Appendices the Technical Details for the Price Pass-Through, Household Expenditure and Industrial: the Case of Taiwan

I. The Estimation Results for the Empirical Study Model

(I) Results for Price Pass-Through in Taiwan

(1) Global Food Price Index (PFOODWD) to CPI in Food (CPIFOOD)

(a)Ordinary Least Squares
QUARTERLY data for 52 periods from 1982Q1 to 19994Q4
dlogya(cpifood)

= 0.57837 * dlogya(cpifood)[-1] + 0.12608 * dlogya(cpifood)[-2]
(5.91027) (1.09815)

+ 0.09334 * dlogya(cpifood)[-3] - 0.35902 * dlogya(cpifood)[-4]
(0.80844) (3.54839)

+ 0.01913 * dlogya(pfoodwd) + 0.02277 * dlogya(pfoodwd)[-1]
(0.36899) (0.29665)

+ 0.01472 * dlogya(pfoodwd)[-2] - 0.06504 * dlogya(pfoodwd)[-3]
(0.18566) (0.83224)

+ 0.07439 * dlogya(pfoodwd)[-4] + 0.01135 + 0.00037 * SEASON_2
(1.34956) (1.91303) (0.04729)

+ 0.00022 * SEASON_3 + 0.00378 * SEASON_4
(0.02868) (0.48333)

Sum Sq 0.0700 Std Err 0.0279 LHS Mean 0.0232
R Sq 0.5212 R Bar Sq 0.4573 F 12, 90 8.1633
D.W.(1) 1.8544 D.W.(4) 2.3007

(b) Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3
Date: 24 MAY 2009

dlogya(cpifood)

= 0.52959 * dlogya(cpifood)[-1] + 0.11811 * dlogya(cpifood)[-2]
(4.18402) (0.88045)

+ 0.18385 * dlogya(cpifood)[-3] - 0.48845 * dlogya(cpifood)[-4]
(1.39157) (3.95678)

+ 0.03297 * dlogya(pfoodwd) + 0.03744 * dlogya(pfoodwd)[-1]
(0.54896) (0.41239)

+ 0.02358 * dlogya(pfoodwd)[-2] - 0.15790 * dlogya(pfoodwd)[-3]
(0.24906) (1.68656)

+ 0.15236 * dlogya(pfoodwd)[-4] + 0.00866 + 0.00067 * SEASON_2
(2.25214) (1.14521) (0.06756)

+ 0.00152 * SEASON_3 + 0.00890 * SEASON_4
(0.15408) (0.88690)

Sum Sq 0.0281 Std Err 0.0258 LHS Mean 0.0218
R Sq 0.6325 R Bar Sq 0.5275 F 12, 42 6.0244
D.W.(1) 1.8904 D.W.(4) 2.3357

(2) Global Energy Price Index (PENERGYWD) to CPI in Energy (cpiENERGY)

Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3

dlogya(CPIENERGY)

= + 0.81331 * dlogya(CPIENERGY)[-1]
(5.16964)

+ 0.03441 * dlogya(CPIENERGY)[-2]
(0.17868)

+ 0.01491 * dlogya(CPIENERGY)[-3]
(0.07744)

- 0.21091 * dlogya(CPIENERGY)[-4] + 0.07237 * dlogya(penergywd)
(1.48272) (3.23880)

- 0.01019 * dlogya(penergywd)[-1] + 0.00729 * dlogya(penergywd)[-2]
(0.28757) (0.21217)

- 0.05838 * dlogya(penergywd)[-3]
(1.64843)
+ 0.04930 * dlogya(penergywd)[-4]
(1.76111)

+ 0.00286 + 0.00128 * SEASON_2 + 0.00068 * SEASON_3
(0.54973) (0.20564) (0.10850)

+ 0.00115 * SEASON_4
(0.18107)

Sum Sq 0.0114 Std Err 0.0165 LHS Mean 0.0319
R Sq 0.8632 R Bar Sq 0.8241 F 12, 42 22.0876
D.W.(1) 1.8296 D.W.(4) 2.3051

(3) CPI in Food (cpifood) &CPI in Energy (cpiENERGY) to core CPI

Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3

dlogya(corecpi)

= + 1.24737 * dlogya(corecpi)[-1] - 0.33910 * dlogya(corecpi)[-2]
(6.89924) (1.06990)

+ 0.16902 * dlogya(corecpi)[-3] - 0.14988 * dlogya(corecpi)[-4]
(0.50779) (0.78043)

+ 0.03171 * dlogya(cpifood.normalize) - 0.01583 * dlogya(cpifood.normalize)[-1]
(1.29250) (0.61519)

+ 0.02358 * dlogya(cpifood.normalize)[-2] - 0.00021 * dlogya(cpifood.normalize)[-3]
(0.97331) (0.00753)

- 0.02555 * dlogya(cpifood.normalize)[-4] - 0.08034 * dlogya(cpienergy.normalize)
(0.95968) (2.29237)

+ 0.11471 * dlogya(cpienergy.normalize)[-1]
(2.46763)

- 0.00933 * dlogya(cpienergy.normalize)[-2]
(0.19430)

- 0.00084 * dlogya(cpienergy.normalize)[-3]
(0.01786)

- 0.01023 * dlogya(cpienergy.normalize)[-4]
(0.29689)

+ 0.03025 * dlogya(gdp01)-dlogya(pogdp01tw)
(0.63663)

+ 0.06304 * dlogya(gdp01)-dlogya(pogdp01tw)[-1]
(0.86559)

- 0.02974 * dlogya(gdp01)-dlogya(pogdp01tw)[-2]
(0.43783)

- 0.08094 * dlogya(gdp01)-dlogya(pogdp01tw)[-3]
(1.35986)

+ 0.03349 * dlogya(gdp01)-dlogya(pogdp01tw)[-4] - 0.00003
(0.68647) (0.02063)

+ 0.00001 * SEASON_2 + 0.00084 * SEASON_3 + 0.00048 * SEASON_4
(0.00592) (0.55053) (0.30382)

Sum Sq 0.0005 Std Err 0.0040 LHS Mean 0.0117
R Sq 0.9363 R Bar Sq 0.8925 F 22, 32 21.3879
D.W.(1) 1.7989 D.W.(4) 2.4037

(4) Global Food Price Index (PFOODWD) & Global Energy Price Index (PENERGYWD) to Export Price Index in terms of US$ (XPIUSD)

Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3

dlogya(xpiusd)

= + 1.41309 * dlogya(xpiusd)[-1] - 0.66331 * dlogya(xpiusd)[-2]
(8.25805) (2.27273)

- 0.03608 * dlogya(xpiusd)[-3] - 0.00585 * dlogya(xpiusd)[-4]
(0.12626) (0.03724)

+ 0.01359 * dlogya(pfoodwd) + 0.02891 * dlogya(pfoodwd)[-1]
(0.33589) (0.50588)

- 0.03207 * dlogya(pfoodwd)[-2] + 0.02719 * dlogya(pfoodwd)[-3]
(0.53594) (0.46815)

+ 0.02817 * dlogya(pfoodwd)[-4] + 0.04844 * dlogya(penergywd)
(0.66100) (2.49731)

- 0.03863 * dlogya(penergywd)[-1]
(1.34927)
+ 0.03099 * dlogya(penergywd)[-2]
(1.02603)

- 0.04266 * dlogya(penergywd)[-3] + 0.02992 * dlogya(penergywd)[-4]
(1.43485) (1.40122)

- 0.00763 + 0.00233 * SEASON_2 - 0.00207 * SEASON_3
(1.59509) (0.41063) (0.36402)

+ 0.00004 * SEASON_4
(0.00723)

Sum Sq	0.0083	Std Err	0.0150	LHS Mean	-0.0068
R Sq	0.9448	R Bar Sq	0.9195	F 17, 37	37.2635
D.W.(1)	1.8134	D.W.(4)	2.4975		

(5) Global Food Price Index (PFOODWD) & Global Energy Price Index (PENERGYWD) to Import Price Index in terms of US$ (MPIUSD)

MPIUSD
Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3
Date: 24 MAY 2009

dlogya(mpiusd)

= + 1.31311 * dlogya(mpiusd)[-1] - 0.65602 * dlogya(mpiusd)[-2]
(7.61170) (2.28869)

+ 0.23015 * dlogya(mpiusd)[-3] - 0.22866 * dlogya(mpiusd)[-4]
(0.82310) (1.36110)

+ 0.03351 * dlogya(pfoodwd) + 0.09580 * dlogya(pfoodwd)[-1]
(0.48755) (1.02389)

- 0.11259 * dlogya(pfoodwd)[-2] + 0.03775 * dlogya(pfoodwd)[-3]
(1.17314) (0.41518)

+ 0.09008 * dlogya(pfoodwd)[-4] + 0.16005 * dlogya(penergywd)
(1.40732) (5.22394)

- 0.14216 * dlogya(penergywd)[-1]
(2.87029)
+ 0.01946 * dlogya(penergywd)[-2]
(0.35636)

- 0.00018 * dlogya(penergywd)[-3] + 0.02782 * dlogya(penergywd)[-4]
(0.00340) (0.72814)

- 0.00499 + 0.00217 * SEASON_2 - 0.00289 * SEASON_3
(0.73878) (0.24678) (0.32901)

- 0.00001 * SEASON_4
(0.00121)

Sum Sq 0.0199 Std Err 0.0232 LHS Mean 0.0228
R Sq 0.9591 R Bar Sq 0.9403 F 17, 37 51.0658
D.W.(1) 1.8702 D.W.(4) 2.4439

(6) Global Food Price Index (PFOODWD) to Import Price Index in FOOD (MPIFOOD)

(a) Ordinary Least Squares
QUARTERLY data for 52 periods from 1982Q1 to 1994Q4

dlogya(mpifood)

= + 0.97772 * dlogya(mpifood)[-1] - 0.02956 * dlogya(mpifood)[-2]
(5.56860) (0.12240)

- 0.28695 * dlogya(mpifood)[-3] - 0.12734 * dlogya(mpifood)[-4]
(1.16714) (0.76680)

+ 0.23492 * dlogya(pfoodwd) - 0.22336 * dlogya(pfoodwd)[-1]
(2.47914) (2.22463)

+ 0.01285 * dlogya(pfoodwd)[-2] + 0.04578 * dlogya(pfoodwd)[-3]
(0.11731) (0.42671)

+ 0.21142 * dlogya(pfoodwd)[-4] + 1.07341 * dlogya(er@tw)
(2.07004) (6.54747)

- 0.65578 * dlogya(er@tw)[-1]
(1.81457)
- 0.74961 * dlogya(er@tw)[-2]
(1.93519)

+ 0.72277 * dlogya(er@tw)[-3] - 0.07287 * dlogya(er@tw)[-4]
(1.85775) (0.32750)

+ 0.00734 - 0.00850 * SEASON_2 - 0.00531 * SEASON_3
(0.99807) (0.98061) (0.60498)

- 0.00117 * SEASON_4
(0.13288)

Sum Sq 0.0134 Std Err 0.0211 LHS Mean -0.0206
R Sq 0.9699 R Bar Sq 0.9529 F 17, 30 56.8878
D.W.(1) 2.0588 D.W.(4) 2.1728

(b)Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3

dlogya(mpifood)

= + 0.77871 * dlogya(mpifood)[-1] - 0.23746 * dlogya(mpifood)[-2]
(5.89155) (1.31992)

- 0.01025 * dlogya(mpifood)[-3] - 0.46282 * dlogya(mpifood)[-4]
(0.05826) (3.80574)

+ 0.49789 * dlogya(pfoodwd) - 0.01657 * dlogya(pfoodwd)[-1]
(8.03139) (0.17187)

