Appendix B
The ROW Part of the MCB Model

October 29, 2004

Table B.1
The Countries and Variables in the MCB Model

Quarterly Countries			Local Currency	Trade Share Equations Only		
1	US	United States	U.S. Dollar (mil.)	40	TU	Turkey
2	CA	Canada	Can. Dollar (mil.)	41	PD	Poland
3	JA	Japan	Yen (bil.)	42	RU	Russia
4	AU	Austria	Euro (mil.)	43	UE	Ukraine
5	FR	France	Euro (mil.)	44	EG	Egypt
6	GE	Germany	Euro (mil.)	45	IS	Israel
7	IT	Italy	Euro (mil.)	46	KE	Kenya
8	NE	Netherlands	Euro (mil.)	47	BA	Bangladesh
9	ST	Switzerland	Swiss Franc (bil.)	48	HK	Hong Kong
10	UK	United Kingdom	Pound Sterling (mil.)	49	SI	Singapore
11	FI	Finland	Euro (mil.)	50	VI	Vietnam
12	AS	Australia	Aust. Dollar (mil.)	51	NI	Nigeria
13	SO	South Africa	Rand (mil.)	52	AL	Algeria
14	KO	Rep. of Korea	Won (bil.)	53	IA	Indonesia
Annual Countries				54	IN	Iran
15	BE	Belgium	Euro (mil.)	55	IQ	Iraq
16	DE	Denmark	Den. Kroner (bil.)	56	KU	Kuwait
17	NO	Norway	Nor. Kroner (bil.)	57	LI	Libya
18	SW	Sweden	Swe. Kroner (bil.)	58	UA	United Arab Emirates
19	GR	Greece	Euro (mil.)	59	AO	All Other
20	IR	Ireland	Euro (mil.)			
21	PO	Portugal	Euro (mil.)			
22	SP	Spain	Euro (mil.)			
23	NZ	New Zealand	N.Z. Dollar (mil.)			
24	SA	Saudi Arabia	Riyals (bil.)			
25	VE	Venezuela	Bolivares (bil.)			
26	CO	Colombia	Col. Pesos (bil.)			
27	JO	Jordan	Jor. Dinars (mil.)			
28	SY	Syria	Syr. Pound (mil.)			
29	ID	India	Ind. Rupee (bil.)			
30	MA	Malaysia	Ringgit (mil.)			
31	PA	Pakistan	Pak. Rupee (bil.)			
32	PH	Philippines	Phil. Peso (bil.)			
33	TH	Thailand	Baht (bil.)			
34	CH	China	Yuan (bil.)			
35	AR	Argentina	Arg. Peso (mil.)			
36	BR	Brazil	Reais (mil.)			
37	CE	Chile	Chi. Peso (bil.)			
38	ME	Mexico	New Peso (mil.)			
39	PE	Peru	Nuevos Soles (mil.)			

• The countries that make up the EMU, denoted EU in the model, are AU, FR, GE, IT, NE, FI, BE, IR, PO, SP, GR. (GR begins in 2001.) (Luxembourg, which is also part of the EMU, is not in the model.)
• Prior to 1999:1 the currency is Schillings for AU, Fr. Francs for FR, DM for GE, Lira for IT, Guilders for NE, Markkaa for FI, Bel. Francs for BE, Irish Pounds for IR, Escudes for PO, Pesetas for SP, and Drachmas for GR (prior to 2001:1). The units are in euro equivalents. For example, in 1999:1 the Lira was converted to the euro at 1936.27 Liras per euro, and 1936.27 was used to convert the Lira to its euro equivalent for 1998:4 back.
• The NIPA base year is 1995 for all countries except CA (1997), ST (2000), UK (2001), FI (2000), AS (2002-2003), and KO (2000).

Table B.2
The Variables for a Given Country in Alphabetical Order

Variable	Eq. No.	Description
a_{ij}	L-1	Share of i's merchandise exports to j out of total merchandise imports of j. [See below]
A	I-7	Net stock of foreign security and reserve holdings, end of quarter, in lc. [$A_{-1} + S$. Base value of zero used for the quarter prior to the beginning of the data.]
AF	exog	Level of the armed forces in thousands. [OECD data]
C	2	Personal consumption in constant lc. [OECD data or IFS96F/CPI]
E	9	Exchange rate, average for the period, lc per $. [IFSRF]
EE	I-9	Exchange rate, end of period, lc per $. [IFSAE]
EX	I-2	Total exports (NIPA) in constant lc. [OECD data or (IFS90C or IFS90N)/ PX]
$EXDS$	exog	Discrepancy between NIPA export data and other export data in constant lc. [$EX - PX00(E00 \cdot X00\$ + XS)$.]
$E00$	exog	E in 2000, 2000 lc per 2000 $. [IFSRF in 2000]
F	10	Three-month forward exchange rate, lc per $. [IFSB]
G	exog	Government purchases of goods and services in constant lc. [OECD data or (IFS91F or IFS91FF)/PY] (Denoted GZ for countries CO and TH.)
H	9	Exchange rate, average for the period, lc per DM euro. [E/E_{GE}]
I	3	Gross fixed investment in constant lc. [OECD data or IFS93/PY]
IM	I-1	Total imports (NIPA) in constant lc. [OECD data or IFS98C/PM]
$IMDS$	exog	Discrepancy between NIPA import data and other import data in constant lc. [$IM - PM00(M + MS)$]
J	13	Total employment in thousands. [OECD data or IFS67 or IFS67E or IFS67EY or IFS67EYC]
JJ	I-14	Employment population ratio. [J/POP]
JJP	exog	Peak to peak interpolation of JJ.
JJS	I-15	Ratio of JJ to JJP. [JJ/JJP]
$JMIN$	I-13	Minimum amount of employment needed to produce Y in thousands. [Y/LAM]
LAM	exog	Computed from peak to peak interpolation of $\log(Y/J)$.
$L1$	14	Labor force of men in thousands. [OECD data]
$L2$	15	Labor force of women in thousands. [OECD data]
M	1	Total merchandise imports (fob) in 2000 lc. [IFS71V/PM]
MS	exog	Other goods, services, and income (debit) in 2000 lc, BOP data. [((IFS78AED+IFS78AHD)E)/PM]
$M00\$A$	I-8	Merchandise imports (fob) from the trade share matrix in 2000 $. [See below]
$M00\$B$	exog	Difference between total merchandise imports and merchandise imports from the trade share matrix in 2000 $ (i.e., imports from countries other than the 44 in the trade share matrix). [$M/E00 - M00\$A$]
$M1$	6	Money supply in lc. [IFS34 or IFS34A.N+IFS34B.N or IFS35L.B or IFS39MAC or IFS59MA or IFS59MC]
NW	I-21	National Wealth in constant lc. [$NW_{-1} + I + V1 + EX - IM$. Base value of zero used for the quarter prior to the beginning of the data.]
PM	I-19	Import price deflator, 2000 = 1.0. [IFS75/100]
PMP	L-4	Import price index from DOT data, 2000 = 1.0. [See below]
$PM00$	exog	PM in the NIPA base year divided by PM in 2000.
POP	exog	Population in millions. [IFS99Z]
$POP1$	exog	Population of labor-force-age men in thousands. [OECD data]
$POP2$	exog	Population of labor-force-age women in thousands. [OECD data]
$PSI1$	exog	$[(EE + EE_{-1})/2]/E$]
$PSI2$	exog	$[PM/PMP]$
$PW\$$	L-5	World price index, $/2000$. [See below]
PX	11	Export price index, 2000 = 1.0. [IFS74/100. If no IFS74 data for t, then $PX_t = PX\$_t(E_t/E00_t$, where $PX\$_t$ is defined next.]

Table B.2 (continued)

Variable	Eq. No.	Description
$PX\$$	I-22	Export price index, \$/2000\$, 2000 = 1.0. $[(E00 \cdot PX)/E$. If no IFS74 data at all, then $PX\$_t = PX_{USt}$ for all t. If IFS74 data only from t through $t+h$, then for $i > 0$, $PX\$_{t-i} = PX\$_t(PX_{USt-i}/PX_{USt}$ and $PX\$_{t+h+i} = PX\$_{t+h}(PX_{USt+k+i}/PX_{USt}$.
$PX00$	exog	PX in the NIPA base year divided by PX in 2000.
PY	5	GDP or GNP deflator, equals 1.0 in the NIPA base year. [OECD data or (IFS99B/IFS99B.P]
RB	8	Long term interest rate, percentage points. [IFS61]
RS	7	Three-month interest rate, percentage points. [IFS60 or IFS60B or IFS60C or IFS60L or IFS60P]
S	I-6	Total net goods, services, and transfers in lc. Current account balance. [See Table B.7] (Denoted SZ for countries CO and TH.)
$STAT$	exog	Statistical discrepancy in constant lc. $[Y - C - I - G - EX + IM - V1]$
T	exog	Time trend. [For quarterly data, 1 in 1952.1, 2 in 1952.2, etc.; for annual data, 1 in 1952, 2 in 1953, etc.]
TT	exog	Total net transfers in lc. [See Table B.7]
UR	I-12	Unemployment rate. $[(L1 + L2 - J)/(L1 + L2 - AF)]$
V	I-5	Stock of inventories, end of period, in constant lc. $[V_{-1} + V1$. Base value of zero was used for the period (quarter or year) prior to the beginning of the data.]
$V1$	I-4	Inventory investment in constant lc. [OECD data or IFS93I/PY]
W	12	Nominal wage rate. [IFS65..C or IFS65A or IFS65EY or IFS65UMC]
X	I-3	Final sales in constant lc. $[Y - V1]$ (Denoted XZ for country PE.)
XS	exog	Other goods, services, and income (credit) in 2000 lc. BOP data. [(E(IFS78ADD+IFS78AGD))/PX]
$X00\$$	L-3	Merchandise exports from the trade share matrix in 2000 \$. [See below]
$XX00\$_{ij}$	L-2	Merchandise exports from i to j in 2000\$. [See below]
Y	4	Real GDP or GNP in constant lc. [OECD data or IFS99B.P or IFS99B.R]
YS	I-17	Potential value of Y. $[LAM \cdot JJP \cdot POP]$
Z	I-16	Labor constraint variable. $[\min(0, 1 - JJP/JJ)]$
ZZ	I-18	Demand pressure variable. $[(YS - Y)/YS]$

Construction of variables related to the trade share matrix:

The raw data are:

$XX\$_{ij}$	Merchandise exports from i to j in \$, $i, j = 1, ..., 58$ [DOT data. 0 value used if no data]
$X\$_i$	Total merchandise exports (fob) in \$. $i = 1, ..., 39$ [IFS70/E or IFS70D]

The constructed variables are:

$XX\$_{i59} =$	$X\$_i - \sum_{j=1}^{58} XX\$_{ij}, i = 1, ..., 39$
$XX00\$_{ij} =$	$XX\$_{ij}/PX\$_i, i = 1, ..., 39, j = 1, ..., 59$ and $i = 40, ..., 58, j = 1, ..., 58$
$M00\$A_i =$	$\sum_{j=1}^{58} XX00\$_{ji}, i = 1, ..., 58$; $M00\$A_{59} = \sum_{j=1}^{39} XX00\$_{j59}$
$a_{ij} =$	$XX00\$_{ij}/M00\$A_j, i = 1, ..., 39, j = 1, ..., 59$ and $i = 40, ..., 58, j = 1, ..., 58$
$X00\$_i =$	$\sum_{j=1}^{59} XX00\$_{ij}, i = 1, ..., 39$; $X00\$_i = \sum_{j=1}^{58} XX00\$_{ij}, i = 40, ..., 58$
$PMP_i =$	$(E_i/E00_i) \sum_{j=1}^{58} a_{ji} PX\$_j, i = 1, ..., 39$
$PW\$_i =$	$(\sum_{j=1}^{58} PX\$_j X00\$_j)/(\sum_{j=1}^{58} X00\$_j), i = 1, ..., 39$ An element in this summation is skipped if $j = i$. This summation also excludes the oil exporting countries, which are SA, VE, NI, AL, IA, IN, IQ, KU, LI, UA.

