

«Note»

Proof of General Data-Consistency Connecting LONG (1960–2011) with Short (1990–2011) Database by Country, Using KEWT 7.13–1, 13–2, 13–3, 13–4 for Eight Countries

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Abstract

The author presents two Notes : Note for common use and Note for specific use. This Note is the former, which is sister Note of the latter presented to *Journal of Economic Sciences* (*JES*). Each Abstract of Sister Notes is the same, except for bold letters. Generally this Note covers any country in the world except for Japan and the US. Of course, similarly to the case of Japan and the US, the author is able to settle data-sets by country. But, these tries confuse the readers since it is not easy for policy-makers to connect SNA data with *IFS*, IMF. The author believes that this Note is better for policy-makers to utilize this Note for general use.

This Note focuses how to maintain ever data-consistency between LONG (1960–2011) data-sets and Short (1990–2011) data-sets in the series of the author's KEWT (Kamiryo Endogenous World Table) database, generally for any country in the global world. Japan and the US are separately summarized in the sister journal, *Journal of Economic Sciences*. The reason for such separation is that data-consistency for Japan and the US uses not only 25=10 (for the real assets)+15 (for the financial/market assets and external others) original data taken from *International Financial Statistics Yearbook* (*IFS*) but also typically precise national accounts of Japan Government Office and the Bureau of Economic Activity, the US. Earlier for many years, the author had compared

the data of a system for national accounts (SNA, 1993) with the *IFSY*. The author finds that *IFSY* database is commonly available for world countries, compared with SNA database by country. Also, SNA database well maintains national taste, culture, and history, compared with IMF and the World Bank databases. It is noted that both databases, SNA and IMF, aim at recording/records and are not fitted for directly policy-oriented. The difference is just specific or commonly to the world countries.

Contrarily, the author's *Earth Endogenous System (EES)* (EES, lxviii+568, May 15, 2013) is purely policy-oriented. Recording and policy-oriented are not compatible interrupted by the market principles. The *EES* is able to integrate recording with policy-oriented. As a result, causes and effects/results are realized at the same time, apart from one way or two-ways. Theoretical essence underlying the *EES* is: There are purely endogenous equations and these equations hold without any assumption. In the literature, equations always have some partial assumptions each as surrogate for equation. Contrarily, endogenous equations hold and perfect competition is precisely measured. And, endogenous equations even reinforce the essence of the market principles. All the values and ratios are ever consistently measured by country, sector (G and PRI, and its weight-aggregated Total) and, years and over years.

For empirical data, **this Note combines the KEWT II for 16 and other countries (“LONG,” 1960–2011) with the KEWT 7.13–1, 13–2, 13–3, 13–4 (“Short,” 1990–2011) for Pacific and Asia area, Euro area, non-Euro European area, and BRICs and other area.**

The contents in the Excel are composed of several key blue bird devices. The author uses these key devices for further researches and finds new discoveries in the near future. After eternity, the KEWT databases hopefully are presented to IMF and the World Bank, as gifts or fortune. For key devices are connected with the author's copyright. Copy right between two countries may be solved

by specific lawyers yet, the author’s copy right has not been born without surprising support and understanding to the *EES*. In this respect, the author sincerely desires that all the copy right is succeeded by the Better Advances Press, Toronto. This is the way of the author’s spiritual life. Of course, while the author is alive, the author intends to exclusively and directly convey whatever of KEWT contents to IMF and the World Bank. This is also because the *EES* has not been born without 25 actual and external original data included in *IFSY*, IMF, over years. Furthermore, the *EES* satisfies Keynes’ spirit towards peaceful world without war and hyperinflation by utilizing an endogenous container (i.e., policy-oriented methodology). Leaders and policy-makers by country will decide the level of exercise and people by country will enjoy the results. This is because actual data remain within a certain range of endogenous data by country, sector and, years and over years.

Mechanics of the data consistency between LONG and Short database

Data consistency between LONG and Short database is directly expressed by using the capital at the total economy K and the capital at the government sector K_G . The results are shown by country; France, Germany, the UK, Sweden, Spain, Italy, Greece, and Ireland. These eight country data *typically* express each character by area and by historical difference. These eight country data *commonly* examine the cells, (1) BQ to CB, and (2) FB to FN.

“Sister Note” of *PRSCE* to be published at the same time may be more overwhelming. This Note may be more policy-oriented since through consistency examination/practice readers learn simultaneous cause-effect relationship between actual statistics and endogenous and dynamic balances between the government and the private sector (the G and PRI sector).

Let the author first explain Tables S1 and S2. Bottom-MEMO of Table S1 is

defined as a means to confirm the author's neutrality of the financial/market assets to the real asset, by comparing three financial/market assets, 10 year market debt yield, M2 or its equivalent, and the exchange rate. In particular, the exchange rate is neutral to real assets growth robustness, setting the US (aa of the *IFSY*) and SDR (ae of the *IFSY*) either as a base. For international comparison, the exchange rate is most convenient. The 10 year market debt yield also is precise but not always complete international reflecting each countries specific taste and culture to some extent. These data examination or test results are shown in Appendix at the end.

Specific device of Table S2 for the LONG and Short databases is an example of Ireland. This table shows comparative consistency between the speed years for convergence by sector ($1/\lambda^*, 1/\lambda_G^*, 1/\lambda_{PRI}^*$). This test shows a direct process to whole consistency yet, connected with disappearance of true reasons and causes lying between *beta* and *delta*₀. For Euro area data consistency, the initial Short 1990 and 1999 Euro starting data of $1/\lambda^*, 1/\lambda_G^*, 1/\lambda_{PRI}^*$ need twice delicate attention. When the 1999 $1/\lambda^*, 1/\lambda_G^*, 1/\lambda_{PRI}^*$ data are corrected, the initial 1990 $1/\lambda^*, 1/\lambda_G^*, 1/\lambda_{PRI}^*$ data turn to completely endogenous only if LONG 1999 data match Short 1999 $1/\lambda^*, 1/\lambda_G^*, 1/\lambda_{PRI}^*$ data. The author added two examples for LONG 1990 data to Table S2, using Spain and Italy. As a result, anywhere in the Excel temporal or discretion setting of a given value disappears at LONG and Short database.

Now let the author examine Tables 1 to 8 for total capital consistency by country, comparing with Tables 9 to 16 for government sector capital consistency. Total capital consistency results are similar to those of the PRI sector due to weighted average aggregation by sector. Capital consistency is exaggerated at the G sector, as shown by Tables 9 to 16. What is a reason? At the G sector, each denominator is not the total sector' but the G sector values. Even if the size of government is small, causes-effects is clearly expressed at

the G sector. At the total sector or the whole economy, government causes-effects is spread and absorbed into the PRI sector.

Nevertheless, some countries such as Greece and Ireland cannot conceal unbalanced results. In the case of Greece, bad signs were already enough expressed for several years before and after becoming the Euro currency area member. These signs and signals are not hidden. Even if data were modified, these signs and signals express themselves. In other words, data is always honest just like the market principle for the long-term, e.g., 10 year market debts yield.

For this reason, the author added **Appendix B** for the neutrality of the financial/market assets to the real assets. When the real assets results become significantly unbalanced, the speed years for convergence reflect less quality level, regardless of data modification, pull-out, and falsifying. This phenomenon is similar to God's hand in the market principles for the long-term. This phenomenon is similar to the face expressed when human become older. The face itself tells us what he or she has long lived with each life-style and philosophy.

In the case of corporate accounting, it is difficult for accountants to clarify window dressing after falsification of data. In the case of the *EES* and its database, it is meaningless for policy-makers to falsify some data. A reason is that the *EES* does not need any assumption and every data are connected with endogenous equations by country, sector and, years and over years.

This Note, by chance, generally proved the meaningless falsification of data, through the examination of the data consistency between LONG (1960–2011) and Short (1990–2011) databases as the purpose of this Note.

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Table S1 Bottom-MEMO at the Excel for the neutrality of the exchange rate,

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Table 1 France, K consistency between LONG (1960–2011) and Short (1990–2011)

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Appendix A

Table A1–1 Proof of no time function in the purely endogenous: using Y/K
Japan 2010

Table A1–2 Continued

Table A1–1 Proof of no time function in the purely endogenous: using Y/K the
US 2010

Table A1–2 Continued

Table A2–1 Proof of no time function in the purely endogenous: using Y/L
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Table A2–2 Continued

Table A2–1 Proof of no time function in the purely endogenous: using Y/L the
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Table A2–2 Continued

The above Appendix is commonly to “sister Note” of *PRSCE* to be published
at the same time.

Appendix B

Table BF–1 France: Fundamental endogenous ratios

Table BF–2 France: Neutrality of the financial/market assets to the real assets

Table BG–1 Germany: Fundamental endogenous ratios

Table BG–2 Germany: Neutrality of the financial/market assets to the real assets

Table BS–1 Sweden: Fundamental endogenous ratios

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Table BSp–2 Spain: Neutrality of the financial/market assets to the real assets

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Table BGr–1 Greece: Fundamental endogenous ratios

Table BGr–2 Greece: Neutrality of the financial/market assets to the real assets

Table BIr–1 Ireland: Fundamental endogenous ratios

Table BIr–2 Ireland: Neutrality of the financial/market assets to the real assets

Table S1 Bottom-MEMO at the Excel for the neutrality of the exchange rate, regarding whole consistency confirmation

| the UK | | cell EU of the US | cell EUgy*(US) | For DO y*(US) | For EV r*(US) | | δ_0/α | |
|---|------------|-------------------|----------------|-------------------|---------------------|--------------|-------------------|-------|
| | | Never erase | | cell DO of the US | cell DO of the US | | | |
| For 1960-2011 analysis by country, | | | 0.0145 | 1960 | 5.16 | 0.0304 | 1960 | 4.387 |
| Use three pasted forms here from each cell of 59 to 109 | | | 0.0122 | 1961 | 4.75 | 0.0302 | 1961 | 4.850 |
| | | | 0.0164 | 1962 | 5.79 | 0.0320 | 1962 | 4.259 |
| | | | 0.0171 | 1963 | 6.26 | 0.0324 | 1963 | 4.134 |
| | | | 0.0176 | 1964 | 6.84 | 0.0339 | 1964 | 4.061 |
| | | | 0.0253 | 1965 | 8.60 | 0.0363 | 1965 | 3.320 |
| | | | 0.0283 | 1966 | 9.86 | 0.0379 | 1966 | 3.136 |
| | | | 0.0255 | 1967 | 10.12 | 0.0357 | 1967 | 3.399 |
| | | | 0.0265 | 1968 | 11.34 | 0.0366 | 1968 | 3.371 |
| | | | 0.0273 | 1969 | 12.38 | 0.0377 | 1969 | 3.364 |
| | | | 0.0216 | 1970 | 11.63 | 0.0380 | 1970 | 4.050 |
| | | | 0.0241 | 1971 | 12.63 | 0.0392 | 1971 | 4.128 |
| | | | 0.0292 | 1972 | 15.24 | 0.0408 | 1972 | 3.669 |
| | | | 0.0342 | 1973 | 18.19 | 0.0447 | 1973 | 3.287 |
| | | | 0.0323 | 1974 | 19.55 | 0.0441 | 1974 | 3.473 |
| | | | 0.0236 | 1975 | 19.78 | 0.0464 | 1975 | 4.209 |
| | | | 0.0314 | 1976 | 23.85 | 0.0482 | 1976 | 3.928 |
| | | | 0.0380 | 1977 | 27.33 | 0.0501 | 1977 | 3.862 |
| | | | 0.0444 | 1978 | 31.89 | 0.0542 | 1978 | 3.764 |
| | | | 0.0462 | 1979 | 36.00 | 0.0571 | 1979 | 3.790 |
| | | | 0.0380 | 1980 | 36.78 | 0.0543 | 1980 | 4.461 |
| | | | 0.0446 | 1981 | 44.43 | 0.0580 | 1981 | 3.954 |
| | | | 0.0335 | 1982 | 43.20 | 0.0555 | 1982 | 4.310 |
| | | | 0.0347 | 1983 | 48.20 | 0.0584 | 1983 | 4.138 |
| | | | 0.0477 | 1984 | 55.26 | 0.0566 | 1984 | 3.859 |
| | | | 0.0429 | 1985 | 58.20 | 0.0576 | 1985 | 3.933 |
| | | | 0.0358 | 1986 | 59.68 | 0.0629 | 1986 | 3.780 |
| | | | 0.0349 | 1987 | 63.00 | 0.0639 | 1987 | 3.697 |
| | | | 0.0321 | 1988 | 66.33 | 0.0637 | 1988 | 3.947 |
| | | | 0.0309 | 1989 | 69.67 | 0.0627 | 1989 | 4.210 |
| | | | 0.0098 | 1990 | 45.73 | 0.0983 | 1990 | 4.262 |
| | | | 0.0084 | 1991 | 38.80 | 0.0892 | 1991 | 4.970 |
| | | | 0.0075 | 1992 | 38.62 | 0.0966 | 1992 | 4.903 |
| | | | 0.0149 | 1993 | 56.85 | 0.0868 | 1993 | 4.814 |
| | | | 0.0201 | 1994 | 72.23 | 0.0837 | 1994 | 4.670 |
| | | | 0.0117 | 1995 | 51.94 | 0.0586 | 1995 | 4.101 |
| | | | 0.0145 | 1996 | 59.68 | 0.0562 | 1996 | 4.139 |
| | | | 0.0189 | 1997 | 69.34 | 0.0521 | 1997 | 4.218 |
| | | | 0.0235 | 1998 | 77.69 | 0.0503 | 1998 | 4.161 |
| | | | 0.0311 | 1999 | 91.14 | 0.0496 | 1999 | 3.880 |
| | | | 0.0344 | 2000 | 99.35 | 0.0503 | 2000 | 3.720 |
| | | | 0.0247 | 2001 | 96.76 | 0.0589 | 2001 | 3.454 |
| | | | 0.0175 | 2002 | 92.91 | 0.0745 | 2002 | 3.023 |
| | | | 0.0165 | 2003 | 98.02 | 0.0815 | 2003 | 2.853 |
| | | | 0.0195 | 2004 | 111.85 | 0.0830 | 2004 | 2.744 |
| | | | 0.0194 | 2005 | 121.23 | 0.0906 | 2005 | 2.614 |
| | | | 0.0278 | 2006 | 138.78 | 0.0769 | 2006 | 2.765 |
| | | | 0.0322 | 2007 | 144.76 | 0.0627 | 2007 | 3.169 |
| | | | 0.0246 | 2008 | 142.03 | 0.0702 | 2008 | 3.013 |
| | | | (0.0033) | 2009 | 21.82 | 0.1075 | 2009 | 2.264 |
| | | | 0.0055 | 2010 | 77.46 | 0.0960 | 2010 | 3.251 |
| | | | 0.0067 | 2011 | 88.60 | 0.0956 | 2011 | 3.251 |
| the UK | 8Jan2013OK | | gy* | $y^*=A^*k^*y$ | $r^*=\alpha/\Omega$ | EV of the US | δ_0/α | |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table S2 Specific device of consistency using the speed years by country and by sector, G and PRI

| IRELAND | $1/\lambda^*$ | $1/\lambda_G^*$ | $1/\lambda_{PRI}^*$ | | | | |
|---------|---------------|-----------------|---------------------|--|--|--|--|
| 1990 | 16.51 | 405.81 | (112.50) | on 2Feb 2013, completely the same as Short | | | |
| 1991 | 20.22 | (1335.09) | (90.55) | | | | |
| 1992 | 23.88 | (156.33) | (85.27) | | | | |
| 1993 | 25.79 | 1400.82 | (110.18) | | | | |
| 1994 | 25.61 | 846.22 | (101.98) | | | | |
| 1995 | 24.49 | (921.39) | (67.34) | | | | |
| 1996 | 24.54 | 1348.09 | (66.32) | | | | |
| 1997 | 25.38 | 585.71 | (63.19) | | | | |
| 1998 | 24.20 | 558.59 | (50.08) | | | | |
| 1999 | 24.19 | 91.46 | 20.56 | on 2Feb 2013, completely the same as Short | | | |
| 2000 | 26.25 | 103.54 | 22.60 | | | | |
| 2001 | 26.45 | 50.77 | 25.82 | | | | |
| 2002 | 27.05 | 39.42 | 28.03 | | | | |
| 2003 | 28.68 | 42.00 | 29.74 | | | | |
| 2004 | 28.59 | 52.39 | 29.19 | | | | |
| 2005 | 27.61 | 63.83 | 28.46 | | | | |
| 2006 | 26.86 | 76.07 | 26.76 | | | | |
| 2007 | 24.39 | 64.07 | 24.34 | | | | |
| 2008 | 24.17 | 14.65 | 27.86 | | | | |
| 2009 | 30.99 | 5.84 | 59.20 | | | | |
| 2010 | 38.54 | 2.98 | (55.82) | | | | |
| 2011 | 38.33 | 9.29 | 66.89 | | | | |
| IRELAND | $1/\lambda^*$ | $1/\lambda_G^*$ | $1/\lambda_{PRI}^*$ | | | | |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Note: Related items to be examined are the following.