- 0.18999 * dlogya(pfoodwd)[-2] + 0.14992 * dlogya(pfoodwd)[-3]
(1.92082) (1.42312)

+ 0.40847 * dlogya(pfoodwd)[-4] + 0.92121 * dlogya(er@tw)
(4.13537) (8.27465)

- 0.74821 * dlogya(er@tw)[-1]
(4.18571)
+ 0.20960 * dlogya(er@tw)[-2]
(1.06874)

- 0.02778 * dlogya(er@tw)[-3] + 0.63132 * dlogya(er@tw)[-4]
(0.14251) (4.05665)

+ 0.00877 + 0.00346 * SEASON_2 + 0.00153 * SEASON_3
(1.35885) (0.41906) (0.18514)

+ 0.00467 * SEASON_4
(0.55586)

Sum Sq 0.0175 Std Err 0.0217 LHS Mean 0.0558
R Sq 0.9687 R Bar Sq 0.9543 F 17, 37 67.2920
D.W.(1) 1.8038 D.W.(4) 2.0000

(7) Global Energy Price Index (PENERGYWD) to Import Price Index in Energy (MPIENERGY)

Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3

dlogya(mpienergy)

= + 0.34972 * dlogya(mpienergy)[-1] - 0.00432 * dlogya(mpienergy)[-2]
(2.35696) (0.02677)

+ 0.00260 * dlogya(mpienergy)[-3] - 0.48868 * dlogya(mpienergy)[-4]
(0.01636) (3.39563)

+ 0.79259 * dlogya(penergywd) - 0.26123 * dlogya(penergywd)[-1]
(19.6438) (1.91805)

- 0.09247 * dlogya(penergywd)[-2] + 0.03636 * dlogya(penergywd)[-3]
(0.63914) (0.25413)

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      + 0.36693 * dlogya(penergywd)[-4] + 0.55764 * dlogya(er@tw)
        (3.00393)                         (4.24134)

      - 0.41058 * dlogya(er@tw)[-1]
        (2.14530)
                                          - 0.00193 * dlogya(er@tw)[-2]
                                            (0.00972)

      + 0.08849 * dlogya(er@tw)[-3] + 0.00316 * dlogya(er@tw)[-4]
        (0.44994)                     (0.01842)

      + 0.04289      + 0.00011 * SEASON_2 + 0.00119 * SEASON_3
        (2.95149)      (0.01203)            (0.12840)

      - 0.00107 * SEASON_4
        (0.11294)

Sum Sq       0.0222    Std Err      0.0245    LHS Mean     0.1386
R Sq         0.9889    R Bar Sq     0.9838    F 17, 37   193.434
D.W.( 1)     1.7360    D.W.( 4)     1.7964
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(8) Global Agr. Raw Materials Price Index (PAGRWD) to Import Price Index in Agr. Raw Materials (MPIAGR)

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Ordinary Least Squares
QUARTERLY data for     55 periods from 1995Q1 to 2008Q3

dlogya(mpiagr)

  =      0.88113 * dlogya(mpiagr)[-1] - 0.11274 * dlogya(mpiagr)[-2]
        (5.83470)                     (0.57156)

      + 0.05586 * dlogya(mpiagr)[-3] - 0.28742 * dlogya(mpiagr)[-4]
        (0.29192)                     (2.14518)

      + 0.21910 * dlogya(pagrwd) - 0.02728 * dlogya(pagrwd)[-1]
        (2.61858)                  (0.21168)

      - 0.10842 * dlogya(pagrwd)[-2] + 0.19622 * dlogya(pagrwd)[-3]
        (0.82802)                     (1.56933)

      - 0.03205 * dlogya(pagrwd)[-4] + 0.01554       - 0.00346 * SEASON_2
        (0.35117)                     (1.68301)       (0.28643)

      + 0.00172 * SEASON_3 - 0.00197 * SEASON_4
        (0.14182)            (0.16013)

Sum Sq       0.0425    Std Err      0.0318    LHS Mean     0.0320
R Sq         0.8242    R Bar Sq     0.7739    F 12, 42    16.4039
D.W.( 1)     1.8400    D.W.( 4)     2.4397
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(9) Global Metal Price Index (PMETALWD) to Import Price Index in Metal (MPIMETAL)

Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3
Date: 24 MAY 2009

dlogya(mpimetal)

= 0.82822 * dlogya(mpimetal)[-1] + 0.10215 * dlogya(mpimetal)[-2]
(5.52683) (0.52187)

- 0.10155 * dlogya(mpimetal)[-3] - 0.20962 * dlogya(mpimetal)[-4]
(0.52823) (1.41374)

+ 0.46903 * dlogya(pmetalwd) - 0.24773 * dlogya(pmetalwd)[-1]
(5.12870) (1.71563)

- 0.16049 * dlogya(pmetalwd)[-2] + 0.13209 * dlogya(pmetalwd)[-3]
(1.07526) (0.83971)

+ 0.03117 * dlogya(pmetalwd)[-4] + 0.01391 + 0.00576 * SEASON_2
(0.25483) (0.98728) (0.31686)

+ 0.00410 * SEASON_3 + 0.00453 * SEASON_4
(0.22530) (0.24316)

Sum Sq	0.0960	Std Err	0.0478	LHS Mean	0.0905
R Sq	0.8981	R Bar Sq	0.8689	F 12, 42	30.8337
D.W.(1)	1.8338	D.W.(4)	2.1876		

(10) Global Food Price Index (PFOODWD) to Export Price Index in FOOD (XPIFOOD)

(a) Ordinary Least Squares
QUARTERLY data for 52 periods from 1982Q1 to 1994Q4

dlogya(xpifood)

= + 0.84887 * dlogya(xpifood)[-1] - 0.00360 * dlogya(xpifood)[-2]
(4.40539) (0.01418)

- 0.06660 * dlogya(xpifood)[-3] - 0.01638 * dlogya(xpifood)[-4]
(0.32669) (0.10483)

- 0.01109 * dlogya(pfoodwd) + 0.03654 * dlogya(pfoodwd)[-1]
(0.10334) (0.27965)

+ 0.02968 * dlogya(pfoodwd)[-2] + 0.07960 * dlogya(pfoodwd)[-3]
(0.22438) (0.58415)

- 0.12830 * dlogya(pfoodwd)[-4] + 0.71706 * dlogya(er@tw)
(1.09944) (3.18896)

- 0.78377 * dlogya(er@tw)[-1]
(2.05894)

+ 0.49315 * dlogya(er@tw)[-2]
(1.28570)

- 0.40071 * dlogya(er@tw)[-3] + 0.17844 * dlogya(er@tw)[-4]
(1.09529) (0.87294)

+ 0.00363 + 0.00075 * SEASON_2 + 0.01194 * SEASON_3
(0.38208) (0.06636) (1.05863)

+ 0.00621 * SEASON_4
(0.54336)

Sum Sq	0.0225	Std Err	0.0274	LHS Mean	0.0014
R Sq	0.8772	R Bar Sq	0.8076	F 17, 30	12.6026
D.W.(1)	2.0290	D.W.(4)	1.9360		

(b)Ordinary Least Squares
QUARTERLY data for 55 periods from 1995Q1 to 2008Q3
dlogya(xpifood)

= + 1.04738 * dlogya(xpifood)[-1] - 0.30253 * dlogya(xpifood)[-2]
(7.89566) (1.56427)

+ 0.04842 * dlogya(xpifood)[-3] - 0.11736 * dlogya(xpifood)[-4]
(0.25083) (0.88101)

+ 0.12518 * dlogya(pfoodwd) + 0.02515 * dlogya(pfoodwd)[-1]
(0.97449) (0.13166)

+ 0.05231 * dlogya(pfoodwd)[-2] + 0.05870 * dlogya(pfoodwd)[-3]
(0.26970) (0.31232)

- 0.05469 * dlogya(pfoodwd)[-4] + 0.56156 * dlogya(er@tw)
(0.41483) (2.31585)

- 0.58544 * dlogya(er@tw)[-1]
(1.81805)
+ 0.21689 * dlogya(er@tw)[-2]
(0.62624)

+ 0.07629 * dlogya(er@tw)[-3] + 0.23760 * dlogya(er@tw)[-4]
(0.21654) (0.92705)

+ 0.00073 + 0.00239 * SEASON_2 + 0.00174 * SEASON_3
(0.05436) (0.12845) (0.09326)

- 0.00107 * SEASON_4
(0.05639)

Sum Sq	0.1872	Std Err	0.0573	LHS Mean	0.0261
R Sq	0.7916	R Bar Sq	0.7294	F 17, 57	12.7337
D.W.(1)	1.8484	D.W.(4)	2.2545		

(II) The Equations for the Macro-econometric Model

1. The Code and Definitions of Variables

Endogenous Variables

No.	Type	Code	Definitions	Data processing	Data sources
1	I	CP	Private Final Consumption Expenditure	CP	NIAQ
2	I	CP01	Real Private Consumption Expenditure	CP01	NIAQ
3	I	CPBEV	Private Consumption Expenditure - Beverages	CPBEV	NIAQ
4	E	CPBEV01	Real Private Consumption Expenditure - Beverages	CPBEV01	NIAQ
5	I	CPCLFT	Private Consumption Expenditure - Clothing Footwear	CPCL&FT	NIAQ
6	E	CPCLFT01	Real Private Consumption Expenditure - Clothing Footwear	CPCL&FT01	NIAQ
7	I	CPFOOD	Private Consumption Expenditure - Food	CPFOOD	NIAQ
8	E	CPFOOD01	Real Private Consumption Expenditure - Food	CPFOOD01	NIAQ
9	I	CPFUEL	Private Consumption Expenditure - Fuel & Power	CPFUEL&P	NIAQ
10	E	CPFUEL01	Real Private Consumption Expenditure - Fuel & Power	CPFUEL&P01	NIAQ
11	I	CPFURN	Private Consumption Expenditure - Furniture & House Equip	CPFURN	NIAQ
12	E	CPFURN01	Real Private Consumption Expenditure - Furniture & House Equip	CPFURN01	NIAQ
13	I	CPHEALTH	Private Consumption Expenditure - Medicare & Health	CPHEALTH	NIAQ
14	E	CPHEALTH01	Real Private Consumption Expenditure - Medicare & Health	CPHEALTH01	NIAQ
15	I	CPHOP	Private Consumption Expenditure - Household Operation	CPHOP	NIAQ
16	E	CPHOP01	Real Private Consumption Expenditure - Household Operation	CPHOP01	NIAQ
17	E	CPI	Consumer Price Index - General Index	CPI	PRICE
18	E	CPIFOOD	Consumer Price Index - Food	CPI@FOOD	PRICE
19	E	CPIENERGY	Consumer Price Index - Energy	weight average	PRICE
20	I	CPO	Private Consumption Expenditure - Miscellaneous	CPO	NIAQ
21	E	CPO01	Real Private Consumption Expenditure - Miscellaneous	CPO01	NIAQ
22	I	CPRECED	Private Consumption Expenditure - Recreation & Education	CPREC&ED	NIAQ
23	E	CPRECED01	Real Private Consump. Expenditure - Recreation & Education	CPREC&ED01	NIAQ
24	I	CPRENTW	Private Consumption Expenditure - Rents & Water Charges	CPRENT&W	NIAQ
25	E	CPRENTW01	Real Private Consump. Expenditure - Rents & Water Charges	CPRENT&W01	NIAQ
26	E	CPTOB01	Private Consumption Expenditure - Tobacco	CPTOB	NIAQ
27	E	CPTOB01	Real Private Consumption Expenditure - Tobacco	CPTOB01	NIAQ
28	I	CPTRNCOM	Consumption Expenditure - Transport & Communication	CPTRN&COM	NIAQ
29	E	CPTRNCOM01	Real Private Consum. Expen. - Transport & Communication	CPTRN&COM01	NIAQ
30	E	ER@TW	Exchange Rate (NT$ per US$) Index	EUS/33.81*100	2001=100
31	I	EUS	Exchange Rate - NT$ per US$	RX$	FSM
32	I	EX	Exports of Goods & Services	EX	QNET
33	E	EX01	Real Exports of Goods & Services	EX01	NIAQ
34	I	GDP	Expenditure on GDP	GDP	NIAQ
35	I	GDP01	Real Gross Domestic Product	GDP01	NIAQ
36	I	GNP	Gross National Product	GNP	QNET
37	I	GNP01	Real Gross National Product	GNP01	QNET
38	I	IFIX	Gross Fixed Capital Formation - Amount at Current Prices	IFIX	NIAQ