- Variables available for trade share only countries are $M00\$A$, $PX\$$, $X00\$$.
- lc = local currency
- IFSxxxxx = variable number xxxxx from the IFS data

Table B.2 (continued)
The EU Variables

Variable	Eq. No.	Description
E	9	Exchange rate, average for the period, euro per $. [IFSRF]
PY	[ ]	GDP deflator. $[(\sum_{i=1}^{6} PY_i Y_i)/Y_{EU}$, where the summation is for $i =$ GE, AU, FR, IT, NE, FI.]
RB	8	Long term interest rate, percentage points. [IFS61]
RS	7	Three-month interest rate, percentage points. [IFS60]
Y	[ ]	Real GDP in constant euros. $[Y_{GE} + \sum_{i=1}^{5} [Y_i/(E00_i/E00_{GE})]$, where the summation is for $i =$ AU, FR, IT, NE, FI.]
YS	[ ]	Potential value of Y_{EU}. $[YS_{GE} + \sum_{i=1}^{5} [YS_i/(E00_i/E00_{GE})]$, where the summation is for $i =$ AU, FR, IT, NE, FI.]
ZZ	I-18	Demand pressure variable. $[(YS_{EU} - Y_{EU})/YS_{EU}]$

Table B.3
The Equations for a Given Country

STOCHASTIC EQUATIONS

Eq.	LHS Variable	Explanatory Variables
1	$\log(IM/POP)$	cnst, $\log(IM/POP)_{-1}$, $\log(PY/PM)$, $\log[(C+I+G)/POP]$ [Total Imports (NIPA), constant lc]
2	$\log(C/POP)$	cnst, $\log(C/POP)_{-1}$, RS or RB, $\log(Y/POP)$, $[A/(PY \cdot YS)]_{-1}$ [Consumption, constant lc]
3	$\log I$	cnst, $\log I_{-1}$, $\log Y$, RS or RB [Fixed Investment, constant lc]
4	$\log Y$	$\log Y_{-1}$, $\log X$, $\log V_{-1}$ [Real GDP, constant lc]
5	$\log PY$	cnst, $\log PY_{-1}$, $\log W - \log LAM$, $\log PM$, DP, T [GDP Price Deflator, base year = 1.0]
6	$\log[M1/(POP \cdot PY)]$	cnst, $\log[M1/(POP \cdot PY)]_{-1}$ or $\log[M1_{-1}/(POP_{-1}PY)]$, RS, $\log(Y/POP)$ [Money Supply, lc]
7	RS	cnst, RS_{-1}, $100[(PY/PY_{-1})^4 - 1]$, ZZ or JJS, RS_{GE}, RS_{US} [Three-Month Interest Rate, percentage points]
8	$RB - RS_{-2}$	cnst, $RB_{-1} - RS_{-2}$, $RS - RS_{-2}$, $RS_{-1} - RS_{-2}$ [Long Term Interest Rate, percentage points]
9	$\Delta \log E$	cnst, $\log(PY/PY_{US} - \log E_{-1}$, $.25 \log[(1 + RS/100)/(1 + RS_{US}/100)]$ [Exchange Rate, lc per \$] [For all countries but AU, FR, IT, NE, ST, UK, FI, BE, DE, NO, SW, GR, IR, PO, and SP]
9	$\Delta \log H$	cnst, $\log(PY/PY_{GE} - \log H_{-1}$, $.25 \log[(1 + RS/100)/(1 + RS_{GE}/100)]$ [Exchange Rate, lc per DM] [For countries AU, FR, IT, NE, ST, UK, FI, BE, DE, NO, SW, GR, IR, PO, and SP]
10	$\log F$	$\log EE$, $.25 \log[(1 + RS/100)/(1 + RS_{US}/100)]$ [Three-Month Forward Rate, lc per \$]
11	$\log PX - \log[PW\$(E/E00)]$	$\log PY - \log[PW\$(E/E00)]$ [Export Price Index, 2000 = 1.0]
12	$\log W - \log LAM$	cnst, $\log W_{-1} - \log LAM_{-1}$, $\log PY$, DW, T, $\log PY_{-1}$, [Nominal Wage Rate, base year = 1.0]
13	$\Delta \log J$	cnst, T, $\log(J/JMIN)_{-1}$, $\Delta \log Y$, $\Delta \log Y_{-1}$ [Employment, thousands]
14	$\log(L1/POP1)$	cnst, T, $\log(L1/POP1)_{-1}$, $\log(W/PY)$, Z [Labor Force—men, thousands]
15	$\log(L2/POP2)$	cnst, T, $\log(L2/POP2)_{-1}$, $\log(W/PY)$, Z [Labor Force—women, thousands]

Table B.3 (continued)

IDENTITIES

Eq.	LHS Variable	Explanatory Variables
I-1	$M =$	$(IM - IMDS)/PM00 - MS$ [Merchandise Imports, 2000 lc]
I-2	$EX =$	$PX00(E00 \cdot X00\$ + XS) + EXDS$ [Total Exports (NIPA), constant lc]
I-3	$X =$	$C + I + G + EX - IM + STAT$ [Final Sales, constant lc]
I-4	$V1 =$	$Y - X$ [Inventory Investment, constant lc]
I-5	$V =$	$V_{-1} + V1$ [Inventory Stock, constant lc]
I-6	$S =$	$PX(E00 \cdot X00\$ + XS) - PM(M + MS) + TT$ [Current Account Balance, lc]
I-7	$A =$	$A_{-1} + S$ [Net Stock of Foreign Security and Reserve Holdings, lc]
I-8	$M00\$A =$	$M/E00 - M00\$B$ [Merchandise Imports from the Trade Share Calculations, 2000 $]
I-9	$EE =$	$2PSI1 \cdot E - EE_{-1}$ [Exchange Rate, end of period, lc per $]
I-12	$UR =$	$(L1 + L2 - J)/(L1 + L2 - AF)$ [Unemployment Rate]
I-13	$JMIN =$	Y/LAM [Minimum Required Employment, thousands]
I-14	$JJ =$	J/POP [Employment Population Ratio]
I-15	$JJS =$	JJ/JJP [Peak to Peak Interpolation of JJ]
I-16	$Z =$	$\min(0, 1 - JJP/JJ)$ [Labor Constraint Variable]
I-17	$YS =$	$LAM \cdot JJP \cdot POP$ [Potential Y]
I-18	$ZZ =$	$(YS - Y)/YS$ [Demand Pressure Variable]
I-19	$PM =$	$PSI2 \cdot PMP$ [Import Price Deflator, 2000 = 1.0]
I-20	E	$E = H \cdot E_{GE}$ [Exchange Rate: lc per $] [Equation relevant for countries AU, FR, IT, NE, ST, UK, FI, BE, DE, NO, SW, GR, IR, PO, and SP only]
I-21	$NW =$	$NW_{-1} + I + V1 + EX - IM$ [National Wealth, constant lc]
I-22	$PX\$ =$	$(E00/E)PX$ [Export Price Index, $/2000$]

• From 1999:1 on for GE: $E_{GE} = E_{EU}$, $RS_{GE} = RS_{EU}$, and $RB_{GE} = RB_{EU}$. From 1999:1 on for an EU country i (except GE): $H_i = 1.0$, $RS_i = RS_{EU}$, and $RB_i = RB_{EU}$.
• In equations 5 and 12 DP and DW are demand pressure variables.
• $PX\$$ and $M00\$A$ are exogenous for trade share only countries.

Table B.3 (continued)

Equations that Pertain to the Trade and Price Links Among Countries

L-1	$a_{ij} =$	computed from trade share equations [Trade Share Coefficients]
L-2	$XX00\$_{ij} =$	$a_{ij} M00\$A_j, i = 1, ..., 39, j = 1, ..., 59$ and $i = 40, ..., 58, j = 1, ..., 58$ [Merchandise Exports from i to j, 2000$]
L-3	$X00\$_i =$	$\sum_{j=1}^{59} XX00\$_{ij}, i = 1, ..., 39$
	$X00\$_i =$	$\sum_{j=1}^{58} XX00\$_{ij}, i = 40, ..., 58$ [Total Merchandise Exports, 2000$]
L-4	$PMP_i =$	$(E_i/E00_i) \sum_{j=1}^{58} a_{ji} PX\$_j, i = 1, ..., 39$ [Import Price Deflator, 2000 = 1.0]
L-5	$PW\$_i =$	$(\sum_{j=1}^{58} PX\$_j X00\$_j) / \sum_{j=1}^{58} X00\$_j), i = 1, ..., 39$ An element in this summation is skipped if $j = i$. This summation also excludes the oil exporting countries, which are SA, VE, NI, AL, IA, IN, IQ, KU, LI, UA. [World Price Index, $/2000$]

Linking of the Annual and Quarterly Data

• Quarterly data exist for all the trade share calculations, and all these calculations are quarterly. Feeding into these calculations from the annual models are predicted annual values of $PX\$_i$, $M00\$A_i$, and E_i. For each of these three variables the predicted value for a given quarter was taken to be the predicted annual value multiplied by the ratio of the actual quarterly value to the actual annual value. This means in effect that the distribution of an annual value into its quarterly values is taken to be exogenous.

• Once the quarterly values have been computed from the trade share calculations, the annual values of $X00\$_i$ that are needed for the annual models are taken to be the sums of the quarterly values. Similarly, the annual values of PMP_i and $PW\$_i$ are taken to be the averages of the quarterly values.

Table B.4
Coefficient Estimates and Test Results
for the ROW Equations

See Chapter 1 for discussion of the tests.
See Chapter 2 for discussion of the equations.
* = significant at the 99 percent confidence level.
ρ = first order autoregressive coefficient of the error term.
† = variable is lagged one period.
Dummy variable coefficient estimates are not shown for GE and EU.
t-statistics are in parentheses.

Table B1: Coefficient Estimates for Equation 1

$$\log(IM/POP) = a_1 + a_2 \log(IM/POP)_{-1} + a_3 \log(PY/PM) + a_4 \log[(C+I+G)/POP)]$$

	a_1	a_2	a_3	a_4	ρ	SE	DW
Quarterly							
CA	-0.358	0.958	0.077	0.078	0.226	0.0290	2.02
	(-0.93)	(34.74)	(1.71)	(1.18)	(2.71)	1966.1–2004.2	
JA	-0.103	0.919	0.061	0.068		0.0282	1.84
	(-0.58)	(37.92)	(6.18)	(1.70)		1966.1–2004.1	
AU	-1.554	0.859		0.309		0.0334	2.13
	(-3.46)	(22.66)		(3.61)		1970.1–2003.4	
FR	-1.055	0.903	0.071	0.205		0.0206	1.24
	(-2.34)	(27.56)	(3.82)	(2.60)		1971.1–2004.2	
GE	-0.261	0.969	0.018	0.058		0.0213	2.17
	(-0.82)	(41.83)	(1.30)	(1.05)		1971.1–2004.2	
IT	-1.169	0.841	0.074	0.272		0.0374	2.09
	(-2.81)	(20.69)	(3.46)	(3.34)		1971.1–2003.4	
NE	-1.105	0.907	0.027	0.218		0.0181	1.77
	(-1.70)	(20.86)	(1.22)	(1.89)		1978.1–2004.1	
UK	-2.141	0.787	0.035	0.438		0.0287	2.00
	(-3.73)	(14.46)	(1.94)	(3.84)		1966.1–2004.1	
FI	-0.337	0.958	0.013	0.076		0.0515	2.59
	(-0.57)	(27.73)	(0.30)	(0.88)		1976.2–2004.2	
AS	-3.091	0.775	0.144	0.527	0.269	0.0376	2.04
	(-3.83)	(12.20)	(3.18)	(3.76)	(2.54)	1966.1–2004.1	
SO	-0.029	0.903		0.085		0.0699	1.91
	(-0.07)	(25.18)		(1.23)		1961.1–2004.1	
KO	-0.853	0.816	0.057	0.267		0.0578	1.99
	(-1.85)	(18.24)	(0.95)	(3.09)		1974.1–2004.2	
Annual							
BE	-2.119	0.624	0.294	0.578		0.0421	1.65
	(-1.46)	(4.31)	(3.71)	(2.04)		1962–2003	
DE	-1.396	0.746	0.125	0.469		0.0534	1.90
	(-1.45)	(6.47)	(0.92)	(1.81)		1962–2003	
NO	-0.154	0.531	0.214	0.416		0.0498	1.37
	(-0.39)	(3.96)	(2.36)	(2.68)		1962–2002	
GR	-0.792	0.880	0.176	0.192		0.0692	1.93
	(-0.77)	(11.42)	(1.70)	(1.11)		1963–2003	
IR	-2.980	0.649	0.492	0.650		0.0691	1.02
	(-1.34)	(3.59)	(3.19)	(1.64)		1968–2003	
PO	-1.510	0.229	0.510	0.847		0.0739	1.36
	(-2.39)	(1.68)	(5.51)	(4.93)		1962–2003	
SP	-1.071	0.712	0.315	0.362		0.0712	1.15
	(-0.67)	(6.62)	(3.95)	(1.44)		1962–2003	
NZ	-7.077	0.508	0.332	1.127		0.0698	1.81
	(-2.39)	(2.99)	(2.92)	(2.60)		1962–2002	
SA	-0.131	0.802		0.182		0.1473	1.15
	(-0.41)	(6.73)		(1.19)		1970–2003	
CO	0.815	0.533	0.359	0.234		0.1078	1.62
	(0.49)	(2.46)	(1.69)	(0.88)		1971–2002	
SY	-4.631	0.281	0.104	1.080		0.1301	1.21
	(-3.35)	(1.82)	(2.37)	(4.23)		1965–2002	
ID	-0.851	0.844		0.382		0.1046	1.79
	(-1.75)	(8.21)		(1.87)		1962–2002	
MA	-2.118	0.741		0.493		0.0976	1.50
	(-2.43)	(8.81)		(2.86)		1972–2003	
PA	-1.725	0.142		0.981		0.0682	1.51
	(-4.41)	(1.02)		(4.98)		1974–2003	

Table B1: Coefficient Estimates for Equation 1

	a_1	a_2	a_3	a_4	ρ	SE	DW
PH	-3.402	0.603	0.193	1.268		0.1629	2.05
	(-2.70)	(4.91)	(0.98)	(2.88)			1962–2003
TH	-0.815	0.752		0.411		0.0990	1.45
	(-2.57)	(8.51)		(2.84)			1962–2003
CH	-1.185	0.422		0.831		0.1121	1.52
	(-3.03)	(2.85)		(3.29)			1984–2000
BR				0.736		0.1872	0.36
				(92.52)			1995–2002
CE	-1.805	0.390		0.753		0.1037	0.98
	(-2.40)	(1.96)		(3.04)			1979–2003
ME	-2.488	0.829	0.339	0.386		0.1648	1.31
	(-1.43)	(9.88)	(2.09)	(1.82)			1962–2002
PE		0.509		0.391		0.0490	2.00
		(3.75)		(3.65)			1992–2003