In the case of Euro area, it is similar to non-Euro to examine the whole consistency over years. For example,

| | | | |
|---|--|--|--|
| For SPAIN, 1960-2011, using cell FD, $K_{Gt} = \Delta K_G + K_{G(t-1)}$ | | | |
| 23465.82 | Paste this value at Short at the previous year | | |
| 33500.16 | | | |
| 110 | Just confirm this value at LONG | | |

| | | | |
|---|--|--|--|
| For ITALY, 1960-2011, using cell FD, $K_{Gt} = \Delta K_G + K_{G(t-1)}$ | | | |
| 1044.936 | Paste this value at 1989 Short data. | | |
| 1280.673 | Confirm this value as the same at Short. | | |

Table 1 France, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301°c°2-22.608°c+10.566 | | | | | | | | | | theoretical wage rate | |
|------------------------------------|--------|---------|----------------------|----------|-----------------------------------|-----------|------|--------|--------|-----------------------|----------|
| r [*] G (REAL) | c=C/Y | (rho/r) | $\alpha=1-c/(rho/r)$ | (r/w) | K _L =ΔK+K _L | k=(α/(1-α | K=Lk | Ω=K/Y | Γ=α/Ω | w=(r/w) | gw (I) |
| FRANCE | | | | | 28 | | | | | | |
| 1962 | 0.9216 | 1.0276 | 0.1032 | 0.200862 | 30 | 0.57 | 30 | 1.2944 | 0.0797 | 0.40 | |
| 1963 | 0.9130 | 1.0122 | 0.0980 | 0.179192 | 32 | 0.61 | 32 | 1.2946 | 0.0757 | 0.42 | 0.0644 |
| 1962 | 0.9259 | 1.0361 | 0.1064 | 0.188093 | 34 | 0.63 | 34 | 1.3005 | 0.0818 | 0.43 | 0.0293 |
| 1963 | 0.9248 | 1.0338 | 0.1055 | 0.177624 | 36 | 0.66 | 36 | 1.2885 | 0.0819 | 0.46 | 0.0599 |
| 1964 | 0.9046 | 0.9991 | 0.0945 | 0.145535 | 39 | 0.72 | 39 | 1.2844 | 0.0736 | 0.51 | 0.0974 |
| 1965 | 0.9025 | 0.9960 | 0.0939 | 0.134679 | 42 | 0.77 | 42 | 1.2903 | 0.0728 | 0.54 | 0.0684 |
| 1966 | 0.9008 | 0.9937 | 0.0935 | 0.125432 | 45 | 0.82 | 45 | 1.2997 | 0.0719 | 0.57 | 0.0611 |
| 1967 | 0.9046 | 0.9991 | 0.0945 | 0.118350 | 48 | 0.88 | 48 | 1.3255 | 0.0713 | 0.60 | 0.0509 |
| 1968 | 0.8949 | 0.9862 | 0.0925 | 0.106842 | 53 | 0.95 | 53 | 1.3271 | 0.0697 | 0.65 | 0.0831 |
| 1969 | 0.8861 | 0.9766 | 0.0927 | 0.099656 | 57 | 1.03 | 57 | 1.3394 | 0.0692 | 0.69 | 0.0642 |
| 1970 | 0.8847 | 0.9753 | 0.0929 | 0.093022 | 61 | 1.10 | 61 | 1.3119 | 0.0708 | 0.76 | 0.0961 |
| 1971 | 0.8861 | 0.9767 | 0.0927 | 0.086530 | 66 | 1.18 | 66 | 1.2562 | 0.0738 | 0.85 | 0.1203 |
| 1972 | 0.9065 | 1.0018 | 0.0952 | 0.083089 | 71 | 1.27 | 71 | 1.2192 | 0.0781 | 0.94 | 0.1016 |
| 1973 | 0.8964 | 0.9880 | 0.0927 | 0.073144 | 78 | 1.40 | 78 | 1.1669 | 0.0794 | 1.09 | 0.1560 |
| 1974 | 0.9239 | 1.0320 | 0.1048 | 0.075548 | 87 | 1.55 | 87 | 1.1370 | 0.0922 | 1.22 | 0.1234 |
| 1975 | 0.9270 | 1.0382 | 0.1072 | 0.070837 | 95 | 1.69 | 95 | 0.9839 | 0.1089 | 1.54 | 0.2604 |
| 1976 | 0.9036 | 0.9976 | 0.0942 | 0.054948 | 106 | 1.89 | 106 | 0.9201 | 0.1024 | 1.86 | 0.2120 |
| 1977 | 0.8863 | 0.9768 | 0.0927 | 0.047672 | 120 | 2.14 | 120 | 0.9038 | 0.1025 | 2.15 | 0.1541 |
| 1978 | 0.8820 | 0.9729 | 0.0934 | 0.042709 | 135 | 2.41 | 135 | 0.8828 | 0.1058 | 2.48 | 0.1522 |
| 1979 | 0.8895 | 0.9800 | 0.0924 | 0.037248 | 153 | 2.73 | 153 | 0.8552 | 0.1081 | 2.90 | 0.1705 |
| 1980 | 0.9013 | 0.9943 | 0.0936 | 0.034497 | 169 | 2.99 | 169 | 0.8055 | 0.1162 | 3.37 | 0.1609 |
| 1981 | 0.9139 | 1.0137 | 0.0985 | 0.034154 | 180 | 3.20 | 180 | 0.7809 | 0.1261 | 3.69 | 0.0961 |
| 1982 | 0.9184 | 1.0217 | 0.1011 | 0.032579 | 194 | 3.45 | 194 | 0.7723 | 0.1309 | 4.02 | 0.0881 |
| 1983 | 0.9200 | 1.0247 | 0.1021 | 0.030383 | 211 | 3.74 | 211 | 0.7674 | 0.1331 | 4.38 | 0.0904 |
| 1984 | 0.9217 | 1.0278 | 0.1032 | 0.028227 | 230 | 4.08 | 230 | 0.7882 | 0.1310 | 4.64 | 0.0595 |
| 1985 | 0.9100 | 1.0072 | 0.0966 | 0.023905 | 253 | 4.47 | 253 | 0.7902 | 0.1222 | 5.11 | 0.1015 |
| 1986 | 0.9457 | 1.0813 | 0.1254 | 0.030236 | 269 | 4.74 | 269 | 0.7936 | 0.1580 | 5.23 | 0.0225 |
| 1987 | 0.9350 | 1.0556 | 0.1142 | 0.024947 | 294 | 5.17 | 294 | 0.7858 | 0.1454 | 5.83 | 0.1150 |
| 1988 | 0.9390 | 1.0649 | 0.1182 | 0.023069 | 332 | 5.81 | 332 | 0.7976 | 0.1482 | 6.42 | 0.1025 |
| 1989 | 0.9355 | 1.0568 | 0.1148 | 0.019690 | 377 | 6.58 | 377 | 0.8278 | 0.1386 | 7.04 | 0.0958 |
| 1990 | 0.9427 | 1.0739 | 0.1222 | 0.019038 | 418 | 7.31 | 418 | 0.8628 | 0.1416 | 7.44 | 0.0563 |
| 1991 | 0.9613 | 1.1242 | 0.1450 | 0.021865 | 445 | 7.75 | 445 | 0.8777 | 0.1651 | 7.55 | 0.0156 |
| 1992 | 0.9778 | 1.1770 | 0.1692 | 0.025378 | 461 | 8.03 | 461 | 0.8754 | 0.1933 | 7.62 | 0.0086 |
| 1993 | 0.9803 | 1.1853 | 0.1730 | 0.025221 | 478 | 8.29 | 478 | 0.8611 | 0.2009 | 7.97 | 0.0457 |
| 1994 | 0.9655 | 1.1370 | 0.1508 | 0.020708 | 496 | 8.58 | 496 | 0.8437 | 0.1788 | 8.63 | 0.0837 |
| 1995 | 0.9508 | 1.0947 | 0.1314 | 0.016467 | 533 | 9.19 | 533 | 0.8435 | 0.1558 | 9.46 | 0.0962 |
| 1996 | 0.9480 | 1.0873 | 0.1281 | 0.014913 | 573 | 9.85 | 573 | 0.8488 | 0.1509 | 10.12 | 0.0694 |
| 1997 | 0.9303 | 1.0452 | 0.1099 | 0.011595 | 622 | 10.65 | 622 | 0.8471 | 0.1298 | 11.19 | 0.1061 |
| 1998 | 0.9210 | 1.0265 | 0.1028 | 0.009827 | 682 | 11.66 | 682 | 0.8673 | 0.1185 | 12.06 | 0.0774 |
| 1999 | 0.9448 | 1.0791 | 0.1244 | 0.011198 | 745 | 12.69 | 745 | 0.9092 | 0.1369 | 12.22 | 0.0135 |
| 2000 | 0.9530 | 1.1006 | 0.1341 | 0.011262 | 810 | 13.75 | 810 | 0.9385 | 0.1429 | 12.69 | 0.0381 |
| 2001 | 0.9544 | 1.1046 | 0.1360 | 0.010590 | 878 | 14.86 | 878 | 0.9663 | 0.1407 | 13.29 | 0.0473 |
| 2002 | 0.9524 | 1.0989 | 0.1334 | 0.009523 | 959 | 16.16 | 959 | 0.9926 | 0.1344 | 14.11 | 0.0617 |
| 2003 | 0.9499 | 1.0922 | 0.1303 | 0.008552 | 1044 | 17.52 | 1044 | 1.0171 | 0.1281 | 14.98 | 0.0618 |
| 2004 | 0.9525 | 1.0994 | 0.1336 | 0.008116 | 1138 | 18.99 | 1138 | 1.0518 | 0.1270 | 15.65 | 0.0445 |
| 2005 | 0.9613 | 1.1244 | 0.1450 | 0.008270 | 1235 | 20.51 | 1235 | 1.0959 | 0.1323 | 16.00 | 0.0228 |
| 2006 | 0.9685 | 1.1465 | 0.1552 | 0.008406 | 1323 | 21.86 | 1323 | 1.1274 | 0.1377 | 16.38 | 0.0234 |
| 2007 | 0.9640 | 1.1325 | 0.1487 | 0.007483 | 1422 | 23.35 | 1422 | 1.1504 | 0.1293 | 17.28 | 0.0551 |
| 2008 | 0.9688 | 1.1473 | 0.1556 | 0.007463 | 1513 | 24.69 | 1513 | 1.1921 | 0.1305 | 17.49 | 0.0121 |
| 2009 | 0.9683 | 1.1458 | 0.1549 | 0.007096 | 1592 | 25.83 | 1592 | 1.2623 | 0.1227 | 17.29 | (0.0113) |
| 2010 | 0.9658 | 1.1381 | 0.1513 | 0.006539 | 1692 | 27.27 | 1692 | 1.2772 | 0.1185 | 18.12 | 0.0479 |
| 2011 | 0.9579 | 1.1145 | 0.1405 | 0.005677 | 1797 | 28.79 | 1797 | 1.3172 | 0.1067 | 18.79 | 0.0368 |
| r [*] G (REAL) | c=C/Y | (rho/r) | $\alpha=1-c/(rho/r)$ | (r/w) | K _L =ΔK+K _L | k=(α/(1-α | K=Lk | Ω=K/Y | Γ=α/Ω | w=(r/w) | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 3 the UK, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301°c°2-22.608°c+10.566 | | | | | | | | | | theoretical wage rate | |
|------------------------------------|--------|---------|---------------|----------|-----------------------------------|-----------|------|--------|--------|-----------------------|----------|
| r [*] _{G(REAL)} | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _L =ΔK+K _L | k=(α/(1-α | K=Lk | Ω=K/Y | Γ=α/Ω | w=τ(r/w) | gw (I) |
| the UK | | | | | 28 | | | | | | |
| 1962 | 0.9216 | 1.0276 | 0.1032 | 0.200862 | 30 | 0.57 | 30 | 1.2944 | 0.0797 | 0.40 | |
| 1963 | 0.9130 | 1.0122 | 0.0980 | 0.179192 | 32 | 0.61 | 32 | 1.2946 | 0.0757 | 0.42 | 0.0644 |
| 1962 | 0.9259 | 1.0361 | 0.1064 | 0.188093 | 34 | 0.63 | 34 | 1.3005 | 0.0818 | 0.43 | 0.0293 |
| 1963 | 0.9248 | 1.0338 | 0.1055 | 0.177624 | 36 | 0.66 | 36 | 1.2885 | 0.0819 | 0.46 | 0.0599 |
| 1964 | 0.9046 | 0.9991 | 0.0945 | 0.145535 | 39 | 0.72 | 39 | 1.2844 | 0.0736 | 0.51 | 0.0974 |
| 1965 | 0.9025 | 0.9960 | 0.0939 | 0.134679 | 42 | 0.77 | 42 | 1.2903 | 0.0728 | 0.54 | 0.0684 |
| 1966 | 0.9008 | 0.9937 | 0.0935 | 0.125432 | 45 | 0.82 | 45 | 1.2997 | 0.0719 | 0.57 | 0.0611 |
| 1967 | 0.9046 | 0.9991 | 0.0945 | 0.118350 | 48 | 0.88 | 48 | 1.3255 | 0.0713 | 0.60 | 0.0509 |
| 1968 | 0.8949 | 0.9862 | 0.0925 | 0.106842 | 53 | 0.95 | 53 | 1.3271 | 0.0697 | 0.65 | 0.0831 |
| 1969 | 0.8861 | 0.9766 | 0.0927 | 0.099656 | 57 | 1.03 | 57 | 1.3394 | 0.0692 | 0.69 | 0.0642 |
| 1970 | 0.8847 | 0.9753 | 0.0929 | 0.093022 | 61 | 1.10 | 61 | 1.3119 | 0.0708 | 0.76 | 0.0961 |
| 1971 | 0.8861 | 0.9767 | 0.0927 | 0.086530 | 66 | 1.18 | 66 | 1.2562 | 0.0738 | 0.85 | 0.1203 |
| 1972 | 0.9065 | 1.0018 | 0.0952 | 0.083089 | 71 | 1.27 | 71 | 1.2192 | 0.0781 | 0.94 | 0.1016 |
| 1973 | 0.8964 | 0.9880 | 0.0927 | 0.073144 | 78 | 1.40 | 78 | 1.1669 | 0.0794 | 1.09 | 0.1560 |
| 1974 | 0.9239 | 1.0320 | 0.1048 | 0.075548 | 87 | 1.55 | 87 | 1.1370 | 0.0922 | 1.22 | 0.1234 |
| 1975 | 0.9270 | 1.0382 | 0.1072 | 0.070837 | 95 | 1.69 | 95 | 0.9839 | 0.1089 | 1.54 | 0.2604 |
| 1976 | 0.9036 | 0.9976 | 0.0942 | 0.054948 | 106 | 1.89 | 106 | 0.9201 | 0.1024 | 1.86 | 0.2120 |
| 1977 | 0.8863 | 0.9768 | 0.0927 | 0.047672 | 120 | 2.14 | 120 | 0.9038 | 0.1025 | 2.15 | 0.1541 |
| 1978 | 0.8820 | 0.9729 | 0.0934 | 0.042709 | 135 | 2.41 | 135 | 0.8828 | 0.1058 | 2.48 | 0.1522 |
| 1979 | 0.8895 | 0.9800 | 0.0924 | 0.037248 | 153 | 2.73 | 153 | 0.8552 | 0.1081 | 2.90 | 0.1705 |
| 1980 | 0.9013 | 0.9943 | 0.0936 | 0.034497 | 169 | 2.99 | 169 | 0.8055 | 0.1162 | 3.37 | 0.1609 |
| 1981 | 0.9139 | 1.0137 | 0.0985 | 0.034154 | 180 | 3.20 | 180 | 0.7809 | 0.1261 | 3.69 | 0.0961 |
| 1982 | 0.9184 | 1.0217 | 0.1011 | 0.032579 | 194 | 3.45 | 194 | 0.7723 | 0.1309 | 4.02 | 0.0881 |
| 1983 | 0.9200 | 1.0247 | 0.1021 | 0.030383 | 211 | 3.74 | 211 | 0.7674 | 0.1331 | 4.38 | 0.0904 |
| 1984 | 0.9217 | 1.0278 | 0.1032 | 0.028227 | 230 | 4.08 | 230 | 0.7882 | 0.1310 | 4.64 | 0.0595 |
| 1985 | 0.9100 | 1.0072 | 0.0966 | 0.023905 | 253 | 4.47 | 253 | 0.7902 | 0.1222 | 5.11 | 0.1015 |
| 1986 | 0.9457 | 1.0813 | 0.1254 | 0.030236 | 269 | 4.74 | 269 | 0.7936 | 0.1580 | 5.23 | 0.0225 |
| 1987 | 0.9350 | 1.0556 | 0.1142 | 0.024947 | 294 | 5.17 | 294 | 0.7858 | 0.1454 | 5.83 | 0.1150 |
| 1988 | 0.9390 | 1.0649 | 0.1182 | 0.023069 | 332 | 5.81 | 332 | 0.7976 | 0.1482 | 6.42 | 0.1025 |
| 1989 | 0.9355 | 1.0568 | 0.1148 | 0.019690 | 377 | 6.58 | 377 | 0.8278 | 0.1386 | 7.04 | 0.0958 |
| 1990 | 0.9427 | 1.0739 | 0.1222 | 0.019038 | 418 | 7.31 | 418 | 0.8628 | 0.1416 | 7.44 | 0.0563 |
| 1991 | 0.9613 | 1.1242 | 0.1450 | 0.021865 | 445 | 7.75 | 445 | 0.8777 | 0.1651 | 7.55 | 0.0156 |
| 1992 | 0.9778 | 1.1770 | 0.1692 | 0.025378 | 461 | 8.03 | 461 | 0.8754 | 0.1933 | 7.62 | 0.0086 |
| 1993 | 0.9803 | 1.1853 | 0.1730 | 0.025221 | 478 | 8.29 | 478 | 0.8611 | 0.2009 | 7.97 | 0.0457 |
| 1994 | 0.9655 | 1.1370 | 0.1508 | 0.020708 | 496 | 8.58 | 496 | 0.8437 | 0.1788 | 8.63 | 0.0837 |
| 1995 | 0.9508 | 1.0947 | 0.1314 | 0.016467 | 533 | 9.19 | 533 | 0.8435 | 0.1558 | 9.46 | 0.0962 |
| 1996 | 0.9480 | 1.0873 | 0.1281 | 0.014913 | 573 | 9.85 | 573 | 0.8488 | 0.1509 | 10.12 | 0.0694 |
| 1997 | 0.9303 | 1.0452 | 0.1099 | 0.011595 | 622 | 10.65 | 622 | 0.8471 | 0.1298 | 11.19 | 0.1061 |
| 1998 | 0.9210 | 1.0265 | 0.1028 | 0.009827 | 682 | 11.66 | 682 | 0.8673 | 0.1185 | 12.06 | 0.0774 |
| 1999 | 0.9448 | 1.0791 | 0.1244 | 0.011198 | 745 | 12.69 | 745 | 0.9092 | 0.1369 | 12.22 | 0.0135 |
| 2000 | 0.9530 | 1.1006 | 0.1341 | 0.011262 | 810 | 13.75 | 810 | 0.9385 | 0.1429 | 12.69 | 0.0381 |
| 2001 | 0.9544 | 1.1046 | 0.1360 | 0.010590 | 878 | 14.86 | 878 | 0.9663 | 0.1407 | 13.29 | 0.0473 |
| 2002 | 0.9524 | 1.0989 | 0.1334 | 0.009523 | 959 | 16.16 | 959 | 0.9926 | 0.1344 | 14.11 | 0.0617 |
| 2003 | 0.9499 | 1.0922 | 0.1303 | 0.008552 | 1044 | 17.52 | 1044 | 1.0171 | 0.1281 | 14.98 | 0.0618 |
| 2004 | 0.9525 | 1.0994 | 0.1336 | 0.008116 | 1138 | 18.99 | 1138 | 1.0518 | 0.1270 | 15.65 | 0.0445 |
| 2005 | 0.9613 | 1.1244 | 0.1450 | 0.008270 | 1235 | 20.51 | 1235 | 1.0959 | 0.1323 | 16.00 | 0.0228 |
| 2006 | 0.9685 | 1.1465 | 0.1552 | 0.008406 | 1323 | 21.86 | 1323 | 1.1274 | 0.1377 | 16.38 | 0.0234 |
| 2007 | 0.9640 | 1.1325 | 0.1487 | 0.007483 | 1422 | 23.35 | 1422 | 1.1504 | 0.1293 | 17.28 | 0.0551 |
| 2008 | 0.9688 | 1.1473 | 0.1556 | 0.007463 | 1513 | 24.69 | 1513 | 1.1921 | 0.1305 | 17.49 | 0.0121 |
| 2009 | 0.9683 | 1.1458 | 0.1549 | 0.007096 | 1592 | 25.83 | 1592 | 1.2623 | 0.1227 | 17.29 | (0.0113) |
| 2010 | 0.9658 | 1.1381 | 0.1513 | 0.006539 | 1692 | 27.27 | 1692 | 1.2772 | 0.1185 | 18.12 | 0.0479 |
| 2011 | 0.9579 | 1.1145 | 0.1405 | 0.005677 | 1797 | 28.79 | 1797 | 1.3172 | 0.1067 | 18.79 | 0.0368 |
| r [*] _{G(REAL)} | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _L =ΔK+K _L | k=(α/(1-α | K=Lk | Ω=K/Y | Γ=α/Ω | w=τ(r/w) | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 5 Spain, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301°e°2-22.608°e+10.566 | | | | | | | | | | theoretical wage rate | |
|------------------------------------|--------|---------|---------------|----------|-----------------------------------|------------|--------|--------|--------|-----------------------|----------|
| r [*] G (REAL) | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _r =ΔK/K _r | k=(α/(1-α) | K=L/k | Ω=K/Y | Γ=α/Ω | w=τ/(r/w) | gw (I) |
| SPAIN | | | | | 28 | | | | | | |
| 1960 | 0.8678 | 0.9634 | 0.0993 | 0.040010 | 84 | 2.76 | 84 | 0.1501 | 0.6615 | 16.53 | |
| 1961 | 0.8597 | 0.9604 | 0.1049 | 0.021190 | 170 | 5.53 | 170 | 0.2675 | 0.3923 | 18.52 | 0.1199 |
| 1962 | 0.8527 | 0.9593 | 0.1111 | 0.013506 | 288 | 9.25 | 288 | 0.3910 | 0.2841 | 21.04 | 0.1362 |
| 1963 | 0.8691 | 0.9641 | 0.0986 | 0.008016 | 428 | 13.64 | 428 | 0.4934 | 0.1997 | 24.92 | 0.1844 |
| 1964 | 0.9133 | 1.0127 | 0.0982 | 0.005852 | 590 | 18.60 | 590 | 0.5453 | 0.1800 | 30.76 | 0.2345 |
| 1965 | 0.9229 | 1.0301 | 0.1041 | 0.004673 | 797 | 24.86 | 797 | 0.6330 | 0.1644 | 35.19 | 0.1440 |
| 1966 | 0.9215 | 1.0274 | 0.1031 | 0.003578 | 1040 | 32.12 | 1040 | 0.7148 | 0.1442 | 40.30 | 0.1453 |
| 1967 | 0.9186 | 1.0220 | 0.1012 | 0.002849 | 1294 | 39.52 | 1294 | 0.7906 | 0.1280 | 44.93 | 0.1150 |
| 1968 | 0.9126 | 1.0115 | 0.0978 | 0.002274 | 1577 | 47.67 | 1577 | 0.8601 | 0.1137 | 50.00 | 0.1128 |
| 1969 | 0.8488 | 0.9592 | 0.1151 | 0.002227 | 1952 | 58.39 | 1952 | 0.9361 | 0.1229 | 55.20 | 0.1040 |
| 1970 | 0.8502 | 0.9592 | 0.1137 | 0.001851 | 2341 | 69.29 | 2341 | 1.0095 | 0.1126 | 60.83 | 0.1020 |
| 1971 | 0.8520 | 0.9592 | 0.1118 | 0.001579 | 2722 | 79.74 | 2722 | 1.0356 | 0.1080 | 68.39 | 0.1243 |
| 1972 | 0.8489 | 0.9592 | 0.1150 | 0.001391 | 3205 | 93.45 | 3205 | 1.0377 | 0.1108 | 79.70 | 0.1653 |
| 1973 | 0.8473 | 0.9593 | 0.1167 | 0.001194 | 3828 | 110.64 | 3828 | 1.0275 | 0.1136 | 95.12 | 0.1935 |
| 1974 | 0.8522 | 0.9592 | 0.1116 | 0.000925 | 4752 | 135.77 | 4752 | 1.0349 | 0.1079 | 116.55 | 0.2253 |
| 1975 | 0.8600 | 0.9605 | 0.1047 | 0.000722 | 5765 | 161.95 | 5765 | 1.0645 | 0.0983 | 136.22 | 0.1687 |
| 1976 | 0.8793 | 0.9707 | 0.0941 | 0.000543 | 6882 | 191.32 | 6882 | 1.0570 | 0.0891 | 163.96 | 0.2037 |
| 1977 | 0.8832 | 0.9739 | 0.0932 | 0.000461 | 8103 | 222.92 | 8103 | 0.9810 | 0.0950 | 206.06 | 0.2568 |
| 1978 | 0.8776 | 0.9694 | 0.0947 | 0.000410 | 9347 | 254.85 | 9347 | 0.9247 | 0.1024 | 249.50 | 0.2108 |
| 1979 | 0.8868 | 0.9773 | 0.0926 | 0.000351 | 10745 | 290.48 | 10745 | 0.9092 | 0.1019 | 289.90 | 0.1619 |
