   1.040683    -0.14   0.890   -2.183824
1.895579
          researcher5 |   2.203316   1.257651     1.75   0.080   - .2616358
4.668267
          learn |   .0781582   .4089419     0.19   0.848   - .7233533
.8796696
          income |   .0137644   .1586112     0.09   0.931   - .2971079
```

```

.3246366
    avg_distance |   .3323717   .1425779    2.33   0.020    .0529242
.6118192
    freq_use_ev |  -.0211512   .1735306   -0.12   0.903   -.3612649
.3189625
    club_kepco2 |  -.277095   .4985478   -0.56   0.578   -1.254231
.7000407
    club_jeju3 |  -1.11258   .8818105   -1.26   0.207   -2.840897
.6157366
    ev_owner |    .783331   .6529594    1.20   0.230   -.4964459
2.063108
    saving_free |  -.9567904   .6745448   -1.42   0.156   -2.278874
.3652931
b_cons_short_dis |  -.4700111   .211109   -2.23   0.026   -.8837771
-.056245
    _cons |    2.085038   2.155535    0.97   0.333   -2.139734
6.30981
-----
--

```

[31]: *\* One concern series1. : b AS*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free b_cons_as
estimates store model2b

```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -100.53691
Iteration 2:  log likelihood = -99.586965
Iteration 3:  log likelihood = -99.564932
Iteration 4:  log likelihood = -99.564882
Iteration 5:  log likelihood = -99.564882

```

```

Logistic regression                Number of obs    =        184
                                   LR chi2(17)         =         41.05
                                   Prob > chi2          =         0.0009
Log likelihood = -99.564882        Pseudo R2         =         0.1709

```

```

-----
-
      y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-

```

.8427851	age		.2453737	.3048074	0.81	0.421	-.3520377
.973519	gender		-.0469756	.5206701	-0.09	0.928	-1.06747
.4576037	marriage		-.501071	.4891287	-1.02	0.306	-1.459746
2.619498	student1		.5097782	1.076408	0.47	0.636	-1.599942
.604172	company_man2		-1.9948	1.32603	-1.50	0.132	-4.593771
1.418163	public_officer3		-.0110845	.7292211	-0.02	0.988	-1.440332
1.813608	profession4		-.1958003	1.025227	-0.19	0.849	-2.205208
4.794331	researcher5		2.298157	1.273582	1.80	0.071	-.1980181
.846281	learn		.0436128	.4095321	0.11	0.915	-.7590553
.3804194	income		.0653463	.1607546	0.41	0.684	-.2497268
.5883321	avg_distance		.3148022	.1395586	2.26	0.024	.0412724
.3344025	freq_use_ev		-.0024172	.1718499	-0.01	0.989	-.3392369
.5879533	club_kepco2		-.3907009	.4993225	-0.78	0.434	-1.369355
.4965157	club_jeju3		-1.209133	.8702448	-1.39	0.165	-2.914781
2.004819	ev_owner		.7300992	.6503793	1.12	0.262	-.5446208
.1349724	saving_free		-1.14609	.6536155	-1.75	0.080	-2.427153
-.0024223	b_cons_as		-.3718768	.1885006	-1.97	0.049	-.7413312
5.908962	_cons		1.821413	2.085522	0.87	0.382	-2.266136

-----  
-

[32]: *\* One concern series1. : b charging fee*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3 ↪
↪ ev_owner saving_free b_cons_charge_fee
estimates store model3b
```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -101.92405
Iteration 2:  log likelihood = -101.20213
Iteration 3:  log likelihood = -101.1872
Iteration 4:  log likelihood = -101.18714
Iteration 5:  log likelihood = -101.18714

```

```

Logistic regression              Number of obs   =       184
                                LR chi2(17)      =       37.81
                                Prob > chi2       =       0.0026
Log likelihood = -101.18714      Pseudo R2    =       0.1574

```

```

-----
---
              y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
---
          age |   .2600036   .3007311     0.86   0.387    - .3294185
.8494258
        gender |  -.0235503   .5142927    -0.05   0.963    -1.031545
.9844449
      marriage |  -.4076641   .4899139    -0.83   0.405    -1.367878
.5525494
    student1 |   .324157   1.067848     0.30   0.761    -1.768786
2.4171
  company_man2 | -2.238329   1.338489    -1.67   0.094    -4.861719
.3850608
 public_officer3 | -.0974601   .7202944    -0.14   0.892    -1.509211
1.314291
  profession4 |  -.1038369   1.019145    -0.10   0.919    -2.101325
1.893651
  researcher5 |   2.099828   1.247984     1.68   0.092    -.3461768
4.545832
        learn |  -.067327   .4030072    -0.17   0.867    -.8572065
.7225525
        income |   .0312795   .1581153     0.20   0.843    -.2786207
.3411797
   avg_distance |   .2796953   .1379437     2.03   0.043     .0093306
.55006
   freq_use_ev |   .0194343   .1691061     0.11   0.909    -.3120075
.3508761
   club_kepco2 |  -.348007   .4896598    -0.71   0.477    -1.307723
.6117086
   club_jeju3 | -1.444222   .858116    -1.68   0.092    -3.126099
.2376543
     ev_owner |   .7425656   .6424572     1.16   0.248    -.5166275

```

```

2.001759
      saving_free |  -1.207784   .6497621   -1.86   0.063   -2.481295
.0657259
b_cons_charge_fee |  -.1556943   .1695044   -0.92   0.358   -.487917
.1765283
      _cons |    1.494348   2.172748    0.69   0.492   -2.764159
5.752856
-----
---
```

[33]: *\* One concern series1. : b charging facility lack*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
      ↪ ev_owner saving_free b_cons_num_charge_lack
estimates store model4b
```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -102.23653
Iteration 2:  log likelihood = -101.50111
Iteration 3:  log likelihood = -101.48539
Iteration 4:  log likelihood = -101.48533
Iteration 5:  log likelihood = -101.48533
```

```

Logistic regression                                Number of obs      =       184
                                                    LR chi2(17)        =       37.21
                                                    Prob > chi2        =       0.0032
Log likelihood = -101.48533                        Pseudo R2         =       0.1549
```

```

-----
-----
              y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-----
              age |   .2752197   .3010241     0.91   0.361    - .3147766
.8652161
              gender | -.0286951   .5183838    -0.06   0.956    -1.044709
.9873185
              marriage | -.4799121   .4863378    -0.99   0.324    -1.433117
.4732924
              student1 | .3355041   1.065101     0.31   0.753    -1.752055
2.423063
              company_man2 | -2.042688   1.310695    -1.56   0.119    -4.611604
.5262272
```

1.375707	public_officer3		-.0277882	.716082	-0.04	0.969	-1.431283
1.932157	profession4		-.0629207	1.017916	-0.06	0.951	-2.057999
4.551934	researcher5		2.109198	1.246317	1.69	0.091	-.3335384
.7519025	learn		-.0351833	.4015818	-0.09	0.930	-.8222692
.3353917	income		.0259005	.1579065	0.16	0.870	-.2835906
.5645564	avg_distance		.2930922	.1385047	2.12	0.034	.021628
.3579492	freq_use_ev		.0255988	.1695696	0.15	0.880	-.3067515
.6281646	club_kepco2		-.329569	.4886486	-0.67	0.500	-1.287303
.1458529	club_jeju3		-1.53646	.8583389	-1.79	0.073	-3.218774
2.005156	ev_owner		.7332925	.6489218	1.13	0.258	-.5385708
.124048	saving_free		-1.146868	.6484386	-1.77	0.077	-2.417784
.3163314	b_cons_num_charge_lack		-.1094765	.2172529	-0.50	0.614	-.5352844
5.540811	_cons		1.227319	2.200801	0.56	0.577	-3.086172

-----  
-----

[34]: *\* One concern series1. : b charging time*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
      ↪ ev_owner saving_free b_cons_long_charge_time
estimates store model5b
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -100.57438
Iteration 2: log likelihood = -99.532376
Iteration 3: log likelihood = -99.514467
Iteration 4: log likelihood = -99.514412
Iteration 5: log likelihood = -99.514412
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	41.15

	Prob > chi2	=	0.0009
Log likelihood = -99.514412	Pseudo R2	=	0.1713

	y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
	age	.2447033	.3059363	0.80	0.424	-.3549208
	gender	-.0225428	.522933	-0.04	0.966	-1.047473
	marriage	-.5534917	.4946596	-1.12	0.263	-1.523007
	student1	.3565582	1.074111	0.33	0.740	-1.748661
	company_man2	-1.994135	1.314315	-1.52	0.129	-4.570146
	public_officer3	-.0050904	.7343915	-0.01	0.994	-1.444471
	profession4	-.1782785	1.033245	-0.17	0.863	-2.203402
	researcher5	2.18135	1.265232	1.72	0.085	-.2984593
	learn	.0342798	.4062044	0.08	0.933	-.7618663
	income	.0386228	.1594198	0.24	0.809	-.2738343
	avg_distance	.3145533	.1417995	2.22	0.027	.0366314
	freq_use_ev	.0077114	.1725258	0.04	0.964	-.330433
	club_kepco2	-.420976	.5021007	-0.84	0.402	-1.405075
	club_jeju3	-1.386832	.8648532	-1.60	0.109	-3.081913
	ev_owner	.8788082	.6602557	1.33	0.183	-.4152692
	saving_free	-1.076185	.6578455	-1.64	0.102	-2.365538
	b_cons_long_charge_time	-.4609431	.2336006	-1.97	0.048	-.918792
	_cons	2.456363	2.212751	1.11	0.267	-1.880549



[35]: *\* One concern series1. : b concern on hill side*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free b_cons_hill_ride
estimates store model6b
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -101.91675
Iteration 2: log likelihood = -101.15547
Iteration 3: log likelihood = -101.13898
Iteration 4: log likelihood = -101.13892
Iteration 5: log likelihood = -101.13892
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	37.90
	Prob > chi2	=	0.0025
Log likelihood = -101.13892	Pseudo R2	=	0.1578

```
-----
--
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .2389226   .3047536     0.78   0.433    - .3583835
.8362287
        gender |  -.0019761   .5169982    -0.00   0.997    -1.015274
1.011322
       marriage |  -.4798643   .4887609    -0.98   0.326    -1.437818
.4780895
       student1 |   .3000294   1.077559     0.28   0.781    -1.811948
2.412007
    company_man2 |  -2.224047   1.321269    -1.68   0.092    -4.813688
.3655932
 public_officer3 |  -.0895823   .7213535    -0.12   0.901    -1.503409
1.324245
    profession4 |  -.048444   1.022699    -0.05   0.962    -2.052896
1.956008
    researcher5 |   2.056194   1.25249     1.64   0.101    - .3986414
4.511029
         learn |  -.0723619   .4017388    -0.18   0.857    - .8597554
.7150316
         income |   .0325077   .1572675     0.21   0.836    - .2757309
.3407462
```

avg_distance	.2693892	.1391337	1.94	0.053	-.0033078
.5420863					
freq_use_ev	.036845	.1693778	0.22	0.828	-.2951294
.3688195					
club_kepco2	-.3734523	.4915743	-0.76	0.447	-1.33692
.5900156					
club_jeju3	-1.549975	.8621297	-1.80	0.072	-3.239718
.1397686					
ev_owner	.7323872	.6420379	1.14	0.254	-.525984
1.990758					
saving_free	-1.186061	.6491558	-1.83	0.068	-2.458383
.0862612					
b_cons_hill_ride	-.1473965	.1519258	-0.97	0.332	-.4451655
.1503725					
_cons	1.548354	2.17542	0.71	0.477	-2.71539
5.812098					

-----  
--

[36]: *\* One concern series1. : b concern on hvac*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free b_cons_hac
estimates store model7b
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -101.13658
Iteration 2: log likelihood = -100.3066
Iteration 3: log likelihood = -100.28844
Iteration 4: log likelihood = -100.28838
Iteration 5: log likelihood = -100.28838
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	39.60
	Prob > chi2	=	0.0015
Log likelihood = -100.28838	Pseudo R2	=	0.1649

-----  
-

y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
---	-------	-----------	---	------	-------------------------

-----  
-

age	.2713536	.3001148	0.90	0.366	-.3168606
-----	----------	----------	------	-------	-----------

```

.8595678
      gender |  -.0179794   .5180803   -0.03   0.972   -1.033398
.9974393
      marriage |  -.5457615   .4934456   -1.11   0.269   -1.512897
.4213741
      student1 |   .0272473   1.096384    0.02   0.980   -2.121626
2.176121
      company_man2 | -2.111383   1.319912   -1.60   0.110   -4.698363
.4755979
public_officer3 |  -.1114137   .7262745   -0.15   0.878   -1.534885
1.312058
      profession4 |  -.3504157   1.039063   -0.34   0.736   -2.386941
1.68611
      researcher5 |   1.95456   1.258908    1.55   0.121   -.5128555
4.421975
      learn |  -.0064222   .4031528   -0.02   0.987   -.7965871
.7837427
      income |   .0181735   .1601568    0.11   0.910   -.2957281
.3320751
      avg_distance |  .2879255   .1390113    2.07   0.038   .0154684
.5603827
      freq_use_ev |   .0367004   .1700986    0.22   0.829   -.2966867
.3700874
      club_kepco2 |  -.3724043   .4915937   -0.76   0.449   -1.33591
.5911017
      club_jeju3 | -1.396161   .8640642   -1.62   0.106   -3.089696
.2973739
      ev_owner |   .6798735   .6434679    1.06   0.291   -.5813004
1.941047
      saving_free | -1.180414   .6469265   -1.82   0.068   -2.448367
.0875384
      b_cons_hac |  -.260389   .1624495   -1.60   0.109   -.5787841
.0580061
      _cons |   1.771712   2.106546    0.84   0.400   -2.357043
5.900466
-----
-

```

[37]: *\* Total Before Model*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free b_cons_short_dis b_cons_as b_cons_charge_fee
↪b_cons_num_charge_lack b_cons_long_charge_time b_cons_hac b_cons_hill_ride
estimates store model8b