39	E	IFIX01	Real Gross Fixed Capital Formation	IFIX01	NIAQ
40	I	M	Imports of Goods & Services	M	QNET
41	E	M01	Real Imports of Goods & Services	M01	NIAQ
42	E	M2	Monetary Aggregates - M2	M2	FSM
43	E	MPIUSD	Import Price Index on U.S.$ Basis - General Index	MPI	PRICE
44	I	PCGNP	GNP at Current Prices - per Capita	GNP/EUS/N	
45	I	PCP	Priv. Cons. Expenditure Deflator	PCP	NIAQ
46	E	PCPBEV	Private Cons. Expenditure Deflator – Beverages	PCPBEV	NIAQ
47	E	PCPCLFT	Private Cons. Expenditure. Deflator - Clothing Footwear	PCPCL&FT	NIAQ
48	E	PCPFOOD	Private Consumption Expenditure Deflator - Food	PCPFOOD	NIAQ
49	E	PCPFUEL	Private Cons. Expenditure. Deflator - Fuel & Power	PCPFUEL&P	NIAQ
50	E	PCPFURN	Priv. Cons. Expenditure. Deflator - Furn. & House Equip	PCPFURN	NIAQ
51	E	PCPHEALTH	Priv. Cons. Expenditure. Deflator - Medicare & Health	PCPHEALTH	NIAQ
52	E	PCPHOP	Priv. Cons. Expenditure. Deflator - Household Operation	PCPHOP	NIAQ
53	E	PCPO	Priv. Cons. Expenditure. Deflator – Miscellaneous	PCPO	NIAQ
54	E	PCPRECED	Priv. Cons. Expenditure. Deflator - Recreation & Education	PCPREC&ED	NIAQ
55	E	PCPRENTW	Private Cons. Expenditure. Deflator - Rents & Water Charges	PCPRENT&W	NIAQ
56	E	PCPTOB	Private Cons. Expenditure Deflator - Tobacco	PCPTOB	NIAQ
57	E	PCPTRNCOM	Priv. Cons. Expen. Deflator - Transport & Communication	PCPTRN&COM	NIAQ
58	E	PEX	Exports of Goods & Services Deflator	PEX	NIAQ
59	I	PGDP	Gross Domestic Product Deflator	PGDP	NIAQ
60	E	PIFIX	Gross Fixed Capital Formation Deflator	PIFIX	NIAQ
61	E	PM	Imports of Goods & Services Deflator	PM	NIAQ
62	E	RMCP90	Interbank Money Market Interest Rates - Total	RMIB	FSM
63	E	WPI	Wholesale Price Index - General Index	WPI	PRICE
64	E	XPIUSD	Export Price Index on U.S.$ Basis - General Index	XPI	PRICE

Exogenous Variables

No.	Code	Definitions	Databank code and processing	Data sources
1	CG	Government Consumption	CG	NIAQ
2	CG01	Real Government Consumption	CG01	NIAQ
3	ER@JP	Exchange Rate - Yen$ per US$	158**RF*ZF/108.78	IFS@IMF , 2001=100
4	POGDP01TW	Potential Real GDP	Hodrick-Prescott filtered estimated.	
4	RGDP@US	US Real GDP	11199E*RZF	IFS@IMF
5	INVCH	Inventory Change	INVCH01	NIAQ
6	INVCH01	Real Inventory Change	INVCH01	NIAQ
7	N	Total Population	N	MAN
8	PCOMWD	All Commodities Index*	00176ACDZF	IFS@IMF
9	PENERGYWD	Global energy price index*	00176ENDZF(00176AADZF)	IFS@IMF
10	PFOODWD	Global food price index	00176EXDZF	IFS@IMF
11	REDIS	Interest Rate - Rediscount Rate	RMCEC @RDISC	FSM
12	WPI@US	US WPI	11163***ZF	IFS@IMF
13	YWN	Net Factor Income from Abroad	YWN	NIAQ
14	YWN01	Real Net Factor Income from Abroad	YWN01	NIAQ

Note: The Global energy price index is unavailable by 1992q2, the missing data is appended by average crude oil Spot Price Index. The All Commodities Index also calculated by weigh average all commodities index.

2. The Equations of Model

(1)Behavior Equations

A. Private Final Consumption Expenditure

(E1)Real Private Consumption Expenditure – Food (CPFOOD01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpfood01)
= 0.81362 * log(cpfood01)[-1] + 0.16595 * log(gdp01)
(19.0913) (4.33490)
- 0.16512 * log(pcpfood/pgdp) - 0.07361 - 0.03282 * SEASON_2
(5.41957) (0.61020) (6.62167)
- 0.02483 * SEASON_3 + 0.01573 * SEASON_4
(7.12934) (3.13962)

Sum Sq 0.0057 Std Err 0.0101 LHS Mean 12.5808
R Sq 0.9957 R Bar Sq 0.9951 F 7, 56 1838.31
D.W.(1) 2.0874 D.W.(4) 1.2951
H -0.4144

AR_0 = - 0.39142 * AR_1
(3.05395)

(E2)Real Private Consumption Expenditure – Beverages (CPBEV01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpbev01)
= 0.57376 * log(cpbev01)[-4] + 0.25588 * log(gdp01)
(8.98601) (4.04186)
- 0.67216 * log(pcpbev/pgdp) + 0.69941 + 0.07730 * SEASON_2
(5.23958) (1.16220) (6.29647)
+ 0.11853 * SEASON_3 + 0.03858 * SEASON_4
(6.87375) (5.04786)

Sum Sq 0.0254 Std Err 0.0213 LHS Mean 10.5024
R Sq 0.9771 R Bar Sq 0.9742 F 7, 56 340.869
D.W.(1) 2.1379 D.W.(4) 1.9289

AR_0 = + 0.40282 * AR_1
(3.28148)

(E3)Private Consumption Expenditure – Tobacco (CPTOB01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cptob01)
= 0.37733 * log(cptob01)[-4] + 0.36453 * log(gdp01)
(7.24612) (9.29395)
- 0.40792 * log(pcptob/pgdp) + 0.65262 - 0.01470 * SEASON_2
(11.6662) (2.05937) (2.04018)
- 0.07883 * SEASON_3 + 0.01519 * SEASON_4
(8.10512) (2.14694)

Sum Sq 0.0222 Std Err 0.0197 LHS Mean 9.5179
R Sq 0.9614 R Bar Sq 0.9574 F 6, 57 236.907
D.W.(1) 1.6685 D.W.(4) 1.8168

(E4)Real Private Consumption Expenditure-Clothing Footwear (CPCLFT01)

Cochrane-Orcutt
QUARTERLY data for 111 periods from 1981Q1 to 2008Q3
log(cpclft01)
= 0.89368 * log(cpclft01)[-1] - 0.22453 * log(pcpclft/pgdp)
(25.9148) (3.46984)
+ 0.05721 * log(gdp01) + 0.70429 - 1.00916 * SEASON_2
(1.82852) (4.09726) (53.1367)
- 0.39314 * SEASON_3 - 0.05245 * SEASON_4
(30.3019) (4.11681)

Sum Sq 0.0798 Std Err 0.0278 LHS Mean 10.4047
R Sq 0.9985 R Bar Sq 0.9984 F 7,103 9645.92
D.W.(1) 1.9362 D.W.(4) 0.7345
H 0.3241

AR_0 = - 0.32974 * AR_1
(3.52193)

(E5)Real Private Consumption Expenditure-Fuel & Power (CPFUEL01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpfuel01)
= 0.51098 * log(cpfuel01)[-1] - 0.25790 * log(pcpfuel/pgdp)
(4.37481) (2.84543)
+ 0.43432 * log(gdp01) - 1.34834 + 0.07809 * SEASON_2
(3.88094) (2.50926) (7.54251)
+ 0.03111 * SEASON_3 + 0.03997 * SEASON_4
(3.00608) (3.63267)

Sum Sq 0.0400 Std Err 0.0265 LHS Mean 10.3602
R Sq 0.9768 R Bar Sq 0.9744 F 6, 57 400.375
D.W.(1) 1.9635 D.W.(4) 1.6925
H -1.2747

(E6)Real Private Consumption Expenditure - Rents & Water Charges (CPRENTW01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cprentw01)
= 0.87833 * log(cprentw01)[-1] - 0.02949 * log(pcprentw/pgdp)
(25.7155) (0.29953)
+ 0.06111 * log(gdp01) + 0.60922 + 0.00609 * SEASON_2
(2.54439) (2.69776) (1.17946)
+ 0.00470 * SEASON_3 + 0.00082 * SEASON_4
(1.28060) (0.21782)

Sum Sq 0.0048 Std Err 0.0092 LHS Mean 12.3568
R Sq 0.9961 R Bar Sq 0.9957 F 6, 57 2429.07
D.W.(1) 1.5826 D.W.(4) 0.8232
H 1.6094

(E7)Real Private Consumption Expenditure - Furniture & House Equip (CPFURN01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpfurn01)
= 0.61727 * log(cpfurn01)[-1] - 0.56967 * log(pcpfurn/pgdp)
(6.81023) (4.25559)

+ 0.35353 * log(gdp01) - 0.88160 - 0.25836 * SEASON_2
(3.22837) (1.23510) (8.50359)
- 0.33950 * SEASON_3 - 0.27697 * SEASON_4
(22.3617) (27.8052)

Sum Sq 0.0423 Std Err 0.0273 LHS Mean 10.6471
R Sq 0.9914 R Bar Sq 0.9905 F 6, 57 1096.63
D.W.(1) 1.7764 D.W.(4) 0.7990
H 1.2265

(E8)Real Private Consumption Expenditure - Household Operation (CPHOP01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cphop01)
= 0.93276 * log(cphop01)[-1] - 0.15984 * log(pcphop/pgdp)
(34.3331) (2.74735)
+ 0.10509 * log(gdp01) - 0.73220 - 0.12387 * SEASON_2
(2.66468) (1.93722) (20.4085)
- 0.14153 * SEASON_3 - 0.11520 * SEASON_4
(26.6085) (18.9752)

Sum Sq 0.0097 Std Err 0.0131 LHS Mean 10.5759
R Sq 0.9975 R Bar Sq 0.9972 F 7, 56 3239.29
D.W.(1) 2.0170 D.W.(4) 1.5183
H -0.1491

AR_0 = - 0.22447 * AR_1
(1.67948)

(E9)Real Private Consumption Expenditure - Medicare & Health (CPHEALTH01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cphealth01)
= 0.77032 * log(cphealth01)[-1] + 0.35561 * log(gdp01)
(13.8140) (3.74144)
- 0.34121 * log(pcphealth/pgdp) - 2.56938 + 0.17925 * SEASON_2
(3.21236) (3.25325) (23.1598)
+ 0.06380 * SEASON_3 - 0.09657 * SEASON_4
(7.37623) (10.9139)