Table B1: Test Results for Equation 1

	Lags	log PY	RHO	T	Stability			End Test		overid	
	p-val	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly											
CA	0.735	0.471	0.265	0.001	8.59	5	5.744	0.963	1998.4	0.002	6
JA	0.500	0.751	0.000	0.423	10.24	4	5.638	1.000	1998.3	0.845	5
AU	0.051	0.000	0.000	0.050	24.71	3	4.121	0.849	1998.3		
FR	0.000	0.537	0.000	0.196	11.05	4	3.698	0.460	1998.3	0.001	5
GE	0.271	0.347	0.187	0.776	11.43	4	4.417	0.382	1998.4		
IT	0.460	0.768	0.541	0.005	7.14	4	3.765	1.000	1998.3	0.000	5
NE	0.390	0.117	0.092	0.022	1.12	4	1.786	0.919	1998.4		
UK	0.180	0.700	0.007	0.136	9.17	4	5.638	0.954	1998.3	0.002	5
FI	0.001	0.217	0.002	0.000	26.52	4	2.138	1.000	1998.3		
AS	0.033	0.679	0.027	0.000	4.21	5	5.475	1.000	1998.2	0.014	6
SO	0.735	0.312	0.000	0.394	3.88	3	7.936	0.867	1998.3		
KO	0.324	0.331	0.000	0.003	16.21	4	2.849	0.260	1998.4		
Annual											
BE	0.211	0.684	0.005	0.003	25.33	4	5.129	0.630	1996	0.006	5
DE	0.239	0.799	0.000	0.008	93.20	4	3.609	0.323	1998	0.000	5
NO	0.026	0.000	0.000	0.121	39.13	4	6.623	0.625	1998		
GR	0.325	0.001	0.310	0.000	11.23	4	5.917	0.300	1998	0.051	5
IR	0.122	0.169	0.000	0.030	8.44	4	4.048	0.000	1998	0.025	5
PO	0.023	0.838	0.099	0.938	4.81	4	5.129	0.960	1995		
SP	0.030	0.239	0.000	0.003	17.82	4	6.333	0.806	1998		
NZ	0.761	0.003	0.006	0.000	15.69	4	6.623	1.000	1998	0.001	5
SA	0.044		0.000	0.000	20.93	3	3.399	0.826	1998		
CO	0.144	0.053	0.018	0.121	10.58	4	3.194	0.609	1998		
SY	0.235	0.159	0.000	0.072	9.83	4	5.343	0.897	1998		
ID	0.614		0.457	0.145	6.75	3	4.779				
MA	0.656		0.129	0.018	7.39	3	2.806	0.571	1998		
PA	0.123		0.118	0.066	3.54	3	2.270	0.211	1998		
PH	0.001	0.000	0.508	0.000	29.55	4	7.080	0.818	1999		
TH	0.292		0.001	0.203	4.18	3	6.333	0.032	1998		
CH	0.063		0.205	0.984							
CE	0.164		0.000	0.032	1.35	3	1.381				
ME	0.000	0.000	0.000	0.000	12.89	4	6.623	0.906	1998		

Table B2: Coefficient Estimates for Equation 2

$$\log(C/POP) = a_1 + a_2 \log(C/POP)_{-1} + a_3 RS + a_4 RB + a_5 \log(Y/POP) + a_6 [A/(PY \cdot YS)]_{-1}$$

	a_1	a_2	a_3	a_4	a_5	a_6	ρ	SE	DW
Quarterly									
CA	-0.012	0.915		-0.0007†	0.083	0.004		0.0082	2.17
	(-0.31)	(18.22)		(-2.47)	(1.73)	(1.15)		1966.1–2004.2	
JA	0.076	0.846		-0.0013	0.130		-0.281	0.0096	2.07
	(2.93)	(21.55)		(-3.79)	(3.39)		(-3.52)	1966.1–2004.1	
AU		0.856	-0.0015		0.135			0.0144	2.52
		(24.31)	(-2.36)		(4.11)			1970.1–2003.4	
FR	0.123	0.886	-0.0003		0.093			0.0068	2.28
	(3.39)	(21.65)	(-1.49)		(2.39)			1971.1–2004.2	
GE	0.130	0.898		-0.0021	0.082	0.010	-0.393	0.0091	2.03
	(1.49)	(26.85)		(-4.07)	(2.10)	(2.62)	(-4.74)	1971.1–2004.2	
IT	-0.082	0.897	-0.0003		0.107			0.0059	0.99
	(-1.34)	(28.21)	(-2.60)		(2.92)			1971.1–2003.4	
NE	0.226	0.904		-0.0016	0.063			0.0085	2.31
	(2.35)	(29.37)		(-2.14)	(2.58)			1978.1–2004.1	
ST	0.020	0.799		-0.0026	0.159		-0.335	0.0058	2.02
	(0.97)	(14.69)		(-4.41)	(3.60)		(-3.10)	1981.1–2003.2	
UK	-0.422	0.858		-0.0013	0.188	0.014		0.0101	2.41
	(-4.09)	(20.01)		(-3.63)	(3.72)	(2.67)		1966.1–2004.1	
FI	0.046	0.824	-0.0003		0.158			0.0080	1.54
	(0.91)	(22.91)	(-1.33)		(4.52)			1976.2–2004.2	
AS	-0.239	0.887		-0.0005	0.136	0.009		0.0066	2.07
	(-2.60)	(28.37)		(-1.83)	(3.86)	(2.34)		1966.1–2004.1	
SO	-0.025	0.916	-0.0008†		0.083	0.006		0.0200	2.27
	(-0.10)	(24.84)	(-1.72)		(2.61)	(2.29)		1961.1–2004.1	
KO	0.168	0.860		-0.0010	0.111			0.0197	1.84
	(2.90)	(12.93)		(-1.64)	(1.81)			1974.1–2004.2	
Annual									
BE	-0.056	0.577			0.404			0.0112	1.98
	(-0.63)	(6.52)			(4.49)			1962–2003	
DE	0.389	0.496			0.367			0.0178	1.60
	(4.60)	(3.81)			(3.52)			1962–2003	
NO	0.242	0.670			0.241			0.0199	1.51
	(2.98)	(5.59)			(2.68)			1962–2002	
SW	0.381	0.594			0.285			0.0161	1.14
	(3.82)	(6.68)			(4.34)			1965–2003	
GR	0.125	0.895	-0.0012		0.090			0.0210	1.42
	(0.76)	(19.57)	(-1.52)		(1.58)			1963–2003	
IR	2.229	0.492		-0.0034	0.257	0.186		0.0209	1.
	(5.28)	(3.73)		(-2.09)	(2.85)	(3.13)		1968–2003	
PO	-0.143	0.619		-0.0030	0.384	0.161		0.0328	1.92
	(-0.98)	(8.38)		(-3.02)	(5.33)	(3.43)		1962–2003	
SP	0.266	0.657	-0.0018		0.300			0.0133	1.54
	(3.05)	(5.88)	(-2.01)		(2.68)			1962–2003	

Table B2: Coefficient Estimates for Equation 2

	a_1	a_2	a_3	a_4	a_5	a_6	ρ	SE	DW
NZ	0.228	0.511		-0.0027	0.445			0.0171	1.55
	(1.00)	(3.98)		(-3.03)	(3.79)			1962–2002	
SA		0.883			0.067	0.094		0.1526	1.73
		(13.52)			(1.48)	(1.71)		1970–2003	
VE	-0.971	0.751			0.381			0.0745	1.91
	(-1.09)	(9.57)			(2.87)			1962–2002	
CO	0.615	0.649	-0.0016		0.259	0.193		0.0423	1.72
	(1.21)	(4.75)	(-1.49)		(2.17)	(1.30)		1971–2002	
SY	1.013				0.867			0.0653	1.19
	(2.42)				(21.40)			1965–2002	
ID	0.035	0.255	-0.0022		0.624			0.0287	1.87
	(0.88)	(2.24)	(-1.31)		(6.79)			1962–2002	
MA	0.798	0.359			0.502	0.039		0.0438	1.23
	(2.92)	(2.15)			(3.80)	(0.64)		1972–2003	
PA	0.188	0.539			0.340			0.0285	1.63
	(2.85)	(4.34)			(3.16)			1974–2003	
PH	0.049	0.823	-0.0014		0.152			0.0203	1.73
	(0.63)	(12.55)	(-1.83)		(2.74)			1962–2003	
TH	0.084	0.359			0.534			0.0235	1.65
	(3.81)	(4.63)			(8.19)			1962–2003	
CH	-0.318	0.319	-0.0069		0.613			0.0240	1.78
	(-3.92)	(2.66)	(-2.05)		(5.61)			1984–2000	
BR		0.375			0.588			0.0256	0.97
		(1.10)			(1.83)			1995–2002	
CE	0.117	0.476			0.480			0.0372	1.52
	(0.57)	(5.59)			(6.50)			1979–2003	
ME	1.052	0.196			0.678			0.0233	0.59
	(5.15)	(1.93)			(7.47)			1962–2002	
PE		0.591			0.394			0.0161	0.80
		(4.96)			(3.45)			1992–2003	

Table B2: Test Results for Equation 2

	Lags	RHO	T	Leads	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly											
CA	0.210	0.355	0.166	0.755	25.13	5	5.744	0.982	1998.4	0.001	3
JA	0.200	0.082	0.518	0.012	5.70	5	5.638	0.972	1998.3	0.002	4
AU	0.001	0.000	0.000	0.918	6.69	2	4.121	1.000	1998.3	0.001	5
FR	0.022	0.000	0.008	0.109	24.10	4	3.698	1.000	1998.3		
GE	0.106	0.137	0.928	0.297	7.73	6	4.417	0.854	1998.4	0.008	6
IT	0.000	0.000	0.000	0.006	16.42	4	3.765	1.000	1998.3	0.000	4
NE	0.133	0.121	0.000	0.151	11.22	4	1.786	1.000	1998.4	0.000	3
ST	0.963	0.787	0.022	0.703	8.05	5	1.000	1.000	1998.3	0.077	4
UK	0.005	0.028	0.031	0.264	2.68	5	5.638	1.000	1998.3	0.156	3
FI	0.016	0.001	0.004	0.067	19.39	4	2.138	1.000	1998.3	0.000	3
AS	0.585	0.782	0.038	0.078	5.11	5	5.475	1.000	1998.2	0.190	3
SO	0.038	0.093	0.029	0.126	9.54	5	7.936	1.000	1998.3	0.002	4
KO	0.471	0.108	0.052	0.060	6.90	4	2.849	0.260	1998.4	0.011	3
Annual											
BE	0.993	0.862	0.143	0.358	4.03	3	5.129	0.741	1996	0.264	4
DE	0.483	0.002	0.872	0.373	1.78	3	3.609	0.290	1998	0.114	5
NO	0.088	0.041	0.385	0.777	8.94	3	6.623	0.906	1998	0.377	4
SW	0.001	0.002	0.001	0.104	4.07	3	5.127	0.929	1998	0.006	4
GR	0.191	0.000	0.000	0.115	10.19	4	5.917	1.000	1998		
IR	0.010	0.076	0.348	0.534	12.35	5	4.048	0.920	1998	0.005	3
PO	0.564	0.797	0.004	0.095	6.19	5	5.129	0.760	1995	0.063	3
SP	0.115	0.124	0.000	0.949	25.16	4	6.333	1.000	1998	0.205	3
NZ	0.186	0.082	0.719	0.183	6.94	4	6.623	1.000	1998	0.170	3
SA	0.330	0.499	0.139	0.788	2.45	3	3.399	0.957	1998		
VE	0.616	0.787	0.038	0.018	11.88	3	6.623	0.500	1998		
CO	0.172	0.377	0.037	0.588	0.83	5	1.000	0.348	1998		
SY	0.992	0.015	0.576	0.305	2.06	2	5.343	0.207	1998		
ID	0.257	0.002	0.000	0.586	13.96	4	4.779				
MA	0.003	0.005	0.142	0.809	4.07	4	2.806	0.000	1998		
PA	0.535	0.162	0.399	0.174	12.89	3	2.270	0.895	1998		
PH	0.641	0.445	0.003	0.149	6.98	4	7.080	0.636	1999		
TH	0.543	0.011	0.048	0.580	4.65	3	6.333	0.000	1998		
CH	0.202	0.736	0.041	0.000							
CE	0.705	0.001	0.000	0.002	1.10	3	1.381				
ME	0.000	0.000	0.181	0.962	12.79	3	6.623	0.656	1998		

