

Lampiran 2
Output SPSS versi 11.5

Discriminant

Analysis Case Processing Summary

Unweighted Cases		N	Percent
Valid		34	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		34	100,0

Group Statistics

Y		Mean	Std. Deviation	Valid N (listwise)	
				Unweighted	Weighted
0	X1	,1595432	,07445871	26	26,000
	X2	,8682647	,08005334	26	26,000
	X3	1,6445595	,45330995	26	26,000
	X4	,0310066	,00749514	26	26,000
	X5	,0464146	,02971127	26	26,000
	X6	4,9488427	4,18987982	26	26,000
	X7	,0327581	,02353752	26	26,000
1	X1	,1276674	,03596398	8	8,000
	X2	,7902860	,11493588	8	8,000
	X3	1,4759506	,33602601	8	8,000
	X4	,0209659	,01533317	8	8,000
	X5	,0222330	,02123416	8	8,000
	X6	18,04317	8,25803402	8	8,000
	X7	,0102462	,02395896	8	8,000
Total	X1	,1520430	,06828467	34	34,000
	X2	,8499167	,09372504	34	34,000
	X3	1,6048868	,42999508	34	34,000
	X4	,0286441	,01054129	34	34,000
	X5	,0407248	,02954325	34	34,000
	X6	8,0298600	7,71692941	34	34,000
	X7	,0274612	,02520759	34	34,000

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Tests of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
X1	,960	1,347	1	32	,254
X2	,872	4,711	1	32	,038
X3	,971	,939	1	32	,340
X4	,832	6,470	1	32	,016
X5	,876	4,538	1	32	,041
X6	,466	36,634	1	32	,000
X7	,852	5,552	1	32	,025

Pooled Within-Groups Matrices^a

	X1	X2	X3	X4	X5	X6	X7	
Covariance	X1	,005	,000	,010	,000	,000	,062	,001
	X2	,000	,008	,002	,000	,001	,004	,000
	X3	,010	,002	,185	,001	-,003	,364	,008
	X4	,000	,000	,001	9,532E-05	3,127E-05	-,001	2,969E-06
	X5	,000	,001	-,003	3,127E-05	,001	-,038	,000
	X6	,062	,004	,364	-,001	-,038	28,633	,012
	X7	,001	,000	,008	2,969E-06	,000	,012	,001
Correlation	X1	1,000	,060	,348	,281	-,119	,171	,341
	X2	,060	1,000	,051	-,268	,246	,009	-,067
	X3	,348	,051	1,000	,257	-,261	,158	,761
	X4	,281	-,268	,257	1,000	,114	-,026	,013
	X5	-,119	,246	-,261	,114	1,000	-,250	-,366
	X6	,171	,009	,158	-,026	-,250	1,000	,097
	X7	,341	-,067	,761	,013	-,366	,097	1,000

a. The covariance matrix has 32 degrees of freedom.

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Covariance Matrices^a

Y		X1	X2	X3	X4	X5	X6	X7
0	X1	,006	,000	,011	,000	,000	,100	,001
	X2	,000	,006	,003	,000	,001	-,012	,000
	X3	,011	,003	,205	,002	-,003	,894	,008
	X4	,000	,000	,002	5,618E-05	-1,54E-05	,009	6,405E-05
	X5	,000	,001	-,003	-1,54E-05	,001	-,056	,000
	X6	,100	-,012	,894	,009	-,056	17,555	,041
	X7	,001	,000	,008	6,405E-05	,000	,041	,001
1	X1	,001	8,685E-05	,006	,000	,000	-,072	,000
	X2	8,685E-05	,013	-,001	-,001	,001	,062	,000
	X3	,006	-,001	,113	-,002	-,002	-1,529	,007
	X4	,000	-,001	-,002	,000	,000	-,038	,000
	X5	,000	,001	-,002	,000	,000	,028	,000
	X6	-,072	,062	-1,529	-,038	,028	68,195	-,089
	X7	,000	,000	,007	,000	,000	-,089	,001
Total	X1	,005	,001	,011	,000	-7,64E-05	-,017	,001
	X2	,001	,009	,004	-8,00E-05	,001	-,185	,000
	X3	,011	,004	,185	,001	-,002	-,056	,008
	X4	,000	-8,00E-05	,001	,000	7,533E-05	-,026	4,478E-05
	X5	-7,64E-05	,001	-,002	7,533E-05	,001	-,095	,000
	X6	-,017	-,185	-,056	-,026	-,095	59,551	-,043
	X7	,001	,000	,008	4,478E-05	,000	-,043	,001

a. The total covariance matrix has 33 degrees of freedom.

