

ภาคผนวก ๔

ผลการประเมินค่าจากระบบสมการ

Augmented Dickey-Fuller Unit Root Test on MEG

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|--------------------|-----------|-----|----------------|---------|
| ADF Test Statistic | -7.400840 | 1% | Critical Value | -4.1896 |
| | | 5% | Critical Value | -3.5189 |
| | | 10% | Critical Value | -3.1898 |

*MacKinnon critical values for rejection of hypothesis of a unit root

Augmented Dickey Fuller Test Equation

Dependent Variable: D (MEG)

Method: Least Squares

Date: 05/07/06 Time: 22:38

Sample (adjusted): 2001: 07 2004: 12

Included observations: 42 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|-----------|
| MEG (-1) | -1.217922 | 0.164565 | -7.40084 | 0.0000 |
| C | -0.161328 | 0.076599 | 2.106145 | 0.0417 |
| @TREND (2001: 06) | 0.000979 | 0.003047 | 0.321179 | 0.7498 |
| R-squared | 0.585821 | Mean dependent var | | -0.007857 |
| Adjusted R-squared | 0.564581 | S.D. dependent var | | 0.359821 |
| S.E. of regression | 0.237432 | Akaike info criterion | | 0.030880 |
| Sum squared resid | 2.198587 | Schwarz criterion | | 0.154999 |
| Log Likelihood | 2.351529 | F-statistic | | 27.58114 |
| Durbin-Watson stat | 1.732053 | Prob (F-statistic) | | 0.000000 |

Augmented Dickey-Fuller Unit Root Test on BOTTLE

| | | | | |
|--------------------|-----------|-----|----------------|---------|
| ADF Test Statistic | -6.428655 | 1% | Critical Value | -4.1896 |
| | | 5% | Critical Value | -3.5189 |
| | | 10% | Critical Value | -3.1898 |

*MacKinnon critical values for rejection of hypothesis of a unit root

Augmented Dickey Fuller Test Equation

Dependent Variable: D (BOTTLE)

Method: Least Squares

Date: 05/07/06 Time: 22:40

Sample (adjusted): 2001: 07 2004: 12

Included observations: 42 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|--------|
| BOTTLE (-1) | -1.059064 | 0.164741 | -6.428655 | 0.0000 |
| C | 0.018939 | 0.040919 | 0.462828 | 0.6461 |
| @TREND (2001: 06) | 0.003806 | 0.001733 | 2.196447 | 0.0341 |
| R-squared | 0.514979 | Mean dependent var | 0.010000 | |
| Adjusted R-squared | 0.490106 | S.D. dependent var | 0.181901 | |
| S.E. of regression | 0.129889 | Akaike info criterion | -1.175518 | |
| Sum squared resid | 0.657979 | Schwarz criterion | -1.051398 | |
| Log Likelihood | 27.685870 | F-statistic | 20.704470 | |
| Durbin-Watson stat | 1.891000 | Prob (F-statistic) | 0.000001 | |

Augmented Dickey-Fuller Unit Root Test on POLYESTER

| | | | | |
|--------------------|-----------|-----|----------------|---------|
| ADF Test Statistic | -4.852740 | 1% | Critical Value | -4.1896 |
| | | 5% | Critical Value | -3.5189 |
| | | 10% | Critical Value | -3.1898 |

*MacKinnon critical values for rejection of hypothesis of a unit root

Augmented Dickey Fuller Test Equation

Dependent Variable: D (POLYESTER)

Method: Least Squares

Date: 05/07/06 Time: 22:41

Sample (adjusted): 2001: 07 2004: 12

Included observations: 42 after adjusting endpoints

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|--------|
| POLYESTER (-1) | -0.718717 | 0.148105 | -4.852740 | 0.0000 |
| C | -0.019127 | 0.037543 | -0.509466 | 0.6133 |
| @TREND (2001: 06) | 0.001653 | 0.001537 | 1.075467 | 0.2888 |
| R-squared | 0.377873 | Mean dependent var | -0.004286 | |
| Adjusted R-squared | 0.345969 | S.D. dependent var | 0.147733 | |
| S.E. of regression | 0.119475 | Akaike info criterion | -1.342670 | |
| Sum squared resid | 0.556697 | Schwarz criterion | -1.218550 | |
| Log Likelihood | 31.196060 | F-statistic | 11.844080 | |
| Durbin-Watson stat | 2.039214 | Prob (F-statistic) | 0.000096 | |