Table B3: Coefficient Estimates for Equation 3

$$\log I = a_1 + a_2 \log I_{-1} + a_3 \log Y + a_4 RS + a_5 RB$$

	a_1	a_2	a_3	a_4	a_5	SE	DW
Quarterly							
CA	-0.393	0.900	0.120		-0.0010†	0.0215	1.40
	(-2.52)	(27.06)	(2.96)		(-1.34)	1966.1–2004.2	
JA	0.297	0.923	0.044		-0.0018	0.0224	1.76
	(3.00)	(34.01)	(1.46)		(-1.66)	1966.1–2004.1	
AU	0.697	0.862	0.059		-0.0087	0.0324	2.48
	(3.58)	(20.53)	(1.68)		(-3.56)	1970.1–2003.4	
FR	0.309	0.944	0.026		-0.0025†	0.0137	1.26
	(3.37)	(41.11)	(1.37)		(-4.77)	1971.1–2004.2	
GE	0.138	0.917	0.063		-0.0016	0.0271	2.37
	(0.79)	(27.79)	(1.87)		(-0.82)	1971.1–2004.2	
IT	0.431	0.884	0.067		-0.0018†	0.0164	1.72
	(3.34)	(29.67)	(3.42)		(-4.09)	1971.1–2003.4	
NE	-0.010	0.449	0.482		-0.0106†	0.0453	2.40
	(-0.02)	(5.43)	(5.63)		(-2.69)	1978.1–2004.1	
UK	-0.205	0.841	0.155		-0.0044†	0.0255	2.10
	(-1.50)	(22.89)	(4.08)		(-4.33)	1966.1–2004.1	
FI	0.075	0.955	0.031			0.0373	1.94
	(0.35)	(36.48)	(1.52)			1976.2–2004.2	
AS	-0.188	0.938	0.072		-0.0017	0.0272	1.77
	(-1.80)	(28.19)	(2.00)		(-2.37)	1966.1–2004.1	
SO	-0.161	0.968	0.046		-0.0044†	0.0395	2.29
	(-0.93)	(65.27)	(2.38)		(-3.36)	1961.1–2004.1	
KO	-0.066	0.936	0.065			0.0519	1.87
	(-0.42)	(27.86)	(1.52)			1974.1–2004.2	
Annual							
BE	0.290	0.654	0.288		-0.0157	0.0489	1.93
	(1.02)	(6.61)	(3.09)		(-4.15)	1962–2003	
DE	0.175	0.772	0.162		-0.0095	0.0683	1.84
	(0.56)	(9.38)	(1.90)		(-3.29)	1962–2003	
SW	0.255	0.709	0.193	-0.0031		0.0540	1.08
	(0.92)	(6.24)	(2.13)	(-1.07)		1965–2003	
GR	0.195	0.532	0.406	-0.0146		0.0820	1.85
	(0.43)	(4.86)	(3.83)	(-4.52)		1963–2003	
IR	0.361	0.811	0.140		-0.0068	0.0831	1.48
	(0.78)	(6.82)	(1.15)		(-1.21)	1968–2003	
PO	-0.671	0.507	0.500		-0.0092	0.0626	1.16
	(-1.99)	(4.36)	(3.98)		(-3.79)	1962–2003	
SP	0.137	0.786	0.187	-0.0072		0.0514	1.09
	(0.35)	(9.08)	(1.85)	(-3.54)		1962–2003	

Table B3: Coefficient Estimates for Equation 3

$$\log I = a_1 + a_2 \log I_{-1} + a_3 \log Y + a_4 RS + a_5 RB$$

	a_1	a_2	a_3	a_4	a_5	SE	DW
NZ	-1.830	0.597	0.511		-0.0059	0.0744	1.17
	(-2.23)	(4.26)	(2.84)		(-1.67)		1962–2002
ID	-1.111	0.735	0.346			0.0483	1.59
	(-2.53)	(7.21)	(2.65)				1962–2002
PA	0.260	0.784	0.131			0.0581	1.56
	(1.05)	(9.16)	(1.42)				1974–2003
CH	-1.528	0.330	0.772	-0.0056		0.0860	0.89
	(-1.60)	(1.14)	(2.21)	(-0.47)			1984–2000

Table B3: Test Results for Equation 3

	Lags	RHO	T	Leads	Stability			End Test		overid	
	p-val	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly											
CA	0.000	0.000	0.014	0.117	9.32	4	5.744	1.000	1998.4	0.005	4
JA	0.129	0.000	0.000	0.385	18.12	4	5.638	0.787	1998.3		
AU	0.002	0.001	0.471	0.851	5.95	4	4.121	0.828	1998.3	0.062	4
FR	0.000	0.000	0.501	0.048	8.83	4	3.698	0.874	1998.3	0.014	4
GE	0.016	0.053	0.000	0.156	4.31	4	4.417	1.000	1998.4		
IT	0.083	0.092	0.032	0.101	6.25	4	3.765	0.067	1998.3	0.053	4
NE	0.000	0.000	0.000	0.159	4.19	4	1.786	0.935	1998.4	0.000	4
UK	0.330	0.540	0.002	0.137	5.42	4	5.638	1.000	1998.3	0.053	4
FI	0.824	0.001	0.000	0.000	19.33	3	2.138	1.000	1998.3	0.000	5
AS	0.127	0.007	0.180	0.044	5.94	4	5.475	0.472	1998.2	0.018	4
SO	0.070	0.065	0.000	0.194	8.01	4	7.936	0.961	1998.3	0.013	4
KO	0.404	0.329	0.001	0.059	5.21	3	2.849	1.000	1998.4	0.095	5
Annual											
BE	0.713	0.808	0.028	0.572	7.63	4	5.129	1.000	1996	0.358	4
DE	0.542	0.527	0.000	0.783	22.47	4	3.609	1.000	1998	0.007	4
SW	0.000	0.000	0.360	0.489	2.97	4	5.127	0.679	1998	0.035	4
GR	0.577	0.803	0.058	0.384	20.00	4	5.917	1.000	1998	0.031	4
IR	0.036	0.001	0.000	0.064	7.37	4	4.048	1.000	1998		
PO	0.000	0.007	0.265	0.992	3.48	4	5.129	0.960	1995	0.909	4
SP	0.000	0.000	0.651	0.035	6.01	4	6.333	1.000	1998	0.049	4
NZ	0.000	0.001	0.591	0.342	10.27	4	6.623	1.000	1998	0.587	4
ID	0.316	0.006	0.037	0.886	12.14	3	4.779				
PA	0.021	0.041	0.004	0.056	2.16	3	2.270	0.421	1998		
CH	0.000	0.019	0.019	0.013							

Table B4: Coefficient Estimates for Equation 4

$\log Y = a_1 + a_2 \log Y_{-1} + a_3 \log X + a_4 \log V_{-1}$

	a_1	a_2	a_3	a_4	ρ	Implied Values See eq. 2.10 λ	α	β	SE	DW
Quarterly										
JA	0.248	0.179	0.851	-0.0536	0.479	0.821	0.065	0.572	0.0035	2.06
	(9.11)	(7.01)	(33.30)	(-4.75)	(6.36)				1966.1–2004.1	
IT	-0.430	0.646	0.533	-0.1419	0.371	0.354	0.401	1.261	0.0059	2.06
	(-3.75)	(11.55)	(8.84)	(-4.91)	(4.25)				1971.1–2003.4	
NE	0.542	0.396	0.632	-0.0765		0.604	0.127	0.371	0.0065	1.76
	(4.50)	(9.76)	(15.30)	(-4.14)					1978.1–2004.1	
UK	0.401	0.177	0.855	-0.0657	0.525	0.823	0.080	0.485	0.0053	2.12
	(2.55)	(4.57)	(21.54)	(-2.60)	(6.53)				1966.1–2004.1	
AS	0.319	0.333	0.719	-0.0840	0.338	0.667	0.126	0.622	0.0057	1.81
	(3.43)	(5.85)	(12.37)	(-3.65)	(3.14)				1976.1–2004.1	
Annual										
SW	0.095	0.181	0.841	-0.0400		0.819	0.049	0.538	0.0093	1.25
	(1.92)	(2.00)	(9.65)	(-2.55)					1965–2003	
GR	0.178	0.407	0.595	-0.0189		0.593	0.032	0.103	0.0183	1.05
	(1.57)	(5.43)	(7.80)	(-2.22)					1963–2003	
SP	0.219	0.106	0.930	-0.0586		0.894	0.066	0.619	0.0043	1.54
	(9.43)	(2.34)	(22.53)	(-5.99)					1962–2003	
MA	0.149	0.030	0.979	-0.0261		0.970	0.027	0.337	0.0127	1.86
	(2.54)	(0.53)	(16.80)	(-1.81)					1972–2003	
PA	-0.146	0.084	0.958	-0.0242		0.916	0.026	1.728	0.0045	1.47
	(-2.08)	(1.51)	(18.94)	(-1.82)					1974–2003	

Table B4: Test Results for Equation 4

	Lags	RHO	T	Leads	Stability			End Test	
	p-val	p-val	p-val	p-val	AP	df	λ	p-val	End
Quarterly									
JA	0.312	0.622	0.015	0.205	13.04	5	5.638	0.315	1998.3
IT	0.551	0.269	0.599	0.000	9.30	5	3.765	0.989	1998.3
NE	0.209	0.007	0.442	0.881	6.61	4	1.786	1.000	1998.4
UK	0.282	0.120	0.012	0.001	18.31	5	5.638	1.000	1998.3
AS	0.147	0.839	0.989	0.002	10.15	5	2.503	1.000	1998.2
Annual									
SW	0.004	0.001	0.167	0.675	23.65	4	5.127	0.893	1998
GR	0.000	0.000	0.398	0.223	14.51	4	5.917	1.000	1998
SP	0.269	0.081	0.061	0.111	10.83	4	6.333	0.935	1998
MA	0.793	0.550	0.364	0.057	4.98	4	2.806	0.857	1998
PA	0.257	0.249	0.364	0.180	6.07	4	2.270	0.474	1998

Table B5: Coefficient Estimates for Equation 5

$$\log PY = a_1 + a_2 \log PY_{-1} + a_3(\log W - \log LAM) + a_4 \log PM + a_5 DP + a_6 T$$

	a_1	a_2	a_3	a_4	a_5	a_6	ρ	SE	DW
Quarterly									
CA	0.864	0.871	0.088	0.031	-0.13618†	0.00004		0.0071	0.79
	(3.69)	(27.87)	(3.53)	(3.79)	(-4.61)	(0.47)		1966.1–2004.2	
JA	-0.044	0.947		0.013	-0.07599	0.00024	0.392	0.0075	1.95
	(-1.87)	(57.54)		(2.18)	(-3.59)	(1.82)	(5.10)	1966.1–2004.1	
AU	-0.013	0.973		0.006	-0.05451	0.00010	-0.352	0.0087	2.02
	(-0.85)	(75.69)		(0.65)	(-2.08)	(1.16)	(-4.30)	1970.1–2003.4	
FR	-0.014	0.869	0.060	0.029	-0.04853†	0.00013	0.315	0.0039	1.94
	(-0.66)	(47.66)	(3.49)	(2.84)	(-1.81)	(1.17)	(3.69)	1971.1–2004.2	
GE	0.010	0.990		0.006†	-0.15043†	0.00004		0.0049	1.96
	(0.77)	(86.85)		(1.43)	(-3.23)	(0.59)		1971.1–2004.2	
IT	-0.070	0.939		0.035	-0.19878†	0.00048		0.0083	1.77
	(-3.56)	(148.03)		(7.67)	(-5.41)	(4.30)		1971.1–2003.4	
NE	-0.054	0.923		0.028	-0.09580†	0.00035		0.0058	1.93
	(-1.49)	(22.42)		(2.67)	(-3.71)	(1.67)		1978.1–2004.1	
ST	-0.009	0.964			-0.12123†	0.00006	-0.174	0.0051	2.05
	(-0.81)	(90.68)			(-5.71)	(0.98)	(-1.58)	1981.1–2003.2	
UK	1.421	0.804	0.149	0.066†	-0.32089†	-0.00021	0.269	0.0088	2.11
	(3.32)	(18.32)	(3.22)	(5.79)	(-4.86)	(-1.14)	(3.15)	1966.1–2004.1	
FI	0.024	0.982		0.003	-0.13311†	-0.00009		0.0072	2.10
	(1.81)	(130.15)		(0.49)	(-4.17)	(-1.27)		1976.2–2004.2	
AS	1.185	0.889	0.114	0.013	-0.15853†	-0.00034	0.269	0.0083	2.07
	(3.28)	(23.44)	(3.11)	(1.02)	(-4.59)	(-3.14)	(3.24)	1966.1–2004.1	
SO	-0.119	0.957		0.016†		0.00084	0.071	0.0181	2.03
	(-2.84)	(89.87)		(1.91)		(3.66)	(0.90)	1961.1–2004.1	
KO	0.240	0.810	0.130	0.025	-0.00276†	-0.00121		0.0162	2.03
	(2.42)	(18.66)	(3.69)	(1.29)	(-0.07)	(-2.32)		1974.1–2004.2	
Annual									
BE	-0.083	0.865		0.063	-0.32170†	0.00285		0.0117	0.85
	(-2.27)	(28.25)		(3.41)	(-9.79)	(2.93)		1962–2003	
DE	-0.014	0.855		0.131	-0.39478†	0.00101		0.0127	1.11
	(-0.36)	(26.34)		(5.32)	(-9.36)	(0.97)		1962–2003	
NO	-0.347	0.646		0.250	-1.62670†	0.01056		0.0287	1.
	(-2.19)	(6.08)		(3.55)	(-3.86)	(2.87)		1962–2002	
SW	2.552	0.595	0.390	0.096	-0.21850†	-0.00201		0.0154	1.37
	(5.54)	(9.50)	(5.19)	(3.93)	(-1.17)	(-1.57)		1965–2003	
GR	0.312	0.816		0.237	-0.21186†	-0.00620		0.0215	1.67
	(1.65)	(11.28)		(5.49)	(-2.36)	(-1.39)		1963–2003	
IR	-0.077	0.757		0.214	-0.14604†	0.00266		0.0274	1.86
	(-0.69)	(10.92)		(4.64)	(-1.95)	(0.94)		1968–2003	
PO	-0.357	0.713		0.265	-0.19688†	0.01010		0.0191	1.86
	(-6.36)	(45.41)		(22.48)	(-2.25)	(7.23)		1962–2003	
SP	0.026	0.672	0.196	0.068†	-0.41608†	0.00018		0.0129	1.29
	(0.51)	(26.16)	(16.78)	(4.34)	(-5.38)	(0.14)		1962–2003	
NZ	0.124	0.821		0.212	-0.27054†	-0.00208		0.0331	1.49
	(1.30)	(14.80)		(5.65)	(-2.07)	(-0.81)		1962–2002	
CO	0.357	0.742		0.287†	-0.50370	-0.00100		0.0358	2.28
	(0.75)	(11.76)		(6.09)	(-2.89)	(-0.08)		1971–2002	
JO	0.095	0.890		0.123		-0.00151		0.0364	1.65
	(0.43)	(7.63)		(2.50)		(-0.26)		1978–2002	
SY	-0.048	0.903		0.111		0.00353		0.0683	1.31
	(-0.18)	(15.41)		(3.48)		(0.49)		1965–2002	

