ภาคผนวก ซ.

ค่าสถิติ Correlation and MRA

```
GET
  FILE='C:\Users\Admin\Desktop\New
folder\data400.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
CORRELATIONS
  /VARIABLES=X1 X2 X3 X4 X5 X6 X7 X8 X9 X10 X11 TOTY1
  /PRINT=TWOTAIL
NOSIG
  /MISSING=PAIRWISE.
```

Correlations

[DataSet1] C:\Users\Admin\Desktop\New folder\data400.sav

Correlations

		X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	TOTY1
X1	Pearson Correlation	1	.839**	.822**	.796**	.781**	.760**	.738**	.784**	.783**	.715**	.775**	.811**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X2	Pearson Correlation	.839**	1	.814**	.792**	.820**	.785**	.747**	.834**	.749**	.724**	.845**	.800**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X3	Pearson Correlation	.822**	.814**	1	.866**	.790**	.762**	.732**	.781**	.785**	.726**	.784**	.828**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X4	Pearson Correlation	.796**	.792**	.866**	1	.828**	.806**	.810**	.769**	.795**	.775**	.752**	.826**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000	.000

	N	400	400	400	400	400	400	400	400	400	400	400	400
X5	Pearson Correlation	.781**	.820**	.790**	.828**	1	.821**	.784**	.799**	.797**	.773**	.790**	.779**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X6	Pearson Correlation	.760**	.785**	.762**	.806**	.821**	1	.767**	.789**	.768**	.767**	.769**	.736**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X7	Pearson Correlation	.738**	.747**	.732**	.810**	.784**	.767**	1	.875**	.754**	.826**	.846**	.812**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X8	Pearson Correlation	.784**	.834**	.781**	.769**	.799**	.789**	.875**	1	.778**	.801**	.909**	.808**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X9	Pearson Correlation	.783**	.749**	.785**	.795**	.797**	.768**	.754**	.778**	1	.770**	.763**	.798**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X10	Pearson Correlation	.715**	.724**	.726**	.775**	.773**	.767**	.826**	.801**	.770**	1	.795**	.772**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000	.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
X11	Pearson Correlation	.775**	.845**	.784**	.752**	.790**	.769**	.846**	.909**	.763**	.795**	1	.798**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000		.000
	N	400	400	400	400	400	400	400	400	400	400	400	400
TOTY1	Pearson Correlation	.811**	.800**	.828**	.826**	.779**	.736**	.812**	.808**	.798**	.772**	.798**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
	N	400	400	400	400	400	400	400	400	400	400	400	400

**. Correlation is significant at the 0.01 level (2-tailed).

```
CORRELATIONS
  /VARIABLES=X1.11 X1.12 X2.11 X2.12 X3.11 X3.12 X3.13
TOTX1
  /PRINT=TWOTAIL
NOSIG

/MISSING=PAIRWISE.
```

Correlations

Correlations

		X1.11	X1.12	X2.11	X2.12	X3.11	X3.12	X3.13	TOTX1
X1.11	Pearson Correlation	1	.608**	.574**	.587**	.646**	.632**	.587**	.648**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400
X1.12	Pearson Correlation	.608**	1	.545**	.628**	.723**	.647**	.773**	.732**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400
X2.11	Pearson Correlation	.574**	.545**	1	.741**	.559**	.485**	.535**	.660**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400
X2.12	Pearson Correlation	.587**	.628**	.741**	1	.654**	.538**	.611**	.724**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000	.000
	N	400	400	400	400	400	400	400	400
X3.11	Pearson Correlation	.646**	.723**	.559**	.654**	1	.689**	.750**	.707**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000	.000
	N	400	400	400	400	400	400	400	400
X3.12	Pearson Correlation	.632**	.647**	.485**	.538**	.689**	1	.757**	.642**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000
	N	400	400	400	400	400	400	400	400
X3.13	Pearson Correlation	.587**	.773**	.535**	.611**	.750**	.757**	1	.714**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000		.000
	N	400	400	400	400	400	400	400	400
TOTX1	Pearson Correlation	.648**	.732**	.660**	.724**	.707**	.642**	.714**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	
	N	400	400	400	400	400	400	400	400

