

EXEMPLO DO CAPÍTULO 6 – ficheiro smoke.wf1

Dependent Variable: FUMA

Method: Least Squares

Included observations: 807

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.412071	0.301269	1.367782	0.1718
CIGPRIC	-0.001045	0.003632	-0.287857	0.7735
LOG(INCOME)	0.012645	0.025824	0.489668	0.6245
EDUC	-0.028870	0.005640	-5.118992	0.0000
AGE	0.019638	0.005425	3.620277	0.0003
AGE^2	-0.000258	5.73E-05	-4.494581	0.0000
RESTAURN	-0.099129	0.037389	-2.651295	0.0082
R-squared	0.061689	Mean dependent var		0.384139
Log likelihood	-537.7520	Hannan-Quinn criter.		1.365699
Wald F-statistic	12.18712	Prob(Wald F-statistic)		0.000000

Dependent Variable: FUMA

Method: ML - Binary Probit (Quadratic hill climbing)

Included observations: 807

Convergence achieved after 5 iterations

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.260593	0.848960	-0.306955	0.7589
CIGPRIC	-0.003189	0.009735	-0.327567	0.7432
LOG(INCOME)	0.031742	0.070742	0.448691	0.6537
EDUC	-0.083368	0.016797	-4.963196	0.0000
AGE	0.061918	0.016598	3.730436	0.0002
AGE^2	-0.000814	0.000186	-4.375447	0.0000
RESTAURN	-0.281112	0.110474	-2.544599	0.0109
McFadden R-squared	0.051064	Mean dependent var		0.384139
Schwarz criterion	1.322144	Log likelihood		-510.0584
Hannan-Quinn criter.	1.297066	Deviance		1020.117
Restr. deviance	1075.011	Restr. log likelihood		-537.5055
LR statistic	54.89428	Avg. log likelihood		-0.632043
Prob(LR statistic)	0.000000			

Dependent Variable: FUMA

Method: ML - Binary Logit (Quadratic hill climbing)

Included observations: 807

Convergence achieved after 5 iterations;

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.430838	1.383905	-0.311320	0.7556
CIGPRIC	-0.005316	0.015869	-0.335007	0.7376
LOG(INCOME)	0.049176	0.115778	0.424742	0.6710
EDUC	-0.135010	0.027783	-4.859436	0.0000
AGE	0.102915	0.028019	3.673093	0.0002
AGE^2	-0.001354	0.000318	-4.253907	0.0000
RESTAURN	-0.449441	0.181595	-2.474960	0.0133
McFadden R-squared	0.050580	Mean dependent var		0.384139
Schwarz criterion	1.322788	Log likelihood		-510.3184
Hannan-Quinn criter.	1.297711	Deviance		1020.637
Restr. deviance	1075.011	Restr. log likelihood		-537.5055
LR statistic	54.37419	Avg. log likelihood		-0.632365
Prob(LR statistic)	0.000000			

CONTINUAÇÃO DO EXEMPLO DO CAP. 6

Dependent Variable: FUMA
 Method: ML - Binary Probit (Quadratic hill climbing)
 Included observations: 807
 Convergence achieved after 5 iterations
 Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.199107	0.349188	-0.570201	0.5685
EDUC	-0.081666	0.016313	-5.006075	0.0000
AGE	0.063638	0.016039	3.967827	0.0001
AGE^2	-0.000833	0.000180	-4.628265	0.0000
RESTAURN	-0.282179	0.109118	-2.585986	0.0097
McFadden R-squared	0.050788	Mean dependent var		0.384139
S.D. dependent var	0.486693	S.E. of regression		0.472815
Akaike info criterion	1.276845	Sum squared resid		179.2902
Schwarz criterion	1.305923	Log likelihood		-510.2068
Hannan-Quinn criter.	1.288011	Deviance		1020.414
Restr. deviance	1075.011	Restr. log likelihood		-537.5055
LR statistic	54.59746	Avg. log likelihood		-0.632227
Prob(LR statistic)	0.000000			
Obs with Dep=0	497	Total obs		807
Obs with Dep=1	310			

Redundant Variables Test
 Specification: FUMA C CIGPRIC LOG(INCOME) EDUC AGE AGE^2
 RESTAURN
 Redundant Variables: CIGPRIC LOG(INCOME)

	Value	df	Probability
Likelihood ratio	0.296828	2	0.8621

LR test summary:

	Value	df
Restricted LogL	-510.2068	802
Unrestricted LogL	-510.0584	800

Expectation-Prediction Evaluation for Binary Specification

Equation: EQ04

Success cutoff: C = 0.5

	Estimated Equation			Constant Probability		
	Dep=0	Dep=1	Total	Dep=0	Dep=1	Total
P(Dep=1)≤C	432	240	672	497	310	807
P(Dep=1)>C	65	70	135	0	0	0
Total	497	310	807	497	310	807
Correct	432	70	502	497	0	497
% Correct	86.92	22.58	62.21	100.00	0.00	61.59
% Incorrect	13.08	77.42	37.79	0.00	100.00	38.41
Total Gain*	-13.08	22.58	0.62			
Percent Gain**	NA	22.58	1.61			