Sum Sq 0.0268 Std Err 0.0217 LHS Mean 11.6649
R Sq 0.9945 R Bar Sq 0.9939 F 6, 57 1717.60
D.W.(1) 1.8495 D.W.(4) 0.8939
H 0.0549

(E10)Real Private Consumption Expenditure - Recreation & Education (CPRECED01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpreced01)
= 0.13073 * log(cpreced01)[-1] + 0.89910 * log(gdp01)
(1.58739) (9.9059)
- 0.00376 * pchya(pcpreced/pgdp) - 0.26067 * dum03q2 - 2.18585
(1.42758) (9.7610) (4.53205)
- 0.39304 * SEASON_2 + 0.05857 * SEASON_3 - 0.30183 * SEASON_4
(19.2339) (3.57696) (13.2649)

Sum Sq 0.0314 Std Err 0.0239 LHS Mean 12.4987
R Sq 0.9938 R Bar Sq 0.9928 F 8, 55 1093.85
D.W.(1) 1.9522 D.W.(4) 1.2674
H -0.3933

AR_0 = + 0.47000 * AR_1
(3.59383)

(E11)Real Private Consumption Expenditure - Transport & Communication (CPTRNCOM01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cptrncom01)
= 0.98713 * log(cptrncom01)[-1] + 0.17461 * log(gdp01/gdp01[-1])
(115.212) (1.13287)
- 0.23124 * log(pcptrncom/pgdp) - 0.06709 * dum03q1 + 0.23302
(3.51519) (2.98263) (2.27254)
- 0.31851 * SEASON_2 + 0.18526 * SEASON_3 - 0.12665 * SEASON_4
(23.3431) (15.5336) (8.86399)

Sum Sq 0.0309 Std Err 0.0237 LHS Mean 12.0373
R Sq 0.9930 R Bar Sq 0.9920 F 8, 55 973.728
D.W.(1) 1.6491 D.W.(4) 1.4665
H 1.0912

AR_0 = - 0.49991 * AR_1
(4.02694)

(E12)Real Private Consumption Expenditure – Miscellaneous (CPO01)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(cpo01)
= 0.64397 * log(cpo01)[-1] + 0.45615 * log(gdp01)
(6.69922) (3.85566)
- 1.19894 * log(pcpo/pgdp) - 2.31355 - 0.21753 * SEASON_2
(2.98219) (2.06930) (5.25470)
- 0.22183 * SEASON_3 - 0.26789 * SEASON_4
(6.69249) (7.98065)

Sum Sq 0.1913 Std Err 0.0579 LHS Mean 11.8386
R Sq 0.9285 R Bar Sq 0.9210 F 6, 57 123.449
D.W.(1) 2.1546 D.W.(4) 2.3273
H -1.2194

(E13) Private Consumption Expen. Deflator – Food (PCPFOOD)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpfood)
= + 0.73810 * dlogya(pcpfood)[-1] + 0.05872 * dlogya(pcpfood)[-2]
(4.41350) (0.27053)
+ 0.04787 * dlogya(pcpfood)[-3] - 0.11165 * dlogya(pcpfood)[-4]
(0.21654) (0.69025)
+ 2.75647 * dlogya(cpi) - 2.02695 * dlogya(cpi)[-1]
(18.4058) (4.12868)
- 0.13175 * dlogya(cpi)[-2] - 0.46268 * dlogya(cpi)[-3]
(0.21056) (0.72765)
+ 0.28429 * dlogya(cpi)[-4]
(0.60399)

- 0.20810 * dlogya(gdp01)-dlogya(pogdp01twb)
(2.70595)
- 0.03014 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.23458)
- 0.17577 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(1.38941)
+ 0.14843 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(1.16456)
- 0.06413 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00028
(0.66851) (0.10232)
- 0.00201 * SEASON_2 - 0.00128 * SEASON_3 + 0.00229 * SEASON_4
(0.61736) (0.38223) (0.69963)

Sum Sq	0.0037	Std Err	0.0090	LHS Mean	0.0243
R Sq	0.9513	R Bar Sq	0.9333	F 17, 46	52.8610
D.W.(1)	1.8169	D.W.(4)	1.7529		

(E14) Private Consumption Expen. Deflator – Beverages (PCPBEV)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpbev)
= + 0.72109 * dlogya(pcpbev)[-1] - 0.12157 * dlogya(pcpbev)[-2]
(4.95763) (0.64883)
+ 0.07232 * dlogya(pcpbev)[-3] - 0.12401 * dlogya(pcpbev)[-4]
(0.38768) (0.88421)
- 0.07292 * dlogya(cpi) + 0.20423 * dlogya(cpi)[-1]
(0.21107) (0.53680)
+ 0.21759 * dlogya(cpi)[-2] + 0.04413 * dlogya(cpi)[-3]
(0.56216) (0.11421)
- 0.32290 * dlogya(cpi)[-4]
(0.94196)
- 0.12469 * dlogya(gdp01)-dlogya(pogdp01twb)
(0.66319)
+ 0.18904 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.60403)
- 0.46113 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(1.43653)
- 0.09382 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(0.30310)
- 0.19789 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00419
(0.80539) (0.59133)
+ 0.00017 * SEASON_2 + 0.00072 * SEASON_3 + 0.00458 * SEASON_4
(0.02220) (0.09099) (0.58634)

Sum Sq	0.0219	Std Err	0.0218	LHS Mean	0.0121
R Sq	0.6793	R Bar Sq	0.5608	F 17, 46	5.7328
D.W.(1)	1.9036	D.W.(4)	2.5014		

(E15) Private Consumption Expen. Deflator– Tobacco (PCPTOB)

Cochrane-Orcutt
QUARTERLY data for 63 periods from 1993Q2 to 2008Q4
dlogya(pcptob)
= + 0.89919 * dlogya(pcptob)[-1] - 0.01559 * dlogya(pcptob)[-2]
(14.0581) (0.31618)
- 0.03560 * dlogya(pcptob)[-3] + 0.03900 * dlogya(pcptob)[-4]
(0.71413) (0.74173)
- 0.40491 * dlogya(cpi) - 0.14244 * dlogya(cpi)[-1]
(1.83692) (0.66024)

```
      + 0.71552 * dlogya(cpi)[-2] + 0.26464 * dlogya(cpi)[-3]
        (3.30258)                   (1.16098)
      - 0.45997 * dlogya(cpi)[-4]
        (2.09156)
      - 0.09158 * dlogya(gdp01)-dlogya(pogdp01twb)
        (0.75556)
      + 0.03346 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
        (0.19251)
      + 0.22671 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
        (1.24991)
      - 0.28823 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
        (1.75305)
      - 0.22142 * dlogya(gdp01)-dlogya(pogdp01twb)[-4]
        (1.34799)
      - 0.25199 * dum03q1 + 0.25506 * dum02q1 + 0.00323
        (13.3227)           (15.5469)           (0.48239)
      - 0.00015 * SEASON_2 + 0.00173 * SEASON_3 + 0.00292 * SEASON_4
        (0.03575)            (0.35976)            (0.67190)

Sum Sq       0.0077    Std Err      0.0136    LHS Mean     0.0307
R Sq         0.9725    R Bar Sq     0.9594    F 20, 42    74.2385
D.W.( 1)     1.8890    D.W.( 4)     2.5398

AR_0 =    + 0.41147 * AR_1
           (2.65057)
```

(E16) Private Consumption Expen. Deflator - Clothing Footwear (PCPCLFT)

```
Ordinary Least Squares
 QUARTERLY data for      64 periods from 1993Q1 to 2008Q4
 dlogya(pcpclft)
   =    + 0.70605 * dlogya(pcpclft)[-1] + 0.25202 * dlogya(pcpclft)[-2]
         (4.81407)                       (1.43875)
       - 0.32115 * dlogya(pcpclft)[-3] + 0.03306 * dlogya(pcpclft)[-4]
         (1.90386)                       (0.23101)
       + 0.54002 * dlogya(cpi) - 0.48856 * dlogya(cpi)[-1]
         (1.96893)               (1.50728)
       - 0.15944 * dlogya(cpi)[-2] + 0.38844 * dlogya(cpi)[-3]
         (0.47839)                   (1.13690)
       - 0.17109 * dlogya(cpi)[-4]
         (0.59779)
       + 0.17439 * dlogya(gdp01)-dlogya(pogdp01twb)
         (1.18287)
       - 0.43183 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
         (1.78151)
       + 0.39455 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
         (1.57863)
       - 0.11137 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
         (0.44455)
       - 0.13158 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] - 0.00261
         (0.70674)                                        (0.47650)
       + 0.00257 * SEASON_2 - 0.00110 * SEASON_3 + 0.00462 * SEASON_4
         (0.39257)            (0.17107)            (0.70471)

 Sum Sq       0.0146    Std Err      0.0178    LHS Mean     0.0011
 R Sq         0.6214    R Bar Sq     0.4815    F 17, 46     4.4409
 D.W.( 1)     2.0076    D.W.( 4)     1.9976
```

(E17) Private Consumption Expen. Deflator - Fuel & Power (PCPFUEL)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpfuel)

```
=  + 0.82968 * dlogya(pcpfuel)[-1] - 0.04331 * dlogya(pcpfuel)[-2]
     (5.46708)                       (0.22147)
   + 0.06276 * dlogya(pcpfuel)[-3] - 0.17210 * dlogya(pcpfuel)[-4]
     (0.30624)                       (1.17949)
   - 0.30091 * dlogya(cpi) + 0.27004 * dlogya(cpi)[-1]
     (1.49788)               (1.19971)
   + 0.15929 * dlogya(cpi)[-2] + 0.12661 * dlogya(cpi)[-3]
     (0.69704)                   (0.55038)
   - 0.14848 * dlogya(cpi)[-4]
     (0.72446)
   - 0.19927 * dlogya(gdp01)-dlogya(pogdp01twb)
     (1.76298)
   + 0.39475 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
     (2.13205)
   - 0.05274 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
     (0.27161)
   - 0.03039 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
     (0.16008)
   - 0.07199 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00461
     (0.49264)                                        (1.11232)
   - 0.00389 * SEASON_2 - 0.00288 * SEASON_3 + 0.00213 * SEASON_4
     (0.82235)            (0.59794)            (0.44938)
```

Sum Sq	0.0079	Std Err	0.0131	LHS Mean	0.0152
R Sq	0.7472	R Bar Sq	0.6537	F 17, 46	7.9967
D.W.(1)	1.8553	D.W.(4)	2.2636		

(E18) Private Consumption Expen. Deflator - Rents & Water Charges (PCPRENTW)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcprentw)

```
=  + 0.99998 * dlogya(pcprentw)[-1] - 0.15393 * dlogya(pcprentw)[-2]
     (7.46964)                       (0.87961)
   + 0.33503 * dlogya(pcprentw)[-3] - 0.26036 * dlogya(pcprentw)[-4]
     (1.91174)                       (2.14712)
   + 0.01393 * dlogya(cpi) - 0.02573 * dlogya(cpi)[-1]
     (0.24887)               (0.43186)
   - 0.07198 * dlogya(cpi)[-2] + 0.11417 * dlogya(cpi)[-3]
     (1.22260)                   (1.90880)
   + 0.03940 * dlogya(cpi)[-4]
     (0.65655)
   - 0.00759 * dlogya(gdp01)-dlogya(pogdp01twb)
     (0.26748)
   + 0.06586 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
     (1.43954)
   + 0.01877 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
     (0.40081)
   - 0.01151 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
     (0.24656)
   + 0.04012 * dlogya(gdp01)-dlogya(pogdp01twb)[-4]
     (1.12429)
   + - 0.00062       - 0.00000 * SEASON_2
       (0.59062)       (0.00392)
```

