

ภาคผนวก

Discriminant

Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		114	100.0
Excluded	Missing or out-of-range group codes	0	.0
	At least one missing discriminating variable	0	.0
	Both missing or out-of-range group codes and at least one missing discriminating variable	0	.0
	Total	0	.0
Total		114	100.0

Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
CFO/TL	.855	18.983	1	112	.000
NCFO	.948	6.159	1	112	.015
CA/CL	.761	35.157	1	112	.000
QA/CL	.819	24.785	1	112	.000
WC/TA	.758	35.803	1	112	.000
TL/TE	.987	1.424	1	112	.235
TL/TA	.600	74.567	1	112	.000
CL/TL	.964	1.840	1	112	.178
RE/TA	.764	34.521	1	112	.000
ECPROF	.978	2.507	1	112	.116
NCA/LTF	.954	5.351	1	112	.023
CLP/TLL	.985	1.740	1	112	.190
NS/TA	.818	24.970	1	112	.000
OI/TA	.860	18.263	1	112	.000
ARTURN	.991	.961	1	112	.329
INVTURN	.994	.627	1	112	.430
GP/NP	.986	1.632	1	112	.204
ROA	.873	16.351	1	112	.000

Stepwise Statistics

Variables Entered/Removed^a

Step	Entered	Wilks' Lambda							
		Statistic	df1	df2	df3	Exact F			
						Statistic	df1	df2	Sig.
1	TL/TA	.600	1	1	112.000	74.567	1	112.000	.000
2	NS/TA	.488	2	1	112.000	58.150	2	111.000	.000
3	RE/TA	.410	3	1	112.000	52.871	3	110.000	.000
4	CA/CL	.381	4	1	112.000	44.210	4	109.000	.000
5	WC/TA	.348	5	1	112.000	40.431	5	108.000	.000

At each step, the variable that minimizes the overall Wilks' Lambda is entered.

- a. Maximum number of steps is 36.
- b. Maximum significance of F to enter is .05.
- c. Maximum significance of F to remove is .10.
- d. F level, tolerance, or VIF insufficient for further computation.

Variables in the Analysis

Step		Tolerance	Sig. of F to Remove	Wilks' Lambda
1	TL/TA	1.000	.000	
2	TL/TA	.972	.000	.818
	NS/TA	.972	.000	.600
3	TL/TA	.150	.000	.637
	NS/TA	.925	.000	.528
	RE/TA	.154	.000	.488
4	TL/TA	.150	.000	.561
	NS/TA	.915	.000	.497
	RE/TA	.153	.000	.459
	CA/CL	.875	.005	.410
5	TL/TA	.127	.000	.557
	NS/TA	.856	.000	.478
	RE/TA	.146	.001	.389
	CA/CL	.591	.000	.405
	WC/TA	.204	.002	.381

Wilks' Lambda

Step	Number of Variables	Lambda	df1	df2	df3	Exact F			
						Statistic	df1	df2	Sig.
1	1	.600	1	1	112	74.567	1	112.000	1.356E-14
2	2	.488	2	1	112	58.150	2	111.000	.000
3	3	.410	3	1	112	52.871	3	110.000	3.033E-21
4	4	.381	4	1	112	44.210	4	109.000	5.116E-22
5	5	.348	5	1	112	40.431	5	108.000	2.996E-23

Summary of Canonical Discriminant Functions

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	1.872 ^a	100.0	100.0	.807

a. First 1 canonical discriminant functions were used in the analysis.

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	.348	115.517	5	.000

Standardized Canonical Discriminant Function Coefficients

	Function	
	1	
CA/CL	-.602	
WC/TA	.807	
TL/TA	2.130	
RE/TA	1.045	
NS/TA	-.698	

Canonical Discriminant Function Coefficients

	Function	
	1	
CA/CL	-.597	
WC/TA	1.961	
TL/TA	6.418	
RE/TA	2.477	
NS/TA	-1.216	
(Constant)	-2.397	

Unstandardized coefficients

Functions at Group Centroids

	Function	
	1	
Default	1.356	
normal	-1.356	

Unstandardized canonical discriminant functions evaluated at group means

Classification Results^{b,c}

			Predicted Group Membership		Total
			Default	normal	
Original	Count	Default	56	1	57
		normal	3	54	57
	%	Default	98.2	1.8	100.0
		normal	5.3	94.7	100.0
Cross-validated ^a	Count	Default	55	2	57
		normal	4	53	57
	%	Default	96.5	3.5	100.0
		normal	7.0	93.0	100.0

a. Cross validation is done only for those cases in the analysis. In cross validation, each case is classified by the functions derived from all cases other than that case.

b. 96.5% of original grouped cases correctly classified.

c. 94.7% of cross-validated grouped cases correctly classified.