```

```

Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -97.577459
Iteration 2:  log likelihood = -96.404875
Iteration 3:  log likelihood = -96.385049
Iteration 4:  log likelihood = -96.384988
Iteration 5:  log likelihood = -96.384988

```

```

Logistic regression              Number of obs   =      184
                                LR chi2(23)      =      47.41
                                Prob > chi2       =      0.0020
Log likelihood = -96.384988      Pseudo R2    =      0.1974

```

-----						
-----						
	y	Coef.	Std. Err.	z	P> z	[95% Conf.
Interval]						
-----+-----						
-----						
	age	.2026883	.3077751	0.66	0.510	-.4005398
.8059164						
	gender	-.0008958	.5372153	-0.00	0.999	-1.053818
1.052027						
	marriage	-.4896003	.5126346	-0.96	0.340	-1.494346
.5151452						
	student1	.116532	1.126398	0.10	0.918	-2.091167
2.324231						
	company_man2	-2.393867	1.406472	-1.70	0.089	-5.150501
.3627674						
	public_officer3	-.1167694	.7634492	-0.15	0.878	-1.613102
1.379563						
	profession4	-.5616008	1.079223	-0.52	0.603	-2.67684
1.553638						
	researcher5	2.235938	1.29907	1.72	0.085	-.3101922
4.782068						
	learn	.1462894	.4294046	0.34	0.733	-.6953281
.9879069						
	income	.0440136	.1649038	0.27	0.790	-.2791919
.367219						
	avg_distance	.3448247	.1466705	2.35	0.019	.0573557
.6322937						
	freq_use_ev	-.0477006	.1786309	-0.27	0.789	-.3978108
.3024097						
	club_kepco2	-.4278665	.5194242	-0.82	0.410	-1.445919
.5901861						
	club_jeju3	-.736143	.9107275	-0.81	0.419	-2.521136
1.04885						
	ev_owner	.8351093	.6659908	1.25	0.210	-.4702086

```

2.140427
      saving_free | -1.003027 .6715192 -1.49 0.135 -2.31918
.3131269
      b_cons_short_dis | -.3170699 .2384889 -1.33 0.184 -.7844996
.1503598
      b_cons_as | -.2270959 .2006697 -1.13 0.258 -.6204014
.1662095
      b_cons_charge_fee | -.1920307 .1878082 -1.02 0.307 -.560128
.1760666
      b_cons_num_charge_lack | .1897604 .2600026 0.73 0.465 -.3198352
.6993561
      b_cons_long_charge_time | -.2925494 .2865051 -1.02 0.307 -.8540891
.2689904
      b_cons_hac | -.1781143 .2041452 -0.87 0.383 -.5782316
.222003
      b_cons_hill_ride | .0865883 .1914417 0.45 0.651 -.2886305
.461807
      _cons | 3.68851 2.496601 1.48 0.140 -1.204738
8.581759
-----
-----

```

[38]: *\* Model1 total before table: se and star cannot be together*

```

estimates table base model1b model2b model3b model4b model5b model6b model7b
→model8b, b(%9.3f) star(0.01, 0.05, 0.1) eq(1) stats(11)

```

```

-----
-----
Variable |      base      model1b      model2b      model3b
model4b   model5b   model6b   model7b   model8b
-----+-----
-----
      age |      0.274      0.219      0.245      0.260
0.275     0.245     0.239     0.271     0.203
      gender |      -0.002      0.062     -0.047     -0.024
-0.029     -0.023     -0.002     -0.018     -0.001
      marriage |      -0.459     -0.468     -0.501     -0.408
-0.480     -0.553     -0.480     -0.546     -0.490
      student1 |      0.345      0.219      0.510      0.324
0.336     0.357     0.300     0.027     0.117
company_man2 |      -2.067     -2.284*     -1.995     -2.238*
-2.043     -1.994     -2.224*     -2.111     -2.394*
public_off~3 |      -0.032     -0.000     -0.011     -0.097
-0.028     -0.005     -0.090     -0.111     -0.117
profession4 |      -0.040     -0.144     -0.196     -0.104

```

-0.063	-0.178	-0.048	-0.350	-0.562
researcher5	2.122*	2.203*	2.298*	2.100*
2.109*	2.181*	2.056	1.955	2.236*
learn	-0.055	0.078	0.044	-0.067
-0.035	0.034	-0.072	-0.006	0.146
income	0.028	0.014	0.065	0.031
0.026	0.039	0.033	0.018	0.044
avg_distance	0.288**	0.332**	0.315**	0.280**
0.293**	0.315**	0.269*	0.288**	0.345**
freq_use_ev	0.033	-0.021	-0.002	0.019
0.026	0.008	0.037	0.037	-0.048
club_kepco2	-0.321	-0.277	-0.391	-0.348
-0.330	-0.421	-0.373	-0.372	-0.428
club_jeju3	-1.519*	-1.113	-1.209	-1.444*
-1.536*	-1.387	-1.550*	-1.396	-0.736
ev_owner	0.738	0.783	0.730	0.743
0.733	0.879	0.732	0.680	0.835
saving_free	-1.165*	-0.957	-1.146*	-1.208*
-1.147*	-1.076	-1.186*	-1.180*	-1.003
b_cons_sho~s		-0.470**		
-0.317				
b_cons_as			-0.372**	
-0.227				
b_cons_cha~e				-0.156
-0.192				
b_cons_num~k				
-0.109				0.190
b_cons_lon~e				
-0.461**			-0.293	
b_cons_hil~e				
-0.147		0.087		
b_cons_hac				
-0.260	-0.178			
_cons	0.779	2.085	1.821	1.494
1.227	2.456	1.548	1.772	3.689
-----				
ll	-101.614	-98.877	-99.565	-101.187
-101.485	-99.514	-101.139	-100.288	-96.385
-----				

legend: \* p<.1; \*\* p<.05; \*\*\* p<.01

```
[39]: estimates table base model1b model2b model3b model4b model5b model6b model7b
      ↪ model8b, b(%9.3f) se(%9.3f) eq(1) stats(ll)
```

-----						
Variable	base	model1b	model2b	model3b	model4b	
model5b	model6b	model7b	model8b			
-----						
age	0.274	0.219	0.245	0.260	0.275	
0.245	0.239	0.271	0.203			
	0.300	0.303	0.305	0.301	0.301	
0.306	0.305	0.300	0.308			
gender	-0.002	0.062	-0.047	-0.024	-0.029	
-0.023	-0.002	-0.018	-0.001			
	0.515	0.527	0.521	0.514	0.518	
0.523	0.517	0.518	0.537			
marriage	-0.459	-0.468	-0.501	-0.408	-0.480	
-0.553	-0.480	-0.546	-0.490			
	0.484	0.490	0.489	0.490	0.486	
0.495	0.489	0.493	0.513			
student1	0.345	0.219	0.510	0.324	0.336	
0.357	0.300	0.027	0.117			
	1.066	1.085	1.076	1.068	1.065	
1.074	1.078	1.096	1.126			
company_man2	-2.067	-2.284	-1.995	-2.238	-2.043	
-1.994	-2.224	-2.111	-2.394			
	1.312	1.350	1.326	1.338	1.311	
1.314	1.321	1.320	1.406			
public_off~3	-0.032	-0.000	-0.011	-0.097	-0.028	
-0.005	-0.090	-0.111	-0.117			
	0.714	0.736	0.729	0.720	0.716	
0.734	0.721	0.726	0.763			
profession4	-0.040	-0.144	-0.196	-0.104	-0.063	
-0.178	-0.048	-0.350	-0.562			
	1.013	1.041	1.025	1.019	1.018	
1.033	1.023	1.039	1.079			
researcher5	2.122	2.203	2.298	2.100	2.109	
2.181	2.056	1.955	2.236			
	1.247	1.258	1.274	1.248	1.246	
1.265	1.252	1.259	1.299			
learn	-0.055	0.078	0.044	-0.067	-0.035	
0.034	-0.072	-0.006	0.146			
	0.401	0.409	0.410	0.403	0.402	
0.406	0.402	0.403	0.429			
income	0.028	0.014	0.065	0.031	0.026	
0.039	0.033	0.018	0.044			
	0.158	0.159	0.161	0.158	0.158	
0.159	0.157	0.160	0.165			
avg_distance	0.288	0.332	0.315	0.280	0.293	
0.315	0.269	0.288	0.345			
	0.138	0.143	0.140	0.138	0.139	

0.142	0.139	0.139	0.147		
freq_use_ev	0.033	-0.021	-0.002	0.019	0.026
0.008	0.037	0.037	-0.048		
		0.168	0.174	0.172	0.169
0.173	0.169	0.170	0.179		
club_kepco2	-0.321	-0.277	-0.391	-0.348	-0.330
-0.421	-0.373	-0.372	-0.428		
		0.488	0.499	0.499	0.490
0.502	0.492	0.492	0.519		
club_jeju3	-1.519	-1.113	-1.209	-1.444	-1.536
-1.387	-1.550	-1.396	-0.736		
		0.855	0.882	0.870	0.858
0.865	0.862	0.864	0.911		
ev_owner	0.738	0.783	0.730	0.743	0.733
0.879	0.732	0.680	0.835		
		0.642	0.653	0.650	0.642
0.660	0.642	0.643	0.666		
saving_free	-1.165	-0.957	-1.146	-1.208	-1.147
-1.076	-1.186	-1.180	-1.003		
		0.649	0.675	0.654	0.650
0.658	0.649	0.647	0.672		
b_cons_sho~s		-0.470			
-0.317					
		0.211			
0.238					
b_cons_as			-0.372		
-0.227					
			0.189		
0.201					
b_cons_cha~e				-0.156	
-0.192					
				0.170	
0.188					
b_cons_num~k					-0.109
0.190					
					0.217
0.260					
b_cons_lon~e					
-0.461			-0.293		
0.234			0.287		
b_cons_hil~e					
-0.147		0.087			
0.152		0.191			
b_cons_hac					
-0.260	-0.178				



0.162	0.204					
	_cons		0.779	2.085	1.821	1.494
2.456			1.548	1.772	3.689	1.227
			2.014	2.156	2.086	2.173
2.213			2.175	2.107	2.497	2.201
-----+-----						
-----						
	ll		-101.614	-98.877	-99.565	-101.187
-99.514			-101.139	-100.288	-96.385	-101.485
-----						
-----						
legend: b/se						

```
[40]: * One concern series1. : g short distance

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free g_cons_short_dis
estimates store model1g
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -101.74403
Iteration 2: log likelihood = -100.97846
Iteration 3: log likelihood = -100.96199
Iteration 4: log likelihood = -100.96193
Iteration 5: log likelihood = -100.96193
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	38.26
	Prob > chi2	=	0.0023
Log likelihood = -100.96193	Pseudo R2	=	0.1593

```
-----
--
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .2681188   .3025017     0.89   0.375    -1.03683
.8610113
        gender |  -.0217995   .5178823    -0.04   0.966    -1.427957
.9932311
       marriage |  -.4738028   .4868222    -0.97   0.330    -1.728319
.4803512
      student1 |   .3610081   1.066003     0.34   0.735    -1.728319
2.450335
```

company_man2		-2.09454	1.309432	-1.60	0.110	-4.66098
.4718996						
public_officer3		-.0466421	.7203947	-0.06	0.948	-1.45859
1.365306						
profession4		-.0247994	1.018286	-0.02	0.981	-2.020604
1.971005						
researcher5		2.107157	1.24914	1.69	0.092	-.341112
4.555426						
learn		-.0505369	.4010091	-0.13	0.900	-.8365002
.7354265						
income		.0186252	.157433	0.12	0.906	-.2899378
.3271881						
avg_distance		.2853998	.1385851	2.06	0.039	.013778
.5570216						
freq_use_ev		.0371724	.1689415	0.22	0.826	-.2939468
.3682917						
club_kepco2		-.3215711	.4907916	-0.66	0.512	-1.283505
.6403627						
club_jeju3		-1.57283	.8562581	-1.84	0.066	-3.251065
.1054046						
ev_owner		.6991092	.6526008	1.07	0.284	-.5799648
1.978183						
saving_free		-1.080103	.6564622	-1.65	0.100	-2.366745
.2065396						
g_cons_short_dis		.1862959	.1641718	1.13	0.256	-.1354749
.5080667						
_cons		.8208407	2.026567	0.41	0.685	-3.151158
4.79284						

-----

--

[41]: *\* One concern series1. : g AS*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free g_cons_as
estimates store model2g
```

```
Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -102.30211
Iteration 2: log likelihood = -101.54333
Iteration 3: log likelihood = -101.52655
Iteration 4: log likelihood = -101.52649
Iteration 5: log likelihood = -101.52649
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	37.13
	Prob > chi2	=	0.0032
Log likelihood = -101.52649	Pseudo R2	=	0.1546

-----						
	y	Coef.	Std. Err.	z	P> z	[95% Conf.
Interval]	-----					
-----						
	age	.2701295	.3001065	0.90	0.368	-.3180685
.8583275						
	gender	.0090316	.515626	0.02	0.986	-1.001577
1.01964						
	marriage	-.4618134	.4838474	-0.95	0.340	-1.410137
.48651						
	student1	.3680995	1.06842	0.34	0.730	-1.725965
2.462164						
	company_man2	-2.065365	1.31456	-1.57	0.116	-4.641855
.5111247						
	public_officer3	-.0129571	.7162161	-0.02	0.986	-1.416715
1.390801						
	profession4	-.0046193	1.015895	-0.00	0.996	-1.995737
1.986498						
	researcher5	2.108895	1.249208	1.69	0.091	-.3395079
4.557297						
	learn	-.0523935	.4004397	-0.13	0.896	-.8372408
.7324539						
	income	.0317722	.1580661	0.20	0.841	-.2780317
.3415761						
	avg_distance	.2897965	.1382741	2.10	0.036	.0187842
.5608087						
	freq_use_ev	.0247531	.169689	0.15	0.884	-.3078313
.3573375						
	club_kepco2	-.3186643	.4876503	-0.65	0.513	-1.274441
.6371126						
	club_jeju3	-1.557273	.8583333	-1.81	0.070	-3.239576
.1250293						
	ev_owner	.7158361	.6439665	1.11	0.266	-.5463151
1.977987						
	saving_free	-1.150269	.6497761	-1.77	0.077	-2.423806
.1232693						
	g_cons_as	.0682917	.163096	0.42	0.675	-.2513705
.3879539						
	_cons	.7849213	2.010567	0.39	0.696	-3.155717
4.725559						
-----						

