



ภาคผนวก

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright© by Chiang Mai University
All rights reserved

ผลวิเคราะห์ Logit model

* NOTE: Deleted 1 observations with missing data. N is now 400 *

Normal exit from iterations. Exit status=0.

```

-----+-----
Multinomial Logit Model
Maximum Likelihood Estimates
Dependent variable           Z
Weighting variable           ONE
Number of observations       400
Iterations completed         7
Log likelihood function     -202.0655
Restricted log likelihood    -277.2589
Chi-squared                 150.3867
Degrees of freedom          12
Significance level           .0000000
-----+-----

```

```

-----+-----+-----+-----+-----+-----+-----+-----+
| Variable | Coefficient | Standard Error | b/St.Er. | P[|Z|>z] | Mean of X |
|-----+-----+-----+-----+-----+-----+-----+-----+

```

```

-----+-----+-----+-----+-----+-----+-----+-----+
| Characteristics in numerator of Prob[Y = 1]
Constant - .1104488853 1.4100131 -.078 .9376
X1 -.2528363178E-04 .11867550E-04 -2.130 .0331 33680.870
X2 -.4599495057E-01 .24052608E-01 -1.912 .0558 44.570000
X3 1.878866095 .27626294 6.801 .0000 .4300000
X4 -.3699089999E-06 .47230651E-06 -.783 .4335 584110.00
X5 -.1517037234 .39230534 -.387 .6990 .1500000
X6 .4441359508E-02 .22078621E-02 2.012 .0443 183.89000
X7 .6963821569 1.4434531 .482 .6295 .19866992
X8 .7307310461E-04 .19465369E-04 3.754 .0002 19315.460
X9 .9465569556 .57796378 1.638 .1015 .70000000E-
01
X10 -.5666732783 .22405634 -2.529 .0114 1.5200000
X11 1.680590270 .90514208 1.857 .0634 .83048572
X12 -.9699117456 .36295919 -2.672 .0075 .25000000

```

```

-----+-----+-----+-----+-----+-----+-----+-----+
| Partial derivatives of probabilities with
| respect to the vector of characteristics.
| They are computed at the means of the Xs.
| Observations used for means are All Obs.
|-----+-----+-----+-----+-----+-----+-----+-----+

```

```

-----+-----+-----+-----+-----+-----+-----+-----+
| Variable | Coefficient | Standard Error | b/St.Er. | P[|Z|>z] | Mean of X |
|-----+-----+-----+-----+-----+-----+-----+-----+

```

Marginal effects on Prob[Y = 1]

Constant	-.2707149194E-01	.34572273	-.078	.9376	
X1	-.6197125773E-05	.29045316E-05	-2.134	.0329	33680.870
X2	-.1127355817E-01	.58675237E-02	-1.921	.0547	44.570000
X3	.4605180775	.66976847E-01	6.876	.0000	.43000000
X4	-.9066627046E-07	.11560151E-06	-.784	.4329	584110.00
X5	-.3718322836E-01	.96077161E-01	-.387	.6987	.15000000
X6	.1088596121E-02	.53958531E-03	2.017	.0436	183.89000
X7	.1706862309	.35309580	.483	.6288	.19866992
X8	.1791052899E-04	.45816638E-05	3.909	.0001	19315.460
X9	.2320051390	.14102508	1.645	-.0999	.70000000E-
X10	-.1388940327	.54166745E-01	-2.564	.0103	1.5200000
X11	.4119198289	.22364854	1.842	.0655	.83048572
X12	-.2377294975	.88207475E-01	-2.695	.0070	.25000000

Fit Measures for Binomial Choice Model		
Logit model for variable Z		
Proportions P0=	.500000	P1= .500000
N =	400	N0= 200 N1= 200
LogL =	-202.06550	LogL0 = -277.2589
Efron	.32762	McFadden
Cramer	.32803	.27120
		Ben./Lerman
		.66402
		Rsqr ML
		.31337
Information	Akaike I.C.	Schwartz I.C.
Criteria	1.07533	482.02004

Frequencies of actual & predicted outcomes
 Predicted outcome has maximum probability.

	Predicted		
	0	1	Total
Actual			
0	156	44	200
1	56	144	200
Total	212	188	400

ผลวิเคราะห์ Logit model เมื่อตัดตัวแปรที่ไม่มีนัยสำคัญ ครั้งที่ 1

* NOTE: Deleted 1 observations with missing data. N is now 400 *

Normal exit from iterations. Exit status=0.

Multinomial Logit Model
Maximum Likelihood Estimates

Dependent variable	Z
Weighting variable	ONE
Number of observations	400
Iterations completed	7
Log likelihood function	-208.5874
Restricted log likelihood	-277.2589
Chi-squared	137.3429
Degrees of freedom	6
Significance level	.0000000

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Characteristics in numerator of Prob[Y = 1]					
Constant	-.9204711802	.50837909	-1.811	.0702	
X1	-.3375745557E-04	.91265305E-05	-3.699	.0002	33680.870
X3	1.694333158	.25312777	6.694	.0000	.43000000
X6	.6592964088E-02	.17209692E-02	3.831	.0001	183.89000
X8	.8083726271E-04	.17874510E-04	4.522	.0000	19315.460
X10	-.6902146507	.19279012	-3.580	.0003	1.5200000
X12	-.5019417742	.28054749	-1.789	.0736	.25000000

Partial derivatives of probabilities with respect to the vector of characteristics. They are computed at the means of the Xs. Observations used for means are All Obs.