Table B5: Coefficient Estimates for Equation 5

	a_1	a_2	a_3	a_4	a_5	a_6	ρ	SE	DW
MA	-0.650	0.321		0.273	-0.18759	0.01793		0.0344	2.02
	(-4.78)	(2.62)		(4.41)	(-1.87)	(4.91)		1972–2003	
PA	-0.139	0.905			-0.79572†	0.00587		0.0293	1.47
	(-0.45)	(9.18)			(-3.11)	(0.71)		1974–2003	
PH	-0.235	0.629		0.270		0.01019		0.0481	1.42
	(-1.05)	(9.33)		(6.80)		(1.71)		1962–2003	
TH	-0.244	0.389		0.311	-0.39051	0.00956		0.0267	1.37
	(-2.87)	(4.89)		(7.68)	(-7.18)	(4.07)		1962–2003	
CH	-0.495	0.803			-0.67754	0.01401		0.0576	0.48
	(-0.77)	(4.00)			(-1.51)	(0.84)		1984–2000	
CE	0.525	0.697		0.372	-0.37350†	-0.01096		0.0520	1.60
	(1.99)	(6.90)		(2.71)	(-1.34)	(-1.63)		1979–2003	
ME	-0.453	0.500		0.471	-0.19664†	0.01162		0.0465	1.45
	(-3.47)	(19.14)		(20.96)	(-1.31)	(3.72)		1962–2002	

Table B5: Test Results for Equation 5

	Lags-1	Lags-2	RHO	Leads	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly											
CA	0.000	0.000	0.000	0.000	63.41	6	5.744	0.349	1998.4	0.000	5
JA	0.008	0.004	0.001		58.75	6	5.638	0.759	1998.3	0.000	5
AU	0.048	0.000	0.001		6.80	6	4.121	0.925	1998.3	0.218	5
FR	0.069	0.351	0.706	0.017	11.66	7	3.698	1.000	1998.3	0.011	6
GE	0.121	0.346	0.028		12.75	5	4.417	0.876	1998.4	0.000	4
IT	0.092	0.031	0.203		6.29	5	3.765	0.652	1998.3	0.089	4
NE	0.280	0.404	0.437		10.03	5	1.786	0.839	1998.4	0.018	4
ST	0.365	0.159	0.080		3.50	5	1.000	0.216	1998.3	0.510	6
UK	0.024	0.002	0.038	0.004	27.96	7	5.638	0.898	1998.3	0.008	7
FI	0.445	0.801	0.851		7.10	5	2.138	1.000	1998.3	0.442	4
AS	0.061	0.018	0.160	0.000	7.39	7	5.475	0.877	1998.2	0.001	6
SO	0.000	0.001	0.001		21.74	5	7.936	0.367	1998.3	0.000	6
KO	0.833	0.948	0.818	0.145	7.97	6	2.849	1.000	1998.4	0.127	5
Annual											
BE	0.000	0.001	0.000		32.17	5	5.129	0.889	1996		
DE	0.000	0.000	0.004		17.17	5	3.609	0.968	1998		
NO	0.018	0.083	0.037		6.32	5	6.623	0.000	1998		
SW	0.032	0.002	0.047	0.002	7.35	6	5.127	0.786	1998		
GR	0.560	0.780	0.327		3.93	5	5.917	0.967	1998		
IR	0.192	0.430	0.951		11.13	5	4.048	1.000	1998		
PO	0.286	0.052	0.694		11.90	5	5.129	1.000	1995		
SP	0.085	0.000	0.001	0.761	11.00	6	6.333	0.226	1998		
NZ	0.028	0.110	0.137		4.94	5	6.623	0.969	1998		
CO	0.328	0.050	0.374		26.31	5	3.194	0.522	1998		
JO	0.890	0.548	0.477								
SY	0.012	0.043	0.004		18.42	4	5.343	0.724	1998		
MA	0.015	0.000	0.567		26.24	5	2.806	0.571	1998		
PA	0.084	0.320	0.093		5.69	4	2.270	1.000	1998		
PH	0.076	0.003	0.002		10.90	4	7.080	0.697	1999		
TH	0.195	0.242	0.046		10.45	5	6.333	0.452	1998		
CH	0.000	0.000	0.000								
CE	0.067	0.387	0.945		20.48	5	1.381				
ME	0.264	0.341	0.116		10.10	5	6.623	0.594	1998		

Table B6: Coefficient Estimates for Equation 6

$$\log[M1/(POP \cdot PY)] = a_1 + a_2 \log[M1/(POP \cdot PY)]_{-1} + a_3 \log[M1_{-1}/(POP_{-1} \cdot PY)] + a_4 RS + a_5 \log(Y/POP)$$

	a_1	a_2	a_3	a_4	a_5	ρ	SE	DW
Quarterly								
CA	-0.275		0.931	-0.0042	0.102		0.0236	2.15
	(-2.95)		(60.34)	(-3.90)	(4.90)			1968.1–2004.2
GE	-0.239	0.984		-0.0023	0.047		0.0194	2.28
	(-1.21)	(65.83)		(-2.69)	(1.29)			1971.1–2004.2
NE	-1.194		0.801	-0.0050	0.349		0.0177	2.18
	(-3.17)		(15.40)	(-4.30)	(3.61)			1978.1–2004.1
ST	-0.097	0.954		-0.0073	0.102		0.0272	2.08
	(-0.80)	(38.15)		(-4.17)	(1.90)			1981.1–2003.2
UK	0.145	0.977		-0.0029	0.003		0.0148	2.17
	(1.19)	(98.02)		(-5.62)	(0.34)			1970.1–2004.1
FI	-0.469		0.877	-0.0034	0.184		0.0377	2.24
	(-1.57)		(24.24)	(-2.32)	(2.84)			1976.2–2004.2
AS	-0.608		0.912	-0.0055	0.158		0.0216	1.84
	(-5.01)		(53.41)	(-5.23)	(5.60)			1966.1–2002.1
KO	0.147		0.861		0.102		0.0639	2.35
	(1.72)		(15.31)		(1.99)			1974.1–2004.2
Annual								
BE	0.525	0.935		-0.0079	0.010		0.0315	1.97
	(1.15)	(13.11)		(-4.07)	(0.40)			1962–2003
DE	-0.611		0.727	-0.0074	0.342		0.0459	2.29
	(-1.99)		(11.07)	(-2.72)	(3.27)			1962–2003
SW	0.603	0.805		-0.0044	0.062		0.0356	1.60
	(1.92)	(6.98)		(-2.23)	(1.04)			1965–2000
IR	0.675		0.481	-0.0147	0.384		0.1216	1.84
	(0.33)		(2.01)	(-0.80)	(1.22)			1983–2002
PO	-0.777	0.859		-0.0026	0.219		0.1366	1.52
	(-1.10)	(9.70)		(-0.74)	(1.50)			1962–2003
SP	0.671		0.808	-0.0019	0.107		0.0431	1.29
	(3.21)		(7.98)	(-0.83)	(1.07)			1962–2003
NZ	-0.061		0.802	-0.0039	0.173		0.0715	1.48
	(-0.06)		(11.05)	(-0.98)	(1.99)			1962–2002
VE	-6.997	0.570		-0.0068	1.404		0.1228	1.84
	(-4.27)	(7.35)		(-5.21)	(4.87)			1962–2002
ID	-0.808		0.566		0.466		0.0454	2.00
	(-3.92)		(5.38)		(4.40)			1962–2002
PA	-0.790		0.324	-0.0194	0.720		0.0499	1.72
	(-2.80)		(2.15)	(-3.83)	(4.02)			1974–2003
PH	-0.430		0.728	-0.0089	0.269		0.0788	2.21
	(-1.48)		(8.51)	(-2.37)	(2.68)			1962–2003

Table B6: Test Results for Equation 6

	[a]N vs R	Lags	RHO	T	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly											
CA	0.739	0.550	0.007	0.841	11.12	4	4.926	0.832	1998.4	0.333	5
GE	0.116	0.080	0.141	0.030	7.96	4	4.417	0.517	1998.4	0.596	4
NE	0.626	0.462	0.613	0.039	4.34	4	1.786	0.000	1998.4		
ST	0.435	0.360	0.081	0.175	4.40	4	1.000	0.137	1998.3	0.140	5
UK	0.000	0.092	0.138	0.029	3.35	4	4.081	0.272	1998.3	0.204	4
FI	0.012	0.376	0.000	0.000	15.44	4	2.138	1.000	1998.3	0.002	4
AS	0.601	0.868	0.783	0.801	5.46	4	6.021	0.684	1998.2	0.462	4
KO	0.493	0.018	0.028	0.909	2.20	3	2.849	0.571	1998.4	0.086	5
Annual											
BE	0.957	0.632	0.871	0.110	6.63	4	5.129	0.296	1996		
DE	0.013	0.366	0.289	0.015	5.83	4	3.802	0.914	1998		
SW	0.196	0.485	0.048	0.491	3.94	4	2.870	0.516	1998		
IR	0.814	0.338	0.631	0.465	1.02	4	1.000	0.636	1998		
PO	0.006	0.060	0.104	0.232	34.14	4	5.129	1.000	1995		
SP	0.260	0.024	0.005	0.001	6.31	4	5.515	0.655	1998		
NZ	0.165	0.606	0.000	0.014	8.07	4	4.644	0.750	1998		
VE	0.174	0.752	0.049	0.074	9.33	4	6.623	1.000	1998		
ID	0.531	0.663	0.995	0.948	17.22	3	4.779				
PA	0.645	0.219	0.613	0.757	1.00	4	2.270	1.000	1998		
PH	0.417	0.153	0.412	0.222	3.44	4	7.080	0.152	1999		

Table B7: Coefficient Estimates for Equation 7

$RS = a_1 + a_2 RS_{-1} + a_3 PCPY + a_4 ZZ + a_5 RS_{GE} + a_6 RS_{US}$

	a_1	a_2	a_3	a_4	a_5	a_6	ρ	SE	DW
Quarterly									
EU	0.21	0.882	0.020	-38.1		0.14		0.729	1.84
	(1.12)	(23.38)	(0.39)	(-4.66)		(4.55)		1972.2–2003.4	
CA	-0.03	0.802	0.047			0.21		0.901	1.58
	(-0.15)	(18.37)	(1.66)			(3.33)		1972.2–2004.2	
JA	-0.28	0.789	0.121			0.14	0.380	0.631	2.04
	(-1.20)	(16.69)	(4.38)			(3.00)	(3.79)	1972.2–2004.1	
AU	0.18	0.764	0.068		0.13	0.04		0.777	1.59
	(0.67)	(11.49)	(1.88)		(2.09)	(1.12)		1972.2–1998.4	
FR	-0.33	0.731	0.040		0.21	0.17		0.873	1.58
	(-1.18)	(17.51)	(1.45)		(4.54)	(3.63)		1972.2–1998.4	
GE	0.10	0.867	0.040	-47.0		0.17		0.795	1.90
	(0.42)	(21.70)	(0.75)	(-4.96)		(4.60)		1972.2–1998.4	
IT	1.51	0.814	0.108	-20.4			0.349	1.063	1.89
	(2.43)	(15.61)	(3.55)	(-2.21)			(3.20)	1972.2–1998.4	
NE	0.04	0.628		-24.7	0.25	0.18		0.898	1.89
	(0.13)	(6.63)		(-3.52)	(2.62)	(3.90)		1978.1–1998.4	
ST	0.39	0.884					0.491	0.651	2.00
	(1.19)	(11.28)					(3.53)	1981.1–2003.2	
UK	0.29	0.805	0.046	-13.2		0.21		0.955	1.56
	(1.20)	(19.04)	(2.49)	(-2.77)		(4.50)		1972.2–2004.1	
FI	-0.16	0.931				0.11	0.156	1.025	1.98
	(-0.36)	(23.20)				(2.12)	(1.36)	1976.2–1998.4	
AS	0.07	0.909	0.019	-8.8		0.13		1.050	1.91
	(0.28)	(28.56)	(0.73)	(-1.49)		(2.54)		1972.2–2004.1	
SO	0.64	0.920		-23.3		0.09	0.391	1.066	2.01
	(0.99)	(23.61)		(-2.64)		(1.63)	(4.04)	1972.2–2004.1	
KO	0.43	0.876	0.081	-18.2		0.13		1.570	1.65
	(1.06)	(21.61)	(3.92)	(-3.30)		(2.03)		1974.1–2004.2	
Annual									
BE	0.21	0.453			0.60			1.482	2.25
	(0.22)	(3.77)			(4.69)			1972–1998	
DE	-0.13	0.684			0.52			2.356	2.22
	(-0.10)	(5.82)			(2.67)			1972–2003	
NO	0.42	0.746			0.12	0.20		1.638	2.15
	(0.40)	(7.59)			(0.82)	(1.48)		1972–2002	
SW	-0.51	0.734				0.42		1.781	2.
	(-0.54)	(7.62)				(3.45)		1972–2003	
IR	2.63		0.155		0.26	0.74		2.062	1.83
	(2.06)		(2.18)		(1.35)	(3.87)		1972–1998	
PO	-0.46	0.790	0.371	-40.2				2.616	1.93
	(-0.34)	(8.42)	(4.49)	(-2.67)				1972–1998	
SP	1.84	0.555	0.196			0.21		3.009	2.40
	(0.88)	(3.06)	(1.73)			(0.72)		1972–1998	
NZ	1.37	0.710	0.211					2.673	1.94
	(1.13)	(6.49)	(2.60)					1972–2002	
ID	2.03	0.694	0.169					2.570	1.53
	(0.88)	(4.55)	(1.43)					1972–2002	
PA	0.58	0.722	0.187					1.393	2.17
	(0.43)	(4.94)	(3.53)					1974–2003	
PH	1.43	0.672	0.162			0.29		2.733	1.54
	(0.70)	(6.21)	(2.82)			(1.51)		1972–2003	