-

```
[42]: * One concern series1. : g charging fee

logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↳researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jezu3
      ↳ev_owner saving_free g_cons_charge_fee
estimates store model3g
```

```
Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -102.09815
Iteration 2:  log likelihood = -101.33524
Iteration 3:  log likelihood = -101.31784
Iteration 4:  log likelihood = -101.31778
Iteration 5:  log likelihood = -101.31778
```

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	37.54
	Prob > chi2	=	0.0028
Log likelihood = -101.31778	Pseudo R2	=	0.1563

```
-----
---
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
---
          age |   .2987924   .3033177    0.99   0.325   -.2956994
.8932843
        gender |   .0218543   .5181086    0.04   0.966   -.9936199
1.037328
      marriage |  -.4733707   .4835158   -0.98   0.328   -1.421044
.474303
      student1 |   .4447153   1.074109    0.41   0.679   -1.660499
2.549929
   company_man2 |  -1.850384   1.33782   -1.38   0.167   -4.472464
.7716948
 public_officer3 |   .0607803   .7248284    0.08   0.933   -1.359857
1.481418
   profession4 |  -.0064993   1.015287   -0.01   0.995   -1.996425
1.983426
      researcher5 |   2.249506   1.260562    1.78   0.074   -.2211506
4.720163
          learn |  -.0481221   .4013345   -0.12   0.905   -.8347232
.738479
```

```

            income |   .0352169   .1589441    0.22   0.825   -.2763078
.3467416
        avg_distance |   .2691386   .1408064    1.91   0.056   -.0068369
.5451141
        freq_use_ev |   .0638139   .1733543    0.37   0.713   -.2759543
.4035821
        club_kepco2 |  -.3037455   .4892985   -0.62   0.535   -1.262753
.655262
        club_jeju3 |  -1.498273   .8554625   -1.75   0.080   -3.174949
.1784026
        ev_owner |    .7882394   .6459236    1.22   0.222   -.4777476
2.054226
        saving_free |  -1.182423   .6524786   -1.81   0.070   -2.461257
.0964116
g_cons_charge_fee |  -.1368022   .1782554   -0.77   0.443   -.4861764
.212572
            _cons |    .5062823   2.040052    0.25   0.804   -3.492146
4.504711
-----
---
```

[43]: *\* One concern series1. : g charging facility lack*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
↪researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
↪ev_owner saving_free g_cons_num_charge_lack
estimates store model4g
```

```

Iteration 0:   log likelihood = -120.09018
Iteration 1:   log likelihood = -102.35129
Iteration 2:   log likelihood = -101.60688
Iteration 3:   log likelihood = -101.59045
Iteration 4:   log likelihood = -101.59039
Iteration 5:   log likelihood = -101.59039
```

```

Logistic regression                                Number of obs   =        184
                                                    LR chi2(17)    =        37.00
                                                    Prob > chi2    =        0.0034
Log likelihood = -101.59039                        Pseudo R2      =        0.1540
```

```

-----
-----
            y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
```

```

-----
                age |   .2673953   .3016901    0.89   0.375   -.3239065
.8586971
                gender |   .0220581   .5263184    0.04   0.967   -1.009507
1.053623
                marriage |   -.45608   .4840101   -0.94   0.346   -1.404722
.4925624
                student1 |   .3671324   1.069207    0.34   0.731   -1.728475
2.46274
            company_man2 |  -2.056771   1.313674   -1.57   0.117   -4.631525
.517984
        public_officer3 |  -.0193086   .7152101   -0.03   0.978   -1.421095
1.382477
            profession4 |  -.0418836   1.012069   -0.04   0.967   -2.025501
1.941734
            researcher5 |   2.158995   1.258863    1.72   0.086   -.3083311
4.626321
                learn |  -.0740531   .4101662   -0.18   0.857   -.877964
.7298578
                income |   .0294718   .1581341    0.19   0.852   -.2804654
.339409
            avg_distance |   .2861345   .1383284    2.07   0.039    .0150158
.5572532
            freq_use_ev |   .0331393   .1683979    0.20   0.844   -.2969146
.3631931
            club_kepco2 |  -.3143021   .4889889   -0.64   0.520   -1.272703
.6440985
            club_jeju3 |  -1.490677   .8639132   -1.73   0.084   -3.183916
.2025616
            ev_owner |   .7462463   .6413174    1.16   0.245   -.5107128
2.003205
            saving_free |  -1.161853   .6497108   -1.79   0.074   -2.435263
.1115566
g_cons_num_charge_lack |  -.0416686   .1908833   -0.22   0.827   -.415793
.3324557
                _cons |   .8068526   2.016064    0.40   0.689   -3.14456
4.758265
-----
-----

```

[44]: *\* One concern series1. : g charging time*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
      ↪ ev_owner saving_free g_cons_long_charge_time
estimates store model5g

```

Iteration 0: log likelihood = -120.09018  
 Iteration 1: log likelihood = -102.21066  
 Iteration 2: log likelihood = -101.42774  
 Iteration 3: log likelihood = -101.41077  
 Iteration 4: log likelihood = -101.41071  
 Iteration 5: log likelihood = -101.41071

Logistic regression	Number of obs	=	184
	LR chi2(17)	=	37.36
	Prob > chi2	=	0.0030
Log likelihood = -101.41071	Pseudo R2	=	0.1555

	y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
	age	.2526962	.3027777	0.83	0.404	-.3407372
.8461295						
	gender	-.002798	.5154976	-0.01	0.996	-1.013155
1.007559						
	marriage	-.4478694	.4856473	-0.92	0.356	-1.399721
.5039819						
	student1	.3653062	1.070625	0.34	0.733	-1.733081
2.463693						
	company_man2	-2.065849	1.307278	-1.58	0.114	-4.628067
.4963695						
	public_officer3	-.0111962	.7169945	-0.02	0.988	-1.41648
1.394087						
	profession4	.0240786	1.019167	0.02	0.981	-1.973452
2.021609						
	researcher5	2.171344	1.251559	1.73	0.083	-.2816675
4.624355						
	learn	-.0266422	.4035161	-0.07	0.947	-.8175192
.7642347						
	income	.0240996	.1578172	0.15	0.879	-.2852164
.3334157						
	avg_distance	.2959125	.1387823	2.13	0.033	.0239043
.5679207						
	freq_use_ev	.0349731	.1686781	0.21	0.836	-.2956299
.3655761						
	club_kepco2	-.351058	.4915507	-0.71	0.475	-1.31448
.6123636						
	club_jeju3	-1.588079	.8635144	-1.84	0.066	-3.280536
.1043782						

```

          ev_owner |   .7055209   .6427908    1.10   0.272   -.5543259
1.965368
          saving_free |  -1.184223   .6523458   -1.82   0.069   -2.462797
.0943514
g_cons_long_charge_time |   .1189369   .1873459    0.63   0.526   -.2482544
.4861282
          _cons |   .7636107   2.024359    0.38   0.706   -3.20406
4.731281
-----
-----

```

[45]: *\* One concern series1. : g concern on hill side*

```

logit y age gender marriage student1 company_man2 public_officer3 profession4
→researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
→ev_owner saving_free g_cons_hill_ride
estimates store model6g

```

```

Iteration 0:   log likelihood = -120.09018
Iteration 1:   log likelihood = -102.28341
Iteration 2:   log likelihood = -101.50905
Iteration 3:   log likelihood = -101.49191
Iteration 4:   log likelihood = -101.49185
Iteration 5:   log likelihood = -101.49185

```

```

Logistic regression                                Number of obs   =       184
                                                    LR chi2(17)    =       37.20
                                                    Prob > chi2    =       0.0032
Log likelihood = -101.49185                        Pseudo R2      =       0.1549

```

```

-----
--
          y |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .2526804   .3041088     0.83   0.406   - .3433618
.8487226
          gender |   .0016496   .5161134     0.00   0.997   -1.009914
1.013213
          marriage |  -.4671721   .4849825    -0.96   0.335   -1.41772
.4833761
          student1 |   .3562605   1.067949     0.33   0.739   -1.736882
2.449403
          company_man2 |  -2.063556   1.309543    -1.58   0.115   -4.630213

```



```

.5031011
public_officer3 | -.0348603 .7155481 -0.05 0.961 -1.437309
1.367588
profession4 | -.0078518 1.014878 -0.01 0.994 -1.996977
1.981273
researcher5 | 2.09182 1.250281 1.67 0.094 -.3586864
4.542326
learn | -.0441427 .4009484 -0.11 0.912 -.8299871
.7417016
income | .0337213 .1578033 0.21 0.831 -.2755675
.34301
avg_distance | .2952936 .139033 2.12 0.034 .0227939
.5677934
freq_use_ev | .0304605 .1687233 0.18 0.857 -.300231
.361152
club_kepco2 | -.3311903 .4889439 -0.68 0.498 -1.289503
.6271221
club_jeju3 | -1.55347 .8587708 -1.81 0.070 -3.23663
.1296896
ev_owner | .7364284 .6396421 1.15 0.250 -.5172471
1.990104
saving_free | -1.147424 .6516068 -1.76 0.078 -2.42455
.1297014
g_cons_hill_ride | .0754002 .1525122 0.49 0.621 -.2235182
.3743185
_cons | .8050491 2.018675 0.40 0.690 -3.151481
4.761579
-----
--

```

```

[46]: * One concern series1. : g concern on hvac

logit y age gender marriage student1 company_man2 public_officer3 profession4_
→researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3 _
→ev_owner saving_free g_cons_hac
estimates store model7g

```

```

Iteration 0: log likelihood = -120.09018
Iteration 1: log likelihood = -101.5966
Iteration 2: log likelihood = -100.85347
Iteration 3: log likelihood = -100.83845
Iteration 4: log likelihood = -100.83839
Iteration 5: log likelihood = -100.83839

```

```

Logistic regression                                Number of obs      =          184

```

Log likelihood = -100.83839

LR chi2(17)	=	38.50
Prob > chi2	=	0.0021
Pseudo R2	=	0.1603

-----						
-						
	y	Coef.	Std. Err.	z	P> z	[95% Conf.
Interval]	-----					
-----						
-						
	age	.288734	.3031969	0.95	0.341	-.305521
.882989						
	gender	.0438185	.5189288	0.08	0.933	-.9732632
1.0609						
	marriage	-.4174317	.4850512	-0.86	0.389	-1.368115
.5332513						
	student1	.357016	1.068626	0.33	0.738	-1.737452
2.451484						
	company_man2	-2.190797	1.34285	-1.63	0.103	-4.822734
.4411403						
	public_officer3	.0077109	.7165675	0.01	0.991	-1.396736
1.412157						
	profession4	.0145553	1.023678	0.01	0.989	-1.991817
2.020927						
	researcher5	2.243602	1.250443	1.79	0.073	-.2072205
4.694424						
	learn	-.0526301	.4017735	-0.13	0.896	-.8400916
.7348315						
	income	.0281813	.1586542	0.18	0.859	-.2827753
.3391379						
	avg_distance	.2879985	.1389527	2.07	0.038	.0156562
.5603407						
	freq_use_ev	.0424937	.1685402	0.25	0.801	-.287839
.3728265						
	club_kepco2	-.3654345	.494168	-0.74	0.460	-1.333986
.6031169						
	club_jeju3	-1.494318	.8612765	-1.74	0.083	-3.182389
.193753						
	ev_owner	.7544165	.6453021	1.17	0.242	-.5103524
2.019185						
	saving_free	-1.300488	.6655026	-1.95	0.051	-2.604849
.0038731						
	g_cons_hac	-.187025	.1514541	-1.23	0.217	-.4838696
.1098195						
	_cons	.7013285	2.018374	0.35	0.728	-3.254612
4.657269						
-----						
-						

[47]: *\*\* gap concern*

```
logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↪ researcher5 learn income avg_distance freq_use_ev club_kepco2 club_jeju3
      ↪ ev_owner saving_free g_cons_short_dis g_cons_as g_cons_charge_fee
      ↪ g_cons_num_charge_lack g_cons_long_charge_time g_cons_hill_ride g_cons_hac
estimates store model8g
```

```
Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood =  -98.93757
Iteration 2:  log likelihood =  -98.01825
Iteration 3:  log likelihood = -97.999745
Iteration 4:  log likelihood = -97.999695
Iteration 5:  log likelihood = -97.999695
```

Logistic regression	Number of obs	=	184
	LR chi2(23)	=	44.18
	Prob > chi2	=	0.0050
Log likelihood = -97.999695	Pseudo R2	=	0.1839

	y	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
	age	.2288567	.3201341	0.71	0.475	-.3985946 .856308
	gender	.1815174	.5518584	0.33	0.742	-.9001052 1.26314
	marriage	-.4329954	.4921615	-0.88	0.379	-1.397614 .5316234
	student1	.72069	1.087692	0.66	0.508	-1.411146 2.852526
	company_man2	-1.850981	1.348545	-1.37	0.170	-4.494082 .792119
	public_officer3	.274416	.7440225	0.37	0.712	-1.183841 1.732673
	profession4	.3452879	1.045763	0.33	0.741	-1.70437 2.394946
	researcher5	2.621105	1.303089	2.01	0.044	.0670979 5.175113
	learn	-.0187287	.4180343	-0.04	0.964	-.8380609 .8006034

.3537278	income	.0418953	.1591011	0.26	0.792	-.2699372
.5593488	avg_distance	.272662	.1462714	1.86	0.062	-.0140247
.4392705	freq_use_ev	.0883844	.1790268	0.49	0.622	-.2625017
.5953351	club_kepco2	-.3952473	.5054085	-0.78	0.434	-1.38583
.0924357	club_jeju3	-1.637314	.8825417	-1.86	0.064	-3.367064
2.077271	ev_owner	.7762152	.6638162	1.17	0.242	-.5248407
.0692836	saving_free	-1.327662	.7127403	-1.86	0.062	-2.724607
.6485762	g_cons_short_dis	.2622668	.1971003	1.33	0.183	-.1240427
.4299647	g_cons_as	.0799425	.178586	0.45	0.654	-.2700797
.1566859	g_cons_charge_fee	-.2334412	.1990481	-1.17	0.241	-.6235683
.3503937	g_cons_num_charge_lack	-.105777	.2327445	-0.45	0.649	-.5619478
.6444897	g_cons_long_charge_time	.1759085	.2390765	0.74	0.462	-.2926728
.5615486	g_cons_hill_ride	.1842571	.1924992	0.96	0.338	-.1930344
-.00257	g_cons_hac	-.3658034	.1853265	-1.97	0.048	-.7290367
4.490702	_cons	.380798	2.096928	0.18	0.856	-3.729106

[48]: *\* Model1 total gap table: se and star cannot be together*