Analysis 1

Box's Test of Equality of Covariance Matrices

Log Determinants

Y	Rank	Log Determinant
0	7	-35,571
1	7	-40,111
Pooled within-groups	7	-34,264

The ranks and natural logarithms of determinants printed are those of the group covariance matrices.

Test Results

Box's M		64,950
F	Approx.	1,346
	df1	28
	df2	595,493
	Sig.	,112

Tests null hypothesis of equal population covariance matrices.

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Summary of Canonical Discriminant Functions

Eigenvalues

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	2,110 ^a	100,0	100,0	,824

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

Wilks' Lambda

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1	,321	32,341	7	,000

Standardized Canonical Discriminant Function Coefficients

	Function
	1
X1	-,003
X2	,484
X3	-,535
X4	,542
X5	,059
X6	-,706
X7	,811

Structure Matrix

	Function
	1
X6	-,737
X4	,310
X7	,287
X2	,264
X5	,259
X1	,141
X3	,118

Pooled within-groups correlations between discriminating variables and standardized canonical discriminant functions
Variables ordered by absolute size of correlation within function.

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Canonical Discriminant Function Coefficients

	Function
	1
X1	-,039
X2	5,443
X3	-1,244
X4	55,530
X5	2,088
X6	-,132
X7	34,315
(Constant)	-4,181

Unstandardized coefficients

Functions at Group Centroids

Y	Function
	1
0	,782
1	-2,541

Unstandardized canonical discriminant functions evaluated at group means

Classification Statistics

Classification Processing Summary

Processed		34
Excluded	Missing or out-of-range group codes	0
	At least one missing discriminating variable	0
Used in Output		34

Prior Probabilities for Groups

Y	Prior	Cases Used in Analysis	
		Unweighted	Weighted
0	,500	26	26,000
1	,500	8	8,000
Total	1,000	34	34,000

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Classification Function Coefficients

	Y	
	0	1
X1	-19,230	-19,100
X2	137,937	119,853
X3	-,864	3,270
X4	724,102	539,600
X5	-50,705	-57,642
X6	,130	,569
X7	95,691	-18,324
(Constant)	-70,271	-59,300

Fisher's linear discriminant functions

Classification Results^{b,c}

	Y	Predicted Group Membership		Total	
		0	1		
Original	Count	0	25	1	26
		1	0	8	8
	%	0	96,2	3,8	100,0
		1	,0	100,0	100,0
Cross-validated ^a	Count	0	24	2	26
		1	0	8	8
	%	0	92,3	7,7	100,0
		1	,0	100,0	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. 97,1% of original grouped cases correctly classified.

c. 94,1% of cross-validated grouped cases correctly classified.

