



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

Copyright © by Chiang Mai University

All rights reserved

ภาคผนวก ก

ผลการวิเคราะห์โดยใช้วิธีการของแบบจำลอง Logit

```

-----
Multinomial logit model
There are 2 outcomes for LH variable BUS
These are the OLS start values based on the
binary variables for each outcome Y(i) = j.
Coefficients for LHS=0 outcome are set to 0.0
-----

```

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Characteristics in numerator of Prob[Y = 1]					
Constant	.2507830157	.10492920	2.390	.0168	
GENDER	-.1159321516E-01	.28156116E-01	-.412	.6805	.45750000
AGE	-.5811885897E-03	.16294520E-02	-.357	.7213	30.152500
INCOME	-.2097655760E-05	.17032664E-05	-1.232	.2181	9026.7500
STATUS	.5728060193E-01	.37343998E-01	1.534	.1251	.61250000
LOCAL1	.1758022224E-01	.60426460E-01	.291	.7711	.49500000
LOCAL2	-.1190964176E-01	.62556654E-01	-.190	.8490	.32250000
LOCAL3	.5094228805E-01	.70606852E-01	.721	.4706	.12250000
EDU	.1033381814E-02	.31953779E-01	.032	.9742	.42250000
OCC	-.6327874476E-01	.31890447E-01	-1.984	.0472	.68000000
FAST	.5229292771	.35741611E-01	14.631	.0000	.53250000
PRICE	-.4543897979E-01	.29976012E-01	-1.516	.1296	.56500000
NUMBER	.1805464618	.38482450E-01	4.692	.0000	.63250000
SAFE	-.2473591313	.35986007E-01	-6.874	.0000	.77000000
CLEAN	.1394988754	.36923254E-01	3.778	.0002	.67500000
SER	-.5702714713E-01	.30594127E-01	-1.864	.0623	.57750000
TIME	.1305136006	.34740952E-01	3.757	.0002	.65500000
ETC	-.4843772688E-01	.35506546E-01	-1.364	.1725	.74000000

Normal exit from iterations. Exit status=0.

```

-----
Multinomial Logit Model
Maximum Likelihood Estimates
Dependent variable          BUS
Weighting variable          ONE
Number of observations      400
Iterations completed         8
Log likelihood function     -74.88354
Restricted log likelihood   -277.2589
Chi-squared                 404.7507
Degrees of freedom          17
Significance level           .0000000
-----

```

Variable	Coefficient	Standard Error	b/St.Er.	P[Z >z]	Mean of X
Characteristics in numerator of Prob[Y = 1]					
Constant	-.9273184165	1.6253651	-.571	.5683	
GENDER	.7746884551E-02	.45524146	.017	.9864	.45750000
AGE	.9599926482E-02	.26207817E-01	.366	.7141	30.152500
INCOME	-.1296660302E-03	.57906324E-04	-2.239	.0251	9026.7500
STATUS	.7563894305	.58921646	1.284	.1992	.61250000
LOCAL1	-.2981640851E-01	.85434748	-.035	.9722	.49500000
LOCAL2	-.3917046729	.92503918	-.423	.6720	.32250000
LOCAL3	.1746280652	1.0564560	.165	.8687	.12250000
EDU	.2751350113	.58243482	.472	.6367	.42250000
OCC	-1.452890166	.61081654	-2.379	.0174	.68000000
FAST	4.326042243	.59075081	7.323	.0000	.53250000
PRICE	-.8675004109	.50253618	-1.726	.0843	.56500000
NUMBER	1.911812307	.58967343	3.242	.0012	.63250000
SAFE	-4.081954440	.79367263	-5.143	.0000	.77000000

CLEAN	2.523861105	.71063676	3.552	.0004	.67500000
SER	-1.009425579	.54060430	-1.867	.0619	.57750000
TIME	1.803960264	.57366063	3.145	.0017	.65500000
ETC	-.5804100976	.59814143	-.970	.3319	.74000000

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	-.2133428415	.37328109	-.572	.5676	
GENDER	.1782281397E-02	.10472628	.017	.9864	.45750000
AGE	.2208600150E-02	.60478175E-02	.365	.7150	30.152500
INCOME	-.2983152156E-04	.12882332E-04	-2.316	.0206	9026.7500
STATUS	.1740181878	.13666441	1.273	.2029	.61250000
LOCAL1	-.6859690482E-02	.19651662	-.035	.9722	.49500000
LOCAL2	-.9011725255E-01	.21209181	-.425	.6709	.32250000
LOCAL3	.4017567965E-01	.24340067	.165	.8689	.12250000
EDU	.6329873760E-01	.13446152	.471	.6378	.42250000
OCC	-.3342581262	.14199826	-2.354	.0186	.68000000
FAST	.9952677829	.13350473	7.455	.0000	.53250000
PRICE	-.1995808552	.11651968	-1.713	.0867	.56500000
NUMBER	.4398397172	.13545288	3.247	.0012	.63250000
SAFE	-.9391118989	.18936113	-4.959	.0000	.77000000
CLEAN	.5806502816	.15673471	3.705	.0002	.67500000
SER	-.2322327664	.12521261	-1.855	.0636	.57750000
TIME	.4150268148	.13411325	3.095	.0020	.65500000
ETC	-.1335316297	.13638284	-.979	.3275	.74000000

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

Actual	Predicted		Total
	0	1	
0	184	16	200
1	12	188	200
Total	196	204	400

ภาคผนวก ข

ผลการวิเคราะห์ Correlation

Descriptive Statistics
All results based on nonmissing observations.