```
estimates table base model1g model2g model3g model4g model5g model6g model7g
↪model8g, b(%9.3f) star(0.01, 0.05, 0.1) eq(1) stats(11)
```

Variable	base	model1g	model2g	model3g
model4g	model5g	model6g	model7g	model8g
age	0.274	0.268	0.270	0.299
0.267	0.253	0.253	0.289	0.229

gender		-0.002	-0.022	0.009	0.022
0.022		-0.003	0.002	0.044	0.182
marriage		-0.459	-0.474	-0.462	-0.473
-0.456		-0.448	-0.467	-0.417	-0.433
student1		0.345	0.361	0.368	0.445
0.367		0.365	0.356	0.357	0.721
company_man2		-2.067	-2.095	-2.065	-1.850
-2.057		-2.066	-2.064	-2.191	-1.851
public_off~3		-0.032	-0.047	-0.013	0.061
-0.019		-0.011	-0.035	0.008	0.274
profession4		-0.040	-0.025	-0.005	-0.006
-0.042		0.024	-0.008	0.015	0.345
researcher5		2.122*	2.107*	2.109*	2.250*
2.159*		2.171*	2.092*	2.244*	2.621**
learn		-0.055	-0.051	-0.052	-0.048
-0.074		-0.027	-0.044	-0.053	-0.019
income		0.028	0.019	0.032	0.035
0.029		0.024	0.034	0.028	0.042
avg_distance		0.288**	0.285**	0.290**	0.269*
0.286**		0.296**	0.295**	0.288**	0.273*
freq_use_ev		0.033	0.037	0.025	0.064
0.033		0.035	0.030	0.042	0.088
club_kepco2		-0.321	-0.322	-0.319	-0.304
-0.314		-0.351	-0.331	-0.365	-0.395
club_jeju3		-1.519*	-1.573*	-1.557*	-1.498*
-1.491*		-1.588*	-1.553*	-1.494*	-1.637*
ev_owner		0.738	0.699	0.716	0.788
0.746		0.706	0.736	0.754	0.776
saving_free		-1.165*	-1.080*	-1.150*	-1.182*
-1.162*		-1.184*	-1.147*	-1.300*	-1.328*
g_cons_sho~s			0.186		
0.262					
g_cons_as				0.068	
0.080					
g_cons_cha~e					-0.137
-0.233					
g_cons_num~k					
-0.042					-0.106
g_cons_lon~e					
0.119				0.176	
g_cons_hil~e					
0.075			0.184		
g_cons_hac					
-0.187		-0.366**			
_cons		0.779	0.821	0.785	0.506
0.807		0.764	0.805	0.701	0.381

---



---

11	-101.614	-100.962	-101.526	-101.318
-101.590	-101.411	-101.492	-100.838	-98.000

-----  
 -----  
 legend: \* p<.1; \*\* p<.05; \*\*\* p<.01

```
[49]: estimates table base model1g model2g model3g model4g model5g model6g model7g
      ↪ model8g, b(%9.3f) se(%9.3f) eq(1) stats(11)
```

Variable	base	model1g	model2g	model3g	model4g
model5g	model6g	model7g	model8g		
-----					
age	0.274	0.268	0.270	0.299	0.267
0.253	0.253	0.289	0.229		
	0.300	0.303	0.300	0.303	0.302
0.303	0.304	0.303	0.320		
gender	-0.002	-0.022	0.009	0.022	0.022
-0.003	0.002	0.044	0.182		
	0.515	0.518	0.516	0.518	0.526
0.515	0.516	0.519	0.552		
marriage	-0.459	-0.474	-0.462	-0.473	-0.456
-0.448	-0.467	-0.417	-0.433		
	0.484	0.487	0.484	0.484	0.484
0.486	0.485	0.485	0.492		
student1	0.345	0.361	0.368	0.445	0.367
0.365	0.356	0.357	0.721		
	1.066	1.066	1.068	1.074	1.069
1.071	1.068	1.069	1.088		
company_man2	-2.067	-2.095	-2.065	-1.850	-2.057
-2.066	-2.064	-2.191	-1.851		
	1.312	1.309	1.315	1.338	1.314
1.307	1.310	1.343	1.349		
public_off~3	-0.032	-0.047	-0.013	0.061	-0.019
-0.011	-0.035	0.008	0.274		
	0.714	0.720	0.716	0.725	0.715
0.717	0.716	0.717	0.744		
profession4	-0.040	-0.025	-0.005	-0.006	-0.042
0.024	-0.008	0.015	0.345		
	1.013	1.018	1.016	1.015	1.012
1.019	1.015	1.024	1.046		
researcher5	2.122	2.107	2.109	2.250	2.159
2.171	2.092	2.244	2.621		
	1.247	1.249	1.249	1.261	1.259
1.252	1.250	1.250	1.303		

learn		-0.055	-0.051	-0.052	-0.048	-0.074
-0.027	-0.044	-0.053	-0.019			
		0.401	0.401	0.400	0.401	0.410
0.404	0.401	0.402	0.418			
income		0.028	0.019	0.032	0.035	0.029
0.024	0.034	0.028	0.042			
		0.158	0.157	0.158	0.159	0.158
0.158	0.158	0.159	0.159			
avg_distance		0.288	0.285	0.290	0.269	0.286
0.296	0.295	0.288	0.273			
		0.138	0.139	0.138	0.141	0.138
0.139	0.139	0.139	0.146			
freq_use_ev		0.033	0.037	0.025	0.064	0.033
0.035	0.030	0.042	0.088			
		0.168	0.169	0.170	0.173	0.168
0.169	0.169	0.169	0.179			
club_kepco2		-0.321	-0.322	-0.319	-0.304	-0.314
-0.351	-0.331	-0.365	-0.395			
		0.488	0.491	0.488	0.489	0.489
0.492	0.489	0.494	0.505			
club_jeju3		-1.519	-1.573	-1.557	-1.498	-1.491
-1.588	-1.553	-1.494	-1.637			
		0.855	0.856	0.858	0.855	0.864
0.864	0.859	0.861	0.883			
ev_owner		0.738	0.699	0.716	0.788	0.746
0.706	0.736	0.754	0.776			
		0.642	0.653	0.644	0.646	0.641
0.643	0.640	0.645	0.664			
saving_free		-1.165	-1.080	-1.150	-1.182	-1.162
-1.184	-1.147	-1.300	-1.328			
		0.649	0.656	0.650	0.652	0.650
0.652	0.652	0.666	0.713			
g_cons_sho~s			0.186			
0.262						
			0.164			
0.197						
g_cons_as				0.068		
0.080						
				0.163		
0.179						
g_cons_cha~e					-0.137	
-0.233						
					0.178	
0.199						
g_cons_num~k						-0.042
-0.106						
						0.191
0.233						





saving_free	-1.165*	-1.482**	-1.003	-1.328*
a_cons_sho~s		0.020		
a_cons_as		-0.122		
a_cons_cha~e		-0.270		
a_cons_num~k		0.090		
a_cons_lon~e		-0.116		
a_cons_hil~e		0.242		
a_cons_hac		-0.417**		
b_cons_sho~s			-0.317	
b_cons_as			-0.227	
b_cons_cha~e			-0.192	
b_cons_num~k			0.190	
b_cons_lon~e			-0.293	
b_cons_hac			-0.178	
b_cons_hil~e			0.087	
g_cons_sho~s				0.262
g_cons_as				0.080
g_cons_cha~e				-0.233
g_cons_num~k				-0.106
g_cons_lon~e				0.176
g_cons_hil~e				0.184
g_cons_hac				-0.366**
_cons	0.779	2.039	3.689	0.381
-----				
ll	-101.614	-96.295	-96.385	-98.000
-----				
legend: * p<.1; ** p<.05; *** p<.01				

```
[58]: estimates table base model8 model8b model8g, eq(1) stats(ll)
```

Variable	base	model8	model8b	model8g
age	.27433601	.34094403	.2026883	.22885667
gender	-.00157215	.01158954	-.0008958	.18151741
marriage	-.45902565	-.47313857	-.48960027	-.43299543
student1	.34500825	.11665415	.11653204	.72069001
company_man2	-2.0672433	-2.1127671	-2.3938666	-1.8509815
public_off~3	-.03150926	-.00256859	-.11676944	.27441597
profession4	-.0396948	-.52058398	-.56160082	.34528793
researcher5	2.121919	2.272473	2.2359377	2.6211054
learn	-.05483902	.12023159	.14628943	-.01872875
income	.02757631	.05603638	.04401357	.0418953
avg_distance	.28818206	.28246135	.3448247	.27266202
freq_use_ev	.03332234	.08671765	-.04770056	.08838438
club_kepco2	-.32075565	-.48827049	-.42786653	-.39524729
club_jeju3	-1.519045	-.9796557	-.736143	-1.6373142

ev_owner		.73753837	.86113988	.83510934	.77621517
saving_free		-1.1649292	-1.4821646	-1.0030266	-1.3276617
a_cons_sho~s			.01985087		
a_cons_as			-.12234938		
a_cons_cha~e			-.27002681		
a_cons_num~k			.09008368		
a_cons_lon~e			-.11631595		
a_cons_hil~e			.24176236		
a_cons_hac			-.41722233		
b_cons_sho~s				-.31706992	
b_cons_as				-.22709594	
b_cons_cha~e				-.19203069	
b_cons_num~k				.18976042	
b_cons_lon~e				-.29254936	
b_cons_hac				-.17811429	
b_cons_hil~e				.08658827	
g_cons_sho~s					.26226676
g_cons_as					.07994249
g_cons_cha~e					-.23344123
g_cons_num~k					-.10577703
g_cons_lon~e					.17590847
g_cons_hil~e					.18425709
g_cons_hac					-.36580335
_cons		.77918613	2.0389122	3.6885104	.38079798
-----					
ll		-101.61422	-96.295387	-96.384988	-97.999695
-----					

```
[59]: logit y age gender marriage student1 company_man2 public_officer3 profession4
      ↪ researcher5 learn income avg_distance freq_use_ev club_kepc02 club_jeju3
      ↪ a_cons_short_dis a_cons_as a_cons_charge_fee a_cons_num_charge_lack
      ↪ a_cons_long_charge_time a_cons_hill_ride a_cons_hac num_car saving_free
      ↪ ev_owner
```

```
Iteration 0:  log likelihood = -120.09018
Iteration 1:  log likelihood = -97.234209
Iteration 2:  log likelihood = -96.274852
Iteration 3:  log likelihood = -96.261024
Iteration 4:  log likelihood = -96.260986
Iteration 5:  log likelihood = -96.260986
```

Logistic regression	Number of obs	=	184
	LR chi2(24)	=	47.66
	Prob > chi2	=	0.0028
Log likelihood = -96.260986	Pseudo R2	=	0.1984

Interval]	y	Coef.	Std. Err.	z	P> z	[95% Conf.
	age	.3629497	.3302146	1.10	0.272	-.284259
1.010158	gender	.0124888	.5355025	0.02	0.981	-1.037077
1.062054	marriage	-.4928449	.5053574	-0.98	0.329	-1.483327
.4976374	student1	.1239182	1.122806	0.11	0.912	-2.076741
2.324577	company_man2	-2.114302	1.415544	-1.49	0.135	-4.888717
.6601121	public_officer3	.0051224	.7533639	0.01	0.995	-1.471444
1.481689	profession4	-.4883932	1.077669	-0.45	0.650	-2.600587
1.6238	researcher5	2.270901	1.291126	1.76	0.079	-.2596602
4.801462	learn	.1275357	.434142	0.29	0.769	-.7233669
.9784383	income	.0570577	.1669668	0.34	0.733	-.2701912
.3843067	avg_distance	.2882062	.1561855	1.85	0.065	-.0179117
.5943241	freq_use_ev	.0853563	.1781081	0.48	0.632	-.2637292
.4344418	club_kepco2	-.4980306	.5175859	-0.96	0.336	-1.51248
.5164191	club_jeju3	-.9674553	.9410337	-1.03	0.304	-2.811848
.876937	a_cons_short_dis	.0227753	.1987913	0.11	0.909	-.3668486
.4123991	a_cons_as	-.1157006	.1879134	-0.62	0.538	-.4840041
.2526029	a_cons_charge_fee	-.2705911	.1909555	-1.42	0.156	-.6448569
.1036747	a_cons_num_charge_lack	.0842318	.2368417	0.36	0.722	-.3799694
.5484329	a_cons_long_charge_time	-.1182191	.23553	-0.50	0.616	-.5798494
.3434111	a_cons_hill_ride	.2468817	.1939714	1.27	0.203	-.1332953
.6270586	a_cons_hac	-.4192161	.1807688	-2.32	0.020	-.7735164
-.0649157	num_car	-.0945288	.3604843	-0.26	0.793	-.8010651

```

.6120074
      saving_free |  -1.475505   .6878524   -2.15   0.032   -2.823671
-.1273392
      ev_owner |    .9014288   .6855678    1.31   0.189   -.4422595
2.245117
      _cons |    2.012862   2.382101    0.84   0.398   -2.65597
6.681694
-----
-----

```