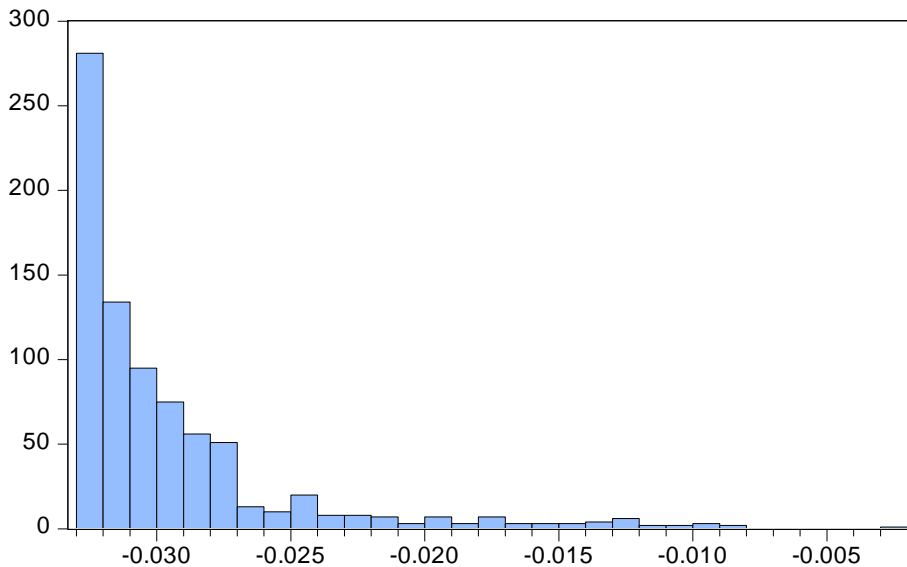
EFEITOS PARCIAIS PROBIT

Efeito parcial médio de EDUC

```
series der=@dnorm(c(1)+c(2)*educ + c(3)*age +c(4)*age^2 +c(5)*restaurn)
series EPeduc=c(2)*der
scalar EPMeduc=@mean(EPeduc)
```

EPMEDUC -0.0295

Efeito Parcial de educ na amostra: EPeduc



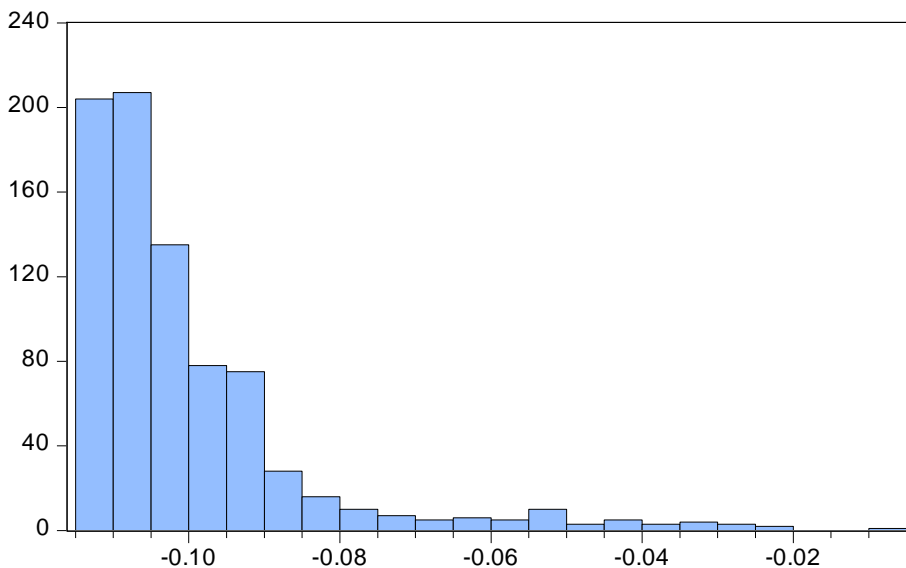
Series: EPEDUC	
Sample 1 807	
Observations 807	
Mean	-0.029486
Median	-0.031114
Maximum	-0.002030
Minimum	-0.032580
Std. Dev.	0.004495
Skewness	2.578673
Kurtosis	10.34918
Jarque-Bera	2710.467
Probability	0.000000

Efeito parcial médio de RESTAURN (V. Dummy)

```
series EPrestaurn=@cnorm(c(1) +c(2)*educ +c(3)*age +c(4)*age^2 +c(5))-@cnorm(c(1) +c(2)*educ +c(3)*age +c(4)*age^2 )
scalar EPMrestaurn=@mean(EPrestaurn)
```

EPMRESTAURN -0.1001

Efeito Parcial de restaurn na amostra: EPrestaurn



Series: EPRESTAURN	
Sample 1 807	
Observations 807	
Mean	-0.100081
Median	-0.105414
Maximum	-0.005068
Minimum	-0.112200
Std. Dev.	0.015776
Skewness	2.601259
Kurtosis	10.74749
Jarque-Bera	2928.392
Probability	0.000000