| 1980 | 0.8773 | 0.9692 | 0.0948 | 0.000305 | 12903 | 343.71 | 12903 | 0.9426 | 0.1006 | 330.06 | 0.1385 |
| 1981 | 0.8960 | 0.9875 | 0.0926 | 0.000256 | 15080 | 399.37 | 15080 | 0.9863 | 0.0939 | 367.41 | 0.1132 |
| 1982 | 0.8951 | 0.9864 | 0.0926 | 0.000221 | 17564 | 462.46 | 17564 | 0.9974 | 0.0928 | 420.76 | 0.1452 |
| 1983 | 0.8944 | 0.9856 | 0.0925 | 0.000193 | 20169 | 528.40 | 20169 | 1.0079 | 0.0918 | 475.78 | 0.1308 |
| 1984 | 0.8769 | 0.9689 | 0.0949 | 0.000177 | 22767 | 593.81 | 22767 | 1.0074 | 0.0943 | 533.49 | 0.1213 |
| 1985 | 0.8759 | 0.9682 | 0.0953 | 0.000158 | 25700 | 667.52 | 25700 | 1.0126 | 0.0941 | 596.41 | 0.1179 |
| 1986 | 0.8752 | 0.9677 | 0.0956 | 0.000141 | 28896 | 747.25 | 28896 | 1.0047 | 0.0952 | 672.64 | 0.1278 |
| 1987 | 0.8798 | 0.9711 | 0.0940 | 0.000122 | 33041 | 850.90 | 33041 | 1.0267 | 0.0916 | 750.85 | 0.1163 |
| 1988 | 0.8689 | 0.9640 | 0.0987 | 0.000111 | 38579 | 990.48 | 38579 | 1.0802 | 0.0913 | 826.48 | 0.1007 |
| 1989 | 0.8234 | 0.9685 | 0.1499 | 0.000145 | 47373 | 1214.69 | 47373 | 1.1832 | 0.1266 | 872.74 | 0.0560 |
| 1990 | 0.8668 | 0.9630 | 0.0999 | 0.00008 | 55533 | 1420 | 55533 | 1.2305 | 0.0812 | 1038 | 0.1898 |
| 1991 | 0.8270 | 0.9662 | 0.1441 | 0.00010 | 66844 | 1704 | 66844 | 1.2810 | 0.1125 | 1139 | 0.0967 |
| 1992 | 0.9058 | 1.0007 | 0.0949 | 0.00006 | 74124 | 1886 | 74124 | 1.4173 | 0.0670 | 1204 | 0.0577 |
| 1993 | 0.9171 | 1.0193 | 0.1003 | 0.00006 | 79466 | 2017 | 79466 | 1.4820 | 0.0677 | 1225 | 0.0166 |
| 1994 | 0.9265 | 1.0372 | 0.1068 | 0.00006 | 84620 | 2142 | 84620 | 1.5182 | 0.0703 | 1260 | 0.0290 |
| 1995 | 0.8940 | 0.9851 | 0.0925 | 0.00004 | 91508 | 2308 | 91508 | 1.4077 | 0.0657 | 1488 | 0.1811 |
| 1996 | 0.8937 | 0.9848 | 0.0924 | 0.00004 | 98378 | 2474 | 98378 | 1.4341 | 0.0645 | 1566 | 0.0522 |
| 1997 | 0.8880 | 0.9786 | 0.0925 | 0.00004 | 105800 | 2654 | 105800 | 1.4540 | 0.0636 | 1657 | 0.0580 |
| 1998 | 0.8915 | 0.9822 | 0.0924 | 0.00004 | 113939 | 2851 | 113939 | 1.5083 | 0.0612 | 1715 | 0.0354 |
| 1999 | 0.9138 | 1.0135 | 0.0984 | 0.00625 | 700 | 17.46 | 700 | 1.4374 | 0.0685 | 10.95 | (0.9936) |
| 2000 | 0.9290 | 1.0424 | 0.1088 | 0.00650 | 757 | 18.79 | 757 | 1.4530 | 0.0749 | 11.52 | 0.0524 |
| 2001 | 0.9350 | 1.0556 | 0.1143 | 0.00649 | 810 | 19.87 | 810 | 1.4622 | 0.0781 | 12.04 | 0.0444 |
| 2002 | 0.9322 | 1.0494 | 0.1116 | 0.00600 | 866 | 20.94 | 866 | 1.4680 | 0.0761 | 12.67 | 0.0526 |
| 2003 | 0.9392 | 1.0653 | 0.1184 | 0.00612 | 923 | 21.96 | 923 | 1.4770 | 0.0802 | 13.11 | 0.0345 |
| 2004 | 0.9468 | 1.0841 | 0.1267 | 0.00624 | 993 | 23.24 | 993 | 1.4759 | 0.0858 | 13.75 | 0.0491 |
| 2005 | 0.9358 | 1.0573 | 0.1150 | 0.00518 | 1088 | 25.07 | 1088 | 1.4780 | 0.0778 | 15.01 | 0.0919 |
| 2006 | 0.9208 | 1.0262 | 0.1026 | 0.00414 | 1215 | 27.60 | 1215 | 1.5060 | 0.0682 | 16.45 | 0.0955 |
| 2007 | 0.9199 | 1.0244 | 0.1020 | 0.00374 | 1356 | 30.39 | 1356 | 1.5646 | 0.0652 | 17.44 | 0.0605 |
| 2008 | 0.9464 | 1.0830 | 0.1262 | 0.00445 | 1466 | 32.46 | 1466 | 1.6633 | 0.0759 | 17.06 | (0.0222) |
| 2009 | 0.9426 | 1.0735 | 0.1220 | 0.00413 | 1535 | 33.64 | 1535 | 1.7822 | 0.0684 | 16.57 | (0.0283) |
| 2010 | 0.9596 | 1.1193 | 0.1427 | 0.00482 | 1592 | 34.55 | 1592 | 1.8430 | 0.0774 | 16.07 | (0.0301) |
| 2011 | 0.9558 | 1.1084 | 0.1377 | 0.00453 | 1638 | 35.26 | 1638 | 1.8573 | 0.0741 | 16.37 | 0.0185 |
| r [*] G (REAL) | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _r =ΔK/K _r | k=(α/(1-α) | K=L/k | Ω=K/Y | Γ=α/Ω | w=τ/(r/w) | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table 6 Italy, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301°c°2-22.608°c+10.566 | | | | | | | | | | | |
|------------------------------------|--------|---------|---------------|----------|-----------------------------------|----------|-------|--------|--------|-----------|-----------------------|
| r [*] G (REAL) | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _r =ΔK+K _r | k=α/(1-α | K=L-k | Ω=K/Y | Γ=α/Ω | w=r/(r/w) | theoretical wage rate |
| ITALY | | | | | 28 | | | | | | gw (I) |
| 1960 | 0.8569 | 0.9598 | 0.1072 | 0.193101 | 31 | 0.62 | 31 | 1.5007 | 0.0715 | 0.37 | #DIV/0! |
| 1961 | 0.8446 | 0.9595 | 0.1197 | 0.195473 | 35 | 0.70 | 35 | 1.5196 | 0.0788 | 0.40 | 0.0895 |
| 1962 | 0.8513 | 0.9592 | 0.1124 | 0.162883 | 40 | 0.78 | 40 | 1.5214 | 0.0739 | 0.45 | 0.1256 |
| 1963 | 0.8733 | 0.9665 | 0.0964 | 0.122687 | 45 | 0.87 | 45 | 1.4939 | 0.0645 | 0.53 | 0.1592 |
| 1964 | 0.8718 | 0.9656 | 0.0971 | 0.112897 | 49 | 0.95 | 49 | 1.5035 | 0.0646 | 0.57 | 0.0875 |
| 1965 | 0.8796 | 0.9710 | 0.0941 | 0.101890 | 53 | 1.02 | 53 | 1.5041 | 0.0625 | 0.61 | 0.0729 |
| 1966 | 0.8899 | 0.9805 | 0.0924 | 0.093696 | 57 | 1.09 | 57 | 1.4904 | 0.0620 | 0.66 | 0.0781 |
| 1967 | 0.8858 | 0.9763 | 0.0927 | 0.087380 | 62 | 1.17 | 62 | 1.4661 | 0.0633 | 0.72 | 0.0941 |
| 1968 | 0.8740 | 0.9669 | 0.0961 | 0.084530 | 67 | 1.26 | 67 | 1.4632 | 0.0657 | 0.78 | 0.0732 |
| 1969 | 0.8659 | 0.9626 | 0.1004 | 0.081606 | 73 | 1.37 | 73 | 1.4503 | 0.0692 | 0.85 | 0.0920 |
| 1970 | 0.8701 | 0.9646 | 0.0980 | 0.072389 | 81 | 1.50 | 81 | 1.4230 | 0.0689 | 0.95 | 0.1212 |
| 1971 | 0.8362 | 0.9617 | 0.1305 | 0.089163 | 91 | 1.68 | 91 | 1.3836 | 0.0943 | 1.06 | 0.1117 |
| 1972 | 0.8483 | 0.9592 | 0.1157 | 0.070149 | 101 | 1.86 | 101 | 1.4123 | 0.0819 | 1.17 | 0.1039 |
| 1973 | 0.8426 | 0.9599 | 0.1222 | 0.064873 | 118 | 2.15 | 118 | 1.3507 | 0.0905 | 1.39 | 0.1946 |
| 1974 | 0.8328 | 0.9631 | 0.1353 | 0.060609 | 142 | 2.58 | 142 | 1.2934 | 0.1046 | 1.73 | 0.2375 |
| 1975 | 0.8578 | 0.9600 | 0.1065 | 0.040839 | 162 | 2.92 | 162 | 1.2960 | 0.0822 | 2.01 | 0.1660 |
| 1976 | 0.8372 | 0.9613 | 0.1291 | 0.042854 | 193 | 3.46 | 193 | 1.2243 | 0.1055 | 2.46 | 0.2229 |
| 1977 | 0.8394 | 0.9606 | 0.1261 | 0.035958 | 225 | 4.01 | 225 | 1.1635 | 0.1084 | 3.01 | 0.2252 |
| 1978 | 0.8363 | 0.9616 | 0.1303 | 0.032286 | 261 | 4.64 | 261 | 1.1418 | 0.1141 | 3.54 | 0.1727 |
| 1979 | 0.8442 | 0.9596 | 0.1203 | 0.025291 | 304 | 5.41 | 304 | 1.0912 | 0.1102 | 4.36 | 0.2326 |
| 1980 | 0.8582 | 0.9601 | 0.1062 | 0.018198 | 368 | 6.53 | 368 | 1.0553 | 0.1006 | 5.53 | 0.2684 |
| 1981 | 0.8728 | 0.9661 | 0.0967 | 0.013801 | 438 | 7.75 | 438 | 1.0489 | 0.0922 | 6.68 | 0.2080 |
| 1982 | 0.8791 | 0.9706 | 0.0942 | 0.011451 | 514 | 9.08 | 514 | 1.0486 | 0.0898 | 7.85 | 0.1750 |
| 1983 | 0.8805 | 0.9717 | 0.0938 | 0.009955 | 591 | 10.40 | 591 | 1.0369 | 0.0905 | 9.09 | 0.1584 |
| 1984 | 0.8757 | 0.9680 | 0.0954 | 0.008734 | 688 | 12.08 | 688 | 1.0516 | 0.0907 | 10.39 | 0.1428 |
| 1985 | 0.8816 | 0.9726 | 0.0935 | 0.007422 | 794 | 13.90 | 794 | 1.0860 | 0.0861 | 11.61 | 0.1174 |
| 1986 | 0.8864 | 0.9770 | 0.0927 | 0.006523 | 896 | 15.66 | 896 | 1.1218 | 0.0826 | 12.66 | 0.0911 |
| 1987 | 0.8941 | 0.9852 | 0.0925 | 0.005844 | 1000 | 17.44 | 1000 | 1.1478 | 0.0806 | 13.79 | 0.0887 |
| 1988 | 0.8893 | 0.9799 | 0.0924 | 0.005210 | 1123 | 19.55 | 1123 | 1.1649 | 0.0793 | 15.23 | 0.1046 |
| 1989 | 0.8885 | 0.9790 | 0.0925 | 0.004636 | 1264 | 21.98 | 1264 | 1.1957 | 0.0773 | 16.68 | 0.0954 |
| 1990 | 0.8828 | 0.9736 | 0.0933 | 0.00416 | 1427 | 24.75 | 1427 | 1.2098 | 0.0771 | 18.55 | 0.1120 |
| 1991 | 0.8887 | 0.9793 | 0.0925 | 0.00361 | 1604 | 28.25 | 1604 | 1.2480 | 0.0741 | 20.54 | 0.1074 |
| 1992 | 0.8989 | 0.9911 | 0.0931 | 0.00334 | 1746 | 30.71 | 1746 | 1.2914 | 0.0721 | 21.57 | 0.0499 |
| 1993 | 0.8939 | 0.9850 | 0.0925 | 0.00314 | 1854 | 32.49 | 1854 | 1.3285 | 0.0696 | 22.20 | 0.0291 |
| 1994 | 0.8907 | 0.9814 | 0.0924 | 0.00295 | 1972 | 34.48 | 1972 | 1.3373 | 0.0691 | 23.40 | 0.0543 |
| 1995 | 0.8509 | 0.9592 | 0.1129 | 0.00337 | 2165 | 37.78 | 2165 | 1.3458 | 0.0839 | 24.90 | 0.0642 |
| 1996 | 0.8681 | 0.9636 | 0.0991 | 0.00273 | 2315 | 40.34 | 2315 | 1.3826 | 0.0717 | 26.28 | 0.0553 |
| 1997 | 0.8726 | 0.9660 | 0.0967 | 0.00247 | 2477 | 43.38 | 2477 | 1.3861 | 0.0698 | 28.27 | 0.0755 |
| 1998 | 0.8865 | 0.9770 | 0.0927 | 0.00221 | 2636 | 46.21 | 2636 | 1.4304 | 0.0648 | 29.31 | 0.0369 |
| 1999 | 0.9151 | 1.0158 | 0.0991 | 0.00448 | 1400 | 24.55 | 1400 | 1.4557 | 0.0681 | 15.19 | (0.4817) |
| 2000 | 0.9213 | 1.0270 | 0.1029 | 0.00443 | 1478 | 25.93 | 1478 | 1.4519 | 0.0709 | 16.02 | 0.0546 |
| 2001 | 0.9122 | 1.0109 | 0.0976 | 0.00396 | 1563 | 27.33 | 1563 | 1.4568 | 0.0670 | 16.93 | 0.0568 |
| 2002 | 0.9140 | 1.0139 | 0.0985 | 0.00380 | 1655 | 28.74 | 1655 | 1.4947 | 0.0659 | 17.33 | 0.0238 |
| 2003 | 0.9246 | 1.0334 | 0.1053 | 0.00391 | 1744 | 30.13 | 1744 | 1.5290 | 0.0689 | 17.63 | 0.0172 |
| 2004 | 0.9213 | 1.0270 | 0.1030 | 0.00352 | 1832 | 32.57 | 1832 | 1.5421 | 0.0668 | 18.94 | 0.0743 |
| 2005 | 0.9305 | 1.0457 | 0.1101 | 0.00379 | 1917 | 32.68 | 1917 | 1.5691 | 0.0702 | 18.53 | (0.0216) |
| 2006 | 0.9279 | 1.0402 | 0.1079 | 0.00354 | 2017 | 34.14 | 2017 | 1.5865 | 0.0680 | 19.19 | 0.0355 |
| 2007 | 0.9241 | 1.0325 | 0.1050 | 0.00328 | 2129 | 35.79 | 2129 | 1.6203 | 0.0648 | 19.77 | 0.0299 |
| 2008 | 0.9366 | 1.0593 | 0.1158 | 0.00350 | 2244 | 37.47 | 2244 | 1.6850 | 0.0687 | 19.66 | (0.0053) |
| 2009 | 0.9663 | 1.1394 | 0.1519 | 0.00469 | 2302 | 38.21 | 2302 | 1.7921 | 0.0848 | 18.08 | (0.0802) |
| 2010 | 0.9669 | 1.1415 | 0.1529 | 0.00459 | 2384 | 39.36 | 2384 | 1.8160 | 0.0842 | 18.36 | 0.0154 |
| 2011 | 0.9674 | 1.1430 | 0.1536 | 0.00448 | 2461 | 40.48 | 2461 | 1.8407 | 0.0835 | 18.61 | 0.0137 |
| r [*] G (REAL) | c=C/Y | (rho/r) | α=1-c/(rho/r) | (r/w) | K _r =ΔK+K _r | k=α/(1-α | K=L-k | Ω=K/Y | Γ=α/Ω | w=r/(r/w) | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 7 Greece, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301*c/2-22.608*c+10.566 | | | | | | | | | | |
|------------------------------------|--------|---------|----------------------|------------|------------------------|------------------------------|--------------|------------------------|---|--------|
| $\epsilon^*_{G(REAL)}$ | C=C/Y | (rho/r) | $\alpha=1-c/(rho/r)$ | (r/w) | $K_t=\Delta K+K_{t-1}$ | $k=(\alpha/(1-\alpha))K=L:k$ | $\Omega=K/Y$ | $\Gamma=\alpha/\Omega$ | theoretical wage rate $w=\tau/(r/w)$ | |
| GREECE | | | | | 28 | | | | gw (I) | |
| 1960 | 1.0213 | 1.3503 | 0.2436 | 0.083627 | 32 | 3.85 | 32 | 0.3388 | 8.60 | |
| 1961 | 0.9790 | 1.1810 | 0.1711 | 0.042991 | 40 | 4.80 | 40 | 0.3777 | 10.53 | |
| 1962 | 0.9780 | 1.1774 | 0.1694 | 0.034944 | 49 | 5.84 | 49 | 0.4349 | 11.15 | |
| 1963 | 0.9493 | 1.0908 | 0.1297 | 0.019731 | 64 | 7.55 | 64 | 0.5054 | 13.01 | |
| 1964 | 0.9325 | 1.0500 | 0.1119 | 0.012492 | 86 | 10.09 | 86 | 0.6037 | 14.84 | |
| 1965 | 0.9387 | 1.0641 | 0.1179 | 0.010151 | 113 | 13.16 | 113 | 0.6956 | 16.70 | |
| 1966 | 0.9339 | 1.0531 | 0.1132 | 0.008107 | 136 | 15.74 | 136 | 0.7531 | 18.54 | |
| 1967 | 0.9491 | 1.0903 | 0.1295 | 0.008252 | 157 | 18.02 | 157 | 0.8080 | 19.42 | |
| 1968 | 0.9411 | 1.0699 | 0.1204 | 0.006458 | 185 | 21.19 | 185 | 0.8771 | 21.25 | |
| 1969 | 0.9097 | 1.0069 | 0.0965 | 0.004147 | 226 | 25.74 | 226 | 0.9412 | 24.71 | |
| 1970 | 0.9089 | 1.0055 | 0.0961 | 0.003464 | 270 | 30.69 | 270 | 1.0028 | 27.66 | |
| 1971 | 0.8945 | 0.9856 | 0.0925 | 0.002812 | 320 | 36.24 | 320 | 1.0765 | 30.55 | |
| 1972 | 0.8649 | 0.9622 | 0.1011 | 0.002579 | 388 | 43.62 | 388 | 1.1407 | 34.37 | |
| 1973 | 0.8320 | 0.9634 | 0.1364 | 0.002815 | 501 | 56.11 | 501 | 1.1500 | 42.14 | |
| 1974 | 0.9059 | 1.0009 | 0.0950 | 0.001606 | 585 | 65.33 | 585 | 1.1527 | 51.29 | |
| 1975 | 0.9190 | 1.0228 | 0.1015 | 0.001498 | 682 | 75.40 | 682 | 1.1280 | 60.07 | |
| 1976 | 0.8980 | 0.9901 | 0.0929 | 0.001173 | 801 | 87.37 | 801 | 1.0791 | 73.45 | |
| 1977 | 0.9093 | 1.0062 | 0.0963 | 0.001061 | 931 | 100.38 | 931 | 1.0729 | 84.55 | |
| 1978 | 0.9012 | 0.9942 | 0.0936 | 0.000892 | 1083 | 115.71 | 1083 | 1.0362 | 101.22 | |
| 1979 | 0.8853 | 0.9759 | 0.0928 | 0.000745 | 1298 | 137.38 | 1298 | 1.0096 | 123.44 | |
| 1980 | 0.8991 | 0.9915 | 0.0931 | 0.000665 | 1488 | 154.37 | 1488 | 0.9664 | 144.86 | |
| 1981 | 0.9493 | 1.0908 | 0.1297 | 0.000875 | 1656 | 170.23 | 1656 | 0.8977 | 165.04 | |
| 1982 | 0.9518 | 1.0973 | 0.1326 | 0.000758 | 1976 | 201.79 | 1976 | 0.8526 | 205.29 | |
| 1983 | 0.9501 | 1.0928 | 0.1306 | 0.000617 | 2399 | 243.59 | 2399 | 0.8658 | 244.60 | |
| 1984 | 0.9348 | 1.0550 | 0.1140 | 0.000434 | 2936 | 296.52 | 2936 | 0.8564 | 306.77 | |
| 1985 | 0.9547 | 0.9406 | (0.0150) | (0.000040) | 3694 | 371.97 | 3694 | 0.8888 | 424.78 | |
| 1986 | 0.9751 | 0.9828 | 0.0078 | 0.000042 | 1868 | 187.35 | 1868 | 0.3806 | 488.45 | |
| 1987 | 0.9998 | 1.0485 | 0.0464 | (0.001130) | (431) | (43.08) | (431) | (0.0772) | 532.28 | |
| 1988 | 0.9574 | 0.9456 | (0.0125) | 0.000029 | (4208) | (419.09) | (4208) | (0.5156) | 822.92 | |
| 1989 | 0.9779 | 0.9893 | 0.0115 | (0.00013) | (8800) | (872.19) | (8800) | (0.9076) | 949.95 | |
| 1990 | 0.9836 | 1.0035 | 0.0198 | (0.00003) | (7476) | (736) | (7476) | (0.6320) | 1141 | |
| 1991 | 0.9714 | 0.9742 | 0.0029 | (0.00001) | (5504) | (537) | (5504) | (0.3768) | 1421 | |
| 1992 | 0.9779 | 0.9894 | 0.0116 | (0.00003) | (3596) | (348) | (3596) | (0.2139) | 1610 | |
| 1993 | 0.9850 | 1.0071 | 0.0220 | (0.00018) | (1280) | (123) | (1280) | (0.0674) | 1790 | |
| 1994 | 0.9735 | 0.9791 | 0.0057 | 0.00003 | 2060 | 198 | 2060 | 0.0953 | 2061 | |
| 1995 | 0.9505 | 0.9334 | (0.0183) | (0.00002) | 8938 | 838 | 8938 | 0.3529 | 2420 | |
| 1996 | 0.9798 | 0.9941 | 0.0143 | 0.00001 | 11034 | 1027 | 11034 | 0.4096 | 2473 | |
| 1997 | 0.8471 | 0.9593 | 0.1169 | 0.00008 | 17790 | 1646 | 17790 | 0.5212 | 2788 | |
| 1998 | 0.8448 | 0.9595 | 0.1195 | 0.00006 | 25582 | 2356 | 25582 | 0.6892 | 3009 | |
| 1999 | 0.8351 | 0.9621 | 0.1320 | 0.00005 | 34873 | 3196 | 34873 | 0.8818 | 3146 | |
| 2000 | 0.9802 | 1.1852 | 0.1729 | 0.01094 | 210 | 19 | 210 | 0.0049 | 35.1827 | |
| 2001 | 0.8509 | 0.9592 | 0.1129 | 0.00565 | 248 | 23 | 248 | 1.8449 | 0.0612 | |
| 2002 | 0.9065 | 1.0018 | 0.0952 | 0.00413 | 282 | 25 | 282 | 2.0701 | 0.0460 | |
| 2003 | 0.8774 | 0.9693 | 0.0948 | 0.00361 | 323 | 29 | 323 | 2.1503 | 0.0441 | |
| 2004 | 1.0034 | 1.2728 | 0.2117 | 0.00876 | 342 | 31 | 342 | 2.1149 | 0.1001 | |
| 2005 | 1.0101 | 1.3005 | 0.2234 | 0.00891 | 361 | 32 | 361 | 2.1492 | 0.1039 | |
| 2006 | 0.9954 | 1.2408 | 0.1978 | 0.00711 | 389 | 35 | 389 | 2.1399 | 0.0924 | |
| 2007 | 0.9971 | 1.2476 | 0.2008 | 0.00664 | 426 | 38 | 426 | 2.1716 | 0.0925 | |
| 2008 | 1.0310 | 1.3955 | 0.2612 | 0.00867 | 461 | 41 | 461 | 2.2475 | 0.1162 | |
| 2009 | 1.0455 | 1.4682 | 0.2879 | 0.00948 | 483 | 42.64 | 483 | 2.3440 | 0.1228 | |
| 2010 | 1.0415 | 1.4479 | 0.2806 | 0.00884 | 501 | 44.12 | 501 | 2.4773 | 0.1133 | |
| 2011 | 1.0437 | 1.4588 | 0.2846 | 0.00879 | 516 | 45.27 | 516 | 2.6932 | 0.1057 | |
| $\epsilon^*_{G(REAL)}$ | C=C/Y | (rho/r) | $\alpha=1-c/(rho/r)$ | (r/w) | $K_t=\Delta K+K_{t-1}$ | $k=(\alpha/(1-\alpha))K=L:k$ | $\Omega=K/Y$ | $\Gamma=\alpha/\Omega$ | $w=\tau/(r/w)$ | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 8 Ireland, K consistency between LONG (1960–2011) and Short (1990–2011)