**. Correlation is significant at the 0.01 level (2-tailed).

```
GET
  FILE='C:\Users\Admin\Desktop\New folder\data400.sav'.
DATASET NAME DataSet1 WINDOW=FRONT.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT TOTY1
  /METHOD=ENTER X1 X2 X3 X4 X5 X6 X7 X8 X9 X10
X11
  /RESIDUALS DURBIN.
```

Regression

[DataSet1] C:\Users\Admin\Desktop\New folder\data400.sav

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	X11, X4, X9, X10, X1, X6, X5, X7, X3, X2, X8[b]		Enter

a. Dependent Variable: TOTY1

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.900[a]	.810	.805	.21385	1.806

a. Predictors: (Constant), X11, X4, X9, X10, X1, X6, X5, X7, X3, X2, X8

b. Dependent Variable: TOTY1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	75.825	11	6.893	150.734	.000[b]
	Residual	17.743	388	.046		
	Total	93.568	399			

a. Dependent Variable: TOTY1

b. Predictors: (Constant), X11, X4, X9, X10, X1, X6, X5, X7, X3, X2, X8

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.597	.101		5.889	.000		
	X1	.141	.044	.151	3.180	.002	.215	4.642
	X2	.113	.050	.123	2.263	.024	.166	6.026
	X3	.183	.044	.218	4.111	.000	.174	5.733
	X4	.112	.052	.126	2.168	.031	.145	6.900
	X5	-.019	.043	-.022	-.446	.656	.197	5.076
	X6	-.102	.040	-.117	-2.583	.010	.238	4.198
	X7	.206	.049	.238	4.214	.000	.153	6.546
	X8	.020	.052	.025	.391	.696	.119	8.433
	X9	.126	.037	.150	3.376	.001	.247	4.053
	X10	.069	.039	.080	1.769	.078	.241	4.147
	X11	.015	.052	.017	.280	.780	.132	7.595

a. Dependent Variable: TOTY1

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions											
				(Constant)	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11
1	1	11.955	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.012	31.531	.80	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
	3	.007	41.540	.02	.03	.00	.08	.03	.01	.00	.06	.04	.02	.05	.03
	4	.005	47.474	.00	.04	.09	.02	.02	.01	.04	.01	.03	.09	.14	.05
	5	.004	54.382	.00	.01	.02	.06	.00	.14	.38	.01	.00	.22	.02	.00
	6	.004	56.336	.00	.01	.01	.11	.14	.02	.01	.06	.00	.47	.01	.00
	7	.003	65.021	.02	.04	.00	.02	.01	.58	.42	.03	.00	.00	.08	.00
	8	.003	65.999	.04	.03	.06	.00	.02	.04	.10	.12	.04	.09	.68	.00
	9	.003	68.445	.06	.60	.00	.22	.01	.00	.01	.13	.01	.02	.00	.07
	10	.002	82.117	.02	.17	.56	.18	.20	.19	.01	.00	.05	.08	.00	.00
	11	.001	91.101	.03	.02	.04	.00	.00	.00	.02	.04	.68	.00	.02	.66
	12	.001	101.576	.01	.05	.22	.30	.57	.00	.01	.54	.14	.01	.00	.17

a. Dependent Variable: TOTY1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1515	4.9148	4.4393	.43593	400
Residual	-.78955	.94877	.00000	.21088	400
Std. Predicted Value	-2.954	1.091	.000	1.000	400
Std. Residual	-3.692	4.437	.000	.986	400

a. Dependent Variable: TOTY1

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT TOTX1.2
  /METHOD=ENTER X1 X2 X3 X4 X5
  /RESIDUALS DURBIN.
```

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	X5, X1, X3, X2, X4[b]		Enter

a. Dependent Variable: TOTX1.2

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.926[a]	.857	.855	.19784	1.653

a. Predictors: (Constant), X5, X1, X3, X2, X4

b. Dependent Variable: TOTX1.2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	92.138	5	18.428	470.809	.000[b]
	Residual	15.421	394	.039		
	Total	107.559	399			

a. Dependent Variable: TOTX1.2

b. Predictors: (Constant), X5, X1, X3, X2, X4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.225	.090		2.497	.013		
	X1	.143	.040	.143	3.595	.000	.229	4.364
	X2	.223	.041	.225	5.438	.000	.213	4.702
	X3	.074	.039	.082	1.872	.062	.191	5.246
	X4	.227	.042	.238	5.451	.000	.191	5.241
	X5	.290	.036	.312	7.990	.000	.238	4.199

a. Dependent Variable: TOTX1.2

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	X1	X2	X3	X4	X5
1	1	5.978	1.000	.00	.00	.00	.00	.00	.00
	2	.011	23.503	.91	.00	.00	.02	.01	.02
	3	.004	40.666	.00	.01	.05	.30	.05	.55
	4	.003	41.736	.05	.31	.21	.01	.21	.14
	5	.002	53.140	.01	.66	.50	.18	.06	.02
	6	.002	57.224	.03	.01	.24	.48	.67	.27

a. Dependent Variable: TOTX1.2

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.0917	5.0030	4.4468	.48054	400
Residual	-.98937	.74694	.00000	.19660	400
Std. Predicted Value	-2.820	1.157	.000	1.000	400
Std. Residual	-5.001	3.776	.000	.994	400

a. Dependent Variable: TOTX1.2