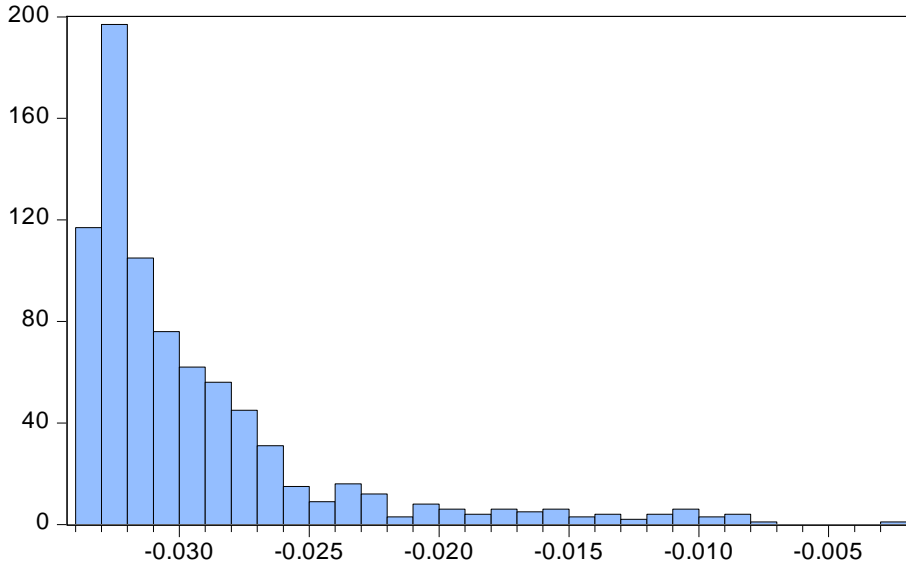
EFEITOS PARCIAIS LOGIT

Efeito parcial médio de EDUC

```
series derlog=@dlogistic(c(1)+c(2)*educ + c(3)*age +c(4)*age^2 +c(5)*restaurn)  
series EPeduc2=c(2)*derlog  
scalar EPMeduc2=@mean(EPeduc2)
```

EPMEDUC2 -0.02934

Efeito Parcial de educ na amostra: EPeduc2



Series: EPEDUC2
Sample 1 807
Observations 807

Mean	-0.029339
Median	-0.031167
Maximum	-0.002569
Minimum	-0.033090
Std. Dev.	0.005062
Skewness	2.250394
Kurtosis	8.300347

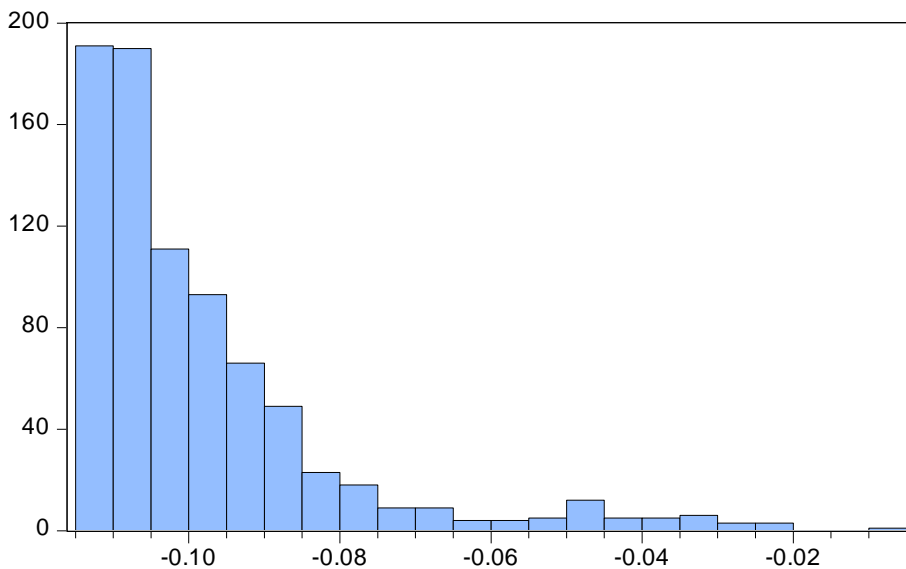
Jarque-Bera	1625.795
Probability	0.000000

Efeito parcial médio de RESTAURN (V. Dummy)

```
series EPrestaurn2=@clogistic(c(1) +c(2)*educ +c(3)*age +c(4)*age^2 +c(5))-@clogistic(c(1) +c(2)*educ +c(3)*age +c(4)*age^2 )  
scalar EPMrestaurn2=@mean(EPrestaurn2)
```

EPMRESTAURN2 -0.098040

Efeito Parcial de restaurn na amostra: EPrestaurn



Series: EPRESTAURN2
Sample 1 807
Observations 807

Mean	-0.098040
Median	-0.103762
Maximum	-0.007106
Minimum	-0.112465
Std. Dev.	0.017340
Skewness	2.229223
Kurtosis	8.465067

Jarque-Bera	1672.665
Probability	0.000000