| (rho/r)=13.301°e°2-22.608°e+10.566 | | | | | | | | | | |
|------------------------------------|--------|---------|-----------------------------|-----------|---|--------|--------------|-------------------|-------------|--|
| $r^*_G(\text{REAL})$ | C=C/Y | (rho/r) | $\alpha=1-c/(\text{rho}/r)$ | (r/w) | $K_c=\Delta K+K_c, k=(\alpha/(1-\alpha))$ | $K=Lk$ | $\Omega=K/Y$ | $r=\alpha/\Omega$ | $w=r/(r/w)$ | theoretical wage rate gw (I) |
| IRELAND | | | | | 0.028 | | | | | |
| 1960 | 0.9896 | 1.2189 | 0.1881 | 12.636199 | 0.05 | 0.02 | 0 | 0.0914 | 2.0587 | 0.16 |
| 1961 | 0.9720 | 1.1577 | 0.1604 | 6.262361 | 0.09 | 0.03 | 0 | 0.1407 | 1.1395 | 0.18 |
| 1962 | 0.9677 | 1.1438 | 0.1540 | 3.722292 | 0.14 | 0.05 | 0 | 0.2089 | 0.7371 | 0.20 |
| 1963 | 0.9636 | 1.1313 | 0.1482 | 2.439391 | 0.20 | 0.07 | 0 | 0.2856 | 0.5190 | 0.21 |
| 1964 | 0.9545 | 1.1048 | 0.1360 | 1.551870 | 0.29 | 0.10 | 0 | 0.3579 | 0.3801 | 0.24 |
| 1965 | 0.9477 | 1.0866 | 0.1278 | 1.067538 | 0.40 | 0.14 | 0 | 0.4580 | 0.2790 | 0.26 |
| 1966 | 0.9474 | 1.0856 | 0.1273 | 0.878252 | 0.48 | 0.17 | 0 | 0.5278 | 0.2413 | 0.27 |
| 1967 | 0.9278 | 1.0399 | 0.1078 | 0.626046 | 0.56 | 0.19 | 1 | 0.5640 | 0.1912 | 0.31 |
| 1968 | 0.9380 | 1.0624 | 0.1172 | 0.570887 | 0.68 | 0.23 | 1 | 0.6037 | 0.1941 | 0.34 |
| 1969 | 0.9250 | 1.0343 | 0.1057 | 0.395865 | 0.87 | 0.30 | 1 | 0.6752 | 0.1565 | 0.40 |
| 1970 | 0.9280 | 1.0404 | 0.1080 | 0.330594 | 1.08 | 0.37 | 1 | 0.7411 | 0.1457 | 0.44 |
| 1971 | 0.9258 | 1.0359 | 0.1063 | 0.270074 | 1.31 | 0.44 | 1 | 0.7868 | 0.1351 | 0.50 |
| 1972 | 0.8926 | 0.9834 | 0.0924 | 0.189952 | 1.62 | 0.54 | 2 | 0.8039 | 0.1149 | 0.61 |
| 1973 | 0.8791 | 0.9706 | 0.0942 | 0.152893 | 2.09 | 0.68 | 2 | 0.8500 | 0.1108 | 0.72 |
| 1974 | 0.9499 | 1.0923 | 0.1303 | 0.180504 | 2.64 | 0.83 | 3 | 0.9809 | 0.1329 | 0.74 |
| 1975 | 0.9192 | 1.0231 | 0.1016 | 0.116096 | 3.11 | 0.97 | 3 | 0.9102 | 0.1116 | 0.96 |
| 1976 | 0.9174 | 1.0199 | 0.1005 | 0.093525 | 3.86 | 1.19 | 4 | 0.9212 | 0.1091 | 1.17 |
| 1977 | 0.9023 | 0.9957 | 0.0938 | 0.067891 | 4.99 | 1.53 | 5 | 0.9717 | 0.0966 | 1.42 |
| 1978 | 0.8987 | 0.9908 | 0.0930 | 0.052230 | 6.50 | 1.96 | 7 | 1.0690 | 0.0870 | 1.67 |
| 1979 | 0.9264 | 1.0371 | 0.1067 | 0.046790 | 8.61 | 2.55 | 9 | 1.2080 | 0.0884 | 1.89 |
| 1980 | 0.9517 | 1.0971 | 0.1326 | 0.048860 | 11 | 3.13 | 11 | 1.2621 | 0.1050 | 2.15 |
| 1981 | 0.9537 | 1.1027 | 0.1351 | 0.040621 | 13 | 3.84 | 13 | 1.2936 | 0.1044 | 2.57 |
| 1982 | 0.8840 | 0.9746 | 0.0930 | 0.021595 | 17 | 4.75 | 17 | 1.3725 | 0.0678 | 3.14 |
| 1983 | 0.8774 | 0.9693 | 0.0948 | 0.018544 | 20 | 5.64 | 20 | 1.4854 | 0.0638 | 3.44 |
| 1984 | 0.8560 | 0.9597 | 0.1081 | 0.018146 | 24 | 6.68 | 24 | 1.5940 | 0.0678 | 3.74 |
| 1985 | 0.8624 | 0.9613 | 0.1029 | 0.014820 | 27 | 7.74 | 27 | 1.7225 | 0.0597 | 4.03 |
| 1986 | 0.8942 | 0.9853 | 0.0925 | 0.011742 | 31 | 8.68 | 31 | 1.7569 | 0.0526 | 4.48 |
| 1987 | 0.8754 | 0.9679 | 0.0955 | 0.010968 | 34 | 9.63 | 34 | 1.8171 | 0.0526 | 4.79 |
| 1988 | 0.8648 | 0.9622 | 0.1012 | 0.010549 | 38 | 10.67 | 38 | 1.8678 | 0.0542 | 5.13 |
| 1989 | 0.8437 | 0.9597 | 0.1209 | 0.011286 | 42.757 | 12.18 | 43 | 1.8901 | 0.0639 | 5.67 |
| 1990 | 0.8289 | 0.9650 | 0.1410 | 0.01184 | 49 | 14 | 49 | 2.0056 | 0.0703 | 6 |
| 1991 | 0.8482 | 0.9592 | 0.1157 | 0.00857 | 54 | 15 | 54 | 2.1396 | 0.0541 | 6 |
| 1992 | 0.8548 | 0.9595 | 0.1091 | 0.00743 | 59 | 16 | 59 | 2.1942 | 0.0497 | 7 |
| 1993 | 0.8347 | 0.9622 | 0.1326 | 0.00859 | 63 | 18 | 63 | 2.2092 | 0.0600 | 7 |
| 1994 | 0.8377 | 0.9611 | 0.1284 | 0.00767 | 69 | 19 | 69 | 2.2101 | 0.0581 | 8 |
| 1995 | 0.7969 | 0.9965 | 0.2003 | 0.01190 | 76 | 21 | 76 | 2.0612 | 0.0972 | 8 |
| 1996 | 0.7836 | 1.0176 | 0.2299 | 0.01285 | 85 | 23 | 85 | 2.0828 | 0.1104 | 9 |
| 1997 | 0.7491 | 1.0943 | 0.3155 | 0.01761 | 96 | 26 | 96 | 2.0450 | 0.1543 | 9 |
| 1998 | 0.7404 | 1.1185 | 0.3380 | 0.01714 | 111 | 30 | 111 | 2.0495 | 0.1649 | 10 |
| 1999 | 0.7466 | 1.1009 | 0.3218 | 0.01227 | 145 | 39 | 145 | 1.7980 | 0.1790 | 15 |
| 2000 | 0.7077 | 1.2278 | 0.4236 | 0.01615 | 173 | 45 | 173 | 1.8351 | 0.2308 | 14 |
| 2001 | 0.7069 | 1.2311 | 0.4258 | 0.01410 | 204 | 53 | 204 | 1.9360 | 0.2200 | 16 |
| 2002 | 0.7030 | 1.2462 | 0.4359 | 0.01279 | 238 | 60 | 238 | 2.0364 | 0.2141 | 17 |
| 2003 | 0.7034 | 1.2444 | 0.4347 | 0.01128 | 273 | 68 | 273 | 2.1788 | 0.1995 | 18 |
| 2004 | 0.7004 | 1.2562 | 0.4424 | 0.01038 | 313 | 76 | 313 | 2.3330 | 0.1896 | 18 |
| 2005 | 0.6935 | 1.2842 | 0.4600 | 0.00983 | 361 | 87 | 361 | 2.4786 | 0.1856 | 19 |
| 2006 | 0.6961 | 1.2734 | 0.4533 | 0.00845 | 415 | 98 | 415 | 2.6149 | 0.1734 | 21 |
| 2007 | 0.7241 | 1.1696 | 0.3809 | 0.00560 | 471 | 110 | 471 | 2.7865 | 0.1367 | 24 |
| 2008 | 0.7842 | 1.0165 | 0.2285 | 0.00250 | 515 | 118 | 515 | 3.2125 | 0.0711 | 28 |
| 2009 | 0.7956 | 0.9983 | 0.2031 | 0.00205 | 547 | 124.11 | 547 | 3.8293 | 0.0530 | 25.83 |
| 2010 | 0.7838 | 1.0173 | 0.2295 | 0.00231 | 575 | 128.72 | 575 | 4.1443 | 0.0554 | 23.93 |
| 2011 | 0.7629 | 1.0597 | 0.2800 | 0.00290 | 607 | 134.07 | 607 | 4.3621 | 0.0642 | 22.13 |
| $r^*_G(\text{REAL})$ | C=C/Y | (rho/r) | $\alpha=1-c/(\text{rho}/r)$ | (r/w) | $K_c=\Delta K+K_c, k=(\alpha/(1-\alpha))$ | $K=Lk$ | $\Omega=K/Y$ | $r=\alpha/\Omega$ | $w=r/(r/w)$ | gw (I) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 9 France, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | The government sector | | | | FL | | | |
|-----------------------|------------|--------------------|-----------------|-----------------------|-------|-------------------------|---------------------|----------|---------------|--------------------|---------------|
| GGGGGG | | | | GGGGGG | | | | | | | |
| $L_G-L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $\ln A_G(\text{STOCK})$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ |
| 10.59 | | 6.00 | | FRANCE | | | | | | HA(G)= | 0.05708 |
| 10.68 | 0.164161 | 6.75 | 0.40 | 0.63 | 1962 | 0.46 | 0.1595 | 0.00886 | 0.0939 | 1.4417 | 0.63 |
| 10.82 | 0.136375 | 7.39 | 0.42 | 0.68 | 1963 | 0.48 | 0.0431 | 0.1293 | 0.00879 | 0.0852 | 1.4797 |
| 11.27 | 0.100972 | 7.65 | 0.43 | 0.68 | 1962 | 0.48 | (0.0015) | 0.0491 | 0.00871 | 0.0641 | 1.4609 |
| 11.20 | 0.022293 | 7.90 | 0.46 | 0.71 | 1963 | 0.47 | (0.0119) | 0.0475 | 0.0051 | 0.0155 | 1.5070 |
| 10.84 | 0.054430 | 8.53 | 0.51 | 0.79 | 1964 | 0.53 | 0.1317 | 0.1106 | 0.0058 | 0.0411 | 1.4926 |
| 11.12 | 0.025789 | 9.25 | 0.54 | 0.83 | 1965 | 0.55 | 0.0403 | 0.1173 | 0.0061 | 0.0210 | 1.5068 |
| 11.41 | 0.001656 | 9.79 | 0.57 | 0.86 | 1966 | 0.57 | 0.0365 | 0.0831 | 0.0059 | 0.0014 | 1.4955 |
| 12.00 | (0.046946) | 10.64 | 0.60 | 0.89 | 1967 | 0.57 | 0.0003 | 0.1225 | 0.0055 | (0.0435) | 1.5361 |
| 11.77 | (0.021538) | 11.22 | 0.65 | 0.95 | 1968 | 0.64 | 0.1116 | 0.0766 | 0.0046 | (0.0210) | 1.4915 |
| 11.55 | 0.111400 | 11.18 | 0.69 | 0.97 | 1969 | 0.77 | 0.2087 | (0.0046) | 0.0040 | 0.0973 | 1.2581 |
| 11.87 | 0.087011 | 10.98 | 0.76 | 0.92 | 1970 | 0.83 | 0.0719 | (0.0200) | 0.0027 | 0.0745 | 1.1244 |
| 12.09 | 0.014709 | 11.51 | 0.85 | 0.95 | 1971 | 0.87 | 0.0459 | 0.0505 | 0.0034 | 0.0138 | 1.1011 |
| 12.51 | (0.013584) | 13.09 | 0.94 | 1.05 | 1972 | 0.93 | 0.0709 | 0.1360 | 0.0031 | (0.0144) | 1.1298 |
| 12.34 | (0.000897) | 15.60 | 1.09 | 1.26 | 1973 | 1.09 | 0.1709 | 0.1874 | 0.0023 | (0.0011) | 1.1651 |
| 13.70 | (0.067487) | 17.95 | 1.22 | 1.31 | 1974 | 1.14 | 0.0521 | 0.1542 | 0.0002 | (0.0969) | 1.1773 |
| 15.03 | (0.188682) | 19.95 | 1.54 | 1.33 | 1975 | 1.27 | 0.1098 | 0.1158 | (0.0004) | (0.3340) | 1.1513 |
| 14.51 | (0.203845) | 19.71 | 1.86 | 1.36 | 1976 | 1.52 | 0.1961 | (0.0122) | (0.0002) | (0.3831) | 1.0084 |
| 13.70 | (0.182954) | 17.69 | 2.15 | 1.29 | 1977 | 1.78 | 0.1732 | (0.0900) | (0.0077) | (0.3092) | 0.7858 |
| 13.48 | (0.157781) | 19.05 | 2.48 | 1.41 | 1978 | 2.13 | 0.1961 | 0.0524 | (0.0002) | (0.2870) | 0.7339 |
| 13.40 | (0.135302) | 21.70 | 2.90 | 1.62 | 1979 | 2.59 | 0.2194 | 0.0872 | 0.0007 | (0.2804) | 0.7145 |
| 14.56 | (0.210164) | 18.99 | 3.37 | 1.30 | 1980 | 2.70 | 0.0422 | (0.0761) | 0.0081 | (0.3777) | 0.5337 |
| 15.02 | (0.294907) | 14.90 | 3.69 | 0.99 | 1981 | 2.60 | (0.0369) | (0.1041) | 0.0004 | (0.4137) | 0.3800 |
| 15.05 | (0.651111) | 6.75 | 4.02 | 0.45 | 1982 | 2.04 | (0.2154) | (0.1905) | (0.0007) | (0.4130) | 0.1579 |
| 15.04 | (4.436311) | 0.99 | 4.38 | 0.07 | 1983 | 1.02 | (0.5018) | (0.1235) | 0.0007 | (0.4096) | 0.0211 |
| 15.05 | 0.487552 | (8.92) | 4.64 | (0.59) | 1984 | 4.08 | 3.0109 | (0.1995) | 0.0020 | (0.4065) | (0.1797) |
| 14.45 | 0.221277 | (17.17) | 5.11 | (1.19) | 1985 | 3.54 | (0.1317) | (0.1514) | 0.0028 | (0.3566) | (0.3153) |
| 15.21 | 0.131499 | (31.78) | 5.23 | (2.09) | 1986 | 2.87 | (0.1907) | (0.2534) | 0.0025 | (0.3788) | (0.5511) |
| 14.64 | 0.073955 | (50.27) | 5.83 | (3.43) | 1987 | 2.86 | (0.0033) | (0.2903) | 0.0030 | (0.3402) | (0.7894) |
| 14.27 | 0.041634 | (78.46) | 6.42 | (5.50) | 1988 | 2.99 | 0.0449 | (0.3989) | 0.0025 | (0.2969) | (1.1099) |
| 13.99 | 0.028957 | (103.55) | 7.04 | (7.40) | 1989 | 3.20 | 0.0728 | (0.3241) | 0.0030 | (0.2728) | (1.3380) |
| 14.75 | (0.021713) | (92.59) | 7.44 | (6.28) | 1990 | 6.78 | 1.1156 | 0.0879 | 0.00017 | 0.1200 | (0.7429) |
| 16.09 | (0.004123) | (84.28) | 7.55 | (5.24) | 1991 | 7.45 | 0.0990 | 0.0670 | 0.00175 | 0.0211 | (0.6791) |
| 17.31 | 0.041862 | (79.70) | 7.62 | (4.60) | 1992 | 4.27 | (0.4267) | 0.0430 | 0.00227 | (0.2387) | (0.7486) |
| 17.30 | 0.054047 | (68.64) | 7.97 | (3.97) | 1993 | 4.30 | 0.0057 | 0.1022 | 0.00278 | (0.2730) | (0.6341) |
| 16.22 | 0.046683 | (57.26) | 8.63 | (3.53) | 1994 | 5.62 | 0.3085 | 0.0974 | 0.00278 | (0.1973) | (0.4897) |
| 15.10 | 0.051209 | (35.58) | 9.46 | (2.36) | 1995 | 7.40 | 0.3162 | 0.1725 | 0.00277 | (0.1372) | (0.2831) |
| 14.69 | 0.056100 | (18.82) | 10.12 | (1.28) | 1996 | 9.21 | 0.2453 | 0.1215 | 0.00276 | (0.0775) | (1.1364) |
| 13.46 | (0.079972) | (1.42) | 11.19 | (0.11) | 1997 | 11.50 | 0.2483 | 0.1146 | 0.00413 | 0.0083 | (0.0093) |
| 12.98 | 0.148492 | 7.93 | 12.06 | 0.61 | 1998 | 13.70 | 0.1915 | 0.0547 | 0.00274 | 0.0832 | 0.0464 |
| 13.88 | 0.098797 | 13.55 | 12.22 | 0.98 | 1999 | 13.43 | (0.0200) | 0.0302 | 0.00308 | 0.0879 | 0.0728 |
| 14.34 | 0.081983 | 19.95 | 12.69 | 1.39 | 2000 | 13.67 | 0.0176 | 0.0316 | 0.00290 | 0.1024 | 0.0984 |
| 14.64 | 0.051221 | 27.93 | 13.29 | 1.91 | 2001 | 13.77 | 0.0077 | 0.0374 | 0.00391 | 0.0890 | 0.1308 |
| 15.07 | (0.000882) | 43.72 | 14.11 | 2.90 | 2002 | 14.11 | 0.0246 | 0.0745 | 0.00406 | (0.0026) | 0.2062 |
| 15.54 | (0.004647) | 70.69 | 14.98 | 4.55 | 2003 | 15.15 | 0.0737 | 0.1183 | 0.00438 | (0.0216) | 0.3102 |
| 16.05 | (0.005620) | 94.50 | 15.65 | 5.89 | 2004 | 16.08 | 0.0610 | 0.0981 | 0.00487 | (0.0342) | 0.3892 |
| 16.76 | (0.006065) | 128.59 | 16.00 | 7.67 | 2005 | 16.85 | 0.0484 | 0.1333 | 0.00518 | (0.0488) | 0.5027 |
| 17.41 | (0.006977) | 138.10 | 16.38 | 7.93 | 2006 | 17.47 | 0.0364 | 0.0353 | 0.00565 | (0.0586) | 0.5127 |
| 17.08 | (0.003085) | 156.57 | 17.28 | 9.17 | 2007 | 17.91 | 0.0253 | 0.0644 | 0.00595 | (0.0291) | 0.5459 |
| 18.04 | (0.013579) | 169.29 | 17.49 | 9.38 | 2008 | 21.16 | 0.1815 | 0.0462 | 0.00608 | (0.1460) | 0.6148 |
| 18.93 | (0.037048) | 186.09 | 17.29 | 9.83 | 2009 | 40.71 | 0.9237 | 0.0807 | 0.0062 | (0.5728) | 0.8941 |
| 18.62 | (0.033685) | 194.61 | 18.12 | 10.45 | 2010 | 42.04 | 0.0326 | 0.0390 | 0.0063 | (0.5435) | 0.8904 |
| 18.08 | (0.032521) | 187.40 | 18.79 | 10.37 | 2011 | 40.91 | (0.0267) | (0.0320) | 0.0061 | (0.5086) | 0.8324 |
| $L_G-L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $\ln A_G(\text{STOCK})$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table 10 Germany, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | | The government sector | | | | FL | | |
|-----------------------|------------|--------------------|-----------------|---------------|-----------------------|-------------------|-----------------|---------|------------|--------------------|---------------|
| GGGGGG | | | | | GGGGGG | | | | | | |
| $L_0-L(W_0/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_0$ | A_G | $g_{A(G)}(STOCK)$ | $k_G^*=I_G/Y_G$ | n_G | α_G | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_0$ |
| 1.49 | | 10.00 | | | GERMANY | | | | | $HA(G)=$ | 0.13949 |
| 1.50 | 0.019047 | 13.14 | 7.62 | 8.75 | 1962 | 6.52 | 0.2351 | 0.00498 | 0.1429 | 0.9850 | 8.75 |
| 1.52 | 0.017222 | 14.61 | 8.19 | 9.61 | 1963 | 6.92 | 0.0624 | 0.00535 | 0.1420 | 1.0066 | 9.61 |