```
REGRESSION
```

```
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT TOTX1
  /METHOD=ENTER X1.11 X1.12 X2.11 X2.12 X3.11 X3.12
X3.13
  /RESIDUALS DURBIN.
```

Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	X3.13, X2.11, X1.11, X2.12, X3.12, X1.12, X3.11[b]		Enter

a. Dependent Variable: TOTX1

b. All requested variables entered.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.839[a]	.705	.699	.27522	1.750

a. Predictors: (Constant), X3.13, X2.11, X1.11, X2.12, X3.12, X1.12, X3.11

b. Dependent Variable: TOTX1

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.837	7	10.120	133.595	.000[b]
	Residual	29.693	392	.076		
	Total	100.531	399			

a. Dependent Variable: TOTX1

b. Predictors: (Constant), X3.13, X2.11, X1.11, X2.12, X3.12, X1.12, X3.11

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.426	.083		5.138	.000		
	X6	.265	.031	.291	8.502	.000	.293	3.410
	X7	.060	.039	.067	1.551	.122	.184	5.431
	X8	.107	.044	.126	2.427	.016	.127	7.894
	X9	.246	.029	.283	8.376	.000	.302	3.316
	X10	.033	.034	.037	.984	.326	.246	4.060
	X11	.190	.042	.214	4.556	.000	.155	6.440

a. Dependent Variable: TOTX1.1

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	X6	X7	X8	X9	X10	X11
1	1	6.972	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.012	24.339	.89	.00	.01	.02	.01	.00	.01
	3	.005	37.144	.04	.15	.06	.05	.46	.00	.06
	4	.004	43.536	.01	.84	.00	.00	.40	.02	.00
	5	.004	44.517	.02	.00	.04	.06	.11	.70	.07
	6	.002	55.238	.00	.00	.78	.00	.02	.25	.23
	7	.001	69.173	.04	.01	.11	.86	.00	.03	.63

a. Dependent Variable: TOTX1.1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1288	4.9305	4.4262	.46797	400
Residual	-.63052	.83123	.00000	.18502	400
Std. Predicted Value	-2.772	1.078	.000	1.000	400
Std. Residual	-3.382	4.459	.000	.992	400

a. Dependent Variable: TOTX1.1

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.628	.131		4.778	.000
	X1.11	.095	.035	.111	2.723	.007
	X1.12	.193	.041	.226	4.742	.000
	X2.11	.137	.039	.149	3.521	.000
	X2.12	.187	.038	.227	4.891	.000
	X3.11	.073	.037	.096	1.977	.049
	X3.12	.048	.037	.061	1.328	.185
	X3.13	.112	.044	.138	2.576	.010

a. Dependent Variable: TOTX1

Collinearity Diagnostics[a]

Model		Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	X1.11	X1.12
1	1	7.950	1.000	.00	.00	.00
	2	.014	23.644	.24	.00	.01
	3	.010	28.311	.45	.00	.00
	4	.007	32.637	.09	.62	.10
	5	.006	35.917	.02	.16	.12
	6	.005	39.381	.13	.10	.35
	7	.004	45.483	.07	.00	.00
	8	.003	49.109	.01	.10	.42

a. Dependent Variable: TOTX1

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.1655	4.8571	4.4374	.42135	400
Residual	-.92070	1.08267	.00000	.27280	400
Std. Predicted Value	-3.019	.996	.000	1.000	400
Std. Residual	-3.345	3.934	.000	.991	400

a. Dependent Variable: TOTX1