Dependent Variable: MEG

Method: Least Squares

Date: 05/07/06 Time: 22:43

Sample (adjusted): 2001: 07 2004: 12

Included observations: 43

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|--------------------|-------------|-----------------------|-------------|--------|
| C | 0.130837 | 0.042603 | 3.071085 | 0.0038 |
| POLYESTER | 0.691991 | 0.274622 | 2.519795 | 0.0158 |
| BOTTLE | -0.052178 | 0.256571 | -0.203367 | 0.8399 |
| R-squared | 0.141013 | Mean dependent var | 0.145814 | |
| Adjusted R-squared | 0.098064 | S.D. dependent var | 0.234533 | |
| S.E. of regression | 0.222737 | Akaike info criterion | -0.098435 | |
| Sum squared resid | 1.984472 | Schwarz criterion | 0.024439 | |
| Log Likelihood | 5.116361 | F-statistic | 3.283237 | |
| Durbin-Watson stat | 2.690663 | Prob (F-statistic) | 0.047834 | |

| Dependent Variable: MEG | | | | |
|---|-------------|-----------------------|-------------|--------|
| Method: Least Squares | | | | |
| Date: 05/08/06 Time: 00:39 | | | | |
| Sample (adjusted): 2001: 07 2004: 12 | | | | |
| Included observations: 42 after adjusting endpoints | | | | |
| Convergence achieved after 8 iterations | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.149981 | 0.029111 | 5.152009 | 0.0000 |
| POLYESTER | 0.880236 | 0.201815 | 4.361598 | 0.0001 |
| BOTTLE | -0.236894 | 0.208385 | -1.136810 | 0.2627 |
| AR (1) | -0.485283 | 0.145477 | -3.335815 | 0.0019 |
| R-squared | 0.345631 | Mean dependent var | 0.148333 | |
| Adjusted R-squared | 0.293970 | S.D. dependent var | 0.236787 | |
| S.E. of regression | 0.198961 | Akaike info criterion | -0.301020 | |
| Sum squared resid | 1.504252 | Schwarz criterion | -0.135528 | |
| Log Likelihood | 10.321430 | F-statistic | 6.690404 | |
| Durbin-Watson stat | 2.044631 | Prob (F-statistic) | 0.000976 | |
| Inverted AR Roots | -.49 | | | |

| Dependent Variable: MEG | | | | |
|---|-------------|-----------------------|-------------|--------|
| Method: Least Squares | | | | |
| Date: 05/08/06 Time: 00:40 | | | | |
| Sample (adjusted): 2001: 07 2004: 12 | | | | |
| Included observations: 42 after adjusting endpoints | | | | |
| Convergence achieved after 4 iterations | | | | |
| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
| C | 0.127501 | 0.021726 | 5.868587 | 0.0000 |
| POLYESTER | 0.900937 | 0.203929 | 4.417892 | 0.0001 |
| AR (1) | -0.461805 | 0.148126 | -3.117659 | 0.0034 |
| R-squared | 0.323494 | Mean dependent var | 0.148333 | |
| Adjusted R-squared | 0.288801 | S.D. dependent var | 0.236787 | |
| S.E. of regression | 0.199688 | Akaike info criterion | -0.315369 | |
| Sum squared resid | 1.555141 | Schwarz criterion | -0.191250 | |
| Log Likelihood | 9.622759 | F-statistic | 9.324579 | |
| Durbin-Watson stat | 2.007906 | Prob (F-statistic) | 0.000490 | |
| Inverted AR Roots | -.46 | | | |