| 1.61 | 0.019864 | 17.00 | 8.87 | 10.58 | 1962 | 7.12 | 0.0290 | 0.00532 | 0.1736 | 0.9858 | 10.58 |
| 1.68 | 0.013785 | 19.63 | 9.42 | 11.66 | 1963 | 7.79 | 0.0928 | 0.0053 | 0.1385 | 1.0657 | 11.66 |
| 1.74 | 0.012744 | 22.76 | 10.12 | 13.08 | 1964 | 8.18 | 0.0505 | 0.0079 | 0.1429 | 1.1076 | 13.08 |
| 1.80 | 0.015023 | 27.30 | 11.13 | 15.19 | 1965 | 8.25 | 0.0081 | 0.0091 | 0.1858 | 1.1114 | 15.19 |
| 1.90 | 0.014993 | 31.27 | 12.17 | 16.41 | 1966 | 8.73 | 0.0587 | 0.0103 | 0.1975 | 1.0821 | 16.41 |
| 1.98 | 0.011489 | 35.63 | 13.15 | 18.02 | 1967 | 9.68 | 0.1084 | 0.0139 | 0.0077 | 0.1711 | 1.1354 |
| 2.07 | 0.007973 | 37.58 | 14.01 | 18.11 | 1968 | 11.13 | 0.1500 | 0.0051 | 0.1262 | 1.1295 | 18.11 |
| 2.11 | 0.007066 | 41.07 | 15.08 | 19.49 | 1969 | 11.97 | 0.0761 | 0.0076 | 0.1211 | 1.1363 | 19.49 |
| 2.15 | 0.006516 | 49.50 | 16.53 | 22.99 | 1970 | 12.63 | 0.0549 | 0.0088 | 0.1303 | 1.2097 | 22.99 |
| 2.32 | 0.002199 | 54.10 | 18.13 | 23.30 | 1971 | 16.34 | 0.2939 | 0.0075 | 0.0487 | 1.2227 | 23.30 |
| 2.33 | 0.001847 | 58.72 | 19.85 | 25.20 | 1972 | 18.00 | 0.1011 | 0.0025 | 0.0445 | 1.2130 | 25.20 |
| 2.34 | 0.001807 | 64.49 | 21.91 | 27.53 | 1973 | 19.66 | 0.0923 | 0.0025 | 0.0078 | 1.1970 | 27.53 |
| 2.39 | 0.000678 | 73.71 | 24.94 | 30.84 | 1974 | 23.73 | 0.2074 | 0.0025 | 0.0205 | 1.2113 | 30.84 |
| 2.49 | 0.002913 | 83.30 | 29.01 | 33.39 | 1975 | 23.32 | (0.0172) | 0.0037 | 0.0886 | 1.0490 | 33.39 |
| 2.59 | 0.003285 | 94.76 | 33.05 | 36.63 | 1976 | 25.15 | 0.0784 | 0.0037 | 0.1074 | 0.9892 | 36.63 |
| 2.91 | 0.000387 | 102.22 | 35.36 | 35.16 | 1977 | 34.17 | 0.3584 | 0.0036 | 0.0134 | 0.9810 | 35.16 |
| 2.96 | (0.002520) | 111.64 | 39.22 | 37.65 | 1978 | 51.93 | 0.5198 | 0.0036 | (0.1048) | 1.0606 | 37.65 |
| 3.00 | (0.004123) | 122.59 | 44.05 | 40.88 | 1979 | 77.71 | 0.4965 | 0.0012 | (0.2027) | 1.1161 | 40.88 |
| 3.07 | (0.004099) | 137.38 | 50.16 | 44.82 | 1980 | 96.35 | 0.2399 | 0.0024 | (0.2250) | 1.0945 | 44.82 |
| 16.18 | (0.070052) | 108.77 | 10.52 | 6.72 | 1981 | 30.34 | (0.6852) | 0.0012 | (0.8901) | 1.2081 | 6.72 |
| 3.17 | (0.005763) | 120.67 | 58.50 | 38.02 | 1982 | 126.80 | 3.1800 | 0.0012 | (0.2806) | 0.8323 | 38.02 |
| 3.03 | (0.005274) | 133.48 | 67.25 | 44.11 | 1983 | 162.63 | 0.2826 | 0.0005 | (0.3032) | 0.8547 | 44.11 |
| 2.91 | (0.002853) | 149.12 | 76.01 | 51.27 | 1984 | 127.39 | (0.2167) | 0.0007 | (0.1713) | 0.7902 | 51.27 |
| 2.89 | (0.001840) | 169.78 | 82.69 | 58.70 | 1985 | 120.78 | (0.0519) | 0.0002 | (0.1211) | 0.7958 | 58.70 |
| 2.86 | (0.000485) | 187.86 | 90.20 | 65.72 | 1986 | 100.22 | (0.1702) | 0.0012 | (0.0329) | 0.7525 | 65.72 |
| 2.78 | 0.001436 | 194.52 | 97.99 | 70.06 | 1987 | 73.13 | (0.2703) | 0.0048 | 0.0914 | 0.6496 | 70.06 |
| 2.70 | 0.002180 | 212.13 | 106.22 | 78.57 | 1988 | 65.73 | (0.1013) | 0.0048 | 0.1462 | 0.6315 | 78.57 |
| 2.73 | 0.002425 | 227.93 | 116.32 | 83.45 | 1989 | 66.43 | 0.0107 | 0.0059 | 0.1683 | 0.5967 | 83.45 |
| 2.91 | 0.001512 | 265.79 | 128.10 | 91.49 | 1990 | 84.23 | | 0.0082 | 0.1215 | 0.6275 | 91 |
| 2.88 | 0.000528 | 310.20 | 137.13 | 107.86 | 1991 | 112.65 | 0.3374 | 0.0070 | 0.0538 | 0.7442 | 108 |
| 2.98 | (0.000877) | 330.43 | 135.25 | 111.03 | 1992 | 202.90 | 0.8012 | 0.0058 | (0.1079) | 0.9095 | 111 |
| 2.98 | (0.001716) | 442.30 | 136.08 | 148.25 | 1993 | 558.78 | 1.7540 | 0.0058 | (0.3413) | 1.4612 | 148 |
| 2.89 | (0.001230) | 541.20 | 143.79 | 186.97 | 1994 | 528.34 | (0.0545) | 0.0080 | (0.2988) | 1.6888 | 187 |
| 2.99 | (0.001146) | 586.01 | 161.30 | 195.88 | 1995 | 576.66 | 0.0914 | 0.0046 | (0.2896) | 1.5660 | 196 |
| 3.04 | (0.000394) | 604.39 | 166.65 | 199.14 | 1996 | 240.92 | (0.5822) | 0.0023 | (0.0850) | 1.2966 | 199 |
| 2.97 | 0.000295 | 654.51 | 173.49 | 220.34 | 1997 | 132.97 | (0.4481) | 0.0010 | 0.0610 | 1.1926 | 220 |
| 3.00 | 0.000636 | 731.85 | 180.77 | 243.83 | 1998 | 99.81 | (0.2494) | 0.00010 | 0.1343 | 1.1677 | 244 |
| 3.00 | 0.000621 | 795.54 | 190.87 | 265.50 | 1999 | 100.95 | 0.0114 | 0.00010 | 0.1414 | 1.1943 | 266 |
| 2.93 | 0.000728 | 826.26 | 199.80 | 281.97 | 2000 | 92.12 | (0.0874) | 0.0011 | 0.1703 | 1.1709 | 282 |
| 2.99 | 0.000413 | 850.04 | 206.64 | 284.61 | 2001 | 127.45 | 0.3835 | 0.0034 | 0.1052 | 1.2324 | 285 |
| 3.04 | 0.000298 | 907.53 | 216.54 | 298.16 | 2002 | 148.08 | 0.1619 | 0.0034 | 0.0816 | 1.2645 | 298 |
| 3.09 | 0.000238 | 1007.71 | 224.81 | 326.62 | 2003 | 159.67 | 0.0782 | 0.0056 | 0.0720 | 1.3482 | 327 |
| 3.07 | 0.000293 | 1137.66 | 229.89 | 371.01 | 2004 | 142.71 | (0.1062) | 0.0056 | 0.0980 | 1.4557 | 371 |
| 3.07 | 0.000308 | 1209.29 | 236.34 | 394.07 | 2005 | 138.72 | (0.0280) | 0.0055 | 0.1083 | 1.4868 | 394 |
| 3.14 | 0.000317 | 1288.92 | 243.98 | 410.93 | 2006 | 137.92 | (0.0058) | 0.0044 | 0.1151 | 1.4904 | 411 |
| 3.17 | 0.000514 | 1362.07 | 251.80 | 430.10 | 2007 | 102.54 | (0.2565) | 0.0055 | 0.1811 | 1.3988 | 430 |
| 3.20 | 0.000449 | 1389.85 | 260.90 | 434.18 | 2008 | 115.66 | 0.1280 | 0.0087 | 0.1633 | 1.3924 | 434.18 |
| 3.22 | (0.000371) | 1424.97 | 266.99 | 442.55 | 2009 | 737.70 | 5.3780 | 0.0076 | (0.1962) | 1.9828 | 442.55 |
| 3.21 | 0.000139 | 1483.20 | 277.97 | 462.57 | 2010 | 204.25 | (0.7231) | 0.0015 | 0.0604 | 1.5636 | 462.57 |
| 3.25 | 0.000226 | 1512.94 | 285.30 | 465.03 | 2011 | 175.81 | (0.1392) | 0.0064 | 0.0951 | 1.4750 | 465.03 |
| $L_0-L(W_0/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_0$ | A_G | $g_{A(G)}(STOCK)$ | $k_G^*=I_G/Y_G$ | n_G | α_G | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_0$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 11 the UK, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | The government sector | | | | FL | | | |
|-----------------------|------------|----------------------|-----------------|-----------------------|-------|-------------------------|---------------------|----------|---------------|--------------------|---------------|
| GGGGGG | | | | GGGGGG | | | | | | | |
| $L_G-L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K_G$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $\ln A_G(\text{STOCK})$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ |
| 10.59 | | 6.00 | | the UK | | | | | | HA(G)= | 0.05708 |
| 10.68 | 0.164161 | 6.75 | 0.40 | 0.63 | 1962 | 0.46 | 0.1595 | 0.00886 | 0.0939 | 1.4417 | 0.63 |
| 10.82 | 0.136375 | 7.39 | 0.42 | 0.68 | 1963 | 0.48 | 0.0431 | 0.1293 | 0.00879 | 0.0852 | 1.4797 |
| 11.27 | 0.100972 | 7.65 | 0.43 | 0.68 | 1962 | 0.48 | (0.0015) | 0.0491 | 0.00871 | 0.0641 | 1.4609 |
| 11.20 | 0.022293 | 7.90 | 0.46 | 0.71 | 1963 | 0.47 | (0.0119) | 0.0475 | 0.0051 | 0.0155 | 1.5070 |
| 10.84 | 0.054430 | 8.53 | 0.51 | 0.79 | 1964 | 0.53 | 0.1317 | 0.1106 | 0.0058 | 0.0411 | 1.4926 |
| 11.12 | 0.025789 | 9.25 | 0.54 | 0.83 | 1965 | 0.55 | 0.0403 | 0.1173 | 0.0061 | 0.0210 | 1.5068 |
| 11.41 | 0.001656 | 9.79 | 0.57 | 0.86 | 1966 | 0.57 | 0.0365 | 0.0831 | 0.0059 | 0.0014 | 1.4955 |
| 12.00 | (0.046946) | 10.64 | 0.60 | 0.89 | 1967 | 0.57 | 0.0003 | 0.1225 | 0.0055 | (0.0435) | 1.5361 |
| 11.77 | (0.021538) | 11.22 | 0.65 | 0.95 | 1968 | 0.64 | 0.1116 | 0.0766 | 0.0046 | (0.0210) | 1.4915 |
| 11.55 | 0.111400 | 11.18 | 0.69 | 0.97 | 1969 | 0.77 | 0.2087 | (0.0046) | 0.0040 | 0.0973 | 1.2581 |
| 11.87 | 0.087011 | 10.98 | 0.76 | 0.92 | 1970 | 0.83 | 0.0719 | (0.0200) | 0.0027 | 0.0745 | 1.1244 |
| 12.09 | 0.014709 | 11.51 | 0.85 | 0.95 | 1971 | 0.87 | 0.0459 | 0.0505 | 0.0034 | 0.0138 | 1.1011 |
| 12.51 | (0.013584) | 13.09 | 0.94 | 1.05 | 1972 | 0.93 | 0.0709 | 0.1360 | 0.0031 | (0.0144) | 1.1298 |
| 12.34 | (0.000897) | 15.60 | 1.09 | 1.26 | 1973 | 1.09 | 0.1709 | 0.1874 | 0.0023 | (0.0011) | 1.1651 |
| 13.70 | (0.067487) | 17.95 | 1.22 | 1.31 | 1974 | 1.14 | 0.0521 | 0.1542 | 0.0002 | (0.0969) | 1.1773 |
| 15.03 | (0.188682) | 19.95 | 1.54 | 1.33 | 1975 | 1.27 | 0.1098 | 0.1158 | (0.0004) | (0.3340) | 1.1513 |
| 14.51 | (0.203845) | 19.71 | 1.86 | 1.36 | 1976 | 1.52 | 0.1961 | (0.0122) | (0.0002) | (0.3831) | 1.0084 |
| 13.70 | (0.182954) | 17.69 | 2.15 | 1.29 | 1977 | 1.78 | 0.1732 | (0.0900) | (0.0077) | (0.3092) | 0.7858 |
| 13.48 | (0.157781) | 19.05 | 2.48 | 1.41 | 1978 | 2.13 | 0.1961 | 0.0524 | (0.0002) | (0.2870) | 0.7339 |
| 13.40 | (0.135302) | 21.70 | 2.90 | 1.62 | 1979 | 2.59 | 0.2194 | 0.0872 | 0.0007 | (0.2804) | 0.7145 |
| 14.56 | (0.210164) | 18.99 | 3.37 | 1.30 | 1980 | 2.70 | 0.0422 | (0.0761) | 0.0081 | (0.3777) | 0.5337 |
| 15.02 | (0.294907) | 14.90 | 3.69 | 0.99 | 1981 | 2.60 | (0.0369) | (0.1041) | 0.0004 | (0.4137) | 0.3800 |
| 15.05 | (0.651111) | 6.75 | 4.02 | 0.45 | 1982 | 2.04 | (0.2154) | (0.1905) | (0.0007) | (0.4130) | 0.1579 |
| 15.04 | (4.436311) | 0.99 | 4.38 | 0.07 | 1983 | 1.02 | (0.5018) | (0.1235) | 0.0007 | (0.4096) | 0.0211 |
| 15.05 | 0.487552 | (8.92) | 4.64 | (0.59) | 1984 | 4.08 | 3.0109 | (0.1995) | 0.0020 | (0.4065) | (0.1797) |
| 14.45 | 0.221277 | (17.17) | 5.11 | (1.19) | 1985 | 3.54 | (0.1317) | (0.1514) | 0.0028 | (0.3566) | (0.3153) |
| 15.21 | 0.131499 | (31.78) | 5.23 | (2.09) | 1986 | 2.87 | (0.1907) | (0.2534) | 0.0025 | (0.3788) | (0.5511) |
| 14.64 | 0.073955 | (50.27) | 5.83 | (3.43) | 1987 | 2.86 | (0.0033) | (0.2903) | 0.0030 | (0.3402) | (0.7894) |
| 14.27 | 0.041634 | (78.46) | 6.42 | (5.50) | 1988 | 2.99 | 0.0449 | (0.3989) | 0.0025 | (0.2969) | (1.1099) |
| 13.99 | 0.028957 | (103.55) | 7.04 | (7.40) | 1989 | 3.20 | 0.0728 | (0.3241) | 0.0030 | (0.2728) | (1.3380) |
| 14.75 | (0.021713) | (92.59) | 7.44 | (6.28) | 1990 | 6.78 | 1.1156 | 0.0879 | 0.00017 | 0.1200 | (0.7429) |
| 16.09 | (0.004123) | (84.28) | 7.55 | (5.24) | 1991 | 7.45 | 0.0990 | 0.0670 | 0.00175 | 0.0211 | (0.6791) |
| 17.31 | 0.041862 | (79.70) | 7.62 | (4.60) | 1992 | 4.27 | (0.4267) | 0.0430 | 0.00227 | (0.2387) | (0.7486) |
| 17.30 | 0.054047 | (68.64) | 7.97 | (3.97) | 1993 | 4.30 | 0.0057 | 0.1022 | 0.00278 | (0.2730) | (0.6341) |
| 16.22 | 0.046683 | (57.26) | 8.63 | (3.53) | 1994 | 5.62 | 0.3085 | 0.0974 | 0.00278 | (0.1973) | (0.4897) |
| 15.10 | 0.051209 | (35.58) | 9.46 | (2.36) | 1995 | 7.40 | 0.3162 | 0.1725 | 0.00277 | (0.1372) | (0.2831) |
| 14.69 | 0.056100 | (18.82) | 10.12 | (1.28) | 1996 | 9.21 | 0.2453 | 0.1215 | 0.00276 | (0.0775) | (0.1364) |
| 13.46 | (0.079972) | (1.42) | 11.19 | (0.11) | 1997 | 11.50 | 0.2483 | 0.1146 | 0.00413 | 0.0083 | (0.0093) |
| 12.98 | 0.148492 | 7.93 | 12.06 | 0.61 | 1998 | 13.70 | 0.1915 | 0.0547 | 0.00274 | 0.0832 | 0.0464 |
| 13.88 | 0.098797 | 13.55 | 12.22 | 0.98 | 1999 | 13.43 | (0.0200) | 0.0302 | 0.00308 | 0.0879 | 0.0728 |
| 14.34 | 0.081983 | 19.95 | 12.69 | 1.39 | 2000 | 13.67 | 0.0176 | 0.0316 | 0.00290 | 0.1024 | 0.0984 |
| 14.64 | 0.051221 | 27.93 | 13.29 | 1.91 | 2001 | 13.77 | 0.0077 | 0.0374 | 0.00391 | 0.0890 | 0.1308 |
| 15.07 | (0.000882) | 43.72 | 14.11 | 2.90 | 2002 | 14.11 | 0.0246 | 0.0745 | 0.00406 | (0.0026) | 0.2062 |
| 15.54 | (0.004647) | 70.69 | 14.98 | 4.55 | 2003 | 15.15 | 0.0737 | 0.1183 | 0.00438 | (0.0216) | 0.3102 |
| 16.05 | (0.005620) | 94.50 | 15.65 | 5.89 | 2004 | 16.08 | 0.0610 | 0.0981 | 0.00487 | (0.0342) | 0.3892 |
| 16.76 | (0.006065) | 128.59 | 16.00 | 7.67 | 2005 | 16.85 | 0.0484 | 0.1333 | 0.00518 | (0.0488) | 0.5027 |
| 17.41 | (0.006977) | 138.10 | 16.38 | 7.93 | 2006 | 17.47 | 0.0364 | 0.0353 | 0.00565 | (0.0586) | 0.5127 |
| 17.08 | (0.003085) | 156.57 | 17.28 | 9.17 | 2007 | 17.91 | 0.0253 | 0.0644 | 0.00595 | (0.0291) | 0.5459 |
| 18.04 | (0.013579) | 169.29 | 17.49 | 9.38 | 2008 | 21.16 | 0.1815 | 0.0462 | 0.00608 | (0.1460) | 0.6148 |
| 18.93 | (0.037048) | 186.09 | 17.29 | 9.83 | 2009 | 40.71 | 0.9237 | 0.0807 | 0.0062 | (0.5728) | 0.8941 |
| 18.62 | (0.033685) | 194.61 | 18.12 | 10.45 | 2010 | 42.04 | 0.0326 | 0.0390 | 0.0063 | (0.5435) | 0.8904 |
| 18.08 | (0.032521) | 187.40 | 18.79 | 10.37 | 2011 | 40.91 | (0.0267) | (0.0320) | 0.0061 | (0.5086) | 0.8324 |
| $L_G-L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K_G$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $\ln A_G(\text{STOCK})$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table 12 Sweden, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | The government sector | | | | FL | | | |
|-----------------------|------------|-------------------------|-----------------|-----------------------|--------|-------------------|---------------|----------|------------|--------------------|---------------|
| GGGGGG | | | | GGGGGG | | | | | | | |
| $L_0-L(W_0/W)$ | $(r/W)_G$ | $K_{0r}=\Delta K_0+K_1$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_0$ | A_G | $g_{A(G)(STOCK)}$ | $k_r=I_G/Y_G$ | n_G | α_G | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_0$ |