Table B7: Test Results for Equation 7

	Lags	RHO	T	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly										
CA	0.000	0.000	0.743	5.89	4	3.397	1.000	1998.4	0.000	6
JA	0.516	0.519	0.235	5.46	5	3.316	1.000	1998.3	0.106	7
AU	0.218	0.003	0.588	7.10	5	2.696		44.4	0.026	5
FR	0.227	0.211	0.018	4.65	5	2.696		44.4	0.061	5
GE	0.218	0.213	0.539	7.52	5	2.696		44.4	0.002	5
IT	0.348	0.087	0.820	2.19	5	2.696	0.538	1998.3	0.003	6
NE	0.410	0.195	0.000	12.29	5	1.154		44.4	0.006	5
ST	0.886	0.886	0.117	2.43	3	1.000	1.000	1998.3	0.030	7
UK	0.373	0.022	0.383	6.42	5	3.316	1.000	1998.3	0.057	5
FI	0.878	0.425	0.488	4.04	4	1.555		44.4	0.114	5
AS	0.048	0.794	0.851	4.49	5	3.209	1.000	1998.2	0.000	5
SO	0.131	0.755	0.259	8.94	5	3.316	0.012	1998.3	0.002	6
KO	0.049	0.000	0.429	10.61	5	2.849	1.000	1998.4	0.069	5
Annual										
BE	0.143	0.365	0.600	0.65	3	2.469				
DE	0.173	0.356	0.020	3.66	3	2.806	0.905	1998		
NO	0.221	0.659	0.674	4.94	4	2.890	0.909	1998		
SW	0.138	0.143	0.781	0.67	3	2.806	1.000	1998		
IR	0.964	0.994	0.084	4.89	4	2.469				
PO	0.946	0.890	0.134	3.31	4	2.469				
SP	0.401	0.122	0.445	2.00	4	2.469				
NZ	0.778	0.837	0.285	4.98	3	1.919	0.818	1998		
ID	0.229	0.104	0.083	1.73	3	1.952				
PA	0.350	0.137	0.681	1.21	3	2.270	0.211	1998		
PH	0.112	0.199	0.193	9.84	4	3.194	0.565	1999		

Table B8: Coefficient Estimates for Equation 8

$RB - RS_{-2} = a_1 + a_2(RB_{-1} - RS_{-2}) + a_3(RS - RS_{-2}) + a_4(RS_{-1} - RS_{-2})$

	a_1	a_2	a_3	a_4	ρ	SE	DW
Quarterly							
EU	0.075	0.933	0.376	-0.353		0.4205	1.79
	(1.33)	(30.33)	(3.77)	(-2.92)			1970.3–2003.4
CA	0.116	0.911	0.424	-0.388		0.4304	2.02
	(2.40)	(34.25)	(3.89)	(-2.91)			1966.1–2004.2
JA	0.023	0.916	0.424	-0.457		0.3751	2.11
	(0.61)	(23.85)	(2.55)	(-1.90)			1966.1–2004.1
AU	0.027	0.965	0.086	-0.010	0.400	0.2822	1.91
	(0.39)	(28.70)	(0.85)	(-0.13)	(4.18)		1970.1–1998.4
FR	0.076	0.870	0.351	-0.174	0.341	0.4157	1.99
	(0.99)	(14.00)	(2.67)	(-1.41)	(2.70)		1971.1–1998.4
GE	0.093	0.921	0.461	-0.449		0.4429	1.90
	(1.57)	(28.56)	(4.41)	(-3.55)			1971.1–2004.2
IT	-0.073	0.720	0.456	-0.277	0.469	0.5846	2.01
	(-0.70)	(8.33)	(3.79)	(-2.42)	(3.65)		1971.1–1998.4
NE	0.082	0.906	0.300	-0.182		0.4293	1.87
	(1.21)	(23.97)	(2.96)	(-1.88)			1978.1–1998.4
ST	0.020	0.959	0.394	-0.393		0.2736	1.92
	(0.61)	(40.01)	(3.91)	(-2.79)			1981.1–2003.2
UK	0.022	0.970	0.331	-0.342		0.4824	1.59
	(0.47)	(38.77)	(1.96)	(-1.66)			1966.1–2004.1
AS	0.095	0.903	0.489	-0.425		0.5155	1.76
	(1.71)	(23.68)	(3.66)	(-3.00)			1966.1–2004.1
SO	0.173	0.917	0.861	-1.170		0.6815	1.96
	(1.91)	(22.86)	(2.87)	(-2.85)			1961.1–2004.1
KO	0.132	0.913	0.376	-0.140		1.1165	2.06
	(0.86)	(18.73)	(2.21)	(-0.70)			1974.1–2004.2
Annual							
BE	0.541	0.742	0.399			0.7780	1.47
	(1.90)	(6.57)	(5.21)				1962–1998
DE	0.325	0.740	0.437			1.2023	1.67
	(1.32)	(6.34)	(4.89)				1962–2003
NO	0.001	0.842	0.434			0.6702	1.72
	(0.01)	(8.34)	(5.68)				1962–2002
IR	0.501	0.528	0.483			1.2667	1.48
	(1.85)	(3.99)	(5.74)				1968–1998
PO	0.109	0.715	0.431			1.4529	1.71
	(0.45)	(6.38)	(4.96)				1962–1998
NZ	-0.174	0.778	0.367			0.9883	2.41
	(-0.95)	(7.60)	(5.26)				1962–2002
TH	-0.041	0.812	0.356			1.0931	2.17
	(-0.19)	(9.57)	(5.18)				1978–2003

Table B8: Test Results for Equation 8

	[a]Restr.	Lags	RHO	T	Leads	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly												
CA	0.013	0.030	0.874	0.490	0.020	3.58	4	5.744	0.908	1998.4	0.082	5
JA	0.056	0.213	0.545	0.765	0.075	2.14	4	5.638	0.796	1998.3	0.165	5
AU	0.473	0.125	0.608	0.010	0.326	2.53	5	3.475		44.4	0.041	6
FR	0.382	0.571	0.804	0.291	0.388	2.91	5	3.117		44.4	0.641	6
GE	0.158	0.008	0.060	0.495	0.245	5.02	4	4.417	0.899	1998.4	0.021	5
IT	0.816	0.901	0.803	0.866	0.798	5.57	5	3.117		44.4	0.979	6
NE	0.414	0.376	0.183	0.710	0.417	2.29	4	1.154		44.4	0.304	5
ST	0.002	0.001	0.217	0.678	0.012	2.51	4	1.000	0.392	1998.3	0.004	5
UK	0.789	0.426	0.028	0.014	0.728	6.38	4	5.638	1.000	1998.3	0.003	5
AS	0.126	0.207	0.009	0.198	0.145	9.76	4	5.475	0.764	1998.2	0.079	5
SO	0.241	0.016	0.101	0.054	0.250	3.57	4	7.936	0.094	1998.3	0.182	5
KO	0.648	0.748	0.569	0.026	9.900	3.79	4	2.849	1.000	1998.4	0.023	5
Annual												
BE	0.252	0.080	0.036	0.003	0.666	6.54	3	6.370				
DE	0.977	0.869	0.180	0.013	0.517	11.20	3	3.609	1.000	1998		
NO	0.093	0.087	0.311	0.037	0.738	4.74	3	6.623	0.719	1998		
IR	0.645	0.593	0.026	0.001	0.751	9.11	3	3.812				
PO	0.003	0.001	0.156	0.008	0.335	4.47	3	6.370				
NZ	0.141	0.000	0.004	0.653	0.433	1.87	3	3.445	0.688	1998		
TH	0.151	0.533	0.648	1.000	0.795	3.76	3	1.367	1.000	1998		

Table B9: Coefficient Estimates for Equation 9

$$\Delta \log E = a_1 + \lambda[\log(PY/PY_{US}) - \log E_{-1}] + .25\lambda\beta \log[(1 + RS/100)/(1 + RS_{US}/100)]$$

or

$$\Delta \log H = a_1 + \lambda[\log(PY/PY_{GE}) - \log H_{-1}] + .25\lambda\beta \log[(1 + RS/100)/(1 + RS_{GE}/100)]$$

	a_1	λ	$\lambda\beta$	ρ	SE	DW
Quarterly						
EU	-0.018	0.086	-2.116	0.289	0.0481	2.00
	(-2.26)	(2.12)	(-1.81)	(2.87)	1972.2–2003.4	
CA	0.017	0.050	-1.392	0.310	0.0176	2.00
	(5.39)		(-2.20)	(3.62)	1972.2–2004.2	
JA	-0.113	0.050	-1.380	0.300	0.0501	1.94
	(-14.62)		(-1.32)	(3.40)	1972.2–2004.1	
AU	0.003	0.050		0.542	0.0045	2.18
	(2.84)			(6.76)	1972.2–1998.4	
FR	-0.001	0.226		0.249	0.0197	2.04
	(-0.38)	(3.33)		(2.05)	1972.2–1998.4	
GE	-0.020	0.088	-1.727	0.304	0.0490	1.98
	(-2.09)	(1.97)	(-1.35)	(2.78)	1972.2–1998.4	
IT	0.015	0.050		0.339	0.0333	1.95
	(3.06)			(3.69)	1972.2–1998.4	
NE	-0.003	0.050	-0.603		0.0048	1.40
	(-4.38)		(-2.73)		1978.1–1998.4	
ST	-0.998	0.156			0.0178	1.60
	(-3.37)	(3.37)			1981.1–2003.2	
UK	0.002	0.050	-0.555		0.0428	1.41
	(0.39)		(-0.82)		1972.2–2004.1	
FI	0.011	0.094	-0.409	0.423	0.0289	2.02
	(0.96)	(1.31)	(-0.38)	(3.11)	1976.2–1998.4	
AS	0.034	0.081		0.318	0.0393	2.04
	(2.24)	(2.14)		(3.23)	1972.2–2004.1	
SO	0.087	0.050			0.0620	1.50
	(15.92)				1972.2–2004.1	
KO	0.019	0.062		0.316	0.0466	1.92
	(2.26)	(1.78)		(3.28)	1974.1–2004.2	
Annual						
BE	0.016	0.171			0.0289	1.38
	(2.88)	(2.01)			1972–1998	
DE	-0.222	0.050			0.0278	0.95
	(-45.15)				1972–2003	
NO	-0.489	0.108			0.0504	1.41
	(-1.42)	(1.48)			1972–2002	
SW	-1.482	0.315			0.0625	1.94
	(-3.06)	(3.14)			1972–2003	
GR	0.123	0.274			0.0674	0.97
	(7.14)	(1.66)			1972–2000	
IR	0.063	0.131			0.0621	0.97
	(3.02)	(1.01)			1972–1998	

Table B9: Coefficient Estimates for Equation 9

	a_1	λ	$\lambda\beta$	ρ	SE	DW
PO	0.139	0.260			0.0969	0.60
	(3.17)	(1.14)				1972–1998
SP	0.067	0.164			0.0723	1.28
	(3.73)	(1.14)				1972–1998
NZ	0.124	0.118	-2.618		0.0986	1.13
	(1.48)	(0.86)	(-1.36)			1972–2002
VE	-0.958	0.527			0.2266	0.93
	(-2.36)	(2.81)				1972–2002
JO	-0.028	0.093			0.0988	1.11
	(-0.43)	(0.96)				1978–2002
PH	-1.091	0.319			0.0963	1.19
	(-2.23)	(2.36)				1972–2003

Table B9: Test Results for Equation 9

	[a]Restr.	Lags	RHO	T	Stability			End Test		overid	
	p-val	*p*-val	*p*-val	*p*-val	AP	df	λ	*p*-val	End	*p*-val	df
Quarterly											
CA	0.740	0.357	0.537	0.429	2.80	3	3.397	0.000	1998.4	0.162	7
JA	0.107	0.947	0.398	0.043	4.56	3	3.316	0.301	1998.3	0.065	7
AU	0.010	0.013	0.074	0.000	5.24	2	2.696		44.4	0.000	7
FR	0.380	0.480	0.431	0.673	0.69	3	2.696		44.4	0.723	6
GE	0.938	0.673	0.938	0.878	4.52	4	2.696		44.4	0.251	6
IT	0.001	0.934	0.521	0.003	4.56	2	2.696		44.4	0.056	7
NE	0.103	0.277	0.001	0.000	6.91	2	1.154		44.4	0.003	7
ST	0.185	0.046	0.042	0.036	2.18	2	1.000	0.804	1998.3	0.025	6
UK	0.000	0.002	0.002	0.000	6.33	2	3.316	0.976	1998.3	0.001	7
FI	0.170	0.798	0.637	0.214	0.37	4	1.555		44.4	0.014	6
AS	0.176	0.298	0.293	0.261	1.80	3	3.209	0.407	1998.2	0.551	6
SO	0.708	0.002	0.014	0.555	0.39	1	3.316	0.217	1998.3		
KO	0.035	0.425	0.143	0.068	7.59	3	2.849	0.377	1998.4	0.524	6
Annual											
BE	0.986	0.115	0.117	0.814	20.18	2	2.469				
DE	0.000	0.002	0.000	0.000	20.18	2	2.806	1.000	1998		
NO	0.353	0.084	0.166	0.292	0.60	2	2.890	0.455	1998		
SW	0.412	0.553	0.847	0.253	0.72	2	2.806	1.000	1998		
GR	0.000	0.000	0.000	0.000	12.09	2	2.806	0.000	1998		
IR	0.000	0.001	0.000	0.000	5.82	2	2.469				
PO	0.025	0.000	0.000	0.005	8.51	2	2.469				
SP	0.003	0.048	0.004	0.007	4.45	2	2.469	0.500	1998		
NZ	0.857	0.000	0.010	0.928	3.42	3	2.890	0.500	1998		
VE	0.020	0.064	0.000	0.004	14.99	2	2.890	1.000	1998		
JO	0.395	0.014	0.003	0.173							
PH	0.215	0.023	0.001	0.214	3.63	2	3.194	0.696	1999		