```

[60]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3_
      ↪profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2_
      ↪club_jeju3 ev_owner saving_free
estimates store base_o

```

```

Iteration 0:   log likelihood = -288.98528
Iteration 1:   log likelihood = -273.57947
Iteration 2:   log likelihood = -273.5551
Iteration 3:   log likelihood = -273.5551

```

```

Ordered probit regression              Number of obs   =       184
                                      LR chi2(16)        =       30.86
                                      Prob > chi2         =       0.0140
Log likelihood = -273.5551             Pseudo R2        =       0.0534

```

```

-----
-
      a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-
      age |    .0193158   .1335208    0.14   0.885   -.2423801
.2810118
      gender |   .2252427   .2451132    0.92   0.358   -.2551703
.7056557
      marriage |  -.0051852   .2146371   -0.02   0.981   -.4258661
.4154958
      student1 | -1.087608   .4994205   -2.18   0.029   -2.066454
-.1087614
      company_man2 | -.1792572   .5701841   -0.31   0.753   -1.296798
.9382831
      public_officer3 | -.0551998   .3505375   -0.16   0.875   -.7422408
.6318411
      profession4 | -.7591568   .4781145   -1.59   0.112   -1.696244
.1779303
      researcher5 | .0303194   .4160135    0.07   0.942   -.785052

```

```

.8456908
      learn |   .1232284   .187602    0.66   0.511   -.2444648
.4909216
      income |  -.0304647   .0695175   -0.44   0.661   -.1667166
.1057872
      avg_distance | -.0388748   .0617486   -0.63   0.529   -.1598998
.0821502
      freq_use_ev |   .0569555   .0794123    0.72   0.473   -.0986898
.2126008
      club_kepc2 |  -.350661   .2093773   -1.67   0.094   -.761033
.0597109
      club_jeju3 |   .7324936   .3939428    1.86   0.063   -.0396201
1.504607
      ev_owner |  -.2192649   .282639   -0.78   0.438   -.7732272
.3346973
      saving_free |  -.6457005   .2827903   -2.28   0.022   -1.199959
-.0914416
-----+-----
-
      /cut1 |  -1.447614   .9174344                -3.245752
.3505247
      /cut2 |  -.8835114   .9124277                -2.671837
.9048141
      /cut3 |  -.1009843   .9130668                -1.890562
1.688594
      /cut4 |   .7302089   .9157855                -1.064698
2.525116
-----
-

```

```

[61]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepc2
      ↪ club_jeju3 ev_owner saving_free a_cons_short_dis
estimates store model10

```

```

Iteration 0:   log likelihood = -288.98528
Iteration 1:   log likelihood = -264.22488
Iteration 2:   log likelihood = -264.13724
Iteration 3:   log likelihood = -264.13723

```

Ordered probit regression	Number of obs	=	184
	LR chi2(17)	=	49.70
	Prob > chi2	=	0.0000
Log likelihood = -264.13723	Pseudo R2	=	0.0860

-----						
--						
a_cons_hac	Coef.	Std. Err.	z	P> z	[95% Conf.	
Interval]	-----					
--						
age	.0476201	.13472	0.35	0.724	-.2164263	
.3116666						
gender	.1516266	.2469204	0.61	0.539	-.3323285	
.6355816						
marriage	-.0357915	.2159372	-0.17	0.868	-.4590205	
.3874375						
student1	-.9823696	.5065341	-1.94	0.052	-1.975158	
.010419						
company_man2	-.2091682	.5759609	-0.36	0.716	-1.338031	
.9196944						
public_officer3	-.1636229	.3565879	-0.46	0.646	-.8625223	
.5352765						
profession4	-.708426	.4832607	-1.47	0.143	-1.6556	
.2387476						
researcher5	-.1075994	.4225526	-0.25	0.799	-.9357873	
.7205886						
learn	.0300777	.1900417	0.16	0.874	-.3423972	
.4025526						
income	-.0423257	.0699893	-0.60	0.545	-.1795023	
.0948508						
avg_distance	-.0769654	.0629608	-1.22	0.222	-.2003663	
.0464355						
freq_use_ev	.1013926	.0804176	1.26	0.207	-.0562229	
.2590082						
club_kepco2	-.3769933	.2116844	-1.78	0.075	-.7918872	
.0379005						
club_jeju3	.3570484	.4049025	0.88	0.378	-.4365459	
1.150643						
ev_owner	-.3339194	.2880276	-1.16	0.246	-.8984431	
.2306043						
saving_free	-.6694244	.284287	-2.35	0.019	-1.226617	
-.1122321						
a_cons_short_dis	.3424568	.079615	4.30	0.000	.1864141	
.4984994						
-----						
--						
/cut1	-.7451142	.9367482			-2.581107	
1.090879						
/cut2	-.1601609	.932689			-1.988198	
1.667876						
/cut3	.6664903	.9356071			-1.167266	
2.500247						

```

/cut4 |      1.56161    .9420478                -.2847696
3.40799
-----
--

```

```

[62]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jezu3 ev_owner saving_free a_cons_as
      estimates store model2o

```

```

Iteration 0:    log likelihood = -288.98528
Iteration 1:    log likelihood = -264.34108
Iteration 2:    log likelihood = -264.24297
Iteration 3:    log likelihood = -264.24296

```

```

Ordered probit regression                Number of obs    =        184
                                         LR chi2(17)       =         49.48
                                         Prob > chi2       =         0.0001
Log likelihood = -264.24296              Pseudo R2        =         0.0856

```

```

-----
-
      a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-
      age |      .021909   .1346898     0.16   0.871    -.2420781
.2858961
      gender |     .339882   .2478069     1.37   0.170    -.1458105
.8255745
      marriage |    -.0282188   .2157366    -0.13   0.896    -.4510549
.3946172
      student1 |   -1.149105   .5046309    -2.28   0.023    -2.138163
-.1600462
      company_man2 |   -.2415778   .5705992    -0.42   0.672    -1.359932
.8767762
public_officer3 |   .0280853   .3524513     0.08   0.936    -.6627065
.7188771
      profession4 |  -.5291275   .4849322    -1.09   0.275    -1.479577
.4213222
      researcher5 |  -.1380242   .4201746    -0.33   0.743    -.9615513
.6855029
      learn |   .0208782   .1901765     0.11   0.913    -.3518609
.3936174
      income |  -.0450142   .0701496    -0.64   0.521    -.182505

```

```

.0924766
    avg_distance |  -.0590368    .062543   -0.94   0.345   -.1816187
.0635452
    freq_use_ev  |   .074464   .0800774    0.93   0.352   -.0824848
.2314129
    club_kepco2  |  -.2934569    .210979   -1.39   0.164   -.7069681
.1200542
    club_jeju3   |   .2707617   .4114885    0.66   0.511   -.535741
1.077264
    ev_owner     |  -.3225697   .2882639   -1.12   0.263   -.8875566
.2424173
    saving_free  |  -.6124878   .2850482   -2.15   0.032   -1.171172
-.0538035
    a_cons_as    |   .3353655   .0781944    4.29   0.000    .1821072
.4886237
-----+-----
-
    /cut1 |  -.6910179   .9397389                -2.532872
1.150837
    /cut2 |  -.0818969   .9364266                -1.917259
1.753466
    /cut3 |   .7540316   .9401738                -1.088675
2.596738
    /cut4 |   1.617034   .9442981                -.2337562
3.467824
-----
-

```

```

[63]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jeju3 ev_owner saving_free a_cons_charge_fee
estimates store model3o

```

```

Iteration 0:  log likelihood = -288.98528
Iteration 1:  log likelihood = -268.37871
Iteration 2:  log likelihood = -268.32914
Iteration 3:  log likelihood = -268.32914

```

```

Ordered probit regression              Number of obs   =       184
                                      LR chi2(17)        =       41.31
                                      Prob > chi2         =       0.0008
Log likelihood = -268.32914            Pseudo R2        =       0.0715

```

```

-----
---
```



a_cons_hac	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]
-----+-----					
---					
age	.0023896	.1341525	0.02	0.986	-.2605445
.2653238					
gender	.2459328	.2462188	1.00	0.318	-.2366473
.7285129					
marriage	-.0584164	.2158698	-0.27	0.787	-.4815135
.3646807					
student1	-1.256179	.5061572	-2.48	0.013	-2.248229
-.2641291					
company_man2	-.3416472	.5751743	-0.59	0.553	-1.468968
.7856737					
public_officer3	-.1301732	.3524195	-0.37	0.712	-.8209027
.5605564					
profession4	-.7490625	.4801292	-1.56	0.119	-1.690098
.1919733					
researcher5	-.1928127	.4237554	-0.46	0.649	-1.023358
.6377326					
learn	.1348414	.1877873	0.72	0.473	-.2332149
.5028978					
income	-.05282	.0700356	-0.75	0.451	-.1900871
.0844472					
avg_distance	.0029035	.0632074	0.05	0.963	-.1209808
.1267878					
freq_use_ev	.0189905	.0803769	0.24	0.813	-.1385454
.1765263					
club_kepcos	-.2978463	.2103857	-1.42	0.157	-.7101946
.114502					
club_jeju3	.6191356	.3966316	1.56	0.119	-.1582481
1.396519					
ev_owner	-.3381333	.2863774	-1.18	0.238	-.8994228
.2231562					
saving_free	-.5893236	.2847271	-2.07	0.038	-1.147379
-.0312687					
a_cons_charge_fee	.2510794	.077887	3.22	0.001	.0984236
.4037351					
-----+-----					
---					
/cut1	-.8604716	.9369197			-2.6968
.9758571					
/cut2	-.2776548	.9327943			-2.105898
1.550588					
/cut3	.5297261	.9351094			-1.303055
2.362507					
/cut4	1.385753	.940122			-.4568524
3.228358					

```
-----
---
```

```
[64]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jeju3 ev_owner saving_free a_cons_num_charge_lack
      estimates store model4o
```

```
Iteration 0:  log likelihood = -288.98528
Iteration 1:  log likelihood = -269.93157
Iteration 2:  log likelihood = -269.86801
Iteration 3:  log likelihood =  -269.868
```

```
Ordered probit regression                                Number of obs   =       184
                                                         LR chi2(17)      =       38.23
                                                         Prob > chi2       =       0.0023
Log likelihood =  -269.868                               Pseudo R2       =       0.0662
```

```
-----
-----
a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-----
          age |   .0448945   .1346036     0.33   0.739    -.2189237
.3087128
        gender |   .1741649   .2464957     0.71   0.480    -.3089578
.6572876
       marriage |   .0059454   .2151953     0.03   0.978    -.4158296
.4277204
       student1 |  -1.193501   .5057725    -2.36   0.018    -2.184797
-.202205
  company_man2 |  -.2982034   .5720645    -0.52   0.602    -1.419429
.8230224
 public_officer3 | -.1355667   .354238     -0.38   0.702    -.8298605
.5587271
   profession4 |  -.6805147   .4818774    -1.41   0.158    -1.624977
.2639475
   researcher5 |  -.1580234   .4241305    -0.37   0.709    -.9893038
.673257
          learn |   .1744494   .1892681     0.92   0.357    -.1965092
.5454079
         income |  -.0393605   .0699728    -0.56   0.574    -.1765046
.0977836
   avg_distance | -.0394155   .0621015    -0.63   0.526    -.1611322
```

```

.0823013
      freq_use_ev |   .0720974   .0798334    0.90   0.366   -.0843733
.2285681
      club_kepc2 |  -.3539926   .2103668   -1.68   0.092   -.7663039
.0583186
      club_jeju3 |   .6289367   .3975605    1.58   0.114   -.1502676
1.408141
      ev_owner |  -.2282124   .2855534   -0.80   0.424   -.7878869
.3314621
      saving_free |  -.687157   .2840442   -2.42   0.016   -1.243873
-.1304406
a_cons_num_charge_lack |   .227926   .0844809    2.70   0.007   .0623465
.3935055
-----+-----
-----
      /cut1 |  -.4327605   .9944531                -2.381853
1.516332
      /cut2 |   .1445232   .9915191                -1.798818
2.087865
      /cut3 |   .9394855   .9939963                -1.008711
2.887683
      /cut4 |   1.788761   .9995371                -.1702957
3.747818
-----
-----

```

```

[65]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepc2
      ↪ club_jeju3 ev_owner saving_free a_cons_long_charge_time
estimates store model5o

```

```

Iteration 0:   log likelihood = -288.98528
Iteration 1:   log likelihood = -266.45085
Iteration 2:   log likelihood = -266.35774
Iteration 3:   log likelihood = -266.35774

```

```

Ordered probit regression              Number of obs   =       184
                                      LR chi2(17)        =       45.26
                                      Prob > chi2         =       0.0002
Log likelihood = -266.35774            Pseudo R2        =       0.0783

```

```

-----
-----
      a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]

```

-----+-----						
-----						
	age	-.0268341	.1356328	-0.20	0.843	-.2926695
.2390013						
	gender	.2431912	.245688	0.99	0.322	-.2383483
.7247308						
	marriage	.0498201	.2162127	0.23	0.818	-.3739489
.4735892						
	student1	-1.072238	.5064514	-2.12	0.034	-2.064865
-.0796115						
	company_man2	-.3108391	.5758247	-0.54	0.589	-1.439435
.8177566						
	public_officer3	-.0361556	.3546343	-0.10	0.919	-.7312261
.6589148						
	profession4	-.4738505	.4881577	-0.97	0.332	-1.430622
.482921						
	researcher5	.1032184	.4211238	0.25	0.806	-.722169
.9286059						
	learn	.0991077	.1887757	0.53	0.600	-.2708859
.4691013						
	income	-.0534327	.0703902	-0.76	0.448	-.191395
.0845296						
	avg_distance	-.0323443	.0622331	-0.52	0.603	-.1543189
.0896303						
	freq_use_ev	.0840561	.0800744	1.05	0.294	-.0728868
.240999						
	club_kepco2	-.3622683	.2110058	-1.72	0.086	-.7758322
.0512955						
	club_jeju3	.4255146	.4043525	1.05	0.293	-.3670017
1.218031						
	ev_owner	-.3579023	.2909951	-1.23	0.219	-.9282422
.2124376						
	saving_free	-.7204855	.2840387	-2.54	0.011	-1.277191
-.1637798						
	a_cons_long_charge_time	.3282766	.0875837	3.75	0.000	.1566158
.4999374						
-----+-----						
-----						
	/cut1	-.3796515	.9623699			-2.265862
1.506559						
	/cut2	.2128966	.9595997			-1.667884
2.093678						
	/cut3	1.018147	.962222			-.8677733
2.904068						
	/cut4	1.883774	.9682445			-.0139506
3.781498						
-----						
-----						