| 1.49 | | 10 | | SWEDEN | | | | | $HA(G)=$ | | 0.13949 |
| 1.50 | 0.019047 | 13 | 7.62 | 1962 | 6.52 | | 0.2351 | 0.00498 | 0.1429 | 0.9850 | 8.75 |
| 1.52 | 0.017222 | 15 | 8.19 | 1963 | 6.92 | 0.0624 | 0.1013 | 0.005335 | 0.1420 | 1.0066 | 9.61 |
| 1.61 | 0.019864 | 17 | 8.87 | 1962 | 7.12 | 0.0290 | 0.1389 | 0.00532 | 0.1736 | 0.9858 | 10.58 |
| 1.68 | 0.013785 | 20 | 9.42 | 1963 | 7.79 | 0.0928 | 0.1428 | 0.0053 | 0.1385 | 1.0657 | 11.66 |
| 1.74 | 0.012744 | 23 | 10.12 | 1964 | 8.18 | 0.0505 | 0.1521 | 0.0079 | 0.1429 | 1.1076 | 13.08 |
| 1.80 | 0.015023 | 27 | 11.13 | 1965 | 8.25 | 0.0081 | 0.1850 | 0.0091 | 0.1858 | 1.1114 | 15.19 |
| 1.90 | 0.014993 | 31 | 12.17 | 1966 | 8.73 | 0.0587 | 0.1373 | 0.0103 | 0.1975 | 1.0821 | 16.41 |
| 1.98 | 0.011489 | 36 | 13.15 | 1967 | 9.68 | 0.1084 | 0.1389 | 0.0077 | 0.1711 | 1.1354 | 18.02 |
| 2.07 | 0.007973 | 38 | 14.01 | 1968 | 11.13 | 0.1500 | 0.0586 | 0.0051 | 0.1262 | 1.1295 | 18.11 |
| 2.11 | 0.007066 | 41 | 15.08 | 1969 | 11.97 | 0.0761 | 0.0967 | 0.0076 | 0.1211 | 1.1363 | 19.49 |
| 2.15 | 0.006516 | 50 | 16.53 | 1970 | 12.63 | 0.0549 | 0.2060 | 0.0088 | 0.1303 | 1.2097 | 22.99 |
| 2.32 | 0.002199 | 54 | 18.13 | 1971 | 16.34 | 0.2939 | 0.1039 | 0.0075 | 0.0487 | 1.2227 | 23.30 |
| 2.33 | 0.001847 | 59 | 19.85 | 1972 | 18.00 | 0.1011 | 0.0955 | 0.0025 | 0.0445 | 1.2130 | 25.20 |
| 2.34 | 0.001807 | 64 | 21.91 | 1973 | 19.66 | 0.0923 | 0.1070 | 0.0025 | 0.0474 | 1.1970 | 27.53 |
| 2.39 | 0.000678 | 74 | 24.94 | 1974 | 23.73 | 0.2074 | 0.1516 | 0.0025 | 0.0205 | 1.2113 | 30.84 |
| 2.49 | 0.002913 | 83 | 29.01 | 1975 | 23.32 | (0.0172) | 0.1207 | 0.0037 | 0.0886 | 1.0490 | 33.39 |
| 2.59 | 0.003285 | 95 | 33.05 | 1976 | 25.15 | 0.0784 | 0.1196 | 0.0037 | 0.1074 | 0.9892 | 36.63 |
| 2.91 | 0.000387 | 102 | 35.36 | 1977 | 34.17 | 0.3584 | 0.0716 | 0.0036 | 0.0134 | 0.9810 | 35.16 |
| 2.96 | (0.002520) | 112 | 39.22 | 1978 | 51.93 | 0.5198 | 0.0895 | 0.0036 | (0.1048) | 1.0606 | 37.65 |
| 3.00 | (0.004123) | 123 | 44.05 | 1979 | 77.71 | 0.4965 | 0.0997 | 0.0012 | (0.2027) | 1.1161 | 40.88 |
| 3.07 | (0.004099) | 137 | 50.16 | 1980 | 96.35 | 0.2399 | 0.1178 | 0.0024 | (0.2250) | 1.0945 | 44.82 |
| 16.18 | (0.070052) | 109 | 10.52 | 1981 | 30.34 | (0.6852) | (0.3178) | 0.0012 | (0.8901) | 1.2081 | 6.72 |
| 3.17 | (0.005763) | 121 | 58.50 | 1982 | 126.80 | 3.1800 | 0.0821 | 0.0012 | (0.2806) | 0.8323 | 38.02 |
| 3.03 | (0.005274) | 133 | 67.25 | 1983 | 162.63 | 0.2826 | 0.0820 | 0.0005 | (0.3032) | 0.8547 | 44.11 |
| 2.91 | (0.002853) | 149 | 76.01 | 1984 | 127.39 | (0.2167) | 0.0829 | 0.0007 | (0.1713) | 0.7902 | 51.27 |
| 2.89 | (0.001840) | 170 | 82.69 | 1985 | 120.78 | (0.0519) | 0.0968 | 0.0012 | (0.1211) | 0.7958 | 58.70 |
| 2.86 | (0.000485) | 188 | 90.20 | 1986 | 100.22 | (0.1702) | 0.0724 | 0.0012 | (0.0329) | 0.7525 | 65.72 |
| 2.78 | 0.001436 | 195 | 97.99 | 1987 | 73.13 | (0.2703) | 0.0222 | 0.0048 | 0.0914 | 0.6496 | 70.06 |
| 2.70 | 0.002180 | 212 | 106.22 | 1988 | 65.73 | (0.1013) | 0.0524 | 0.0048 | 0.1462 | 0.6315 | 78.57 |
| 2.73 | 0.002425 | 228 | 116.32 | 1989 | 66.43 | 0.0107 | 0.0414 | 0.0059 | 0.1683 | 0.5967 | 83.45 |
| 2.91 | 0.001512 | 266 | 128.10 | 1990 | 84.23 | | 0.0894 | 0.0082 | 0.1215 | 0.6275 | 91 |
| 2.88 | 0.000528 | 310 | 137.13 | 1991 | 112.65 | 0.3374 | 0.1065 | 0.0070 | 0.0538 | 0.7442 | 108 |
| 2.98 | (0.000877) | 330 | 135.25 | 1992 | 202.90 | 0.8012 | 0.0557 | 0.0058 | (0.1079) | 0.9095 | 111 |
| 2.98 | (0.001716) | 442 | 136.08 | 1993 | 558.78 | 1.7540 | 0.3696 | 0.0058 | (0.3413) | 1.4612 | 148 |
| 2.89 | (0.001230) | 541 | 143.79 | 1994 | 528.34 | (0.0545) | 0.3086 | 0.0080 | (0.2988) | 1.6888 | 187 |
| 2.99 | (0.001146) | 586 | 161.30 | 1995 | 576.66 | 0.0914 | 0.1198 | 0.0046 | (0.2896) | 1.5660 | 196 |
| 3.04 | (0.000394) | 604 | 166.65 | 1996 | 240.92 | (0.5822) | 0.0394 | 0.0023 | (0.0850) | 1.2966 | 199 |
| 2.97 | 0.000295 | 655 | 173.49 | 1997 | 132.97 | (0.4481) | 0.0913 | 0.000010 | 0.0610 | 1.1926 | 220 |
| 3.00 | 0.000636 | 732 | 180.77 | 1998 | 99.81 | (0.2494) | 0.1234 | 0.000010 | 0.1343 | 1.1677 | 244 |
| 3.00 | 0.000621 | 796 | 190.87 | 1999 | 100.95 | 0.0114 | 0.0956 | 0.000010 | 0.1414 | 1.1943 | 266 |
| 2.93 | 0.000728 | 826 | 199.80 | 2000 | 92.12 | (0.0874) | 0.0435 | 0.0011 | 0.1703 | 1.1709 | 282 |
| 2.99 | 0.000413 | 850 | 206.64 | 2001 | 127.45 | 0.3835 | 0.0345 | 0.0034 | 0.1052 | 1.2324 | 285 |
| 3.04 | 0.000298 | 908 | 216.54 | 2002 | 148.08 | 0.1619 | 0.0801 | 0.0034 | 0.0816 | 1.2645 | 298 |
| 3.09 | 0.000238 | 1008 | 224.81 | 2003 | 159.67 | 0.0782 | 0.1340 | 0.0056 | 0.0720 | 1.3482 | 327 |
| 3.07 | 0.000293 | 1138 | 229.89 | 2004 | 142.71 | (0.1062) | 0.1663 | 0.0056 | 0.0980 | 1.4557 | 371 |
| 3.07 | 0.000308 | 1209 | 236.34 | 2005 | 138.72 | (0.0280) | 0.0881 | 0.0055 | 0.1083 | 1.4868 | 394 |
| 3.14 | 0.000317 | 1289 | 243.98 | 2006 | 137.92 | (0.0058) | 0.0921 | 0.0044 | 0.1151 | 1.4904 | 411 |
| 3.17 | 0.000514 | 1362 | 251.80 | 2007 | 102.54 | (0.2565) | 0.0751 | 0.0055 | 0.1811 | 1.3988 | 430 |
| 3.20 | 0.000449 | 1390 | 260.90 | 2008 | 115.66 | 0.1280 | 0.0278 | 0.0087 | 0.1633 | 1.3924 | 434.18 |
| 3.22 | (0.000371) | 1425 | 266.99 | 2009 | 737.70 | 5.3780 | 0.0489 | 0.0076 | (0.1962) | 1.9828 | 442.55 |
| 3.21 | 0.000139 | 1483 | 277.97 | 2010 | 204.25 | (0.7231) | 0.0614 | 0.0075 | 0.0604 | 1.5636 | 462.57 |
| 3.25 | 0.000226 | 1513 | 285.30 | 2011 | 175.81 | (0.1392) | 0.0290 | 0.0064 | 0.0951 | 1.4750 | 465.03 |
| $L_0-L(W_0/W)$ | $(r/W)_G$ | $K_{0r}=\Delta K_0+K_1$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_0$ | A_G | $g_{A(G)(STOCK)}$ | $k_r=I_G/Y_G$ | n_G | α_G | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_0$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 13 Spain, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | | The government sector | | | | FL | | |
|-----------------------|--------------------|--------------------------|---------------------|-------------------|-----------------------|-------------------|-------------------|----------|------------------|------------------------|-------------------|
| GGGGGG | | | | | GGGGGG | | | | | | |
| Lo-L(Wo/W) | (r/w) _G | $K_G = \Delta K_G / K_G$ | $w_G = r_G / (r/w)$ | $k_G = K_G / L_G$ | A_G | $g_{A(G)}(STOCK)$ | $k_G = I_G / Y_G$ | n_G | $\alpha_G = S_G$ | $\Omega_G = K_G / Y_G$ | $k_G = K_G / L_G$ |
| 3.29 | | 6 | | | SPAIN | | | | | HA(G)= | 0.87550 |
| 3.33 | 0.054047 | 65 | 16.5 | 19.5 | 1960 | 7.40 | 0.5208 | 0.01004 | 0.5128 | 0.5740 | 19.48 |
| 3.29 | 0.027356 | 133 | 18.5 | 40.5 | 1961 | 5.58 (0.2458) | 0.5332 | 0.01018 | 0.5254 | 1.0373 | 40.47 |
| 3.33 | 0.017463 | 214 | 21.0 | 64.2 | 1962 | 4.94 (0.1147) | 0.5415 | 0.01008 | 0.5287 | 1.4392 | 64.24 |
| 3.45 | 0.010637 | 298 | 25 | 86 | 1963 | 5.67 | 0.1467 | 0.5080 | 0.0103 | 0.4783 | 1.8048 |
| 2.83 | 0.008790 | 438 | 31 | 155 | 1964 | 3.96 (0.3005) | 0.6857 | 0.0105 | 0.5767 | 2.1331 | 155.00 |
| 2.96 | 0.006400 | 600 | 35 | 203 | 1965 | 4.01 | 0.0128 | 0.6773 | 0.0107 | 0.5653 | 2.5100 |
| 3.10 | 0.004771 | 788 | 40 | 254 | 1966 | 4.29 | 0.0684 | 0.6785 | 0.0103 | 0.5479 | 2.8501 |
| 3.41 | 0.003596 | 977 | 45 | 287 | 1967 | 5.16 | 0.2020 | 0.6082 | 0.0105 | 0.5078 | 3.1432 |
| 3.34 | 0.003020 | 1201 | 50 | 360 | 1968 | 4.87 (0.0547) | 0.6423 | 0.0107 | 0.5206 | 3.4476 | 359.56 |
| 3.48 | 0.003003 | 1484 | 55 | 427 | 1969 | 4.20 (0.1383) | 0.6454 | 0.0106 | 0.5616 | 3.3877 | 426.50 |
| 3.60 | 0.002490 | 1768 | 61 | 491 | 1970 | 4.47 | 0.0648 | 0.5847 | 0.0105 | 0.5502 | 3.6317 |
| 3.70 | 0.001910 | 2087 | 68 | 564 | 1971 | 5.32 | 0.1887 | 0.6069 | 0.0104 | 0.5186 | 3.9710 |
| 3.69 | 0.001672 | 2430 | 80 | 659 | 1972 | 5.58 | 0.0500 | 0.5544 | 0.0050 | 0.5241 | 3.9330 |
| 3.73 | 0.001449 | 2830 | 95 | 758 | 1973 | 6.20 | 0.1109 | 0.5376 | 0.0087 | 0.5236 | 3.7979 |
| 3.84 | 0.001201 | 3360 | 117 | 874 | 1974 | 7.44 | 0.2003 | 0.5769 | 0.0116 | 0.5122 | 3.6587 |
| 4.08 | 0.000791 | 3887 | 136 | 952 | 1975 | 12.54 | 0.6847 | 0.5404 | 0.0171 | 0.4297 | 3.9868 |
| 4.34 | 0.000554 | 4447 | 164 | 1001 | 1976 | 21.68 | 0.7293 | 0.4158 | 0.0104 | 0.3567 | 3.9275 |
| 4.47 | 0.000485 | 4832 | 206 | 1081 | 1977 | 28.39 | 0.3094 | 0.3456 | 0.0106 | 0.3441 | 3.4412 |
| 4.69 | 0.000390 | 5646 | 249 | 1205 | 1978 | 37.97 | 0.3374 | 0.4735 | 0.0090 | 0.3197 | 3.2857 |
| 4.92 | 0.000300 | 6694 | 290 | 1361 | 1979 | 50.31 | 0.3251 | 0.5219 | 0.0085 | 0.2902 | 3.3321 |
| 5.84 | 0.000156 | 7727 | 330 | 1322 | 1980 | 116.47 | 1.3152 | 0.4440 | 0.0149 | 0.1710 | 3.3208 |
| 6.10 | 0.000109 | 8959 | 367 | 1468 | 1981 | 156.34 | 0.3422 | 0.4737 | 0.0059 | 0.1375 | 3.4465 |
| 6.23 | 0.000085 | 10426 | 421 | 1674 | 1982 | 190.31 | 0.2173 | 0.4900 | 0.0058 | 0.1248 | 3.4825 |
| 6.50 | 0.000054 | 12145 | 476 | 1869 | 1983 | 263.02 | 0.3820 | 0.5054 | 0.0050 | 0.0914 | 3.5700 |
| 6.46 | 0.000050 | 14652 | 533 | 2267 | 1984 | 269.17 | 0.0234 | 0.6526 | 0.0045 | 0.1025 | 3.8137 |
| 6.96 | 0.000016 | 16777 | 596 | 2410 | 1985 | 462.03 | 0.7165 | 0.4926 | 0.0042 | 0.0377 | 3.8884 |
| 7.05 | 0.000012 | 18350 | 673 | 2604 | 1986 | 545.72 | 0.1811 | 0.3217 | 0.0044 | 0.0305 | 3.7532 |
| 7.28 | 0.000001 | 19908 | 751 | 2736 | 1987 | 743.44 | 0.3623 | 0.2848 | 0.0041 | 0.0014 | 3.6389 |
| 7.19 | 0.000007 | 21656 | 826 | 3011 | 1988 | 713.49 | (0.0403) | 0.2878 | 0.0031 | 0.0210 | 3.5668 |
| 7.62 | 0.000008 | 23466 | 873 | 3081 | 1989 | 739.78 | 0.0368 | 0.2660 | 0.0013 | 0.0235 | 3.4477 |
| 7.53 | (0.000006) | 25001 | 1038 | 3322 | 1990 | 1185.50 | 0.6025 | 0.2000 | 0.0031 | (0.0186) | 3.2586 |
| 7.80 | (0.000000) | 26747 | 1139 | 3429 | 1991 | 1149.17 | (0.0306) | 0.1969 | 0.0026 | (0.0013) | 3.0152 |
| 8.38 | (0.000036) | 28069 | 1204 | 3350 | 1992 | 3179.40 | 1.7667 | 0.1486 | 0.0020 | (0.1352) | 3.1570 |
| 8.74 | (0.000098) | 28828 | 1225 | 3299 | 1993 | 39890.45 | 11.5465 | 0.1049 | 0.0025 | (0.4783) | 3.9823 |
| 8.70 | (0.000115) | 29497 | 1260 | 3390 | 1994 | ##### | 2.4763 | 0.1001 | 0.0028 | (0.6391) | 4.4102 |
| 9.04 | (0.000053) | 30699 | 1488 | 3396 | 1995 | 7168.93 | (0.9483) | 0.1088 | 0.0033 | (0.2176) | 2.7781 |
| 9.06 | (0.000057) | 31839 | 1566 | 3515 | 1996 | 9862.87 | 0.3758 | 0.1007 | 0.0030 | (0.2530) | 2.8128 |
| 8.84 | (0.000015) | 32924 | 1657 | 3723 | 1997 | 2552.61 | (0.7412) | 0.0785 | 0.0025 | (0.0596) | 2.3813 |
| 8.94 | (0.000004) | 33500 | 1715 | 3748 | 1998 | 1909.29 | (0.2520) | 0.0382 | 0.0028 | (0.0148) | 2.2173 |
| 9.13 | (0.002159) | 110 | 10.95 | 12.04 | 1999 | 11.40 | (0.9940) | 0.0580 | 0.0033 | (0.0267) | 1.1294 |
| 9.37 | 0.001145 | 107 | 11.52 | 11.40 | 2000 | 11.31 | (0.0073) | (0.0291) | 0.0047 | 0.0129 | 0.9763 |
| 9.64 | 0.000288 | 98 | 12.04 | 10.17 | 2001 | 11.99 | 0.0597 | (0.0753) | 0.0119 | 0.0029 | 0.8429 |
| 9.87 | 0.004235 | 89 | 12.67 | 9.07 | 2002 | 12.13 | 0.0114 | (0.0662) | 0.0147 | 0.0370 | 0.6893 |
| 10.38 | 0.004336 | 81 | 13.11 | 7.84 | 2003 | 12.66 | 0.0444 | (0.0575) | 0.0162 | 0.0329 | 0.5787 |
| 10.91 | 0.004817 | 72 | 13.75 | 6.57 | 2004 | 13.39 | 0.0573 | (0.0631) | 0.0164 | 0.0307 | 0.4628 |
| 10.92 | 0.018615 | 59 | 15.01 | 5.37 | 2005 | 14.18 | 0.0587 | (0.0719) | 0.0157 | 0.0099 | 0.3251 |
| 10.82 | 0.039087 | 43 | 16.45 | 3.99 | 2006 | 15.78 | 0.1128 | (0.0752) | 0.0143 | 0.1349 | 0.2098 |
| 11.06 | 0.061818 | 38 | 17.44 | 3.43 | 2007 | 17.04 | 0.0802 | (0.0223) | 0.0132 | 0.1749 | 0.1622 |
| 12.43 | (0.010795) | 51 | 17.06 | 4.07 | 2008 | 17.39 | 0.0206 | 0.0621 | 0.0123 | (0.0459) | 0.2493 |
| 14 | (0.046860) | 78 | 16.57 | 5.75 | 2009 | 23.07 | 0.3264 | 0.1658 | 0.0109 | (0.3686) | 0.4746 |
| 13.81 | (0.037287) | 97 | 16.07 | 6.99 | 2010 | 23.58 | 0.0223 | 0.1149 | 0.0096 | (0.3525) | 0.5881 |
| 13.32 | (0.023835) | 129 | 16.37 | 9.70 | 2011 | 24.93 | 0.0572 | 0.1950 | 0.0082 | (0.3009) | 0.7711 |
| Lo-L(Wo/W) | (r/w) _G | $K_G = \Delta K_G / K_G$ | $w_G = r_G / (r/w)$ | $k_G = K_G / L_G$ | A_G | $g_{A(G)}(STOCK)$ | $k_G = I_G / Y_G$ | n_G | $\alpha_G = S_G$ | $\Omega_G = K_G / Y_G$ | $k_G = K_G / L_G$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table 14 Italy, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | The government sector | | | | FL | | | | |
|-----------------------|------------|--------------------|-----------------|-----------------------|-------|------------------|---------------------|---------|---------------|--------------------|---------------|-------|