- 0.00059 * SEASON_3 - 0.00021 * SEASON_4
(0.47818) (0.17618)

Sum Sq	0.0005	Std Err	0.0034	LHS Mean	0.0125
R Sq	0.9799	R Bar Sq	0.9719	F 18, 45	122.069
D.W.(1)	2.0156	D.W.(4)	1.9840		

(E19) Private Consumption Expen. Deflator - Furn. & House Equip (PCPFURN)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpfurn)
= + 0.76870 * dlogya(pcpfurn)[-1] + 0.11744 * dlogya(pcpfurn)[-2]
(5.38953) (0.66035)
- 0.11504 * dlogya(pcpfurn)[-3] - 0.15893 * dlogya(pcpfurn)[-4]
(0.63798) (1.13439)
+ 0.36627 * dlogya(cpi) - 0.07888 * dlogya(cpi)[-1]
(2.95671) (0.59169)
+ 0.02144 * dlogya(cpi)[-2] - 0.01941 * dlogya(cpi)[-3]
(0.16147) (0.14808)
+ 0.16584 * dlogya(cpi)[-4]
(1.30330)
+ 0.04631 * dlogya(gdp01)-dlogya(pogdp01twb)
(0.74358)
+ 0.04136 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.40745)
- 0.13559 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(1.32412)
+ 0.18100 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(1.76584)
- 0.07228 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] - 0.00689
(0.92222) (1.98922)
- 0.00021 * SEASON_2 - 0.00163 * SEASON_3 + 0.00039 * SEASON_4
(0.07920) (0.60608) (0.14551)

Sum Sq	0.0025	Std Err	0.0074	LHS Mean	0.0009
R Sq	0.8922	R Bar Sq	0.8523	F 17, 46	22.3902
D.W.(1)	1.7983	D.W.(4)	2.2152		

(E20) Private Consumption Expen. Deflator - Household Operation (PCPHOP)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcphop)
= + 0.38320 * dlogya(pcphop)[-1] + 0.26975 * dlogya(pcphop)[-2]
(2.87641) (1.87907)
+ 0.17094 * dlogya(pcphop)[-3] - 0.39838 * dlogya(pcphop)[-4]
(1.11461) (2.62983)
+ 0.30149 * dlogya(cpi) - 0.32427 * dlogya(cpi)[-1]
(0.95110) (0.91051)
+ 0.27952 * dlogya(cpi)[-2] + 0.22635 * dlogya(cpi)[-3]
(0.74678) (0.62961)
+ 0.02582 * dlogya(cpi)[-4]
(0.07996)
+ 0.22528 * dlogya(gdp01)-dlogya(pogdp01twb)
(1.20456)
- 0.20384 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.62449)
+ 0.19387 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(0.63581)

- 0.46530 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(1.65114)
+ 0.39234 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00546
(1.81734) (0.87185)
- 0.00226 * SEASON_2 - 0.00346 * SEASON_3 - 0.00331 * SEASON_4
(0.31164) (0.47409) (0.45577)

Sum Sq	0.0189	Std Err	0.0203	LHS Mean	0.0202
R Sq	0.5554	R Bar Sq	0.3911	F 17, 46	3.3803
D.W.(1)	1.8006	D.W.(4)	2.4371		

(E21) Private Consumption Expen. Deflator - Medicare & Health (PCPHEALTH)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcphealth)
= + 0.40606 * dlogya(pcphealth)[-1] + 0.17922 * dlogya(pcphealth)[-2]
(2.83951) (1.37058)
- 0.33154 * dlogya(pcphealth)[-3] - 0.03434 * dlogya(pcphealth)[-4]
(2.53429) (0.31383)
+ 0.22592 * dlogya(cpi) - 0.16587 * dlogya(cpi)[-1]
(2.32926) (1.57862)
- 0.08289 * dlogya(cpi)[-2] + 0.03029 * dlogya(cpi)[-3]
(0.79921) (0.29180)
+ 0.25197 * dlogya(cpi)[-4]
(2.51942)
- 0.02277 * dlogya(gdp01)-dlogya(pogdp01twb)
(0.46164)
+ 0.05370 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.65404)
+ 0.01417 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(0.16529)
+ 0.03007 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(0.35852)
- 0.00840 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00954
(0.13555) (4.08400)
- 0.00100 * SEASON_2 - 0.00410 * SEASON_3 - 0.00324 * SEASON_4
(0.46157) (1.89922) (1.51760)

Sum Sq	0.0016	Std Err	0.0059	LHS Mean	0.0150
R Sq	0.5803	R Bar Sq	0.4251	F 17, 46	3.7407
D.W.(1)	1.6307	D.W.(4)	2.3551		

(E22) Private Consumption Expen. Deflator - Recreation & Education (PCPRECED)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpreced)
= + 0.88282 * dlogya(pcpreced)[-1] + 0.02019 * dlogya(pcpreced)[-2]
(6.09864) (0.10869)
- 0.16101 * dlogya(pcpreced)[-3] + 0.01292 * dlogya(pcpreced)[-4]
(0.83059) (0.08931)
+ 0.29728 * dlogya(cpi) - 0.34559 * dlogya(cpi)[-1]
(2.05010) (2.15794)
+ 0.04524 * dlogya(cpi)[-2] + 0.24110 * dlogya(cpi)[-3]
(0.28278) (1.53210)
+ 0.11351 * dlogya(cpi)[-4]
(0.74694)
+ 0.09456 * dlogya(gdp01)-dlogya(pogdp01twb)
(1.26840)

+ 0.03211 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.26090)
- 0.11568 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(0.95316)
+ 0.17046 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(1.40253)
- 0.08139 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00064
(0.89498) (0.23602)
+ 0.00119 * SEASON_2 - 0.00386 * SEASON_3 - 0.00287 * SEASON_4
(0.36331) (1.14975) (0.88426)

Sum Sq	0.0036	Std Err	0.0088	LHS Mean	0.0221
R Sq	0.8905	R Bar Sq	0.8500	F 17, 46	22.0005
D.W.(1)	1.8990	D.W.(4)	2.4284		

(E23) Private Consumption Expen. Deflator - Transport & Communication (PCPTRNCOM)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcptrncom)
= + 0.56773 * dlogya(pcptrncom)[-1] + 0.36608 * dlogya(pcptrncom)[-2]
(2.79387) (1.61856)
- 0.25935 * dlogya(pcptrncom)[-3] - 0.03004 * dlogya(pcptrncom)[-4]
(1.14571) (0.16302)
+ 0.04946 * dlogya(cpi) - 0.26416 * dlogya(cpi)[-1]
(0.20565) (0.98749)
+ 0.01420 * dlogya(cpi)[-2] + 0.49352 * dlogya(cpi)[-3]
(0.05377) (1.84627)
- 0.19358 * dlogya(cpi)[-4]
(0.78884)
+ 0.52078 * dlogya(gdp01)-dlogya(pogdp01twb)
(4.14179)
- 0.10002 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.47809)
+ 0.22605 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(1.06492)
+ 0.03381 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(0.15246)
- 0.04978 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] - 0.00165
(0.28317) (0.35740)
+ 0.00173 * SEASON_2 + 0.00203 * SEASON_3 - 0.00270 * SEASON_4
(0.31589) (0.36645) (0.48982)

Sum Sq	0.0107	Std Err	0.0153	LHS Mean	0.0033
R Sq	0.6865	R Bar Sq	0.5706	F 17, 46	5.9241
D.W.(1)	1.7600	D.W.(4)	1.9588		

(E24) Private Consumption Expen. Deflator – Miscellaneous (PCPO)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pcpo)
= + 0.36923 * dlogya(pcpo)[-1] + 0.17584 * dlogya(pcpo)[-2]
(2.42322) (1.17644)
+ 0.14172 * dlogya(pcpo)[-3] - 0.09585 * dlogya(pcpo)[-4]
(0.96400) (0.72872)
+ 0.54812 * dlogya(cpi) - 0.04174 * dlogya(cpi)[-1]
(4.39387) (0.26768)
- 0.26506 * dlogya(cpi)[-2] + 0.33750 * dlogya(cpi)[-3]
(1.68397) (2.03633)

- 0.08914 * dlogya(cpi)[-4]
(0.55805)
+ 0.10378 * dlogya(gdp01)-dlogya(pogdp01twb)
(1.48999)
- 0.03520 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.31080)
- 0.01805 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(0.16024)
+ 0.02532 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(0.22691)
- 0.06279 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] - 0.00317
(0.74215) (1.27236)
+ 0.00063 * SEASON_2 - 0.00081 * SEASON_3 + 0.00238 * SEASON_4
(0.21400) (0.27404) (0.80207)

Sum Sq	0.0030	Std Err	0.0081	LHS Mean	0.0138
R Sq	0.8514	R Bar Sq	0.7965	F 17, 46	15.5024
D.W.(1)	1.6328	D.W.(4)	1.7000		

B. Investment Sectors

(E25)Real Gross Fixed Capital Formation (IFIX01)

Cochrane-Orcutt
QUARTERLY data for 63 periods from 1993Q2 to 2008Q4
log(ifix01)
= 0.47924 * log(ifix01)[-4] + 0.33980 * log(gdp01)
(3.83764) (2.22334)
+ 0.01546 * pchya(gdp01) - 0.00407 * rmcp90-pchya(wpi)
(5.44546) (2.02679)
- 0.37375 * log(pifix/pgdp) - 0.13700 * dum05q4 + 1.72298
(1.43864) (4.28687) (0.94615)
+ 0.10924 * SEASON_2 + 0.08080 * SEASON_3 + 0.15724 * SEASON_4
(3.72473) (2.97078) (3.83067)

Sum Sq	0.0757	Std Err	0.0381	LHS Mean	13.1347
R Sq	0.9678	R Bar Sq	0.9616	F 10, 52	156.454
D.W.(1)	1.9436	D.W.(4)	2.1843		

AR_0 = + 0.78575 * AR_1
(8.06149)

(E26)Gross Fixed Capital Formation Deflator (PIFIX)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pifix)
= 1.00059 * dlogya(pifix)[-1] - 0.00150 * dlogya(pifix)[-2]
(5.39396) (0.00585)
- 0.05646 * dlogya(pifix)[-3] - 0.16384 * dlogya(pifix)[-4]
(0.22086) (0.89481)
+ 0.25796 * dlogya(wpi) - 0.16718 * dlogya(wpi)[-1]
(3.92203) (1.28068)
- 0.05570 * dlogya(wpi)[-2] - 0.06552 * dlogya(wpi)[-3]
(0.34395) (0.40942)
+ 0.14971 * dlogya(wpi)[-4] + 0.00230 - 0.00270 * SEASON_2
(1.39729) (0.68588) (0.59779)
- 0.00494 * SEASON_3 + 0.00087 * SEASON_4
(1.08728) (0.19003)

Sum Sq	0.0082	Std Err	0.0127	LHS Mean	0.0102
R Sq	0.8200	R Bar Sq	0.7777	F 12, 51	19.3617

D.W.(1) 1.6112 D.W.(4) 1.9163

C. Trade Sectors

(E27)Real Exports of Goods & Services (EX01)

Ordinary Least Squares
QUARTERLY data for 63 periods from 1993Q1 to 2008Q3
log(ex01)