```
[66]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3_
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2_
      ↪ club_jeju3 ev_owner saving_free a_cons_hill_ride
      estimates store model6o
```

```
Iteration 0:   log likelihood = -288.98528
Iteration 1:   log likelihood = -252.82879
Iteration 2:   log likelihood = -252.6716
Iteration 3:   log likelihood = -252.6716
```

```
Ordered probit regression               Number of obs   =       184
                                         LR chi2(17)      =       72.63
                                         Prob > chi2      =       0.0000
Log likelihood = -252.6716              Pseudo R2       =       0.1257
```

```
-----
--
      a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
      age |   -.065919   .1358715    -0.49   0.628   - .3322222
.2003842
      gender |   .3072282   .2492903     1.23   0.218   - .1813718
.7958283
      marriage |  -.0860804   .2170671    -0.40   0.692   - .511524
.3393633
      student1 |  -.9315159   .5132601    -1.81   0.070   -1.937487
.0744553
      company_man2 |   .2874129   .5769876     0.50   0.618   - .843462
1.418288
      public_officer3 |   .0721076   .3573309     0.20   0.840   - .6282481
.7724633
      profession4 |  -.6292245   .4869168    -1.29   0.196   -1.583564
.3251148
      researcher5 |  -.0501436   .4248855    -0.12   0.906   - .8829039
.7826166
      learn |   .2087124   .189856     1.10   0.272   - .1633986
.5808233
      income |  -.0169526   .0703652    -0.24   0.810   - .1548659
.1209607
      avg_distance |   .0562462   .0644972     0.87   0.383   - .0701659
.1826583
      freq_use_ev |   .0381084   .0807581     0.47   0.637   - .1201745
```

```

.1963914
      club_kepco2 |  -.2388172   .2128758   -1.12   0.262   -.6560461
.1784118
      club_jeju3 |   .7121309   .4006752    1.78   0.076   -.0731781
1.49744
      ev_owner |  -.1625402   .2868303   -0.57   0.571   -.7247172
.3996368
      saving_free |  -.4865719   .2892473   -1.68   0.093   -1.053486
.0803423
a_cons_hill_ride |   .4984604   .0782516    6.37   0.000    .34509
.6518308
-----+-----
--
      /cut1 |   .4357244   .9724344                -1.470212
2.341661
      /cut2 |   1.112747   .9726127                -1.7935388
3.019033
      /cut3 |   2.008472   .9796111                .0884692
3.928474
      /cut4 |   2.913437   .9870437                .9788667
4.848007
-----
--

```

```

[67]: oprobit a_cons_hac age gender marriage student1 company_man2 public_officer3_
      ↪profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2_
      ↪club_jeju3 ev_owner saving_free a_cons_short_dis a_cons_as a_cons_charge_fee_
      ↪a_cons_num_charge_lack a_cons_long_charge_time a_cons_hill_ride
estimates store model7oall

```

```

Iteration 0:  log likelihood = -288.98528
Iteration 1:  log likelihood = -238.04074
Iteration 2:  log likelihood = -237.69761
Iteration 3:  log likelihood = -237.69745
Iteration 4:  log likelihood = -237.69745

```

```

Ordered probit regression              Number of obs      =          184
                                      LR chi2(22)           =          102.58
                                      Prob > chi2           =           0.0000
Log likelihood = -237.69745            Pseudo R2           =           0.1775

```

```

-----
-----
      a_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]

```

					</	

3.930459	/cut1	1.855978	1.058428	-.2185038
4.671848	/cut2	2.590308	1.06203	.5087685
5.672621	/cut3	3.569183	1.073202	1.465745
6.702014	/cut4	4.57188	1.086823	2.441745

-----  
-----

```
[68]: estimates table base_o model1o model2o model3o model4o model5o model6o
      ↪model7oall, b(%9.3f) star(0.01, 0.05, 0.1) eq(1) stats(11)
```

Variable	base_o	model1o	model2o	model3o
model4o	model5o	model6o	model7oall	
#1				
age	0.019	0.048	0.022	0.002
0.045	-0.027	-0.066	-0.066	
gender	0.225	0.152	0.340	0.246
0.174	0.243	0.307	0.293	
marriage	-0.005	-0.036	-0.028	-0.058
0.006	0.050	-0.086	-0.098	
student1	-1.088**	-0.982*	-1.149**	-1.256**
-1.194**	-1.072**	-0.932*	-0.988*	
company_man2	-0.179	-0.209	-0.242	-0.342
-0.298	-0.311	0.287	0.065	
public_off~3	-0.055	-0.164	0.028	-0.130
-0.136	-0.036	0.072	0.005	
profession4	-0.759	-0.708	-0.529	-0.749
-0.681	-0.474	-0.629	-0.354	
researcher5	0.030	-0.108	-0.138	-0.193
-0.158	0.103	-0.050	-0.273	
learn	0.123	0.030	0.021	0.135
0.174	0.099	0.209	0.035	
income	-0.030	-0.042	-0.045	-0.053
-0.039	-0.053	-0.017	-0.049	
avg_distance	-0.039	-0.077	-0.059	0.003
-0.039	-0.032	0.056	0.009	
freq_use_ev	0.057	0.101	0.074	0.019
0.072	0.084	0.038	0.093	
club_kepco2	-0.351*	-0.377*	-0.293	-0.298



-0.354*	-0.362*	-0.239	-0.230	
club_jeju3	0.732*	0.357	0.271	0.619
0.629	0.426	0.712*	-0.043	
ev_owner	-0.219	-0.334	-0.323	-0.338
-0.228	-0.358	-0.163	-0.478	
saving_free	-0.646**	-0.669**	-0.612**	-0.589**
-0.687**	-0.720**	-0.487*	-0.536*	
a_cons_sho~s		0.342***		
0.308***				
a_cons_as			0.335***	
0.194**				
a_cons_cha~e				0.251***
0.080				
a_cons_num~k				
0.228***			-0.000	
a_cons_lon~e				
0.328***		0.156		
a_cons_hil~e				
0.498***	0.430***			

---

cut1					
_cons		-1.448	-0.745	-0.691	-0.860
-0.433		-0.380	0.436	1.856*	

---



---

cut2					
_cons		-0.884	-0.160	-0.082	-0.278
0.145		0.213	1.113	2.590**	

---



---

cut3					
_cons		-0.101	0.666	0.754	0.530
0.939		1.018	2.008**	3.569***	

---



---

cut4					
_cons		0.730	1.562*	1.617*	1.386
1.789*		1.884*	2.913***	4.572***	

---



---

Statistics					
ll		-273.555	-264.137	-264.243	-268.329
-269.868		-266.358	-252.672	-237.697	

---

legend: \* p<.1; \*\* p<.05; \*\*\* p<.01

```
[70]: estimates table base_o model1o model2o model3o model4o model5o model6o
      ↪ model7oall , eq(1) stats(11)
```

-----						
-----						
Variable	base_o	model1o	model2o	model3o	model4o	
model5o	model6o	model7oall				
-----						
#1						
age	.01931584	.04762013	.021909	.00238964	.04489453	
-.0268341	-.06591898	-.06630475				
gender	.22524268	.15162658	.33988202	.24593281	.17416492	
.24319121	.30722824	.29254068				
marriage	-.00518517	-.0357915	-.02821881	-.0584164	.00594536	
.04982013	-.08608036	-.0980792				
student1	-1.0876077	-.98236959	-1.1491046	-1.2561791	-1.193501	
-1.072238	-.93151594	-.98771761				
company_man2	-.17925718	-.20916816	-.24157777	-.34164718	-.29820344	
-.31083913	.28741291	.06473394				
public_off~3	-.05519985	-.16362293	.02808528	-.13017316	-.13556671	
-.03615563	.07210759	.00455559				
profession4	-.75915684	-.70842602	-.52912746	-.74906254	-.68051473	
-.47385054	-.62922454	-.35402479				
researcher5	.03031939	-.10759937	-.13802421	-.19281267	-.15802337	
.10321843	-.05014364	-.27315223				
learn	.12322839	.03007768	.02087821	.13484143	.17444937	
.09910772	.20871237	.03464914				
income	-.03046471	-.04232575	-.04501419	-.05281998	-.03936051	
-.0534327	-.01695262	-.04857266				
avg_distance	-.03887482	-.07696537	-.05903678	.00290349	-.03941547	
-.03234428	.05624621	.00890972				
freq_use_ev	.05695547	.10139264	.07446404	.01899047	.07209738	
.0840561	.03810844	.09277928				
club_kepco2	-.35066103	-.37699331	-.29345693	-.29784633	-.35399262	
-.36226834	-.23881715	-.2301891				
club_jeju3	.73249362	.35704843	.27076168	.61913558	.62893666	
.42551463	.71213089	-.04281702				
ev_owner	-.21926494	-.33391941	-.32256965	-.33813331	-.22821239	
-.35790231	-.16254016	-.47817443				
saving_free	-.6457005	-.66942442	-.61248779	-.58932363	-.687157	
-.72048546	-.4865719	-.5358841				
a_cons_sho~s		.34245675				
.30757732						
a_cons_as			.33536547			
.19394017						

```

a_cons_cha~e | .25107935
.07990801
a_cons_num~k | .22792597
-.00042259
a_cons_lon~e |
.32827659 .15612519
a_cons_hil~e |
.49846041 .42965459
-----+-----
cut1 |
      _cons | -1.4476137  -.74511417  -.69101794  -.86047163  -.43276049
-1.37965148  .43572436  1.8559778
-----+-----
cut2 |
      _cons | -.88351139  -.16016089  -.08189691  -.27765485  .1445232
.21289663  1.1127471  2.5903082
-----+-----
cut3 |
      _cons | -.10098429  .66649034  .75403157  .52972609  .93948554
1.0181472  2.0084716  3.5691829
-----+-----
cut4 |
      _cons | .73020895  1.5616102  1.617034  1.385753  1.7887609
1.8837738  2.9134369  4.5718796
-----+-----
Statistics |
      ll | -273.5551  -264.13723  -264.24296  -268.32914  -269.868
-266.35774  -252.6716  -237.69745
-----+-----

```

```

[71]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jezu3 ev_owner saving_free
estimates store base_og

```

```

Iteration 0:  log likelihood = -290.51059
Iteration 1:  log likelihood = -281.98862
Iteration 2:  log likelihood = -281.98369
Iteration 3:  log likelihood = -281.98369

```

Ordered probit regression	Number of obs	=	184
	LR chi2(16)	=	17.05
	Prob > chi2	=	0.3821
Log likelihood = -281.98369	Pseudo R2	=	0.0294

-----						
-						
g_cons_hac	Coef.	Std. Err.	z	P> z	[95% Conf.	
Interval]	-----					
-----+						
-						
age	.0437017	.132008	0.33	0.741	-.2150292	
.3024326						
gender	.1803827	.240235	0.75	0.453	-.2904692	
.6512346						
marriage	.1937332	.2120611	0.91	0.361	-.2218989	
.6093654						
student1	-.0772974	.4839806	-0.16	0.873	-1.025882	
.8712871						
company_man2	-.100128	.5580366	-0.18	0.858	-1.19386	
.9936037						
public_officer3	.0834866	.3421922	0.24	0.807	-.5871977	
.7541709						
profession4	.1637346	.4621727	0.35	0.723	-.7421072	
1.069576						
researcher5	.5894388	.4101415	1.44	0.151	-.2144237	
1.393301						
learn	.0504236	.1837495	0.27	0.784	-.3097188	
.410566						
income	.0305814	.0685303	0.45	0.655	-.1037355	
.1648982						
avg_distance	-.0176234	.0603705	-0.29	0.770	-.1359474	
.1007005						
freq_use_ev	.072824	.0785466	0.93	0.354	-.0811245	
.2267726						
club_kepco2	-.2332887	.2060179	-1.13	0.257	-.6370763	
.170499						
club_jeju3	.144908	.3830321	0.38	0.705	-.6058211	
.8956371						
ev_owner	-.0121167	.2766422	-0.04	0.965	-.5543256	
.5300921						
saving_free	-.4379502	.2743795	-1.60	0.110	-.975724	
.0998237						
-----+						
-						
/cut1	-1.866047	.9235925			-3.676255	
-.0558394						
/cut2	-1.472945	.9040714			-3.244892	

.2990026	/cut3	-.8162868	.8961634	-2.572735
.9401611	/cut4	.0778201	.8949047	-1.676161
1.831801	/cut5	1.258773	.8968726	-.4990647
3.016611	/cut6	1.816217	.9026751	.0470068
3.585428	/cut7	2.817406	.9425872	.9699686
4.664842	/cut8	3.090539	.9771429	1.175374
5.005704				

-----  
-

```
[73]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3_
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2_
      ↪ club_jeju3 ev_owner saving_free g_cons_short_dis
      estimates store modellog
```

```
Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -276.19517
Iteration 2: log likelihood = -276.17612
Iteration 3: log likelihood = -276.17612
```

Ordered probit regression	Number of obs	=	184
	LR chi2(17)	=	28.67
	Prob > chi2	=	0.0377
Log likelihood = -276.17612	Pseudo R2	=	0.0493