| GGGGGG | | | | GGGGGG | | | | | | | | |
| $L_G=L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $g_{A(G)/STOCK}$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |
| 8.34 | | 6 | | ITALY | | | | | | $HA(G)=$ | 0.13987 | |
| 8.40 | 0.400381 | 7 | 0.4 | 0.9 | 1960 | 0.52 | 0.3530 | 0.00800 | 0.2630 | 1.7750 | 0.89 | |
| 8.53 | 0.341276 | 9 | 0.4 | 1.1 | 1961 | 0.54 | 0.0445 | 0.3436 | 0.00635 | 0.2669 | 1.9398 | 1.07 |
| 8.77 | 0.259493 | 11 | 0.5 | 1.3 | 1962 | 0.57 | 0.0527 | 0.3551 | 0.00651 | 0.2451 | 2.0815 | 1.25 |
| 9.16 | 0.129600 | 13 | 1 | 1 | 1963 | 0.59 | 0.0379 | 0.2906 | 0.0061 | 0.1515 | 2.2224 | 1.38 |
| 9.40 | 0.102514 | 14 | 1 | 2 | 1964 | 0.62 | 0.0582 | 0.2666 | 0.0056 | 0.1347 | 2.2971 | 1.52 |
| 9.92 | 0.059447 | 16 | 1 | 2 | 1965 | 0.64 | 0.0311 | 0.3213 | 0.0062 | 0.0896 | 2.4563 | 1.66 |
| 9.79 | 0.062794 | 19 | 1 | 2 | 1966 | 0.69 | 0.0738 | 0.2854 | 0.0069 | 0.1060 | 2.5522 | 1.89 |
| 9.57 | 0.070018 | 21 | 1 | 2 | 1967 | 0.75 | 0.0880 | 0.2912 | 0.0065 | 0.1322 | 2.6079 | 2.18 |
| 9.70 | 0.059831 | 24 | 1 | 2 | 1968 | 0.79 | 0.0545 | 0.3633 | 0.0061 | 0.1288 | 2.7698 | 2.47 |
| 9.64 | 0.099977 | 28 | 1 | 3 | 1969 | 0.86 | 0.0846 | 0.3883 | 0.0062 | 0.2255 | 2.6580 | 2.91 |
| 9.33 | 0.092058 | 34 | 1 | 4 | 1970 | 0.92 | 0.0642 | 0.5246 | 0.0064 | 0.2528 | 2.8867 | 3.68 |
| 10.25 | 0.052510 | 41 | 1 | 4 | 1971 | 1.00 | 0.0960 | 0.5387 | 0.0065 | 0.1749 | 3.1499 | 4.04 |
| 10.55 | 0.035530 | 49 | 1 | 5 | 1972 | 1.09 | 0.0884 | 0.5524 | 0.0074 | 0.1424 | 3.4332 | 4.67 |
| 10.17 | 0.038273 | 61 | 1 | 6 | 1973 | 1.23 | 0.1250 | 0.6462 | 0.0072 | 0.1857 | 3.4786 | 5.96 |
| 9.92 | 0.037952 | 74 | 2 | 8 | 1974 | 1.42 | 0.1537 | 0.6294 | 0.0055 | 0.2216 | 3.3835 | 7.50 |
| 9.91 | 0.013397 | 93 | 2 | 9 | 1975 | 1.76 | 0.2423 | 0.8455 | 0.0054 | 0.1121 | 4.1591 | 9.43 |
| 9.74 | 0.010227 | 111 | 2 | 11 | 1976 | 2.13 | 0.2091 | 0.6603 | 0.0054 | 0.1045 | 4.1514 | 11.41 |
| 9.98 | 0.006624 | 136 | 3 | 14 | 1977 | 2.65 | 0.2419 | 0.7711 | 0.0041 | 0.0830 | 4.1570 | 13.67 |
| 10.32 | 0.003764 | 173 | 4 | 17 | 1978 | 3.18 | 0.2016 | 0.9438 | 0.0036 | 0.0593 | 4.4591 | 16.76 |
| 10.49 | 0.001873 | 205 | 4 | 20 | 1979 | 4.07 | 0.2792 | 0.6766 | 0.0029 | 0.0353 | 4.3256 | 19.54 |
| 10.50 | 0.000932 | 243 | 6 | 23 | 1980 | 5.28 | 0.2991 | 0.6453 | 0.0023 | 0.0211 | 4.1023 | 23.17 |
| 11.28 | (0.002231) | 292 | 7 | 26 | 1981 | 7.68 | 0.4536 | 0.6893 | 0.0014 | (0.0613) | 4.1165 | 25.90 |
| 11.32 | (0.001916) | 360 | 8 | 32 | 1982 | 9.22 | 0.2004 | 0.8080 | 0.0025 | (0.0648) | 4.3122 | 31.77 |
| 11.57 | (0.002066) | 440 | 9 | 38 | 1983 | 11.42 | 0.2383 | 0.8254 | 0.0035 | (0.0852) | 4.5364 | 37.99 |
| 11.55 | (0.001599) | 527 | 10 | 46 | 1984 | 7.13 | (0.3752) | 0.7814 | 0.0028 | (0.0786) | 4.7328 | 45.58 |
| 11.67 | (0.001506) | 638 | 12 | 55 | 1985 | 7.44 | 0.0431 | 0.8965 | 0.0023 | (0.0897) | 5.1313 | 54.65 |
| 11.72 | (0.001353) | 736 | 13 | 63 | 1986 | 7.89 | 0.0605 | 0.7186 | 0.0016 | (0.0928) | 5.4187 | 62.79 |
| 12.09 | (0.001618) | 831 | 14 | 69 | 1987 | 7.21 | (0.0860) | 0.6462 | 0.0023 | (0.1252) | 5.6133 | 68.77 |
| 12.28 | (0.001624) | 934 | 15 | 76 | 1988 | 7.25 | 0.0050 | 0.6259 | 0.0016 | (0.1409) | 5.6997 | 76.08 |
| 12.14 | (0.001305) | 1045 | 17 | 86 | 1989 | 8.43 | 0.1624 | 0.6178 | 0.0014 | (0.1266) | 5.8135 | 86.09 |
| 12.58 | (0.006452) | 1063 | 19 | 84 | 1990 | 1719.27 | 203.0444 | 0.1699 | 0.0024 | (1.1984) | 10.0123 | 84.48 |
| 12.41 | (0.005667) | 1086 | 21 | 88 | 1991 | 843.30 | (0.5095) | 0.1783 | (0.0156) | (0.9839) | 8.4515 | 87.52 |
| 12.48 | (0.004466) | 1109 | 22 | 89 | 1992 | 249.56 | (0.7041) | 0.1428 | 0.0018 | (0.6583) | 6.8346 | 88.89 |
| 12.49 | (0.003843) | 1123 | 22 | 90 | 1993 | 156.40 | (0.3733) | 0.0782 | 0.0033 | (0.5282) | 6.1925 | 89.94 |
| 12.16 | (0.003476) | 1140 | 23 | 94 | 1994 | 141.96 | (0.0923) | 0.0899 | 0.0026 | (0.4839) | 5.9483 | 93.81 |
| 12.81 | (0.003225) | 1169 | 25 | 91 | 1995 | 115.42 | (0.1870) | 0.1274 | 0.0017 | (0.4170) | 5.1917 | 91.25 |
| 13.08 | (0.002909) | 1213 | 26 | 93 | 1996 | 102.18 | (0.1147) | 0.1729 | 0.0014 | (0.3692) | 4.8289 | 92.70 |
| 13.16 | 0.000096 | 1247 | 28 | 95 | 1997 | 27.38 | (0.7320) | 0.0916 | (0.0049) | 0.0090 | 3.3227 | 94.78 |
| 13.06 | (0.000377) | 1281 | 29 | 98 | 1998 | 33.67 | 0.2296 | 0.0915 | (0.0011) | (0.0384) | 3.4750 | 98.09 |
| 13.53 | (0.001165) | 200 | 15 | 15 | 1999 | 15.65 | (0.5351) | 0.0359 | (0.0002) | (0.0175) | 0.9903 | 14.79 |
| 13.71 | 0.001187 | 222 | 16 | 16 | 2000 | 15.49 | (0.0101) | 0.0988 | (0.0007) | 0.0189 | 0.9919 | 16.20 |
| 13.99 | (0.005214) | 252 | 17 | 18 | 2001 | 20.70 | 0.3362 | 0.1397 | 0.0037 | (0.1037) | 1.1745 | 18.02 |
| 14.29 | (0.002263) | 276 | 17 | 19 | 2002 | 18.97 | (0.0835) | 0.0990 | 0.0068 | (0.0456) | 1.1627 | 19.28 |
| 14.85 | 0.000073 | 293 | 18 | 20 | 2003 | 17.58 | (0.0733) | 0.0673 | 0.0047 | 0.0014 | 1.1179 | 19.74 |
| 14.52 | (0.004326) | 312 | 19 | 22 | 2004 | 23.54 | 0.3387 | 0.0768 | (0.0277) | (0.1026) | 1.2519 | 21.51 |
| 15.61 | (0.005440) | 337 | 19 | 22 | 2005 | 24.62 | 0.0461 | 0.0972 | 0.0428 | (0.1331) | 1.3202 | 21.59 |
| 15.54 | (0.002140) | 359 | 19 | 23 | 2006 | 21.48 | (0.1277) | 0.0759 | 0.0070 | (0.0520) | 1.2654 | 23.09 |
| 15.34 | 0.000020 | 394 | 20 | 26 | 2007 | 19.54 | (0.0903) | 0.1145 | 0.0071 | 0.0052 | 1.2910 | 25.65 |
| 16.04 | (0.000754) | 433 | 20 | 27 | 2008 | 20.63 | 0.0557 | 0.1291 | 0.0066 | (0.0208) | 1.4030 | 27.02 |
| 18 | (0.003066) | 480 | 18 | 27 | 2009 | 22.27 | 0.0795 | 0.1575 | 0.0060 | (0.0894) | 1.6118 | 26.76 |
| 17.83 | (0.002392) | 521 | 18 | 29 | 2010 | 22.01 | (0.0115) | 0.1348 | 0.0050 | (0.0752) | 1.7126 | 29.25 |
| 17.42 | (0.001359) | 555 | 19 | 32 | 2011 | 20.83 | (0.0537) | 0.1095 | 0.0040 | (0.0453) | 1.7908 | 31.89 |
| $L_G=L(W_G/W)$ | $(r/W)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $g_{A(G)/STOCK}$ | $\dot{k}_G=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 15 Greece, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | | The government sector | | | | | FL | | |
|-----------------------|------------|----------------------|-------------------|---------------|-----------------------|-----------------|-----------------|----------|---------------|--------------------|---------------|--------|
| GGGGGG | | | | | GGGGGG | | | | | | | |
| L_G-L_G/W_G | $(r/W)_G$ | $K_G=\Delta K_G/K_G$ | $w_G=r_G/(r/W)_G$ | $k_G=K_G/L_G$ | A_G | $g_{AG}(STOCK)$ | $k_G^*=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |
| 1.33 | | 6 | | | GREECE | | | | | HA(G)= | 0.37244 | |
| 1.43 | 0.054656 | 15 | 8.6 | 10.2 | 1960 | 5.85 | | 0.4458 | 0.07494 | 0.3569 | 0.7595 | 10.15 |
| 1.27 | 0.031513 | 25 | 10.5 | 19.3 | 1961 | 5.52 | (0.0549) | 0.4666 | 0.00840 | 0.3785 | 1.1403 | 19.33 |
| 1.31 | 0.021235 | 35 | 11.1 | 26.8 | 1962 | 5.31 | (0.0393) | 0.4587 | 0.00595 | 0.3626 | 1.5320 | 26.79 |
| 1.21 | 0.013996 | 45 | 13 | 37 | 1963 | 5.71 | 0.0749 | 0.4310 | 0.0036 | 0.3438 | 1.8886 | 37.43 |
| 1.11 | 0.012109 | 59 | 15 | 53 | 1964 | 5.12 | (0.1029) | 0.5040 | 0.0035 | 0.3930 | 2.1870 | 53.47 |
| 1.26 | 0.008054 | 72 | 17 | 57 | 1965 | 6.85 | 0.3388 | 0.4113 | 0.0047 | 0.3137 | 2.3331 | 56.76 |
| 1.27 | 0.006740 | 85 | 19 | 67 | 1966 | 7.31 | 0.0670 | 0.3830 | 0.0070 | 0.3099 | 2.4805 | 66.64 |
| 1.45 | 0.004696 | 97 | 19 | 67 | 1967 | 9.32 | 0.2751 | 0.3316 | 0.0128 | 0.2396 | 2.6273 | 67.09 |
| 1.42 | 0.004185 | 112 | 21 | 78 | 1968 | 9.60 | 0.0300 | 0.3594 | 0.0023 | 0.2472 | 2.7795 | 78.46 |
| 1.37 | 0.005023 | 133 | 25 | 97 | 1969 | 8.24 | (0.1423) | 0.4203 | 0.0034 | 0.3270 | 2.6340 | 96.71 |
| 1.36 | 0.004336 | 157 | 28 | 115 | 1970 | 8.55 | 0.0386 | 0.4247 | 0.0023 | 0.3327 | 2.7732 | 114.96 |
| 1.36 | 0.003263 | 181 | 31 | 134 | 1971 | 9.92 | 0.1602 | 0.4113 | 0.0046 | 0.3037 | 3.0464 | 133.66 |
| 1.34 | 0.003017 | 213 | 34 | 160 | 1972 | 9.80 | (0.0124) | 0.4690 | 0.0068 | 0.3249 | 3.1331 | 159.50 |
| 1.31 | 0.002945 | 256 | 42 | 195 | 1973 | 9.72 | (0.0082) | 0.4905 | 0.0045 | 0.3642 | 2.9349 | 194.51 |
| 1.52 | 0.001539 | 297 | 51 | 195 | 1974 | 19.73 | 1.0297 | 0.4082 | 0.0034 | 0.2310 | 2.9264 | 195.18 |
| 1.70 | 0.000923 | 342 | 60 | 202 | 1975 | 30.97 | 0.5700 | 0.3744 | 0.0100 | 0.1570 | 2.8306 | 201.69 |
| 1.69 | 0.000585 | 390 | 73 | 231 | 1976 | 43.65 | 0.4092 | 0.3401 | 0.0133 | 0.1189 | 2.7678 | 230.72 |
| 1.82 | 0.000297 | 437 | 85 | 240 | 1977 | 62.85 | 0.4399 | 0.2839 | 0.0109 | 0.0667 | 2.6534 | 240.39 |
| 1.83 | 0.000268 | 493 | 101 | 269 | 1978 | 74.41 | 0.1840 | 0.2810 | 0.0097 | 0.0675 | 2.4827 | 269.49 |
| 1.89 | 0.000065 | 549 | 123 | 290 | 1979 | 113.29 | 0.5225 | 0.2349 | 0.0096 | 0.0184 | 2.3076 | 290.19 |
| 1.93 | 0.000055 | 607 | 145 | 314 | 1980 | 133.56 | 0.1789 | 0.2046 | 0.0201 | 0.0171 | 2.1315 | 314.16 |
| 2.23 | (0.000456) | 729 | 165 | 327 | 1981 | 386.46 | 1.8936 | 0.3888 | 0.0093 | (0.1748) | 2.3247 | 326.58 |
| 2.30 | (0.000456) | 826 | 205 | 360 | 1982 | 544.66 | 0.4093 | 0.2468 | 0.0062 | (0.1962) | 2.0979 | 360.04 |
| 2.37 | (0.000707) | 946 | 245 | 399 | 1983 | 1856.65 | 2.4088 | 0.2877 | 0.0061 | (0.3938) | 2.2757 | 399.37 |
| 2.42 | (0.000698) | 1068 | 307 | 441 | 1984 | 14.16 | (0.9924) | 0.2380 | 0.0051 | (0.4446) | 2.0778 | 441.23 |
| 2.22 | (0.000561) | 1336 | 425 | 603 | 1985 | 10.67 | (0.2468) | 0.4299 | 0.0030 | (0.5111) | 2.1437 | 602.61 |
| 2.18 | (0.000922) | 1280 | 488 | 586 | 1986 | 0.13 | (0.9882) | (0.1151) | 0.0040 | (1.1744) | 2.6077 | 585.78 |
| 2.30 | (0.001213) | 1205 | 532 | 524 | 1987 | 0.00 | (0.9719) | (0.1678) | 0.0030 | (1.7427) | 2.6982 | 523.64 |
| 1.59 | (0.001265) | 1102 | 823 | 692 | 1988 | 0.00 | (1.0000) | (0.6292) | 0.0040 | (7.0327) | 6.7535 | 691.87 |
| 1.74 | (0.001611) | 1049 | 950 | 602 | 1989 | 0.00 | (1.0000) | (1.0914) | 0.0050 | (33.1249) | 21.6427 | 602.48 |
| 1.76 | (0.000857) | 1448 | 1141 | 823 | 1990 | ##### | ##### | 0.6742 | 0.0069 | (2.3934) | 2.4484 | 823 |
| 1.65 | (0.000263) | 2346 | 1421 | 1426 | 1991 | 69553 | (1.0000) | 0.6146 | 0.0089 | (0.6005) | 1.6060 | 1426 |
| 1.59 | (0.000070) | 3328 | 1610 | 2092 | 1992 | 5123.63 | (0.9263) | 0.4494 | 0.0068 | (0.1722) | 1.5229 | 2092 |
| 1.63 | (0.000046) | 5319 | 1790 | 3271 | 1993 | 6442.95 | 0.2575 | 0.8061 | 0.0058 | (0.1786) | 2.1538 | 3271 |
| 1.59 | (0.000130) | 8174 | 2061 | 5143 | 1994 | ##### | ##### | 2.6418 | 0.0048 | (2.0306) | 7.5625 | 5143 |
| 1.73 | 0.000005 | 11558 | 2420 | 6700 | 1995 | 1906.45 | (1.0000) | 0.7859 | 0.0221 | 0.0306 | 2.6843 | 6700 |
| 1.76 | (0.000052) | 12808 | 2473 | 7284 | 1996 | ##### | 187.81 | 0.4641 | 0.0075 | (0.6139) | 4.7541 | 7284 |
| 1.80 | 0.000018 | 16103 | 2788 | 8956 | 1997 | 935.90 | (0.9974) | 0.5678 | 0.0065 | 0.1360 | 2.7750 | 8956 |
| 1.83 | 0.000014 | 19032 | 3009 | 10400 | 1998 | 1062.70 | 0.1355 | 0.4641 | 0.0046 | 0.1272 | 3.0162 | 10400 |
| 1.88 | 0.000012 | 21765 | 3146 | 11567 | 1999 | 1168.86 | 0.0999 | 0.4065 | 0.0046 | 0.1194 | 3.2373 | 11567 |
| 2.57 | 0.002664 | 32 | 8 | 12 | 2000 | 7.40 | (0.9937) | 0.3464 | 0.0073 | 0.0321 | 1.5500 | 12 |
| 2.34 | (0.002970) | 36 | 10.83 | 15.32 | 2001 | 11.78 | 0.5909 | 0.1622 | 0.0036 | (0.0477) | 1.4821 | 15 |
| 2.58 | (0.009803) | 38 | 11.14 | 14.85 | 2002 | 15.06 | 0.2793 | 0.0948 | 0.0036 | (0.1703) | 1.5601 | 15 |
| 2.41 | (0.004526) | 43 | 12.22 | 18.05 | 2003 | 14.52 | (0.0363) | 0.1915 | 0.0036 | (0.0890) | 1.6086 | 18 |
| 2.79 | (0.011180) | 47 | 11.43 | 16.93 | 2004 | 17.93 | 0.2353 | 0.1476 | 0.0036 | (0.2334) | 1.8267 | 17 |
| 2.99 | (0.009972) | 55 | 11.66 | 18.26 | 2005 | 18.22 | 0.0157 | 0.2591 | 0.0027 | (0.2226) | 1.9142 | 18 |
| 2.73 | (0.003418) | 63 | 12.99 | 22.96 | 2006 | 15.64 | (0.1415) | 0.2474 | 0.0036 | (0.0852) | 1.9176 | 23 |
| 2.85 | (0.004469) | 71 | 13.92 | 24.85 | 2007 | 18.48 | 0.1817 | 0.2311 | 0.0036 | (0.1249) | 2.0086 | 25 |
| 3.15 | (0.005929) | 80 | 13.41 | 25.31 | 2008 | 20.17 | 0.0914 | 0.2443 | 0.0027 | (0.1766) | 2.2207 | 25.31 |
| 4 | (0.013340) | 88 | 12.95 | 24.00 | 2009 | 39.35 | 0.9509 | 0.2483 | 0.0035 | (0.4710) | 2.7253 | 24.00 |
| 3.22 | (0.021945) | 97 | 12.81 | 29.94 | 2010 | 2965.28 | 74.3647 | 0.6289 | 0.0026 | (1.9165) | 6.8174 | 29.94 |
| 3.12 | (0.014960) | 102 | 12.02 | 32.72 | 2011 | 174.00 | (0.9413) | 0.2874 | 0.0026 | (0.9588) | 5.3303 | 32.72 |
| L_G-L_G/W_G | $(r/W)_G$ | $K_G=\Delta K_G/K_G$ | $w_G=r_G/(r/W)_G$ | $k_G=K_G/L_G$ | A_G | $g_{AG}(STOCK)$ | $k_G^*=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table 16 Ireland, K_G consistency between LONG (1960–2011) and Short (1990–2011)