= 0.36271 * log(ex01)[-1] + 1.32730 * log(rgdp@us)
(2.87207) (5.07844)
- 0.12777 * log(pex/er@tw/pcomwd) - 3.77601 + 0.09465 * SEASON_2
(3.53520) (4.61607) (5.74357)
+ 0.03911 * SEASON_3 + 0.10977 * SEASON_4
(3.31337) (7.81635)

Sum Sq 0.0580 Std Err 0.0322 LHS Mean 14.0553
R Sq 0.9934 R Bar Sq 0.9927 F 6, 56 1401.89
D.W.(1) 1.6568 D.W.(4) 2.5015

(E28) Exports of Goods & Services Deflator (PEX)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pex)

= + 0.42295 * dlogya(pex)[-1] + 0.16978 * dlogya(pex)[-2]
(3.07329) (1.04550)
+ 0.21696 * dlogya(pex)[-3] - 0.51235 * dlogya(pex)[-4]
(1.37159) (3.37231)
+ 0.89332 * dlogya(xpiusd) - 0.42006 * dlogya(xpiusd)[-1]
(14.2727) (2.60778)
- 0.15962 * dlogya(xpiusd)[-2] + 0.02774 * dlogya(xpiusd)[-3]
(0.86017) (0.14809)
+ 0.28858 * dlogya(xpiusd)[-4] + 0.77909 * dlogya(er@tw)
(2.05241) (21.2990)
- 0.35547 * dlogya(er@tw)[-1]
(3.00318)
- 0.07971 * dlogya(er@tw)[-2]
(0.59778)
- 0.13099 * dlogya(er@tw)[-3] + 0.38576 * dlogya(er@tw)[-4]
(0.98365) (3.01652)
- 0.00031 + 0.00242 * SEASON_2 + 0.00394 * SEASON_3
(0.16107) (0.92222) (1.48225)
+ 0.00283 * SEASON_4
(1.05933)

Sum Sq 0.0025 Std Err 0.0074 LHS Mean 0.0089
R Sq 0.9721 R Bar Sq 0.9618 F 17, 46 94.2459
D.W.(1) 1.8155 D.W.(4) 2.0676

(E29)Real Imports of Goods & Services (M01)

Cochrane-Orcutt
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
log(m01)

= 0.65316 * log(m01)[-1] + 0.53532 * log(gdp01)
(7.69032) (4.65382)
+ 0.00887 * pchya(gdp01) - 0.09843 * log(pm/pgdp) - 3.12474
(6.89910) (1.72079) (5.16379)
+ 0.12945 * SEASON_2 + 0.05280 * SEASON_3 + 0.08581 * SEASON_4
(7.22766) (3.95854) (4.81490)

Sum Sq 0.0759 Std Err 0.0371 LHS Mean 13.9687
R Sq 0.9856 R Bar Sq 0.9835 F 8, 55 471.653
D.W.(1) 1.8718 D.W.(4) 1.6128
H 0.0386

AR_0 = - 0.33655 * AR_1
(2.23362)

(E30) Imports of Goods & Services Deflator (PM)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(pm)
= + 0.57630 * dlogya(pm)[-1] + 0.01408 * dlogya(pm)[-2]
(3.16787) (0.06542)
- 0.04297 * dlogya(pm)[-3] + 0.11392 * dlogya(pm)[-4]
(0.17845) (0.59768)
+ 0.61826 * dlogya(mpiusd) - 0.24107 * dlogya(mpiusd)[-1]
(11.5880) (1.28480)
- 0.02848 * dlogya(mpiusd)[-2] + 0.08105 * dlogya(mpiusd)[-3]
(0.14821) (0.41914)
- 0.17528 * dlogya(mpiusd)[-4] + 0.73400 * dlogya(er@tw)
(1.13637) (12.7942)
- 0.37424 * dlogya(er@tw)[-1]
(2.30783)
- 0.04445 * dlogya(er@tw)[-2]
(0.24558)
+ 0.12536 * dlogya(er@tw)[-3] - 0.12934 * dlogya(er@tw)[-4]
(0.65391) (0.85331)
- 0.00236 + 0.00123 * SEASON_2 + 0.00202 * SEASON_3
(0.79997) (0.33778) (0.56174)
+ 0.00134 * SEASON_4
(0.36775)

Sum Sq 0.0047 Std Err 0.0101 LHS Mean 0.0265
R Sq 0.9601 R Bar Sq 0.9454 F 17, 46 65.1724
D.W.(1) 1.9880 D.W.(4) 2.0678

D. Monetary Sectors

(E31)Monetary Aggregates - M2/ Consumer Price Index - General Index (M2/CPI)

Ordinary Least Squares
QUARTERLY data for 60 periods from 1993Q1 to 2007Q4
log(m2/cpi)
= 0.88263 * log(m2/cpi)[-1] + 0.08630 * log(gdp01)
(18.7299) (1.55631)
- 0.00757 * log(rmcp90) - 0.33735 * log(cpi/cpi[-4]) + 0.20328
(2.28246) (3.31105) (0.72245)
- 0.03497 * SEASON_2 - 0.02882 * SEASON_3 - 0.02713 * SEASON_4
(9.19640) (8.01796) (6.91396)

Sum Sq 0.0047 Std Err 0.0095 LHS Mean 12.1089
R Sq 0.9987 R Bar Sq 0.9986 F 7, 52 5910.75
D.W.(1) 1.6484 D.W.(4) 1.4030
H 1.1055

(E32)Money Market Rate - Interbank Money Market Interest Rates – Total (RMCP90)

Ordinary Least Squares
QUARTERLY data for 60 periods from 1993Q1 to 2007Q4
log(rmcp90)

```
   =      0.72222 * log(rmcp90)[-1] + 0.41027 * log(redis)
         (17.2030)                    (6.50708)
        + 0.00336 * pchya(ifix01) - 0.21259 * dum93q3
         (3.26959)                   (2.67219)
        + 0.28161 * dum94q3 - 0.18408       - 0.04074 * SEASON_2
         (3.54809)            (4.77936)      (1.47908)
        - 0.02518 * SEASON_3 - 0.02427 * SEASON_4
         (0.87878)            (0.88039)
```

Sum Sq	0.2902	Std Err	0.0754	LHS Mean	1.1846
R Sq	0.9911	R Bar Sq	0.9898	F 8, 51	713.215
D.W.(1)	2.0404	D.W.(4)	1.8621		
H	-0.4080				

(E33)Exchange Rate Index (ER@TW)

Ordinary Least Squares
QUARTERLY data for 60 periods from 1993Q1 to 2007Q4
log(er@tw)

```
   =      0.91486 * log(er@tw)[-1] + 0.11932 * log(er@jp)
         (28.6543)                   (3.59736)
        - 0.10412 * log(ex[-1]/m[-1]) - 0.17658 * log(gdp01/gdp01[-4])
         (1.67150)                     (1.73958)
        + 0.06600 * dum97q4 - 0.06522 * dum98q4 - 0.14454
         (3.41796)            (3.49004)          (0.89605)
        + 0.00244 * SEASON_2 + 0.01282 * SEASON_3 + 0.00994 * SEASON_4
         (0.36891)            (1.92758)            (1.46135)
```

Sum Sq	0.0156	Std Err	0.0177	LHS Mean	4.5160
R Sq	0.9746	R Bar Sq	0.9700	F 9, 50	212.760
D.W.(1)	1.9720	D.W.(4)	2.3598		
H	0.0796				

E. Price Index

(E34)Import Price Index in term of US$ - General Index (MPIUSD)

Ordinary Least Squares
QUARTERLY data for 63 periods from 1993Q1 to 2008Q3
dlogya(mpiusd)

```
   =  + 1.33848 * dlogya(mpiusd)[-1] - 0.63104 * dlogya(mpiusd)[-2]
         (8.45830)                     (2.42509)
        + 0.21300 * dlogya(mpiusd)[-3] - 0.20226 * dlogya(mpiusd)[-4]
         (0.84970)                     (1.31958)
        + 0.04129 * dlogya(pfoodwd) + 0.05666 * dlogya(pfoodwd)[-1]
         (0.64903)                    (0.66066)
        - 0.09278 * dlogya(pfoodwd)[-2] + 0.06700 * dlogya(pfoodwd)[-3]
         (1.08319)                      (0.82855)
        + 0.05250 * dlogya(pfoodwd)[-4] + 0.14619 * dlogya(penergywd)
         (0.87976)                      (5.03611)
        - 0.13297 * dlogya(penergywd)[-1]
         (2.80203)
                                                  + 0.00446 * dlogya(penergywd)[-2]
                                                   (0.08714)
        + 0.00331 * dlogya(penergywd)[-3] + 0.01657 * dlogya(penergywd)[-4]
         (0.06796)                        (0.45635)
```

- 0.00122 + 0.00177 * SEASON_2 - 0.00235 * SEASON_3
(0.19999) (0.21901) (0.28889)
+ 0.00223 * SEASON_4
(0.27048)

Sum Sq	0.0234	Std Err	0.0228	LHS Mean	0.0228
R Sq	0.9529	R Bar Sq	0.9351	F 17, 45	53.5530
D.W.(1)	1.8351	D.W.(4)	2.6023		

(E35)Export Price Index in term of US$ - General Index (XPIUSD)

Ordinary Least Squares
QUARTERLY data for 63 periods from 1993Q1 to 2008Q3
dlogya(xpiusd)
= + 1.47818 * dlogya(xpiusd)[-1] - 0.68066 * dlogya(xpiusd)[-2]
(9.35494) (2.47873)
- 0.07268 * dlogya(xpiusd)[-3] + 0.06590 * dlogya(xpiusd)[-4]
(0.27000) (0.45255)
+ 0.01027 * dlogya(pfoodwd) + 0.01350 * dlogya(pfoodwd)[-1]
(0.27291) (0.25657)
- 0.01138 * dlogya(pfoodwd)[-2] + 0.02269 * dlogya(pfoodwd)[-3]
(0.21073) (0.44246)
+ 0.00812 * dlogya(pfoodwd)[-4] + 0.04364 * dlogya(penergywd)
(0.21608) (2.42080)
- 0.03712 * dlogya(penergywd)[-1]
(1.36651)
+ 0.02583 * dlogya(penergywd)[-2]
(0.90532)
- 0.04024 * dlogya(penergywd)[-3] + 0.02190 * dlogya(penergywd)[-4]
(1.44830) (1.10444)
- 0.00415 + 0.00243 * SEASON_2 - 0.00161 * SEASON_3
(1.03280) (0.47560) (0.31233)
+ 0.00074 * SEASON_4
(0.14146)

Sum Sq	0.0094	Std Err	0.0144	LHS Mean	-0.0056
R Sq	0.9389	R Bar Sq	0.9158	F 17, 45	40.6882
D.W.(1)	1.8990	D.W.(4)	2.5917		