```
-----
--
      g_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
--
          age |   .0233628   .1325138     0.18   0.860    - .2363595
.2830851
        gender |   .1614849   .2409547     0.67   0.503    - .3107776
.6337474
       marriage |   .1755992   .2126573     0.83   0.409    - .2412015
.5923998
       student1 |  -.0369137   .4858007    -0.08   0.939    - .9890657
.9152382
```

company_man2	-.1510718	.5591581	-0.27	0.787	-1.247001
.9448579					
public_officer3	.071331	.3434972	0.21	0.835	-.6019111
.7445731					
profession4	.2224443	.4640421	0.48	0.632	-.6870614
1.13195					
researcher5	.6023998	.4116524	1.46	0.143	-.2044241
1.409224					
learn	.0370491	.1844005	0.20	0.841	-.3243692
.3984674					
income	.020359	.0688044	0.30	0.767	-.1144951
.1552131					
avg_distance	-.0271392	.0606189	-0.45	0.654	-.1459501
.0916717					
freq_use_ev	.0712947	.0787715	0.91	0.365	-.0830947
.2256841					
club_kepco2	-.212024	.2066766	-1.03	0.305	-.6171027
.1930548					
club_jeju3	.1124953	.3843679	0.29	0.770	-.6408519
.8658426					
ev_owner	-.0965494	.2784743	-0.35	0.729	-.642349
.4492503					
saving_free	-.3076673	.2777938	-1.11	0.268	-.8521331
.2367984					
g_cons_short_dis	.2574198	.0757376	3.40	0.001	.1089768
.4058628					
-----					
--					
/cut1	-2.084285	.9322803			-3.911521
-.2570493					
/cut2	-1.658324	.9089619			-3.439856
.1232087					
/cut3	-.9713628	.8998753			-2.735086
.7923604					
/cut4	-.0484751	.8986197			-1.809737
1.712787					
/cut5	1.17038	.9000479			-.5936813
2.934442					
/cut6	1.743549	.9058353			-.0318554
3.518954					
/cut7	2.794846	.9501896			.932509
4.657184					
/cut8	3.08362	.9867095			1.149705
5.017535					
-----					
--					

```
[74]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jeju3 ev_owner saving_free g_cons_as
      estimates store model2og
```

```
Iteration 0:  log likelihood = -290.51059
Iteration 1:  log likelihood = -277.26696
Iteration 2:  log likelihood = -277.25024
Iteration 3:  log likelihood = -277.25023
```

```
Ordered probit regression              Number of obs   =       184
                                      LR chi2(17)        =       26.52
                                      Prob > chi2         =       0.0655
Log likelihood = -277.25023            Pseudo R2        =       0.0456
```

```
-----
-
      g_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-
      age |   .0256869   .132397     0.19   0.846    -.2338065
.2851803
      gender |  .2257452   .2412034     0.94   0.349    -.2470048
.6984952
      marriage | .1712495   .2125184     0.81   0.420    -.2452789
.5877778
      student1 | .0177373   .4858183     0.04   0.971    -.9344491
.9699236
      company_man2 | -.0739677   .55826     -0.13   0.895    -1.168137
1.020202
      public_officer3 | .1639354   .3437483     0.48   0.633    -.5097988
.8376696
      profession4 | .2713891   .4644199     0.58   0.559    -.6388571
1.181635
      researcher5 | .5427502   .411376     1.32   0.187    -.2635318
1.349032
      learn |   .0496974   .1840596     0.27   0.787    -.3110529
.4104477
      income |   .0326248   .068707     0.47   0.635    -.1020384
.167288
      avg_distance | -.0170717   .0604729    -0.28   0.778    -.1355965
.1014531
      freq_use_ev |   .0532053   .078959     0.67   0.500    -.1015516
.2079622
```

club_kepco2		-.2129535	.2065757	-1.03	0.303	-.6178344
.1919274						
club_jeju3		.0282576	.3856689	0.07	0.942	-.7276395
.7841547						
ev_owner		-.0827272	.2780833	-0.30	0.766	-.6277605
.4623061						
saving_free		-.3993569	.2753477	-1.45	0.147	-.9390285
.1403147						
g_cons_as		.2231996	.0727058	3.07	0.002	.0806989
.3657003						
-----+-----						
-						
/cut1		-1.99959	.9277135			-3.817876
-.1813054						
/cut2		-1.592593	.9074793			-3.37122
.1860336						
/cut3		-.8993122	.8981788			-2.65971
.8610859						
/cut4		.0162535	.8963437			-1.740548
1.773055						
/cut5		1.215031	.898695			-.5463787
2.976441						
/cut6		1.788381	.9045115			.0155712
3.561191						
/cut7		2.876025	.9512544			1.0116
4.740449						
/cut8		3.1971	.997032			1.242953
5.151247						
-----						
-						

```
[75]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3_
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2_
      ↪ club_jeju3 ev_owner saving_free g_cons_charge_fee
      estimates store model3og
```

```
Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -281.60748
Iteration 2: log likelihood = -281.60222
Iteration 3: log likelihood = -281.60222
```

Ordered probit regression	Number of obs	=	184
	LR chi2(17)	=	17.82
	Prob > chi2	=	0.4005
Log likelihood = -281.60222	Pseudo R2	=	0.0307



-----						
---						
g_cons_hac	Coef.	Std. Err.	z	P> z	[95% Conf.	
Interval]	-----					
-----						
---						
age	.0333336	.1325544	0.25	0.801	-.2264684	
.2931355						
gender	.1736156	.2403609	0.72	0.470	-.2974831	
.6447143						
marriage	.2028203	.2123262	0.96	0.339	-.2133314	
.618972						
student1	-.1253719	.4872223	-0.26	0.797	-1.08031	
.8295663						
company_man2	-.2059525	.5708089	-0.36	0.718	-1.324717	
.9128124						
public_officer3	.0372885	.3463509	0.11	0.914	-.6415467	
.7161238						
profession4	.1549767	.4623968	0.34	0.738	-.7513043	
1.061258						
researcher5	.5379077	.4144226	1.30	0.194	-.2743458	
1.350161						
learn	.0500996	.1837796	0.27	0.785	-.3101017	
.4103009						
income	.0268263	.0686755	0.39	0.696	-.1077752	
.1614278						
avg_distance	-.0088068	.0612106	-0.14	0.886	-.1287774	
.1111638						
freq_use_ev	.0566936	.0806836	0.70	0.482	-.1014433	
.2148305						
club_kepcos2	-.2341128	.2060376	-1.14	0.256	-.637939	
.1697135						
club_jeju3	.1359355	.3831781	0.35	0.723	-.6150798	
.8869507						
ev_owner	-.0386112	.2783307	-0.14	0.890	-.5841294	
.5069071						
saving_free	-.428008	.2746421	-1.56	0.119	-.9662965	
.1102806						
g_cons_charge_fee	.0697634	.0798793	0.87	0.382	-.086797	
.2263239						
-----						
---						
/cut1	-1.999927	.937018			-3.836449	
-.1634056						
/cut2	-1.60146	.9163329			-3.397439	
.19452						
/cut3	-.934768	.9065348			-2.711544	

```
.8420077
/cut4 | -.0350947 .9043955 -1.807677
1.737488
/cut5 | 1.144384 .9064321 -.6321906
2.920958
/cut6 | 1.699999 .912441 -.0883523
3.488351
/cut7 | 2.702244 .9522185 .8359305
4.568558
/cut8 | 2.978649 .9865867 1.044974
4.912323
-----
---
```

```
[76]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jezu3 ev_owner saving_free g_cons_num_charge_lack
estimates store model4og
```

```
Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -278.42005
Iteration 2: log likelihood = -278.40832
Iteration 3: log likelihood = -278.40832
```

```
Ordered probit regression          Number of obs   =      184
                                   LR chi2(17)        =      24.20
                                   Prob > chi2         =      0.1140
Log likelihood = -278.40832        Pseudo R2       =      0.0417
```

```
-----
-----
g_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-----
          age |   .0736468   .1326842    0.56   0.579   -.1864095
.3337031
        gender |   .0756476   .2437321    0.31   0.756   -.4020585
.5533536
       marriage |   .1688294   .2125745    0.79   0.427   -.2478089
.5854678
       student1 |  -.1832991   .4866252   -0.38   0.706   -1.137067
.7704688
 company_man2 |  -.1784844   .5591134   -0.32   0.750   -1.274326
.9173577
```

.6977492	public_officer3	.0242818	.3436121	0.07	0.944	-.6491856
1.137251	profession4	.2285803	.4636158	0.49	0.622	-.6800901
1.243719	researcher5	.4299619	.4151898	1.04	0.300	-.383795
.5162546	learn	.1483004	.1877352	0.79	0.430	-.2196537
.1525852	income	.017699	.0688207	0.26	0.797	-.1171871
.1093307	avg_distance	-.0093561	.0605556	-0.15	0.877	-.1280429
.2282405	freq_use_ev	.0740065	.0786922	0.94	0.347	-.0802274
.1389356	club_kepco2	-.2661688	.2066897	-1.29	0.198	-.6712732
.7264336	club_jeju3	-.0373259	.3896803	-0.10	0.924	-.8010853
.4745972	ev_owner	-.0701437	.2779341	-0.25	0.801	-.6148846
.0730477	saving_free	-.4658091	.274932	-1.69	0.090	-1.004666
.4062197	g_cons_num_charge_lack	.2342547	.0877389	2.67	0.008	.0622898
-----+-----						
-.0053062	/cut1	-1.824273	.9280611			-3.643239
.3705561	/cut2	-1.406272	.9065616			-3.1831
1.036984	/cut3	-.7236886	.8983189			-2.484361
1.949306	/cut4	.1899502	.8976471			-1.569406
3.158179	/cut5	1.393848	.9001853			-.3704824
3.736364	/cut6	1.960236	.9062045			.1841078
4.819347	/cut7	2.964643	.9462947			1.109939
5.161742	/cut8	3.23909	.9809626			1.316439
-----						

```
[77]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jezu3 ev_owner saving_free g_cons_long_charge_time
      estimates store model5og
```

```
Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -269.43945
Iteration 2: log likelihood = -269.33981
Iteration 3: log likelihood = -269.33913
Iteration 4: log likelihood = -269.33913
```

```
Ordered probit regression                Number of obs   =      184
                                          LR chi2(17)       =      42.34
                                          Prob > chi2       =      0.0006
Log likelihood = -269.33913              Pseudo R2        =      0.0729
```

```
-----
-----
g_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
-----
          age |   -.0374585   .1337118    -0.28   0.779    -.2995287
.2246117
        gender |    .208573    .2416326     0.86   0.388    -.2650182
.6821642
       marriage |    .2144949   .2131068     1.01   0.314    -.2031868
.6321766
       student1 |    .0122879   .4868429     0.03   0.980    -.9419066
.9664824
  company_man2 |   -.1930681   .5620472    -0.34   0.731    -1.29466
.9085241
 public_officer3 |    .1794815   .3445897     0.52   0.602    -.4959019
.8548649
   profession4 |    .4612043    .468745     0.98   0.325    -.4575189
1.379928
   researcher5 |    .8143469   .4160088     1.96   0.050    -.0010154
1.629709
          learn |    .1227056   .1854075     0.66   0.508    -.2406864
.4860975
         income |   -.0042678   .0693404    -0.06   0.951    -.1401726
.131637
   avg_distance |    .0015685   .0608767     0.03   0.979    -.1177477
.1208847
    freq_use_ev |    .0740401   .0789754     0.94   0.348    -.0807488
```

.2288291	club_kepco2	-.2663775	.2078455	-1.28	0.200	-.6737473
.1409922	club_jeju3	-.0426062	.3875039	-0.11	0.912	-.8021
.7168875	ev_owner	-.0732953	.2781801	-0.26	0.792	-.6185183
.4719277	saving_free	-.4968767	.2766002	-1.80	0.072	-1.039003
.0452497						
g_cons_long_charge_time		.4131442	.0830917	4.97	0.000	.2502873
.576001						
-----+-----						
	/cut1	-2.082946	.9399217			-3.925159
-.2407337	/cut2	-1.604773	.9113448			-3.390976
.1814299	/cut3	-.8766474	.9013164			-2.643195
.8899002	/cut4	.0611246	.9003939			-1.703615
1.825864	/cut5	1.295377	.9025443			-.4735778
3.064331	/cut6	1.902696	.9093115			.1204785
3.684914	/cut7	3.165179	.9775288			1.249258
5.0811	/cut8	3.640006	1.06342			1.555741
5.72427						
-----						

```
[78]: oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
      ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
      ↪ club_jeju3 ev_owner saving_free g_cons_hill_ride
      estimates store model6og
```

```
Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -250.76345
Iteration 2: log likelihood = -250.28754
Iteration 3: log likelihood = -250.2838
Iteration 4: log likelihood = -250.28379
```

```
Ordered probit regression          Number of obs    =      184
                                LR chi2(17)         =      80.45
```

Log likelihood = -250.28379                      Prob > chi2                      =                      0.0000  
Pseudo R2                      =                      0.1385

-----						
--						
g_cons_hac	Coef.	Std. Err.	z	P> z	[95% Conf.	
Interval]	-----					
-----+						
--						
age	-.166436	.1370399	-1.21	0.225	-.4350293	
.1021572						
gender	.3406769	.2452827	1.39	0.165	-.1400684	
.8214221						
marriage	.0972822	.2155191	0.45	0.652	-.3251276	
.5196919						
student1	.0529926	.4929275	0.11	0.914	-.9131275	
1.019113						
company_man2	-.240538	.5709077	-0.42	0.674	-1.359497	
.8784205						
public_officer3	.1349414	.3486273	0.39	0.699	-.5483556	
.8182384						
profession4	.5002086	.4724451	1.06	0.290	-.4257667	
1.426184						
researcher5	.4345636	.4188441	1.04	0.299	-.3863557	
1.255483						
learn	.082209	.1868206	0.44	0.660	-.2839527	
.4483706						
income	.0516119	.0699132	0.74	0.460	-.0854155	
.1886393						
avg_distance	.0234862	.0616217	0.38	0.703	-.0972902	
.1442626						
freq_use_ev	.0588335	.0798214	0.74	0.461	-.0976135	
.2152805						
club_kepco2	-.286561	.2101222	-1.36	0.173	-.6983929	
.125271						
club_jeju3	.0187442	.3897556	0.05	0.962	-.7451627	
.7826511						
ev_owner	.0573311	.2807418	0.20	0.838	-.4929127	
.607575						
saving_free	-.3182444	.2796073	-1.14	0.255	-.8662647	
.2297758						
g_cons_hill_ride	.6008113	.0777293	7.73	0.000	.4484646	
.753158						
-----+						
--						
/cut1	-2.791703	.9668423			-4.686679	
-.8967266						
/cut2	-2.21897	.9288826			-4.039546	

