Appendix 1

Sampling Frame
APPENDIX 1 : SAMPLING FRAME AND DATA COLLECTION STATUS

<table>
<thead>
<tr>
<th>Local Commercial Bank</th>
<th>Year (See Notes)</th>
<th>Status of Collection</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maybank</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>Phileo Allied</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>The Pacific Bank</td>
<td>1 1 1 1 1 1</td>
<td>5 4</td>
<td>1 data set missing</td>
</tr>
<tr>
<td>Bank Bumiputra Malaysia</td>
<td>0 0 0 0 0 0</td>
<td>5 0</td>
<td>5 data set missing</td>
</tr>
<tr>
<td>Bank of Commerce</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>DCB/RHB</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Kwang Yik</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Sime Bank</td>
<td>1 1 1 1 1 1</td>
<td>4 0</td>
<td>4 data set missing</td>
</tr>
<tr>
<td>Public Bank</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>Hock Hua</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Perwira Affin/Afin</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td>2 data set missing</td>
</tr>
<tr>
<td>BSN</td>
<td>0 0 1 1 1 1</td>
<td>5 3</td>
<td></td>
</tr>
<tr>
<td>Hong Leong</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>Wah Tat</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Arab Malaysia</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td>1 data set missing</td>
</tr>
<tr>
<td>Bank Utama</td>
<td>1 1 1 1 1 0</td>
<td>6 5</td>
<td></td>
</tr>
<tr>
<td>Eon Bank</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>Oriental Bank</td>
<td>0 0 1 1 1 1</td>
<td>6 4</td>
<td>2 data set missing</td>
</tr>
<tr>
<td>Southern Bank</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>BHL</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Multipurpose</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>International Bank</td>
<td>1 1 1 1 1 1</td>
<td>5 5</td>
<td></td>
</tr>
<tr>
<td>Sabah Bank Berhad</td>
<td>1 1 1 1 1 1</td>
<td>5 3</td>
<td>2 data set missing</td>
</tr>
<tr>
<td>Bank Islam Malaysia</td>
<td>1 1 1 1 1 1</td>
<td>6 6</td>
<td></td>
</tr>
<tr>
<td>Total No Of Report Available</td>
<td>24 23 22 23 22 13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total No Of Report Collected</td>
<td>20 19 20 20 19 12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL PERCENTAGE OF DATA COLLECTED  127 110  87%

Note 1 : [ ] Merging or other restructuring, no annual report issued for that year
Note 2 : '1' Data collected
Note 3 : '0' Data not collected

MBA Thesis
Prepared by : Ling Seng Wah (CGA98073)
Appendix 2

Preliminary Test on Linear and Curvilinear Relationship between RROA and SD.
### Multiple Regression

**Preliminary Test Of Linear Relationship Between RROA And SD**

#### Variables Entered/Removed(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

- a All requested variables entered.
- b Dependent Variable: RROAX

#### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.204(a)</td>
<td>.042</td>
<td>.030</td>
<td>.7574</td>
</tr>
</tbody>
</table>

- a Predictors: (Constant), SD

#### ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>2.044</td>
<td>1</td>
<td>2.044</td>
<td>3.563</td>
<td>.063(a)</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>82</td>
<td>.574</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.086</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- a Predictors: (Constant), SD
- b Dependent Variable: RROAX

#### Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>.703</td>
<td>.243</td>
<td></td>
<td>2.890</td>
</tr>
<tr>
<td>SD</td>
<td>-5.712E-02</td>
<td>.030</td>
<td>-.204</td>
<td>-1.888</td>
</tr>
</tbody>
</table>

- a Dependent Variable: RROAX
Multiple Regression
Preliminary Test Of Curvilinear Relationship Between RROA And SD²

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD2(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.

b Dependent Variable: RROAX

Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.250(a)</td>
<td>.063</td>
<td>.051</td>
<td>.749</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD2