(E36)Wholesale Price Index - General Index (WPI)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(wpi)
= + 0.73727 * dlogya(wpi)[-1] - 0.01000 * dlogya(wpi)[-2]
(4.58793) (0.05002)
- 0.04810 * dlogya(wpi)[-3] - 0.33482 * dlogya(wpi)[-4]
(0.22428) (2.07302)
+ 0.36065 * dlogya(mpiusd) - 0.26068 * dlogya(mpiusd)[-1]
(1.89323) (0.89246)
- 0.04548 * dlogya(mpiusd)[-2] + 0.03932 * dlogya(mpiusd)[-3]
(0.16576) (0.13813)
+ 0.04163 * dlogya(mpiusd)[-4] - 0.10516 * dlogya(xpiusd)
(0.22200) (0.28826)
+ 0.16367 * dlogya(xpiusd)[-1]
(0.26988)
+ 0.22895 * dlogya(xpiusd)[-2]
(0.38541)
- 0.40816 * dlogya(xpiusd)[-3] + 0.37452 * dlogya(xpiusd)[-4]
(0.74742) (1.27694)

```
        + 0.07176 * dlogya(gdp01)-dlogya(pogdp01twb)
          (0.36293)
        + 0.05969 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
          (0.20670)
        + 0.23296 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
          (0.81286)
        - 0.24971 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
          (0.87242)
        - 0.07136 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] + 0.00963
          (0.29700)                                          (1.61746)
        + 0.00111 * SEASON_2 + 0.00383 * SEASON_3 - 0.00019 * SEASON_4
          (0.15745)            (0.54427)            (0.02667)

 Sum Sq        0.0157     Std Err       0.0196     LHS Mean      0.0208
 R Sq          0.8545     R Bar Sq      0.7764     F 22, 41     10.9435
 D.W.( 1)      1.7922     D.W.( 4)      2.5414
```

(E37)Consumer Price Index – Food (CPIFOOD)

```
Ordinary Least Squares
 QUARTERLY data for      63 periods from 1993Q1 to 2008Q3
 dlogya(cpifood)
   =       0.52059 * dlogya(cpifood)[-1] + 0.15212 * dlogya(cpifood)[-2]
          (4.18695)                        (1.07867)
        + 0.18057 * dlogya(cpifood)[-3] - 0.43582 * dlogya(cpifood)[-4]
          (1.30265)                        (3.47669)
        + 0.05163 * dlogya(pfoodwd) - 0.00796 * dlogya(pfoodwd)[-1]
          (0.82705)                   (0.08638)
        + 0.05871 * dlogya(pfoodwd)[-2] - 0.12740 * dlogya(pfoodwd)[-3]
          (0.62654)                        (1.39320)
        + 0.09913 * dlogya(pfoodwd)[-4] + 0.01010       - 0.00005 * SEASON_2
          (1.49305)                        (1.29755)       (0.00542)
        + 0.00392 * SEASON_3 + 0.00658 * SEASON_4
          (0.39429)            (0.65623)

 Sum Sq        0.0386     Std Err       0.0278     LHS Mean      0.0249
 R Sq          0.5617     R Bar Sq      0.4566     F 12, 50      5.3408
 D.W.( 1)      1.8906     D.W.( 4)      2.2908
```

(E38)Consumer Price Index – Energy (CPIENERGY)

```
Ordinary Least Squares
 QUARTERLY data for      63 periods from 1993Q1 to 2008Q3
 dlogya(cpienergy1)
   =   + 0.79389 * dlogya(cpienergy1)[-1]
          (5.50940)
        + 0.00579 * dlogya(cpienergy1)[-2]
          (0.03232)
        + 0.00218 * dlogya(cpienergy1)[-3]
          (0.01216)
        - 0.15631 * dlogya(cpienergy1)[-4] + 0.06668 * dlogya(penergywd)
          (1.21843)                          (3.28497)
        - 0.00297 * dlogya(penergywd)[-1] + 0.00657 * dlogya(penergywd)[-2]
          (0.09159)                        (0.20865)
        - 0.04499 * dlogya(penergywd)[-3]
          (1.44486)
                                           + 0.03688 * dlogya(penergywd)[-4]
                                            (1.51258)
        + 0.00272       + 0.00133 * SEASON_2 + 0.00173 * SEASON_3
          (0.63155)       (0.24081)            (0.31438)
```

+ 0.00159 * SEASON_4
(0.28349)

Sum Sq	0.0121	Std Err	0.0155	LHS Mean	0.0267
R Sq	0.8748	R Bar Sq	0.8448	F 12, 50	29.1240
D.W.(1)	1.8258	D.W.(4)	2.4017		

(E39)Consumer Price Index - General Index (CPI)

Ordinary Least Squares
QUARTERLY data for 64 periods from 1993Q1 to 2008Q4
dlogya(cpi)
= + 0.84108 * dlogya(cpi)[-1] + 0.11720 * dlogya(cpi)[-2]
(5.02590) (0.45829)
+ 0.10615 * dlogya(cpi)[-3] - 0.15058 * dlogya(cpi)[-4]
(0.38264) (0.85484)
+ 0.30678 * dlogya(cpifood) - 0.26099 * dlogya(cpifood)[-1]
(23.7679) (4.94783)
- 0.03088 * dlogya(cpifood)[-2] - 0.00397 * dlogya(cpifood)[-3]
(0.38660) (0.04438)
+ 0.04279 * dlogya(cpifood)[-4] + 0.03228 * dlogya(cpienergy1)
(0.76195) (2.01335)
- 0.03540 * dlogya(cpienergy1)[-1]
(1.47192)
+ 0.00257 * dlogya(cpienergy1)[-2]
(0.09759)
+ 0.03018 * dlogya(cpienergy1)[-3]
(1.12191)
- 0.03011 * dlogya(cpienergy1)[-4]
(1.61941)
+ 0.05537 * dlogya(gdp01)-dlogya(pogdp01twb)
(2.09466)
- 0.00737 * dlogya(gdp01)-dlogya(pogdp01twb)[-1]
(0.16717)
+ 0.04684 * dlogya(gdp01)-dlogya(pogdp01twb)[-2]
(1.19345)
- 0.06699 * dlogya(gdp01)-dlogya(pogdp01twb)[-3]
(1.98982)
+ 0.01062 * dlogya(gdp01)-dlogya(pogdp01twb)[-4] - 0.00018
(0.37235) (0.22991)
+ 0.00012 * SEASON_2 + 0.00045 * SEASON_3 - 0.00011 * SEASON_4
(0.14514) (0.53372) (0.12625)

Sum Sq	0.0002	Std Err	0.0023	LHS Mean	0.0167
R Sq	0.9859	R Bar Sq	0.9784	F 22, 41	130.518
D.W.(1)	1.8603	D.W.(4)	2.0966		

(2)Identity Equations

(I1)Private Consumption Expenditure – Food (CPFOOD)

CPFOOD=CPFOOD01*PCPFOOD/100;

(I2)Private Consumption Expenditure – Beverages (CPBEV)

CPBEV=CPBEV01*PCPBEV/100;

(I3)Private Consumption Expenditure –Tobacco (CPTOB)

CPTOB=CPTOB01*PCPTOB/100;

(I4)Private Consumption Expenditure –Clothing Footwear (CPCLFT)

CPCLFT=CPCLFT01*PCPCLFT/100;

(I5)Private Consumption Expenditure –Fuel & Power (CPFUEL)

CPFUEL=CPFUEL01*PCPFUEL/100;

(I6)Private Consumption Expenditure –Furniture & House Equip (CPFURN)

CPFURN=CPFURN01*PCPFURN/100;

(I7)Private Consumption Expenditure –Rents & Water Charges CPRENTW)

CPRENTW=CPRENTW01*PCPRENTW/100;

(I8)Private Consumption Expenditure –Household Operation (CPHOP)

CPHOP=CPHOP01*PCPHOP/100;

(I9)Private Consumption Expenditure –Medicare & Health (CPHEALTH)

CPHEALTH=CPHEALTH01*PCPHEALTH/100;

(I10)Private Consumption Expenditure –Recreation & Education (CPRECED)

CPRECED=CPRECED01*PCPRECED/100;

(I11)Private Consumption Expenditure –Transport & Communication (CPTRNCOM)

CPTRNCOM=CPTRNCOM01*PCPTRNCOM/100;

(I12)Private Consumption Expenditure –Miscellaneous (CPO)

CPO=CPO01*PCPO/100;

(I13)Real Private Consumption Expenditure – (CP01)

CP01 = CPFOOD01+CPBEV01+CPTOB01+CPCLFT01+CPFUEL01+CPFURN01+
CPRENTW01+CPHOP01+CPHEALTH01+CPO01+CPTRNCOM01+CPRECED01;

(I14)Private Consumption Expenditure – (CP)

CP = CPFOOD+CPBEV+CPTOB+CPCLFT+CPFUEL+CPFURN+CPRENTW+
CPHOP+CPHEALTH+CPO+CPTRNCOM+CPRECED;

(I15)Private Consumption Expenditure Deflator – (PCP)

PCP=CP/CP01*100;

(I16)Gross Fixed Capital Formation (IFIX)

IFIX=IFIX01*PIFIX/100;

(I17) Exports of Goods & Services (EX)-

EX=EX01*PEX/100;

(I18) Imports of Goods & Services (M)

M=M01*PM/100;

(I19)Real Gross Domestic Product (GDP01)

GDP01 = CP01 + CG01 + IFIX01 + INVCH01 + EX01 – M01 ;

(I20) Gross Domestic Product (GDP)

GDP = CP + CG + IFIX + INVCH + EX – M ;

(I21) Gross Domestic Product Deflator(PGDP)

PGDP=GDP/GDP01*100;

(I22) Real Gross National Product (GNP01)

GNP01 = GDP01 + YWN01

(I23) Gross National Product (GNP)

GNP = GDP +YWN

(I24)Per Capita GNP(PCGNP)

PCGNP = GNP/EUS/N

(I25) Exchange Rate (NT$ per US$) Index(ER@TW)

EUS =ER@TW*33.81/100;