Variable	Mean	Std.Dev.	Minimum	Maximum	Cases
GENDER	.457500000	.498814384	.000000000	1.000000000	400
AGE	30.1525000	11.2387730	14.0000000	69.0000000	400
INCOME	9026.75000	9300.24838	1500.00000	120000.000	400
STATUS	.612500000	.487789500	.000000000	1.000000000	400
LOCAL1	.495000000	.500601142	.000000000	1.000000000	400
LOCAL2	.322500000	.468018540	.000000000	1.000000000	400
LOCAL3	.122500000	.328272993	.000000000	1.000000000	400
EDU	.422500000	.494575842	.000000000	1.000000000	400
OCC	.680000000	.467060342	.000000000	1.000000000	400
FAST	.532500000	.499567482	.000000000	1.000000000	400
PRICE	.565000000	.496377858	.000000000	1.000000000	400
NUMBER	.632500000	.482727994	.000000000	1.000000000	400
SAFE	.770000000	.421359537	.000000000	1.000000000	400
CLEAN	.675000000	.468961418	.000000000	1.000000000	400
SER	.577500000	.494575842	.000000000	1.000000000	400
TIME	.655000000	.475963605	.000000000	1.000000000	400
ETC	.740000000	.439183567	.000000000	1.000000000	400
BUS	.500000000	.500626174	.000000000	1.000000000	400

Correlation Matrix for Listed Variables

	GENDER	AGE	INCOME	STATUS	LOCAL1	LOCAL2	LOCAL3	EDU
GENDER	1.00000	.02776	.02324	.06090	.01420	-.02166	-.03700	-.00323
AGE	.02776	1.00000	.36279	-.58900	-.13506	.13976	.02413	-.09368
INCOME	.02324	.36279	1.00000	-.23849	-.10208	.09797	.00576	.16529
STATUS	.06090	-.58900	-.23849	1.00000	.12034	-.03307	-.18802	.22323
LOCAL1	.01420	-.13506	-.10208	.12034	1.00000	-.68307	-.36991	-.07749
LOCAL2	-.02166	.13976	.09797	-.03307	-.68307	1.00000	-.25778	.10283
LOCAL3	-.03700	.02413	.00576	-.18802	-.36991	-.25778	1.00000	-.07259
EDU	-.00323	-.09368	.16529	.22323	-.07749	.10283	-.07259	1.00000
	GENDER	AGE	INCOME	STATUS	LOCAL1	LOCAL2	LOCAL3	EDU
OCC	-.04776	-.17307	-.19512	.18041	.13249	-.05412	-.15235	-.18358
FAST	-.02462	-.02120	-.17187	-.01504	.09586	-.12534	.05972	-.16222
PRICE	.05674	-.00874	-.18231	.00595	.03157	-.09585	.03561	-.21934
NUMBER	-.03901	-.13886	-.23065	.02169	.03905	-.15079	.12664	-.21932
SAFE	.10839	.09052	.07627	-.04451	-.11240	.07206	.04113	-.04967
CLEAN	-.04848	.00990	-.06862	-.05889	.03576	-.08079	.06390	-.21693
SER	-.00693	.06483	-.00499	.01571	.00663	-.02704	.01084	-.08809
TIME	.03309	-.02715	-.20537	-.06990	.00326	-.00557	.06264	-.22034
	OCC	FAST	PRICE	NUMBER	SAFE	CLEAN	SER	TIME
OCC	1.00000	-.07347	.01427	-.01156	.01987	-.02975	-.00087	.03202
FAST	-.07347	1.00000	.01673	.53291	-.25015	.43032	.13179	.39511
PRICE	.01427	.01673	1.00000	.09471	.15554	.02638	.15809	.11637
NUMBER	-.01156	.53291	.09471	1.00000	-.21945	.45640	.22982	.40671
SAFE	.01987	-.25015	.15554	-.21945	1.00000	.01395	.07372	-.03424
CLEAN	-.02975	.43032	.02638	.45640	.01395	1.00000	.34660	.36099
SER	-.00087	.13179	.15809	.22982	.07372	.34660	1.00000	.14581
TIME	.03202	.39511	.11637	.40671	-.03424	.36099	.14581	1.00000
	GENDER	AGE	INCOME	STATUS	LOCAL1	LOCAL2	LOCAL3	EDU
ETC	.02952	.00298	-.08966	-.01521	.01687	-.07877	.06502	-.05838
BUS	-.05520	-.11292	-.21615	.04618	.10001	-.14441	.08388	-.13665

	OCC	FAST	PRICE	NUMBER	SAFE	CLEAN	SER	TIME
ETC	-.00342	.30134	.13520	.32841	.06880	.29448	.19685	.34914
BUS	-.08575	.76662	-.04034	.59632	-.40396	.44836	.08604	.43124

	ETC	BUS
ETC	1.00000	.22798
BUS	.22798	1.00000



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
 Copyright © by Chiang Mai University
 All rights reserved

ประวัติผู้เขียน

ชื่อ นางสาวพวงพิศ วิเศษสุวรรณภูมิ

วัน เดือน ปี เกิด 5 กุมภาพันธ์ 2525

ประวัติการศึกษา สำเร็จการศึกษาดอนปลาย โรงเรียนภูเก็ตวิทยาลัย จังหวัดภูเก็ต
ปีการศึกษา 2543
สำเร็จการศึกษาปริญญาบริหารธุรกิจบัณฑิต สาขาการตลาด
มหาวิทยาลัยสงขลานครินทร์ วิทยาเขตหาดใหญ่ ปีการศึกษา
2547

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
Copyright © by Chiang Mai University
All rights reserved