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>3.069</td>
<td>1</td>
<td>3.069</td>
<td>5.469</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>46.017</td>
<td>82</td>
<td>.561</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>49.086</td>
<td>83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD2

b Dependent Variable: RROAX

Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.540</td>
<td>.141</td>
<td>3.830</td>
</tr>
<tr>
<td></td>
<td>SD2</td>
<td>-4.153E-03</td>
<td>.002</td>
<td>-.250</td>
</tr>
</tbody>
</table>

a Dependent Variable: RROAX
Appendix 3

SSPS Output for Hierarchical Regression Analyses

Using Original Data Sets.
Model 1: Multiple Regression (Without Treatment)

Variables Entered/Removed (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RLAGX, MG, EFF, MS(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.
b Dependent Variable: RROAX

Model Summary (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.586(a)</td>
<td>.344</td>
<td>.311</td>
<td>.6384</td>
<td>.660</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), RLAGX, MG, EFF, MS
b Dependent Variable: RROAX

ANOVA (b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>16.885</td>
<td>4</td>
<td>4.221</td>
<td>10.356</td>
<td>.000(a)</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>79</td>
<td>.408</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.086</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), RLAGX, MG, EFF, MS
b Dependent Variable: RROAX
## Model 1: Multiple Regression (Without Treatment)

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>(Constant)</td>
<td>.287</td>
<td>.268</td>
<td>1.071</td>
<td>.288</td>
</tr>
<tr>
<td>MS</td>
<td>3.552</td>
<td>1.400</td>
<td>.241</td>
<td>2.537</td>
</tr>
<tr>
<td>EFF</td>
<td>-3.760</td>
<td>3.807</td>
<td>-.092</td>
<td>-.988</td>
</tr>
<tr>
<td>MG</td>
<td>-2.967</td>
<td>.725</td>
<td>-.380</td>
<td>4.092</td>
</tr>
<tr>
<td>RLAGX</td>
<td>.116</td>
<td>.045</td>
<td>.244</td>
<td>2.591</td>
</tr>
</tbody>
</table>

**Dependent Variable:** RROAX

## Collinearity Diagnostics(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Variance Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Constant)</td>
<td>MS</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>3.117</td>
<td>1.000</td>
<td>.01</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1.040</td>
<td>1.731</td>
<td>.00</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>.537</td>
<td>2.410</td>
<td>.00</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>.265</td>
<td>3.429</td>
<td>.02</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>4.170E-02</td>
<td>8.645</td>
<td>.97</td>
</tr>
</tbody>
</table>

**a Dependent Variable:** RROAX
Model 2: Multiple Regression
(Without Treatments)

Variables Entered/Removed(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD, MG, RLAGX, EFF, MS(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.
b Dependent Variable: RROAX

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.596(a)</td>
<td>.355</td>
<td>.313</td>
<td>.6372</td>
<td>.675</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD, MG, RLAGX, EFF, MS
b Dependent Variable: RROAX

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>17.418</td>
<td>5</td>
<td>3.484</td>
<td>8.580(a)</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>31.668</td>
<td>78</td>
<td>.406</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.086</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD, MG, RLAGX, EFF, MS
b Dependent Variable: RROAX
# Model 2: Multiple Regression

(Without Treatments)

## Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>.597</td>
<td>.380</td>
<td></td>
<td>1.569</td>
<td>.121</td>
<td>-.160 to 1.354</td>
<td>.872 to 1.147</td>
</tr>
<tr>
<td>MS</td>
<td>3.174</td>
<td>1.435</td>
<td>.215</td>
<td>2.212</td>
<td>.030</td>
<td>.317 to 6.032</td>
<td>.919 to 1.088</td>
</tr>
<tr>
<td>EFF</td>
<td>-2.869</td>
<td>3.879</td>
<td>-.070</td>
<td>-.740</td>
<td>.462</td>
<td>-10.590 to 4.853</td>
<td>.956 to 1.046</td>
</tr>
<tr>
<td>MG</td>
<td>-3.040</td>
<td>.726</td>
<td>-.389</td>
<td>-4.185</td>
<td>.000</td>
<td>-4.486 to -1.594</td>
<td>.924 to 1.082</td>
</tr>
<tr>
<td>RLAGX</td>
<td>.110</td>
<td>.045</td>
<td>.232</td>
<td>2.449</td>
<td>.017</td>
<td>.021 to .200</td>
<td>.891 to 1.122</td>
</tr>
<tr>
<td>SD</td>
<td>-3.091E-02</td>
<td>.027</td>
<td>-.110</td>
<td>1.146</td>
<td>.255</td>
<td>-.085 to .023</td>
<td>.891 to 1.122</td>
</tr>
</tbody>
</table>