```

-.3983931
/cut3 | -1.347329 .9131543 -3.137078
.4424207
/cut4 | -.2735129 .9114245 -2.059872
1.512846
/cut5 | 1.066547 .9111876 -.7193478
2.852442
/cut6 | 1.716376 .9184334 -.0837206
3.516472
/cut7 | 3.214385 1.006257 1.242158
5.186612
/cut8 | 3.782101 1.10957 1.607385
5.956818
-----
--

```

```

[79]: ** order all

oprobit g_cons_hac age gender marriage student1 company_man2 public_officer3
    ↪ profession4 researcher5 learn income avg_distance freq_use_ev club_kepco2
    ↪ club_jeju3 ev_owner saving_free g_cons_short_dis g_cons_as g_cons_charge_fee
    ↪ g_cons_num_charge_lack g_cons_long_charge_time g_cons_hill_ride
estimates store model7oallg

```

```

Iteration 0: log likelihood = -290.51059
Iteration 1: log likelihood = -244.98002
Iteration 2: log likelihood = -244.27779
Iteration 3: log likelihood = -244.26825
Iteration 4: log likelihood = -244.26824

```

```

Ordered probit regression              Number of obs      =          184
                                      LR chi2(22)           =          92.48
                                      Prob > chi2           =          0.0000
Log likelihood = -244.26824            Pseudo R2           =          0.1592

```

```

-----
-----
g_cons_hac |      Coef.   Std. Err.      z    P>|z|     [95% Conf.
Interval]
-----+-----
age |   -.1564773   .139277   -1.12   0.261   -.4294552
.1165007
gender |   .29795   .2504538    1.19   0.234   -.1929304
.7888304

```

.5026486	marriage	.0770572	.2171424	0.35	0.723	-.3485342
1.142531	student1	.1581632	.5022378	0.31	0.753	-.8262048
1.006153	company_man2	-.140821	.5852016	-0.24	0.810	-1.287795
.9458596	public_officer3	.2436798	.3582616	0.68	0.496	-.4585001
1.643322	profession4	.702814	.4798597	1.46	0.143	-.2376937
1.422936	researcher5	.5595411	.4405156	1.27	0.204	-.3038536
.5290933	learn	.1515685	.1926182	0.79	0.431	-.2259563
.1718321	income	.0331917	.0707362	0.47	0.639	-.1054487
.1362368	avg_distance	.0128603	.0629483	0.20	0.838	-.1105162
.2444343	freq_use_ev	.0815134	.0831244	0.98	0.327	-.0814076
.1149635	club_kepco2	-.3010651	.2122634	-1.42	0.156	-.7170936
.6017002	club_jeju3	-.1835608	.4006507	-0.46	0.647	-.9688218
.5357378	ev_owner	-.0246126	.2858983	-0.09	0.931	-.5849631
.2433552	saving_free	-.3190206	.2869317	-1.11	0.266	-.8813964
.280652	g_cons_short_dis	.1098097	.087166	1.26	0.208	-.0610326
.2313052	g_cons_as	.0802931	.0770484	1.04	0.297	-.0707189
.062275	g_cons_charge_fee	-.1132949	.0895781	-1.26	0.206	-.2888648
.3142011	g_cons_num_charge_lack	.1188064	.099693	1.19	0.233	-.0765883
.3795089	g_cons_long_charge_time	.1735837	.1050658	1.65	0.099	-.0323416
.6895715	g_cons_hill_ride	.5229743	.0850001	6.15	0.000	.3563771
-----+-----						
-.7443509	/cut1	-2.694022	.9947483			-4.643693
-.1966481	/cut2	-2.059139	.950268			-3.92163
.6744113	/cut3	-1.151565	.9316378			-2.977542



1.762722	/cut4	-.0592914	.9296157	-1.881305
3.145588	/cut5	1.320082	.9313976	-.5054234
3.847386	/cut6	2.003516	.9407673	.1596463
5.726058	/cut7	3.658138	1.055081	1.590218
6.754141	/cut8	4.39446	1.203941	2.034779

```
[80]: *** ordered one table
estimates table base_og model1og model2og model3og model4og model5og model6og
↪model7oallg, b(%9.3f) star(0.01, 0.05, 0.1) eq(1) stats(11)
```

Variable	base_og	model1og	model2og	model3og
model4og	model5og	model6og	model7oallg	
#1				
age	0.044	0.023	0.026	0.033
0.074	-0.037	-0.166	-0.156	
gender	0.180	0.161	0.226	0.174
0.076	0.209	0.341	0.298	
marriage	0.194	0.176	0.171	0.203
0.169	0.214	0.097	0.077	
student1	-0.077	-0.037	0.018	-0.125
-0.183	0.012	0.053	0.158	
company_man2	-0.100	-0.151	-0.074	-0.206
-0.178	-0.193	-0.241	-0.141	
public_off~3	0.083	0.071	0.164	0.037
0.024	0.179	0.135	0.244	
profession4	0.164	0.222	0.271	0.155
0.229	0.461	0.500	0.703	
researcher5	0.589	0.602	0.543	0.538
0.430	0.814*	0.435	0.560	
learn	0.050	0.037	0.050	0.050
0.148	0.123	0.082	0.152	
income	0.031	0.020	0.033	0.027
0.018	-0.004	0.052	0.033	
avg_distance	-0.018	-0.027	-0.017	-0.009
-0.009	0.002	0.023	0.013	

freq_use_ev	0.073	0.071	0.053	0.057
0.074	0.074	0.059	0.082	
club_kepco2	-0.233	-0.212	-0.213	-0.234
-0.266	-0.266	-0.287	-0.301	
club_jeju3	0.145	0.112	0.028	0.136
-0.037	-0.043	0.019	-0.184	
ev_owner	-0.012	-0.097	-0.083	-0.039
-0.070	-0.073	0.057	-0.025	
saving_free	-0.438	-0.308	-0.399	-0.428
-0.466*	-0.497*	-0.318	-0.319	
g_cons_sho~s		0.257***		
0.110				
g_cons_as			0.223***	
0.080				
g_cons_cha~e				0.070
-0.113				
g_cons_num~k				
0.234***			0.119	
g_cons_lon~e				
0.413***		0.174*		
g_cons_hil~e				
0.601***	0.523***			
-----+-----				
-----				
cut1				
_cons	-1.866**	-2.084**	-2.000**	-2.000**
-1.824**	-2.083**	-2.792***	-2.694***	
-----+-----				
-----				
cut2				
_cons	-1.473	-1.658*	-1.593*	-1.601*
-1.406	-1.605*	-2.219**	-2.059**	
-----+-----				
-----				
cut3				
_cons	-0.816	-0.971	-0.899	-0.935
-0.724	-0.877	-1.347	-1.152	
-----+-----				
-----				
cut4				
_cons	0.078	-0.048	0.016	-0.035
0.190	0.061	-0.274	-0.059	
-----+-----				
-----				
cut5				
_cons	1.259	1.170	1.215	1.144
1.394	1.295	1.067	1.320	
-----+-----				

-----					
cut6					
_cons		1.816**	1.744*	1.788**	1.700*
1.960**		1.903**	1.716*	2.004**	
-----+-----					
-----					
cut7					
_cons		2.817***	2.795***	2.876***	2.702***
2.965***		3.165***	3.214***	3.658***	
-----+-----					
-----					
cut8					
_cons		3.091***	3.084***	3.197***	2.979***
3.239***		3.640***	3.782***	4.394***	
-----+-----					
-----					
Statistics					
ll		-281.984	-276.176	-277.250	-281.602
-278.408		-269.339	-250.284	-244.268	
-----+-----					
-----					
legend: * p<.1; ** p<.05; *** p<.01					

[82]: `estimates table base_og model1log model2og model3og model4og model5og model6og ↵  
↵model7oallg , eq(1) stats(ll)`

-----						
-----						
Variable		base_og	model1log	model2og	model3og	model4og
model5og		model6og	model7oa~g			
-----+-----						
-----						
#1						
age		.04370171	.02336282	.02568689	.03333355	.0736468
-.03745849		-.16643604	-.15647727			
gender		.18038271	.16148489	.22574517	.17361561	.07564757
.20857303		.34067685	.29795002			
marriage		.19373323	.17559916	.17124946	.20282031	.16882944
.21449492		.09728216	.0770572			
student1		-.0772974	-.03691373	.01773725	-.12537193	-.18329909
.01228794		.05299255	.15816321			
company_man2		-.10012799	-.15107179	-.07396768	-.20595255	-.17848439
-.19306812		-.24053803	-.14082099			
public_off~3		.08348661	.07133099	.16393542	.03728854	.02428183
.17948148		.13494141	.24367977			
profession4		.16373457	.22244433	.27138914	.15497671	.22858025
.46120435		.50020859	.70281403			

researcher5		.5894388	.60239976	.54275023	.53790767	.42996194
.81434692		.4345636	.55954115			
learn		.05042361	.03704914	.0496974	.05009963	.14830042
.12270555		.08220896	.15156854			
income		.03058138	.02035902	.03262478	.02682629	.01769903
-.00426782		.05161191	.03319172			
avg_distance		-.01762344	-.0271392	-.01707168	-.00880679	-.0093561
.00156851		.0234862	.01286031			
freq_use_ev		.07282404	.07129468	.05320529	.05669362	.07400654
.07404013		.0588335	.08151336			
club_kepco2		-.23328867	-.21202397	-.21295347	-.23411275	-.26616883
-.26637751		-.28656097	-.30106505			
club_jeju3		.14490801	.11249533	.02825762	.13593547	-.03732587
-.04260622		.01874421	-.18356077			
ev_owner		-.01211675	-.09654937	-.08272724	-.03861118	-.07014371
-.07329532		.05733112	-.02461265			
saving_free		-.43795017	-.30766732	-.39935689	-.42800795	-.46580911
-.4968767		-.31824444	-.31902061			
g_cons_sho~s			.25741979			
.10980972						
g_cons_as				.22319959		
.08029314						
g_cons_cha~e					.06976343	
-.11329489						
g_cons_num~k						.23425474
.11880638						
g_cons_lon~e						
.41314417			.17358365			
g_cons_hil~e						
.6008113		.52297432				

---

cut1						
_cons		-1.8660474	-2.0842851	-1.9995905	-1.9999272	-1.8242725
-2.0829463		-2.7917027	-2.6940218			

---

cut2						
_cons		-1.4729447	-1.6583238	-1.592593	-1.6014596	-1.4062719
-1.6047731		-2.2189695	-2.0591391			

---

cut3						
_cons		-.81628685	-.97136282	-.89931219	-.93476799	-.72368855
-.87664743		-1.3473288	-1.1515652			

---

cut4						
------	--	--	--	--	--	--

	_cons		.0778201	-.04847506	.01625349	-.0350947	.18995017
			.06112461	-.27351288	-.05929137		
-----+-----							
-----							
cut5							
	_cons		1.2587733	1.1703801	1.2150313	1.1443836	1.3938484
			1.2953765	1.0665471	1.3200824		
-----+-----							
-----							
cut6							
	_cons		1.8162174	1.7435492	1.7883813	1.6999993	1.960236
			1.9026963	1.7163757	2.0035163		
-----+-----							
-----							
cut7							
	_cons		2.8174055	2.7948464	2.8760246	2.7022443	2.9646431
			3.1651789	3.2143852	3.6581378		
-----+-----							
-----							
cut8							
	_cons		3.0905391	3.0836199	3.1971002	2.9786487	3.2390902
			3.6400058	3.7821015	4.3944596		
-----+-----							
-----							
Statistics							
	ll		-281.98369	-276.17612	-277.25023	-281.60222	-278.40832
			-269.33913	-250.28379	-244.26824		
-----+-----							
-----							

## 0.1 ##### a\_cons\_hac

```
[83]: tab a_cons_hac
```

a_cons_hac		Freq.	Percent	Cum.
-----+-----				
1		26	14.13	14.13
2		27	14.67	28.80
3		51	27.72	56.52
4		47	25.54	82.07
5		33	17.93	100.00
-----+-----				
Total		184	100.00	

```
[84]: tab b_cons_hac
```

b_cons_hac	Freq.	Percent	Cum.
1	11	5.98	5.98
2	25	13.59	19.57
3	58	31.52	51.09
4	51	27.72	78.80
5	39	21.20	100.00
Total	184	100.00	

```
[85]: tab g_cons_hac
```

g_cons_hac	Freq.	Percent	Cum.
-4	3	1.63	1.63
-3	4	2.17	3.80
-2	16	8.70	12.50
-1	48	26.09	38.59
0	76	41.30	79.89
1	21	11.41	91.30
2	14	7.61	98.91
3	1	0.54	99.46
4	1	0.54	100.00
Total	184	100.00	

```
[ ]: # Need to do more post analysis
```

## 1 The following Part is the practice code

- For standard error check

```
[86]: eststo clear
eststo: qui logit y age
eststo: qui logit y age marriage
eststo: qui logit y age marriage student1
```

(est1 stored)

(est2 stored)

(est3 stored)

```
[87]: %html
      esttab, label title("table") html
```

This front-end or document format cannot display HTML

```
[88]: esttab, label title("table")
```

table

	(1)	(2)	(3)
	y	y	y
y			
age	0.233 (1.21)	0.151 (0.64)	0.145 (0.61)
marriage		-0.225 (-0.58)	-0.228 (-0.59)
student1			0.204 (0.29)
Constant	0.0455 (0.10)	0.324 (0.49)	0.330 (0.49)
Observations	184	184	184

t statistics in parentheses

\* p<0.05, \*\* p<0.01, \*\*\* p<0.001

```
[ ]: #
```