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Marginal effects on Prob[Y = 1]					
Constant	-.2259655659	.12567047	-1.798	.0722	
X1	-.8287084610E-05	.22204125E-05	-3.732	.0002	33680.870
X3	.4159401827	.61719896E-01	6.739	.0000	.43000000
X6	.1618500278E-02	.42219455E-03	3.834	.0001	183.89000
X8	.1984466022E-04	.42308471E-05	4.690	.0000	19315.460
X10	-.1694401167	.46573269E-01	-3.638	.0003	1.5200000
X12	-.1232211931	.68626680E-01	-1.796	.0726	.25000000

Fit Measures for Binomial Choice Model		
Logit model for variable Z		
Proportions P0=	.500000	P1= .500000
N =	400 N0= 200	N1= 200
LogL =	-208.58741	LogL0 = -277.2589
Efron	McFadden	Ben./Lerman
.30001	.24768	.65063
Cramer	Veall/Zim.	Rsqr ML
.30126	.43997	.29062
Information	Akaike I.C.	Schwartz I.C.

```
| Criteria           1.07794      459.11507 |
+-----+-----+
Frequencies of actual & predicted outcomes
Predicted outcome has maximum probability.
```

Actual	Predicted		Total
	0	1	
0	156	44	200
1	56	144	200
Total	212	188	400

ผลวิเคราะห์ Logit model เมื่อตัดตัวแปรที่ไม่มีนัยสำคัญ ครั้งที่ 2

```
* NOTE: Deleted      1 observations with missing data. N is now      400 *
*****
Normal exit from iterations. Exit status=0.
```

Multinomial Logit Model	
Maximum Likelihood Estimates	
Dependent variable	Z
Weighting variable	ONE
Number of observations	400
Iterations completed	7
Log likelihood function	-210.2192
Restricted log likelihood	-277.2589
Chi-squared	134.0794
Degrees of freedom	5
Significance level	.0000000

```
+-----+-----+-----+-----+-----+-----+
+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Characteristics in numerator of Prob[Y = 1]					
X1	-.3266060314E-04	.89919563E-05	-3.632	.0003	33680.870
X3	1.641886069	.24873432	6.601	.0000	.43000000
X6	.6124285750E-02	.16720078E-02	3.663	.0002	183.89000
X8	.7678552235E-04	.17538398E-04	4.378	.0000	19315.460
X10	-.6849775133	.19188107	-3.570	.0004	1.5200000
Constant	-.9312839487	.50076488	-1.860	.0629	

Partial derivatives of probabilities with respect to the vector of characteristics. They are computed at the means of the Xs. Observations used for means are All Obs.

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Marginal effects on Prob[Y = 1]					
X1	-.8045921217E-05	.21986002E-05	-3.660	.0003	33680.870
X3	.4044777097	.61004758E-01	6.630	.0000	.43000000
X6	.1508714351E-02	.41221627E-03	3.660	.0003	183.89000
X8	.1891607025E-04	.41908040E-05	4.514	.0000	19315.460
X10	-.1687438252	.46592486E-01	-3.622	.0003	1.5200000
Constant	-.2294212771	.12418639	-1.847	.0647	

Fit Measures for Binomial Choice Model Logit model for variable Z			
Proportions P0= .500000		P1= .500000	
N = 400	N0= 200	N1= 200	
LogL = -210.21919		LogL0 = -277.2589	
Efron	McFadden	Ben./Lerman	
.29290	.24179	.64729	
Cramer	Veall/Zim.	Rsqr ML	
.29457	.43214	.28480	
Information Criteria	Akaike	I.C.	Schwartz I.C.
	1.08110	456.38717	

Frequencies of actual & predicted outcomes
Predicted outcome has maximum probability.

Actual	Predicted		Total
	0	1	
0	152	48	200
1	64	136	200
Total	216	184	400



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright© by Chiang Mai University
All rights reserved

ประวัติผู้เขียน

ชื่อ - สกุล	นางสาววนิดา จันทวงศ์
วันเดือนปีเกิด	29 พฤษภาคม 2520
ประวัติการศึกษา	ปริญญาตรีบริหารธุรกิจ (การบัญชี) สถาบันเทคโนโลยีราชมงคลวิทยาเขตภาคพายัพ
ประวัติการทำงาน	<p>พ.ศ. 2543 - 2544 พนักงานปฏิบัติการ 3 ธนาคารออมสินสาขาเชียงใหม่ จ.เชียงใหม่</p> <p>พ.ศ. 2544 - 2546 พนักงานปฏิบัติการ 4 กลุ่มงานบุคลากร ภาค 6 ธนาคารออมสินภาค 6 จ.อุตรดิตถ์</p> <p>พ.ศ. 2546 - 2547 พนักงานปฏิบัติการ 5 กลุ่มงานบุคลากร ภาค 6 ธนาคารออมสินภาค 6 จ.อุตรดิตถ์</p> <p>พ.ศ. 2547 - 2548 พนักงานปฏิบัติการ 6 ธนาคารออมสินสาขาแม่ทะ จ.ลำปาง</p> <p>พ.ศ. 2548 - 2549 พนักงานปฏิบัติการ 6 ธนาคารออมสินสาขาแม่แตง จ.เชียงใหม่</p> <p>พ.ศ. 2549 - 2550 พนักงานปฏิบัติการ 7 ธนาคารออมสินสาขาแม่แตง จ.เชียงใหม่</p>