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Output Z-Score

Casewise Statistics

Case Number	Actual Group	Highest Group							Second Highest Group			Discriminant Scores
		Predicted Group	P(D>d G=g)		P(G=g D=d)	Squared Mahalanobis Distance to Centroid	Group	P(G=g D=d)	Squared Mahalanobis Distance to Centroid	Function 1		
			p	df								
Original												
1	0	0	,389	1	,934	,742	6,056	,066		-0,080		
2	1	1	,184	1	,752	1,763	3,980	,248		-1,213		
3	0	0	,367	1	1,000	,812	17,841	,000		1,683		
4	0	0	,507	1	1,000	,441	15,893	,000		1,446		
5	0	0	,624	1	,980	,241	8,020	,020		,291		
6	0	0	,600	1	,999	,275	14,798	,001		1,306		
7	0	0	,324	1	,904	,974	5,454	,096		-2,050		
8	0	0	,414	1	,943	,668	6,277	,057		-0,035		
9	0	0	,396	1	,937	,720	6,120	,063		-0,067		
10	1	1	,460	1	1,000	,546	16,498	,000		-3,280		
11	0	0	,994	1	,996	,000	10,990	,004		,774		
12	0	0	,995	1	,996	,000	11,082	,004		,788		
13	0	0	,669	1	,999	,183	14,064	,001		1,209		
14	0	0	,862	1	,998	,030	12,227	,002		,956		
15	0	0	,620	1	,999	,246	14,582	,001		1,278		
16	0	0	,621	1	,980	,245	7,997	,020		,287		
17	1	1	,000	1	1,000	12,544	47,118	,000		-6,082		
18	0	0	,559	1	,999	,341	15,263	,001		1,366		
19	1	1	,679	1	,984	,172	8,458	,016		-2,127		
20	1	1	,483	1	,960	,491	6,872	,040		-1,840		
21	1	1	,423	1	,946	,642	6,358	,054		-1,740		
22	1	1	,950	1	,997	,004	11,461	,003		-2,604		
23	1	1	,271	1	,866	1,210	4,940	,134		-1,441		
24	0	1**	,108	1	,544	2,585	2,940	,456		-933		
25	0	0	,263	1	,858	1,253	4,853	,142		-338		
26	0	0	,448	1	,952	,576	6,572	,048		,023		
27	0	0	,973	1	,996	,001	10,813	,004		,748		
28	0	0	,866	1	,998	,029	12,190	,002		,951		
29	0	0	,579	1	,999	,309	15,039	,001		1,337		
30	0	0	,452	1	1,000	,567	16,607	,000		1,534		
31	0	0	,131	1	1,000	2,279	23,349	,000		2,291		
32	0	0	,655	1	,999	,200	14,207	,001		1,228		
33	0	0	,473	1	1,000	,515	16,323	,000		1,499		
34	0	0	,837	1	,998	,042	12,445	,002		,987		
Cross-validated ^a												
1	0	1**	,000	7	,836	32,935	36,198	,164				
2	1	1	,610	7	,544	5,408	5,760	,456				
3	0	0	,719	7	1,000	4,511	21,801	,000				
4	0	0	,671	7	1,000	4,908	20,334	,000				
5	0	0	,571	7	,965	5,738	12,378	,035				
6	0	0	,899	7	,999	2,843	17,099	,001				
7	0	0	,931	7	,883	2,448	6,485	,117				
8	0	0	,729	7	,911	4,432	9,073	,089				
9	0	0	,379	7	,864	7,497	11,201	,136				
10	1	1	,002	7	,999	22,393	35,946	,001				
11	0	0	,739	7	,994	4,344	14,656	,006				
12	0	0	,377	7	,994	7,515	17,693	,006				
13	0	0	,035	7	,999	15,059	28,749	,001				
14	0	0	,942	7	,997	2,286	14,020	,003				
15	0	0	,811	7	,999	3,725	17,797	,001				
16	0	0	,000	7	,653	36,905	38,168	,347				
17	1	1	,000	7	1,000	63,087	135,716	,000				
18	0	0	,000	7	1,000	49,667	66,470	,000				
19	1	1	,068	7	,883	13,189	17,223	,117				
20	1	1	,429	7	,874	7,000	10,874	,126				
21	1	1	,151	7	,709	10,730	12,511	,291				
22	1	1	,011	7	,971	18,202	25,246	,029				
23	1	1	,745	7	,757	4,293	6,560	,243				
24	0	1**	,264	7	,903	8,850	13,311	,097				
25	0	0	,516	7	,746	6,207	8,358	,254				
26	0	0	,427	7	,903	7,017	11,476	,097				
27	0	0	,685	7	,994	4,797	14,877	,006				
28	0	0	,723	7	,997	4,480	16,086	,003				
29	0	0	,984	7	,999	1,440	15,874	,001				
30	0	0	,946	7	1,000	2,232	18,149	,000				
31	0	0	,003	7	1,000	21,718	48,363	,000				
32	0	0	,495	7	,999	6,391	20,132	,001				
33	0	0	,966	7	1,000	1,890	17,521	,000				
34	0	0	,121	7	,997	11,434	23,075	,003				

For the original data, squared Mahalanobis distance is based on canonical functions.
For the cross-validated data, squared Mahalanobis distance is based on observations.

** Misclassified case

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.