Dependent Variable: RROAX

## Collinearity Diagnostics(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Variance Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>3.954</td>
<td>1.000</td>
<td>(Constant) .00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.059</td>
<td>1.933</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>.545</td>
<td>2.694</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>.296</td>
<td>3.656</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>.122</td>
<td>5.693</td>
<td>.02</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2.399E-02</td>
<td>12.839</td>
<td>.99</td>
</tr>
</tbody>
</table>

Dependent Variable: RROAX

---

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)

Appendix 3
Page 4 of 6
Model 3 : Multiple Regression
(Without Treatment)

Variables Entered/Removed(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SD2, MG, RLAGX, EFF, MS, SD(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.
b Dependent Variable: RROAX

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.639(a)</td>
<td>.409</td>
<td>.363</td>
<td>.6140</td>
<td>.769</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD2, MG, RLAGX, EFF, MS, SD
b Dependent Variable: RROAX

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>20.062</td>
<td>6</td>
<td>3.344</td>
<td>8.870</td>
<td>.000(a)</td>
</tr>
<tr>
<td>1 Residual</td>
<td>29.024</td>
<td>77</td>
<td>.377</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.086</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SD2, MG, RLAGX, EFF, MS, SD
b Dependent Variable: RROAX
### Model 3: Multiple Regression (Without Treatment)

#### Coefficients(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>95% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>(Constant)</td>
<td>-.541</td>
<td>.565</td>
<td></td>
<td>-.958</td>
<td>.341</td>
<td>-.1665</td>
<td>.583</td>
</tr>
<tr>
<td>MS</td>
<td>2.827</td>
<td>1.389</td>
<td>.192</td>
<td>2.035</td>
<td>.045</td>
<td>.061</td>
<td>5.593</td>
</tr>
<tr>
<td>MG</td>
<td>-3.036</td>
<td>.700</td>
<td>-.389</td>
<td>4.338</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RLAGX</td>
<td>.115</td>
<td>.043</td>
<td>.241</td>
<td>2.644</td>
<td>.010</td>
<td>.028</td>
<td>.201</td>
</tr>
<tr>
<td>SD</td>
<td>.296</td>
<td>.126</td>
<td>1.057</td>
<td>2.346</td>
<td>.022</td>
<td>.045</td>
<td>.547</td>
</tr>
<tr>
<td>SD2</td>
<td>-1.988E-02</td>
<td>.008</td>
<td>-1.197</td>
<td>2.648</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a Dependent Variable: RROAX

#### Collinearity Diagnostics(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Variance Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Constant)</td>
<td>MS</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>4.677</td>
<td>1.000</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>1.094</td>
<td>2.068</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>.575</td>
<td>2.852</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>.395</td>
<td>3.443</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>.222</td>
<td>4.586</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>3.459E-02</td>
<td>11.629</td>
<td>.23</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>2.800E-03</td>
<td>40.869</td>
<td>.77</td>
</tr>
</tbody>
</table>

*a Dependent Variable: RROAX

---

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)
Appendix 4

Residual Distribution vs Variables

Using Original Data Sets for All Models.
Model 2: Residual Distribution vs Variables
(Without Treatment)

Model 2 (Without Treatment)
Residual Distribution vs MS

Model 2 (Without Treatment)
Residual Distribution vs EFF

Model 2 (Without Treatment)
Residual Distribution vs MG

Model 2 (Without Treatment)
Residual Distribution vs RLAG

Model 2 (Without Treatment)
Residual Distribution vs SD
Model 3: Residual Distribution vs Variables (Without Treatment)