Logistic Regression

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	114	100.0
	Missing Cases	0	.0
	Total	114	100.0
Unselected Cases		0	.0
Total		114	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Default	0
normal	1

Block 1: Method = Forward Stepwise (Conditional)

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	95.520	1	.000
	Block	95.520	1	.000
	Model	95.520	1	.000
Step 2	Step	16.787	1	.000
	Block	112.308	2	.000
	Model	112.308	2	.000
Step 3	Step	9.656	1	.002
	Block	121.963	3	.000
	Model	121.963	3	.000
Step 4	Step	8.622	1	.003
	Block	130.585	4	.000
	Model	130.585	4	.000
Step 5	Step	8.888	1	.003
	Block	139.473	5	.000
	Model	139.473	5	.000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	62.517	.567	.757
2	45.730	.627	.835
3	36.074	.657	.876
4	27.453	.682	.909
5	18.564	.706	.941

Hosmer and Lemeshow Test

Step	Chi-square	df	Sig.
1	6.225	8	.622
2	1.290	8	.996
3	5.942	8	.654
4	.777	8	.999
5	7.733	8	.460

Classification Table^a

Observed		Predicted		
		ทำนาย		Percentage Correct
		Default	normal	
Step 1	ทำนาย Default	51	6	89.5
	normal	6	51	89.5
	Overall Percentage			89.5
Step 2	ทำนาย Default	52	5	91.2
	normal	6	51	89.5
	Overall Percentage			90.4
Step 3	ทำนาย Default	55	2	96.5
	normal	4	53	93.0
	Overall Percentage			94.7
Step 4	ทำนาย Default	55	2	96.5
	normal	3	54	94.7
	Overall Percentage			95.6
Step 5	ทำนาย Default	56	1	98.2
	normal	1	56	98.2
	Overall Percentage			98.2

a. The cut value is .500

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
								Lower	Upper
Step 1 ^a	X7	-13.226	2.529	27.348	1	.000	.000	.000	.000
	Constant	8.537	1.677	25.923	1	.000	5101.205		
Step 2 ^b	X7	-14.097	2.964	22.619	1	.000	.000	.000	.000
	X13	3.139	.967	10.531	1	.001	23.089	3.467	153.767
	Constant	6.971	1.771	15.494	1	.000	1064.973		
Step 3 ^c	X7	-24.063	5.628	18.280	1	.000	.000	.000	.000
	X9	-9.393	3.468	7.334	1	.007	.000	.000	.075
	X13	4.178	1.208	11.966	1	.001	65.212	6.114	695.493
	Constant	12.759	3.347	14.527	1	.000	347508.158		
Step 4 ^d	X3	1.251	.482	6.720	1	.010	3.493	1.357	8.991
	X7	-33.282	8.945	13.845	1	.000	.000	.000	.000
	X9	-16.420	5.511	8.877	1	.003	.000	.000	.004
	X13	5.723	1.718	11.092	1	.001	305.680	10.537	8867.543
	Constant	16.296	4.809	11.482	1	.001	11952410.045		
Step 5 ^e	X3	3.408	1.218	7.463	1	.006	30.208	2.620	348.351
	X5	-11.261	4.722	5.688	1	.017	.000	.000	.134
	X7	-44.642	12.787	12.189	1	.000	.000	.000	.000
	X9	-18.363	5.948	9.532	1	.002	.000	.000	.001
	X13	7.453	2.293	10.563	1	.001	1724.865	19.269	154404.265
	Constant	19.382	6.088	10.114	1	.001	256419608.792		

- a. Variable(s) entered on step 1: X7.
- b. Variable(s) entered on step 2: X13.
- c. Variable(s) entered on step 3: X9.
- d. Variable(s) entered on step 4: X3.
- e. Variable(s) entered on step 5: X5.

Step Summary^{a,b}

Step	Improvement			Model			Correct Class %	Variable
	Chi-square	df	Sig.	Chi-square	df	Sig.		
1	95.520	1	.000	95.520	1	.000	89.5%	IN: X7
2	16.787	1	.000	112.308	2	.000	90.4%	IN: X13
3	9.656	1	.002	121.963	3	.000	94.7%	IN: X9
4	8.622	1	.003	130.585	4	.000	95.6%	IN: X3
5	8.888	1	.003	139.473	5	.000	98.2%	IN: X5

- a. No more variables can be deleted from or added to the current model.
- b. End block: 1