III. The Estimation Results for AIDS Model

Dep. \ Indep.	Constant	Food Exp. Deflator	Beverages Exp. Deflator	Tobacco Exp. Deflator	Clothing Exp. Deflator	Fuel & Power Exp. Deflator	Rents & Water Exp. Deflator	House Equip Exp. Deflator	Household Operation Exp. Deflator	Medicare & Health Exp. Deflator	Recreation & Education Exp. Deflator	Transport & Comm. Exp. Deflator	Mis. Exp. Deflator	Real expenditure	Adj-R^2
of Food Exp.	2.23***	0.36***	-0.10***	-0.02	0.15***	-0.03	0.14	-0.22***	-0.05	0.08	0.07	-0.24***	-0.14	-0.11***	0.92
	5.86	9.01	-3.04	-0.93	5.94	-1.31	1.29	-4.37	-1.11	1.43	0.96	-6.43		-5.19	
Ratio of Beverages Exp.	0.23**	-0.10***	0.04***	0.00	0.01	0.06***	0.12***	-0.03**	-0.03*	-0.12***	0.00	0.01	0.04	-0.01*	0.88
	2.03	-3.04	3.94	0.54	1.20	7.86	3.75	-2.20	-1.96	-7.35	-0.04	1.04		-1.74	
Ratio of Tobacco Exp.	0.13***	-0.02	0.00	0.02***	0.01***	-0.01***	-0.01	0.00	0.00	0.01	0.01	-0.02***	0.01	-0.01**	0.92
	2.69	-0.93	0.54	9.67	4.63	-4.04	-0.38	0.49	-0.27	1.67	1.06	-5.14		-2.36	
Ratio of Clothing Exp.	-0.78	0.15***	0.01	0.01	0.06**	-0.28***	-0.42**	0.27***	0.05	0.30***	-0.05	-0.07*	-0.03	0.04*	0.82
	-1.83	5.94	1.20	4.63	2.03	-9.55	-3.41	4.90	1.12	4.80	-0.67	-1.71		1.95	
Ratio of Fuel & Power Exp.	0.23***	-0.03	0.06***	-0.01***	-0.28***	0.06***	0.06***	-0.05***	-0.01	-0.01	0.00	-0.03***	0.24	-0.01***	0.91
	4.01	-1.31	7.86	-4.04	-9.55	15.77	3.67	-6.40	-1.57	-0.78	-0.40	-5.20		-3.55	
Ratio of Rents & Water Charges Exp.	0.84***	0.14	0.12***	-0.01	-0.42**	0.06***	0.61***	-0.04	-0.02	-0.22***	0.08***	-0.15***	-0.15	-0.04**	0.96
	2.84	1.29	3.75	-0.38	-3.41	3.67	7.13	-1.06	-0.74	-5.23	1.43	-5.10		-2.22	
Ratio of House Equip Exp.	-0.56***	-0.22***	-0.03**	0.00***	0.27***	-0.05***	-0.04	0.08***	0.02	0.03	-0.06*	-0.06**	0.06	0.03***	0.84
	-3.35	-4.37	-2.20	0.49	4.90	-6.40	-1.06	3.57	0.91	1.20	-1.92	-3.43		3.57	
Ratio of Household Operation Exp.	-0.02*	-0.05	-0.03*	0.00	0.05	-0.01	-0.02***	0.02	0.05***	0.01*	0.03**	-0.04***	-0.01	0.00	0.93
	-0.22	-1.11	-1.96	-0.27	1.12	-1.57	-0.74	0.91	5.18	0.68	2.06	-5.62		0.59	
Ratio of Medicare & Health Exp.	0.51	0.08	-0.12***	0.01	0.30***	-0.01	-0.22	0.03	0.01*	-0.07	0.18**	-0.09**	-0.10	-0.02	0.84
	1.40	1.43	-7.35	1.67	4.80	-0.78	-5.23	1.20	0.68	-1.36	2.62	-2.67		-1.13	
Ratio of Recreation & Education Exp.	-0.05	0.07	0.00	0.01	-0.05	0.00	0.08***	-0.06*	0.03**	0.18**	0.13	0.36***	-0.75	0.01	0.84
	-0.06	0.96	-0.04	1.06	-0.67	-0.40	1.43	-1.92	2.06	2.62	0.83	4.66		0.31	
Ratio of Transport Exp.	1.11**	-0.24***	0.01	-0.02***	-0.07*	-0.03***	-0.15***	-0.06**	-0.04***	-0.09**	0.36***	0.33***	-1.11	-0.05**	0.76
	2.73	-6.43	1.04	-5.14	-1.71	-5.20	-5.10	-3.43	-5.62	-2.67	4.66	8.38		-2.39	
Ratio of Mis. Exp.	-2.47	-0.14	0.04	0.01	-0.03	0.24	-0.15	0.06	-0.01	-0.10	-0.75	-1.11	1.94	0.12	

Note: 1.*** is denoted as 1% significance level; ** is denoted as 5% significance level; * is denoted as 10% significance level.
2. the 2nd row of each variable is t-Value.

IV. The Matches for Sector in Input-Output tables

(I)The matches for 49-Sectors with 10-Sectors

10-Sectors		49-Sectors	
No.	Definitions	No.	Definitions
1	Agriculture	1	Agricultural Products
		2	Livestock
		3	Forest Products
		4	Fisheries
2	Minerals	5	Minerals
3	Manufacturing—Traditional Industries	6	Process Foods
		7	Beverage
		8	Tobacco
		9	Textile Mill Products
		10	Wearing Apparel and Accessories
		11	Leather & Leather Products
		12	Wood & Wood Products
		13	Paper & Paper Products & Printed Matter
4	Manufacturing—Chemical and petroleum-related industries	14	Industrial Chemicals
		15	Artificial Fibers
		16	Plastic
		17	Plastic & Rubber Products
		18	Misc. Chemical Manufactures
		19	Petroleum Refining Products
		20	Non-metallic Mineral Products Manufacturing
5	Manufacturing—Heavy Industries	21	Iron and Steel Products
		22	Miscellaneous Metals
		23	Metallic Products
		24	Machinery
		25	Household Electrical, Electronic Products
		26	Information Products
		27	Communication Equipment
		28	Electronic Components & Parts
		29	Electrical Machinery & Other Appliances
		30	Transport Equipment
		31	Other Manufactures

10-Sectors		49-Sectors	
No.	Definitions	No.	Definitions
6	Construction	32	Residential Building Construction
		33	Public & Other Construction
7	Electricity, Gas and Water	34	Electricity
		35	Gas
		36	City Water
8	Transportation, Telecommunication & Wholesales, Tradindg	37	Transportation and Warehousing
		38	Post & Telecommunication Services
		39	Commodities Trading
9	Finance, Insurance and Real Estate Services	40	Finance & Insurance Services
		41	Real Estate Services
		42	Restaurant & Hotel Services
10	The other services	45	Public Adminstration Services
		43	Information Services
		44	Other Business Services
		46	Education Services
		47	Medical Services
		48	Broadcasting, Recreational & Cultural Services
		49	Other Social, Personal and Related Community Services

http://www.stat.gov.tw/ct.asp?xItem=17204&ctNode=2107。
http://eng.stat.gov.tw/ct.asp?xItem=8488&ctNode=1650

(II)The matches for 49 Sectors with 161 Sector

49-Sectors		161-Sectors		49 Sectors		161Sectors	
No.	Definitions	No.	Definitions	No.	Definitions	No.	Definitions
1	Agricultural Products	1	Paddy Rice	24	Machinery	86	General-Purpose Industrial Machinery
		2	Coarse Grain Crops			87	Metal Processing Machinery
		3	Sugarcane			88	Industrial Machinery
		4	Other Special Crops			89	Other Machinery
		5	Fruits			90	Machinery Parts,Repair & Maintenance
		6	Vegetables	25	Household Electrical, Electronic Products	91	Household Electrical Appliances
		7	Other Horticultural Crops			92	Electric lamps & Lighting Equipment
		10	Agricultural Services			100	Video and Radio Electronic Products
2	Livestock	8	Hogs	26	Information Products	96	Computer Products
		9	Other Poultry & Livestock			97	Computer Peripheral Equipment
3	Forest Products	11	Forestry			98	Data Storage Media
4	Fisheries	12	Fishery Products			99	Computer Components
5	Minerals	13	Energy Minerals	27	Communication Equipment	101	Communication Equipment
		14	Metallic Minerals	28	Electronic Components & Parts	102	Semiconductors
		15	Salt			103	Optoeletronic Components & Materials
		16	Other Non-Metallic Minerals			104	Electronic Components & Parts
6	Process Foods	17	Slaughtering & By-Products	29	Electrical Machinery & Other Appliances	93	Power Generation, Transmission and Distribution Machinery
		18	Edible Oil & Fat By-Products			94	Wires & Cables
		19	Flour			95	Other Electrical Materials
		20	Rice	30	Transport Equipment	105	Ships
		21	Sugar			106	Motor Vehicles
		22	Animal Feeds			107	Motorcycles
		23	Canned Foods			108	Bicycles
		24	Frozen Foods			109	Other Transport Equitment
		25	Monosodium Glutamate	31	Other Manufactures	110	Precision Instruments & Apparatus
		26	Other Seasonings			111	Education & Entertainment Articles
		27	Dairy Products			112	Other Manufactures

49-Sectors		161-Sectors		49 Sectors		161Sectors	
No.	Definitions	No.	Definitions	No.	Definitions	No.	Definitions
		28	Sugar Confectionery & Bakery Products	32	Residential Building Construction	116	Residential Building Construction
		29	Other Foods			117	Nonresidential Building Construction
7	Beverage	30	Non-Alcoholic Beverages	33	Public & Other Construction	118	Public Works
		31	Alcoholic Beverages			119	Other Construction
8	Tobacco	32	Tobacco	34		113	Electricity
9	Textile Mill Products	33	Cotton & Cotton Fabrics	35	Electricity	114	Gas
		34	Wool & Worsted Fabrics	36	Gas	115	City Water, Steam & Hot Water
		35	Artificial Fabrics	37	City Water Transportation and Warehousing	126	Railroad Vehicle Transportation
		36	Knitted Fabrics			127	Other Land Transportation
		37	Other Fabrics			128	Water Transportation
		38	Printing, Dyeing & Finishing			129	Air Transportation
10	Wearing Apparel and Accessories	39	Tatted Garments			130	Services Incidental to Transport
		40	Knitted Garments			131	Travel Agency Services
		41	Fabric Products, Wearing Apparel & Accessories			132	Warehousing
11	Leather & Leather Products	42	Leather	38	Electricity	133	Postal Services
		43	Leather Footwear			134	Telecommunication Services
		44	Other Leather Products	39	Commodities Trading	120	Wholesale Trade
12	Wood & Wood Products	45	Lumber			121	Retail Trade
		46	Plywood			122	International Trade
		47	Wood,Bamboo & Rattan Products	40	Finance & Insurance Services	135	Finance
		48	Non-Metallic Furniture			136	Securities & Futures
13	Paper & Paper Products & Printed Matter	49	Pulp & Paper			137	Insurance
		50	Paper Products	41	Real Estate Services	138	House Services
		51	Newspapers, Books & Magazines			139	Real Estate Services
		52	Other Printed Matters & Bookbinding	42	Restaurant & Hotel Services	124	Hotel Services
14	Industrial Chemicals	53	Basic Industrial Chemicals			125	Restaurant Services
		54	Petrochemical Raw Materials	43		143	Information Services
		59	Other Chemical Materials	44	Information	123	Commodity Brokerage

49-Sectors		161-Sectors		49 Sectors		161Sectors	
No.	Definitions	No.	Definitions	No.	Definitions	No.	Definitions
15	Artificial Fibers	56	Synthetic Fibers		Services	140	Renting & Leasing Services
		57	Other Artificial Fibers		Other Business Services	141	Legal and Accounting Services
16	Plastic	58	Plastics (Synthetic Resins)			142	Consulting Services
17	Plastic & Rubber Products	67	Rubber Products			144	Research & Development Services
		68	Plastic & Rubber Footwear			145	Advertising Services
		69	Other Plastic Products			146	Other Specialized and Technologic Services
18	Misc. Chemical Manufactures	55	Chemical Fertilizers			152	Support Services
		60	Coatings	45	Public Adminstration Services	160	Public Administration Services
		61	Medicines	46	Education Services	147	Educational Training Services
		62	Pesticides and Herbicides	47	Medical Services	148	Medical & Health Services
		63	Cleaning Preparations and Cosmetics	48	Broadcasting, Recreational & Cultural Services	150	Radio, Television & Movies Services
		64	Other Chemical products			151	Recreational & Cultural Services
19	Petroleum Refining Products	65	Petroleum Refining Products	49	Other Social, Personal and Related Community Services	149	Social Welfare Services
		66	Coal Products			153	Environmental Sanitary Services
20	Non-metallic Mineral Products Manufacturing	70	Ceramic Products			154	Services of Civil Association
		71	Glass & Glass Products			155	Other Social Services
		72	Cement			156	Repair and Maintenance of Motor Vehicles
		73	Cement Products			157	Other Repair Services
		74	Other Non-Metallic Mineral Products			158	Household Services
21	Iron and Steel Products	75	Pig Iron & Crude Steel			159	Other Personal Services
		76	Primary Iron & Steel Products			161	Undistributed
22	Miscellaneous Metals	77	Aluminum				
		78	Other Metals				
23	Metallic Products	79	Metal Forging & Powder Metallurgy				
		80	Metallic Products for Household Use				
		81	Metallic Hand Tools				
		82	Metal Structure & Architectural Components				
		83	Metal Containers				
		84	Other Metal Products				
		85	Surface Treating of Metal Products				

Data Dource:http://www.stat.gov.tw/ct.asp?xItem=17204&ctNode=2107。

http://eng.stat.gov.tw/ct.asp?xItem=8488&ctNode=1650