Model 3: WithOUT Treatment
Residual Distribution vs MS

Model 3: WithOUT Treatment
Residual Distribution vs EFF

Model 3: WithOUT Treatment
Residual Distribution vs MG

Model 3: WithOUT Treatment
Residual Distribution vs RLAG

Model 3: WithOUT Treatment
Residual Distribution vs SD

Model 3: WithOUT Treatment
Residual Distribution vs SD**2

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)
Appendix 5

SSPS Output For Hierarchical Regression Analyses
Using Treated Data Sets
for Heteroscedascity Phenomena
for Model 2 and Model 3.
Model 2: Multiple Regression
(With Treatment For Heterodascity (1/SD))

Variables Entered/Removed(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/SD, RLAGX/SD, MS/SD, MG/SD, EFF/SD(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.
b Dependent Variable: RROAX/SD

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.671(a)</td>
<td>.450</td>
<td>.413</td>
<td>8.102E-02</td>
<td>.982</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), 1/SD, RLAGX/SD, MS/SD, MG/SD, EFF/SD
b Dependent Variable: RROAX/SD

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>.403</td>
<td>5</td>
<td>8.061E-02</td>
<td>12.280</td>
<td>.000(a)</td>
</tr>
<tr>
<td>1</td>
<td>.492</td>
<td>75</td>
<td>6.565E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residual</td>
<td>.492</td>
<td>75</td>
<td>6.565E-03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.895</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), 1/SD, RLAGX/SD, MS/SD, MG/SD, EFF/SD
b Dependent Variable: RROAX/SD
Model 2: Multiple Regression
(With Treatment For Heteroscedasticity (1/SD))

<table>
<thead>
<tr>
<th>Coefficients(a)</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Tolerance</td>
</tr>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.900E-02</td>
<td>.025</td>
<td></td>
<td>.757</td>
<td>.451</td>
</tr>
<tr>
<td>MS/SD</td>
<td>1.560</td>
<td>1.236</td>
<td>.129</td>
<td>1.262</td>
<td>.211</td>
</tr>
<tr>
<td>EFF/SD</td>
<td>-7.457</td>
<td>3.795</td>
<td>-.307</td>
<td>-1.965</td>
<td>.053</td>
</tr>
<tr>
<td>MG/SD</td>
<td>-2.507</td>
<td>.590</td>
<td>-.440</td>
<td>-4.250</td>
<td>.000</td>
</tr>
<tr>
<td>RLAGX/SD</td>
<td>.233</td>
<td>.047</td>
<td>.437</td>
<td>4.907</td>
<td>.000</td>
</tr>
<tr>
<td>1/SD</td>
<td>-9.537E-02</td>
<td>.326</td>
<td>-.054</td>
<td>-2.93</td>
<td>.002</td>
</tr>
</tbody>
</table>

a Dependent Variable: RROAX/SD

<table>
<thead>
<tr>
<th>Coefficients(a)</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>t</td>
<td>Tolerance</td>
</tr>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.900E-02</td>
<td>.025</td>
<td></td>
<td>.757</td>
<td>.451</td>
</tr>
<tr>
<td>MS/SD</td>
<td>1.560</td>
<td>1.236</td>
<td>.129</td>
<td>1.262</td>
<td>.211</td>
</tr>
<tr>
<td>EFF/SD</td>
<td>-7.457</td>
<td>3.795</td>
<td>-.307</td>
<td>-1.965</td>
<td>.053</td>
</tr>
<tr>
<td>MG/SD</td>
<td>-2.507</td>
<td>.590</td>
<td>-.440</td>
<td>-4.250</td>
<td>.000</td>
</tr>
<tr>
<td>RLAGX/SD</td>
<td>.233</td>
<td>.047</td>
<td>.437</td>
<td>4.907</td>
<td>.000</td>
</tr>
<tr>
<td>1/SD</td>
<td>-9.537E-02</td>
<td>.326</td>
<td>-.054</td>
<td>-2.93</td>
<td>.002</td>
</tr>
</tbody>
</table>