Table B10: Coefficient Estimates for Equation 10

$\log F = a_1 \log EE + a_2(.25)\log[(1 + RS/100)/(1 + RS_{US}/100)]$

	a_1	a_2	ρ	SE	DW
Quarterly					
CA	0.9824	1.761	0.793	0.0096	2.28
	(49.23)	(3.68)	(11.64)		1972.2–1997.3
JA	1.0008	1.214	0.375	0.0091	1.82
	(1134.25)	(6.52)	(4.39)		1972.2–2002.1
AU	0.9930	1.049	0.250	0.0058	2.10
	(299.71)	(8.25)	(2.60)		1972.2–1998.4
FR	1.0076	0.644		0.0071	1.54
	(333.90)	(4.78)			1972.2–1989.3
GE	0.9960	1.198	0.720	0.0032	2.21
	(250.42)	(10.89)	(10.67)		1972.2–1998.4
IT	0.9967	1.057		0.0105	1.74
	(257.91)	(8.62)			1976.3–1998.4
NE	0.9955	1.472		0.0097	2.03
	(123.29)	(4.84)			1978.1–1990.4
ST	1.0001	1.128		0.0031	2.12
	(15781.20)	(23.55)			1981.1–2003.2
UK	1.0014	1.277	0.396	0.0061	1.95
	(368.88)	(5.55)	(2.74)		1972.2–1984.4
FI	0.9942	1.211	0.676	0.0071	2.63
	(103.38)	(4.80)	(6.79)		1976.2–1989.3
AS	1.0033	1.285		0.0062	2.00
	(463.92)	(16.90)			1976.1–2004.1

Table B11: Coefficient Estimates for Equation 11

$\log PX - \log[PW\$(E/E00)] = a_1 + \lambda[\log PY - \log[PW\$(E/E00)]$

	a_1	λ	ρ_1	ρ_2	SE	DW
Quarterly						
CA	0.648	1.044	-0.072	0.0216		2.00
	(10.21)	(12.68)	(-0.87)			1966.1–2003.4
JA	0.425	1.296	-0.306	0.0139		1.94
	(15.24)	(16.58)	(-3.98)			1966.1–2003.4
AU	0.868	0.665	0.317	0.0154		2.19
	(22.30)	(8.08)	(3.90)			1970.1–2003.4
FR	0.724	1.136	-0.144	0.0087		2.01
	(29.46)	(12.91)	(-1.64)			1971.1–2003.4
GE	0.805	1.154	-0.166	0.0075		1.88
	(40.67)	(13.21)	(-1.91)			1971.1–2003.4
IT	0.601	0.841	0.133	0.0172		1.94
	(14.37)	(9.60)	(1.51)			1971.1–2003.4
NE	0.480	0.788	0.177	0.0271		2.05
	(6.14)	(8.01)	(1.81)			1978.1–2003.4
ST	0.779	1.042	-0.061	0.0172		1.99
	(15.41)	(9.55)	(-0.53)			1981.1–2003.2
UK	0.710	1.041	-0.048	0.0197		2.00
	(15.80)	(12.68)	(-0.59)			1966.1–2003.4
FI	0.643	0.972	0.018	0.0170		1.98
	(12.60)	(10.24)	(0.19)			1976.2–2003.4
AS	0.579	1.239	-0.257	0.0258		2.00
	(10.31)	(15.72)	(-3.29)			1966.1–2003.4
SO	0.765	0.887	0.107	0.0309		1.99
	(16.14)	(11.59)	(1.39)			1961.1–2003.4
KO	0.813	0.977	0.001	0.0304		1.94
	(13.71)	(10.02)	(0.01)			1974.1–2003.4
Annual						
BE	0.432	0.796	0.107	0.0211		2.03
	(9.11)	(4.94)	(0.71)			1962–2003
DE	0.607	1.039	-0.087	0.0176		1.92
	(13.45)	(6.49)	(-0.57)			1962–2003
SW	0.479	1.149	-0.290	0.0332		1.76
	(5.74)	(7.10)	(-1.86)			1965–2003
IR	0.475	1.054	-0.082	0.0273		1.95
	(6.94)	(5.79)	(-0.46)			1968–2003
SP	0.563	1.049	-0.085	0.0363		1.69
	(6.96)	(6.60)	(-0.56)			1962–2003

Table B11: Coefficient Estimates for Equation 11

	a_1	λ	ρ_1	ρ_2	SE	DW
NZ		0.511	1.012	-0.135	0.0710	1.83
		(3.02)	(6.23)	(-0.86)	1962–2002	
CO		1.001	1.158	-0.172	0.1350	2.01
		(2.90)	(5.88)	(-0.85)	1971–2002	
JO		0.114	1.135	-0.375	0.0575	2.08
		(0.57)	(5.23)	(-1.89)	1978–2002	
ID		0.333	0.720	-0.020	0.0554	1.94
		(6.43)	(4.44)	(-0.12)	1962–2002	
MA		1.000	0.923	0.052	0.1146	1.93
			(5.06)	(0.28)	1972–2003	
PA		0.127	0.818	-0.036	0.0700	2.13
		(1.18)	(4.86)	(-0.22)	1974–2003	
TH		0.279	0.971	-0.273	0.0641	1.82
		(2.33)	(6.20)	(-1.78)	1962–2003	
CH	-0.070		1.006	-0.332	0.0450	1.95
	(-2.07)		(4.05)	(-1.37)	1984–2000	
CE	-0.058		1.060	-0.431	0.0448	2.15
	(-2.38)		(5.53)	(-2.21)	1979–2003	
ME	-0.062		1.116	-0.450	0.0372	2.09
	(-3.55)		(7.68)	(-3.02)	1962–2002	

Table B11: Test Results for Equation 11

	[a]Restr.	Stability			End Test	
	p-val	AP	df	λ	p-val	End
Quarterly						
CA	0.802	3.64	3	6.465	0.000	1998.4
JA	0.000	1.38	3	5.701	0.908	1998.3
AU	0.000	5.30	3	4.121	0.570	1998.3
FR	0.000	14.57	3	3.765	0.330	1998.3
GE	0.000	2.17	3	4.505	0.899	1998.4
IT	0.107	6.48	3	3.801	0.978	1998.3
NE	0.031	8.34	3	1.794	0.000	1998.4
ST	0.052	5.54	3	1.000	0.000	1998.3
UK	0.390	2.83	3	5.701	0.881	1998.3
FI	0.054	1.46	3	2.163	0.000	1998.3
AS	0.016	3.43	3	1.785	0.387	1998.2
SO	0.000	3.27	3	8.035	1.000	1998.3
KO	0.000	17.28	3	2.995	0.301	1998.4
Annual						
BE	0.024	5.16	3	5.129	0.778	1996
DE	0.754	2.52	3	3.609	0.806	1998
SW	0.001	15.21	3	5.127	0.714	1998
IR	0.785	2.66	3	4.048	0.680	1998
SP	0.011	1.59	3	6.333	1.000	1998
NZ	0.000	9.38	3	6.623	0.625	1998
CO	0.300	2.70	3	3.194	1.000	1998
JO	0.000					
ID	0.001	1.49	3	4.779		
MA	0.122	0.49	2	2.806	0.905	1998
PA	0.023	12.15	3	2.270	1.000	1998
TH	0.058	5.50	3	6.333	0.806	1998
CH	0.534					
CE	0.440	0.70	3	1.381		
ME	0.147	1.08	3	6.623	0.688	1998

Table B12: Coefficient Estimates for Equation 12

$$\log W - \log LAM = a_1 + a_2(\log W_{-1} - \log LAM_{-1}) + a_3 \log PY + a_4 DW + a_5 T + a_6 \log PY_{-1}$$

	a_1	a_2	a_3	a_4	a_5	ρ	a_6	SE	DW
Quarterly									
CA	-0.553	0.942	1.173		-0.00010	0.241	-1.106	0.0087	1.97
	(-1.57)	(25.58)	(8.39)		(-1.67)	(2.63)			1966.1–2004.2
FR	-0.007	0.974	1.006		0.00005		-0.979	0.0075	1.74
	(-0.63)	(31.14)	(5.67)		(0.92)				1971.1–2004.2
UK	-1.205	0.868	0.909	-0.03375†	0.00005		-0.782	0.0107	1.96
	(-3.39)	(22.17)	(17.23)	(-0.95)	(1.04)				1966.1–2004.1
AS	-0.870	0.911	1.111	-0.00695†	-0.00001		-1.023	0.0118	2.11
	(-2.48)	(25.49)	(5.55)	(-0.15)	(-0.19)				1966.1–2004.1
KO	-0.496	0.814	0.964	-0.13549†	0.00264		-0.781	0.0309	2.12
	(-2.94)	(10.89)	(2.19)	(-2.04)	(3.03)				1974.1–2004.2
Annual									
SW	-3.067	0.478	0.469	-0.40790	-0.00503		0.044	0.0215	1.77
	(-4.23)	(3.89)	(3.29)	(-2.89)	(-4.19)				1965–2003
SP	-0.052	0.746	1.391	-0.39225†	0.00152		-1.073	0.0277	1.67
	(-1.20)	(10.04)	(7.11)	(-5.78)	(1.20)				1962–2003

Table B12: Test Results for Equation 12

	[a]Restr.	Lags	RHO	Stability			End Test		overid	
	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly										
CA	0.079	0.003	0.008	23.41	4	5.744	0.000	1998.4	0.009	6
FR	0.001	0.119	0.082	17.06	4	3.698	1.000	1998.3	0.008	4
UK	0.801	0.965	0.129	12.27	5	5.638	1.000	1998.3	0.385	6
AS	0.007	0.334	0.253	6.75	5	5.475	1.000	1998.2	0.009	4
KO	0.772	0.408	0.503	4.01	5	2.849	0.753	1998.4	0.438	4
Annual										
SW	0.047	0.457	0.768	11.03	5	5.127	1.000	1998		
SP	0.030	0.335	0.244	83.30	5	6.333	1.000	1998		

Table B13: Coefficient Estimates for Equation 13

$$\Delta \log J = a_1 + a_2 T + a_3 \log(J/JMIN)_{-1} + a_4 \Delta \log Y + a_5 \Delta \log Y_{-1}$$

	a_1	a_2	a_3	a_4	a_5	ρ	SE	DW
Quarterly								
CA	0.005	-0.00001	-0.123	0.347	0.199		0.0040	1.68
	(3.07)	(-1.89)	(-4.65)	(3.45)	(3.64)		1966.1–2004.2	
JA	0.006	-0.00002	-0.050	0.019			0.0037	2.05
	(2.76)	(-2.11)	(-2.51)	(0.27)			1966.1–2004.1	
FR	-0.007	0.00004	-0.206	0.554			0.0022	1.81
	(-5.63)	(5.43)	(-5.44)	(6.53)			1979.1–2004.2	
GE	-0.002	0.00001	-0.187	0.485			0.0045	1.79
	(-1.22)	(1.04)	(-4.53)	(3.56)			1971.1–2004.2	
IT	-0.002	0.00003	-0.131	0.099			0.0052	2.03
	(-0.76)	(1.93)	(-4.49)	(0.94)			1971.1–2003.4	
ST	0.006	-0.00003	-0.165	0.258			0.0037	1.53
	(2.30)	(-1.70)	(-4.64)	(2.09)			1981.1–2003.2	
UK	0.001	0.00002	-0.186	0.101		0.450	0.0030	2.01
	(0.38)	(1.65)	(-6.53)	(2.24)		(5.98)	1966.1–2004.1	
FI	0.007	-0.00004	-0.191	0.624			0.0067	2.12
	(1.59)	(-1.88)	(-5.10)	(5.33)			1976.2–2004.2	
AS	0.004		-0.195	0.035		0.311	0.0049	2.12
	(1.99)	(0.29)	(-4.34)	(0.48)		(3.88)	1966.1–2004.1	
Annual								
BE	-0.016	0.00041	-0.071	0.331			0.0089	1.86
	(-2.61)	(2.21)	(-0.72)	(3.71)			1962–1999	
DE	0.010	-0.00036	-0.201	0.361			0.0148	1.57
	(1.33)	(-1.52)	(-1.77)	(3.14)			1962–2003	
NO	-0.004	0.00011	-0.405	0.388			0.0115	0.88
	(-0.64)	(0.71)	(-4.20)	(3.19)			1962–2002	
SW	-0.002	-0.00007	-0.168	0.483			0.0128	0.87
	(-0.36)	(-0.39)	(-1.72)	(3.85)			1965–2003	
IR	-0.044	0.00123	-0.421	0.573			0.0121	1.51
	(-6.68)	(5.33)	(-3.34)	(7.21)			1968–2003	