A Dependent Variable: RROAX/SD
Model 3: Multiple Regression
(With Treatment For Heterodascity (1/SD**2))

<table>
<thead>
<tr>
<th>Model</th>
<th>Variables Entered</th>
<th>Variables Removed</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1/SD2, RLAGX/SD2, MS/SD2, MG/SD2, EFF/SD2, SD/SD2(a)</td>
<td></td>
<td>Enter</td>
</tr>
</tbody>
</table>

a All requested variables entered.
b Dependent Variable: RROAX/SD2

Model Summary(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.665(a)</td>
<td>.443</td>
<td>.398</td>
<td>1.518E-02</td>
<td>1.234</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), 1/SD2, RLAGX/SD2, MS/SD2, MG/SD2, EFF/SD2, SD/SD2
b Dependent Variable: RROAX/SD2

ANOVA(b)

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.355E-02</td>
<td>6</td>
<td>2.259E-03</td>
<td>9.800</td>
<td>.000(a)</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>74</td>
<td>2.305E-04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3.061E-02</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), 1/SD2, RLAGX/SD2, MS/SD2, MG/SD2, EFF/SD2, SD/SD2
b Dependent Variable: RROAX/SD2
Model 3: Multiple Regression
(With Treatment For Heterodascity (1/SD**2)

<table>
<thead>
<tr>
<th>Coefficients(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>MS/SD2</td>
</tr>
<tr>
<td>EFF/SD2</td>
</tr>
<tr>
<td>MG/SD2</td>
</tr>
<tr>
<td>RLAGX/SD2</td>
</tr>
<tr>
<td>SD/SD2</td>
</tr>
<tr>
<td>1/SD2</td>
</tr>
</tbody>
</table>

a Dependent Variable: RROAX/SD2

Collinearity Diagnostics(a)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimension</th>
<th>Eigenvalue</th>
<th>Condition Index</th>
<th>Condition</th>
<th>Variance Proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Constant</td>
<td>MS/SD2</td>
<td>EFF/SD2</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>4.893</td>
<td>1.000</td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>.954</td>
<td>2.265</td>
<td>.00</td>
<td>.02</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>.571</td>
<td>2.926</td>
<td>.00</td>
<td>.32</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>.402</td>
<td>3.488</td>
<td>.02</td>
<td>.11</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>.160</td>
<td>5.527</td>
<td>.01</td>
<td>.18</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>1.696E-02</td>
<td>16.987</td>
<td>.03</td>
<td>.35</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td>3.141E-03</td>
<td>39.468</td>
<td>.93</td>
<td>.00</td>
</tr>
</tbody>
</table>

a Dependent Variable: RROAX/SD2

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)
Appendix 6

Residual Distribution vs Variables

Using Treated Data Sets for Heteroscedascity Phenomena

for Model 2 and Model 3.
Model 2: Residual Distribution vs Variables
(Weighted 1/SD)

Model 2: (Weighted With 1/SD)
Residual Distribution vs MS

Model 2: (Weighted With 1/SD)
Residual Distribution vs EEF

Model 2: (Weighted With 1/SD)
Residual Distribution vs MG

Model 2: (Weighted With 1/SD)
Residual Distribution vs RLAG

Model 2: (Weighted With 1/SD)
Residual Distribution vs Constant (1/SD)
Model 3: Residual Distribution vs Variables
(Weighted SD^2)

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)
Appendix 7

Scatter Diagram of Variables Using Original Data Sets
Scatter Diagram
Dependent Variable vs Independent Variables

RROA vs MS Scatter Diagram
(Original Data Sets)

RROA vs EFF Scatter Diagram
(Original Data Sets)

RROA vs MG Scatter Diagram
(Original Data Sets)

RROA vs RLAG Scatter Diagram
(Original Data Sets)

RROA vs SD Scatter Diagram
(Original Data Sets)

MBA Thesis
Prepared by: Ling Seng Wah (CGA98073)