Table B13: Test Results for Equation 13

	Lags	RHO	Leads	Stability			End Test		overid	
	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly										
CA	0.437	0.280	0.373	10.00	5	5.744	0.862	1998.4	0.151	5
JA	0.221	0.173	0.725	11.17	4	5.638	0.759	1998.3	0.005	6
FR	0.111	0.002	0.206	9.28	4	1.489	0.509	1998.3	0.079	6
GE	0.001	0.000	0.297	11.95	4	4.417	0.989	1998.4	0.010	6
IT	0.056	0.385	0.672	2.67	4	3.765	0.978	1998.3	0.571	6
ST	0.097	0.009	0.149	10.49	4	1.000	1.000	1998.3	0.000	6
UK	0.003	0.401	0.094	10.32	5	5.638	0.454	1998.3	0.007	6
FI	0.013	0.000	0.253	18.18	4	2.138	0.409	1998.3	0.021	7
AS	0.001	0.001	0.470	6.52	5	5.475	0.896	1998.2	0.352	7
Annual										
BE	0.178	0.498	0.176	6.41	4	6.035	0.871	1996		
DE	0.016	0.028	0.795	10.92	4	3.609	1.000	1998		
NO	0.000	0.000	0.562	27.89	4	6.623	1.000	1998		
SW	0.000	0.000	0.069	9.93	4	5.127	0.929	1998		
IR	0.399	0.134	0.006	4.99	4	4.048	0.000	1998		

Table B14: Coefficient Estimates for Equation 14

$$\log(L1/POP1) = a_1 + a_2 T + a_3 \log(L1/POP1)_{-1} + a_4 \log(W/PY) + a_5 Z$$

	a_1	a_2	a_3	a_4	a_5	SE	DW
Quarterly							
CA	-0.006	-0.00004	0.959	0.007	0.004	0.0042	1.94
	(-0.78)	(-1.16)	(40.73)	(0.73)	(0.14)		1966.1–2004.2
JA	-0.005	-0.00003	0.962			0.0029	2.00
	(-1.31)	(-2.21)	(39.94)				1966.1–2004.1
AU	-0.060	-0.00020	0.736		0.063	0.0038	2.36
	(-3.74)	(-3.33)	(9.94)		(1.10)		1970.1–2003.4
GE	-0.029	0.00002	0.955			0.0028	1.92
	(-3.78)	(2.30)	(76.24)				1971.1–2004.2
IT	-0.016	-0.00006	0.945			0.0041	1.83
	(-2.26)	(-1.36)	(30.51)				1971.1–2003.4
ST	0.002	-0.00004	0.979			0.0042	1.90
	(0.57)	(-2.02)	(48.04)				1981.1–2003.2
UK	-0.007	-0.00003	0.971			0.0030	1.83
	(-1.85)	(-0.83)	(37.79)				1966.1–2004.1
FI	-0.016	-0.00015	0.890		0.098	0.0054	2.47
	(-2.52)	(-3.00)	(24.02)		(2.53)		1976.2–2004.2
AS	-0.012	-0.00011	0.900		0.023	0.0034	2.14
	(-3.13)	(-2.43)	(23.63)		(1.14)		1966.1–2004.1
Annual							
BE	-0.054	-0.00144	0.794		0.233	0.0056	1.96
	(-2.37)	(-2.02)	(8.27)		(3.31)		1962–1999
DE	-0.034	-0.00044	0.851		0.055	0.0084	1.78
	(-2.66)	(-1.39)	(11.88)		(0.79)		1962–2003
NO	-0.063	-0.00048	0.759		0.639	0.0063	1.32
	(-4.18)	(-2.45)	(12.25)		(5.57)		1962–2002
SW	-0.073	-0.00229	0.611	0.047	0.227	0.0066	1.38
	(-2.47)	(-3.12)	(4.59)	(2.28)	(2.12)		1965–2003
IR	-0.023	-0.00073	0.854		0.176	0.0162	2.85
	(-1.42)	(-1.05)	(8.28)		(1.83)		1968–2003

Table B14: Test Results for Equation 14

	Lags	log PY	RHO	Stability			End Test		overid	
	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly										
CA	0.690	0.492	0.181	9.80	5	5.744	1.000	1998.4	0.002	5
JA	0.885		0.768	6.99	3	5.638	0.352	1998.3	0.006	5
AU	0.009		0.042	6.85	4	4.121	0.570	1998.3	0.476	5
GE	0.649		0.288	1.87	3	4.417	0.348	1998.4	0.745	5
IT	0.319		0.609	7.43	3	3.765	1.000	1998.3	0.082	5
ST	0.998		0.056	9.31	3	1.000	1.000	1998.3	0.000	6
UK	0.307		0.264	2.60	3	5.638	0.259	1998.3	0.592	5
FI	0.001		0.003	15.14	4	2.138	0.758	1998.3	0.000	5
AS	0.180		0.424	11.66	4	5.475	0.981	1998.2	0.070	5
Annual										
BE	0.810		0.592	17.57	4	6.035	0.774	1996		
DE	0.489		0.417	18.12	4	3.609	1.000	1998		
NO	0.001		0.022	3.17	4	6.623	0.656	1998		
SW	0.003	0.040	0.040	0.57	0	0.000				
IR	0.002		0.001	9.40	4	4.048	0.880	1998		

Table B15: Coefficient Estimates for Equation 15

$$\log(L2/POP2) = a_1 + a_2 T + a_3 \log(L2/POP2)_{-1} + a_4 \log(W/PY) + a_5 Z$$

	a_1	a_2	a_3	a_4	a_5	SE	DW
Quarterly							
CA	-0.006	-0.00001	0.980	0.014		0.0058	2.00
	(-0.56)	(-0.35)	(78.36)	(0.92)			1966.2–2004.2
JA	-0.030	0.00001	0.961			0.0073	2.14
	(-1.91)	(0.91)	(46.30)				1966.1–2004.1
AU	-0.084	0.00019	0.930			0.0095	2.46
	(-2.66)	(2.86)	(34.98)				1970.1–2003.4
IT	-0.139	0.00024	0.906			0.0110	2.29
	(-2.44)	(2.36)	(24.24)				1971.1–2003.4
ST	-0.005		0.988			0.0061	1.63
	(-0.21)	(0.04)	(48.92)				1981.1–2003.2
UK	-0.017	-0.00004	0.958	0.031		0.0036	1.24
	(-0.91)	(-0.70)	(54.58)	(2.81)			1966.1–2004.1
FI	-0.023	-0.00005	0.944		0.107	0.0053	2.17
	(-2.07)	(-2.52)	(43.34)		(2.85)		1976.2–2004.2
AS	-0.061	0.00015	0.941			0.0082	1.90
	(-1.83)	(1.73)	(32.05)				1966.1–2004.1
Annual							
BE	-0.144	0.00143	0.877			0.0077	1.78
	(-1.47)	(1.57)	(11.21)				1962–1999
DE	0.005	-0.00051	0.964		0.262	0.0147	1.63
	(0.16)	(-1.17)	(26.29)		(2.25)		1962–2003
NO	-0.027	0.00043	0.958			0.0307	1.10
	(-0.36)	(0.35)	(16.31)				1962–2002
IR	-0.319	0.00419	0.788		0.215	0.0208	2.55
	(-2.77)	(3.34)	(10.01)		(1.41)		1968–2003

Table B15: Test Results for Equation 15

	Lags	$\log PY$	RHO	Stability			End Test		overid	
	p-val	p-val	p-val	AP	df	λ	p-val	End	p-val	df
Quarterly										
CA	0.706	0.219	0.394	16.93	4	5.638	0.926	1998.4	0.000	6
JA	0.332		0.599	13.36	3	5.638	0.843	1998.3	0.151	4
AU	0.003		0.013	2.73	3	4.121	0.914	1998.3	0.543	5
IT	0.065		0.072	8.06	3	3.765	1.000	1998.3	0.020	5
ST	0.092		0.009	9.24	3	1.000	1.000	1998.3	0.000	6
UK	0.000	0.022	0.000	22.19	4	5.638	0.509	1998.3	0.001	5
FI	0.144		0.320	6.32	4	2.138	0.288	1998.3	0.001	5
AS	0.848		0.942	4.52	3	5.475	0.604	1998.2	0.411	6
Annual										
BE	0.517		0.495	20.71	3	6.035	0.355	1996		
DE	0.564		0.222	21.40	4	3.609	1.000	1998		
NO	0.119		0.001	19.22	3	6.623	0.969	1998		
IR	0.043		0.064	5.25	4	4.048	0.640	1998		

Table B.5
Links Between the US and ROW Models

The data on the variables for the United States that are needed when the US model is imbedded in the MCB model were collected as described in Table B.2. These variables are (with the US subscript dropped): $EXDS$, $IMDS$, M, MS, $M00\$A$, $M00\$B$, PM, PMP, $PSI2$, $PW\$$, PX (= $PX\$$), S, TT, XS, and $X00\$$. The PX_{US} variable here is not the same as the PX variable for the United States in Appendix A. The variable here is denoted $USPX$ in the MCB model. The PX variable for the United States is the price deflator of total sales of the firm sector.

Variable	Determination
$X00\$_{US}$	Determined in Table B.3
PMP_{US}	Determined in Table B.3
$PW\$_{US}$	Determined in Table B.3
PX_{US}	Determined by an equation that is equivalent to equation 11 for the other countries. See the discussion in Section B.6.
$PEX =$	$DEL3 \cdot PX_{US}$. In the US model by itself, PEX is determined as $PSI1 \cdot PX$, which is equation 32 in Table A.2. This equation is dropped when the US model is linked to the ROW model. $DEL3$ is constructed from the data as PEX/PX_{US} and is taken to be exogenous.
$PM_{US} =$	$PSI2_{US}PMP_{US}$. This is the same as equation I-19 for the other countries.
$PIM =$	$DEL4 \cdot PM_{US}$. PIM is an exogenous variable in the US model by itself. $DEL4$ is constructed from the data as PIM/PM_{US} and is taken to be exogenous.
$EX =$	$(X00\$_{US} + XS_{US} + EXDS_{US})/1000$. This is the same as equation I-2 for the other countries. EX is an exogenous variable in the US model by itself. $EXDS_{US}$ is constructed from the data as $1000EX - X00\$_{US} - XS_{US}$ and is taken to be exogenous.
$M_{US} =$	$1000IM - MS_{US} - IMDS_{US}$. This is the same as equation I-1 for the other countries. $IMDS_{US}$ is constructed from the data as $1000IM - M_{US} - MS_{US}$ and is taken to be exogenous.
$M00\$A_{US} =$	$M_{US} - M00\$B_{US}$. This is the same as equation I-8 for the other countries.
$S_{US} =$	$PX_{US}(X00\$_{US} + XS_{US}) - PM_{US}(M_{US} + MS_{US}) + TT_{US}$. This is the same as equation I-6 for the other countries.

• The new exogenous variables for the US model when it is linked to the ROW model are $DEL3$, $DEL4$, $EXDS_{US}$, $IMDS_{US}$, $M00\$B_{US}$, MS_{US}, $PSI2_{US}$, TT_{US}, and XS_{US}. EX and PIM are exogenous in the US model by itself, but endogenous when the US model is linked to the ROW model.

Table B.6
Construction of the Balance of Payments Data: Data for S and TT

The relevant raw data variables are:

$M\$'$	Goods imports (fob) in \$, BOP data. [IFS78ABD]
$M\$$	Goods imports (fob) in \$. [IFS71V/E]
$X\$'$	Goods exports (fob) in \$, BOP data. [IFS78AAD]
$X\$$	Goods exports (fob) in \$. [IFS70/E]
$MS\$$	Services and income (debit) in \$, BOP data. [IFS78AED + IFS78AHD]
$XS\$$	Services and income (credit) in \$, BOP data. [IFS78ADD + IFS78AGD]
$XT\$$	Current transfers, n.i.e., (credit) in \$, BOP data. [IFS78AJD]
$MT\$$	Current transfers, n.i.e., (debit) in \$, BOP data. [IFS78AKD]

When quarterly data on all the above variables were available, then $S\$$ and $TT\$$ were constructed as:

$$S\$ = \quad X\$' + XS\$ - M\$' - MS\$ + XT\$ - MT\$$$

$$TT\$ = \quad S\$ - X\$ - XS\$ + M\$ + MS\$$$

where $S\$$ is total net goods, services, and transfers in \$ (balance of payments on current account) and $TT\$$ is total net transfers in \$.

When only annual data on $M\$'$ were available and quarterly data were needed, interpolated quarterly data were constructed using $M\$$. Similarly for $MS\$$.

When only annual data on $X\$'$ were available and quarterly data were needed, interpolated quarterly data were constructed using $X\$$. Similarly for $XS\$$, $XT\$$, and $MT\$$.

When no data on $M\$'$ were available, then $M\$'$ was taken to be $\lambda M\$$, where λ is the last observed value of $M\$'/M\$$. Similarly for $MS\$$ (where λ is the last observed annual value of $MS\$/M\$$.)

When no data on $X\$'$ were available, then $X\$'$ was taken to be $\lambda X\$$, where λ is the last observed value of $X\$'/X\$$. Similarly for $XS\$$ (where λ is the last observed annual value of $XS\$/X\$$), for $XT\$$ (where λ is the last observed annual value of $XT\$/X\$$), and for $MT\$$ (where λ is the last observed annual value of $MT\$/X\$$).

The above equations for $S\$$ and $TT\$$ were then used to construct quarterly data for $S\$$ and $TT\$$.

After data on $S\$$ and $TT\$$ were constructed, data on S and TT were constructed as:

$$S = \quad E \cdot S\$$$

$$TT = \quad E \cdot TT\$$$

Note from MS and XS in Table B.2 and from $MS\$$ and $XS\$$ above that

$$MS\$ = \quad (PM \cdot MS)/E$$

$$XS\$ = \quad (PX \cdot XS)/E$$

Note also from Table B.2 that

$$M\$ = \quad (PM \cdot M)/E$$

$$X\$ = \quad (E00 \cdot PX \cdot X00\$)/E$$

Therefore, from the above equations, the equation for S can be written

$$S = \quad PX(E00 \cdot X00\$ + XS) - PM(M + MS) + TT$$

which is equation I-6 in Table B.3.