| The government sector | | | | The government sector | | | | FL | | | | |
|-----------------------|------------|--------------------|-----------------|-----------------------|-------|-------------------|-----------------|----------|---------------|--------------------|---------------|--------|
| GGGGGG | | | | GGGGGG | | | | | | | | |
| $L_G-L(W_G/W)$ | $(r/w)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $g_{A(G)(STOCK)}$ | $k_G^*=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |
| 0.48 | | 6 | | IRELAND | | | | | | | | |
| 0.48 | 0.036135 | 6 | 0.2 | 12.5 | 1960 | 0.11 | 0.5833 | 0.00087 | 0.3113 | 52.8865 | 12.51 | |
| 0.46 | 0.035286 | 6 | 0.2 | 13.3 | 1961 | 0.12 | 0.0856 | 0.6184 | (0.00353) | 0.3195 | 49.7663 | 13.31 |
| 0.46 | 0.033898 | 6 | 0.2 | 13.4 | 1962 | 0.13 | 0.0945 | 0.6338 | 0.00355 | 0.3124 | 46.5459 | 13.41 |
| 0.47 | 0.026277 | 6 | 0 | 13 | 1963 | 0.15 | 0.1426 | 0.5838 | 0.0071 | 0.2607 | 46.6285 | 13.42 |
| 0.49 | 0.021783 | 6 | 0 | 13 | 1964 | 0.18 | 0.2189 | 0.5080 | 0.0035 | 0.2211 | 41.4438 | 13.03 |
| 0.50 | 0.020038 | 6 | 0 | 13 | 1965 | 0.19 | 0.0862 | 0.6353 | 0.0070 | 0.2073 | 39.5727 | 13.05 |
| 0.50 | 0.019868 | 7 | 0 | 13 | 1966 | 0.20 | 0.0485 | 0.4835 | 0.0035 | 0.2075 | 38.0207 | 13.18 |
| 0.48 | 0.020461 | 7 | 0 | 14 | 1967 | 0.22 | 0.0811 | 0.4587 | 0.0035 | 0.2206 | 35.3082 | 13.84 |
| 0.49 | 0.019910 | 7 | 0 | 14 | 1968 | 0.25 | 0.1213 | 0.5697 | 0.0034 | 0.2156 | 31.8508 | 13.80 |
| 0.49 | 0.028026 | 7 | 0 | 14 | 1969 | 0.26 | 0.0598 | 0.6132 | 0.0069 | 0.2830 | 25.5455 | 14.08 |
| 0.54 | 0.022038 | 7 | 0 | 13 | 1970 | 0.32 | 0.2181 | 0.5643 | 0.0068 | 0.2259 | 23.2557 | 13.25 |
| 0.57 | 0.013897 | 7 | 1 | 13 | 1971 | 0.40 | 0.2602 | 0.4528 | 0.0102 | 0.1515 | 21.8009 | 12.85 |
| 0.57 | 0.013439 | 7 | 1 | 13 | 1972 | 0.48 | 0.2064 | 0.4675 | 0.0134 | 0.1506 | 18.5261 | 13.20 |
| 0.58 | 0.012434 | 8 | 1 | 13 | 1973 | 0.59 | 0.2137 | 0.4882 | 0.0166 | 0.1412 | 15.6688 | 13.23 |
| 0.70 | 0.004430 | 8 | 1 | 12 | 1974 | 0.69 | 0.1710 | 0.7218 | 0.0358 | 0.0490 | 15.0232 | 11.63 |
| 0.73 | (0.010858) | 8 | 1 | 12 | 1975 | 1.20 | 0.7436 | 0.6686 | 0.0031 | (0.1444) | 13.8350 | 11.62 |
| 0.72 | (0.012197) | 9 | 1 | 12 | 1976 | 1.55 | 0.2918 | 0.5130 | 0.0125 | (0.1771) | 12.4512 | 12.34 |
| 0.68 | (0.007349) | 9 | 1 | 14 | 1977 | 1.71 | 0.1082 | 0.5251 | 0.0124 | (0.1117) | 10.6388 | 13.67 |
| 0.69 | (0.007291) | 10 | 2 | 14 | 1978 | 2.04 | 0.1929 | 0.7101 | 0.0122 | (0.1182) | 9.7274 | 14.50 |
| 0.76 | (0.010680) | 11 | 2 | 14 | 1979 | 2.59 | 0.2683 | 0.6898 | 0.0181 | (0.1814) | 8.9919 | 14.38 |
| 0.87 | (0.016939) | 12 | 2 | 14 | 1980 | 3.61 | 0.3914 | 0.5983 | 0.0089 | (0.2987) | 8.2032 | 13.58 |
| 0.88 | (0.015605) | 13 | 3 | 15 | 1981 | 4.44 | 0.2312 | 0.7290 | 0.0118 | (0.3004) | 7.4893 | 14.80 |
| 0.84 | (0.013197) | 14 | 3 | 17 | 1982 | 5.57 | 0.2548 | 0.6981 | 0.0116 | (0.2922) | 7.0547 | 17.14 |
| 0.83 | (0.011042) | 16 | 3 | 19 | 1983 | 5.91 | 0.0597 | 0.5482 | 0.0057 | (0.2635) | 6.9365 | 18.89 |
| 0.82 | (0.008734) | 17 | 4 | 21 | 1984 | 1.57 | (0.7337) | 0.5046 | 0.0086 | (0.2201) | 6.7441 | 20.65 |
| 0.82 | (0.007952) | 18 | 4 | 23 | 1985 | 1.67 | 0.0607 | 0.5686 | 0.0028 | (0.2192) | 6.8416 | 22.61 |
| 0.79 | (0.007913) | 16 | 4 | 20 | 1986 | 2.15 | 0.2869 | (0.8977) | 0.0028 | (0.1882) | 5.3047 | 20.01 |
| 0.75 | (0.005917) | 14 | 5 | 18 | 1987 | 3.01 | 0.4003 | (0.6867) | (0.0028) | (0.1212) | 4.2727 | 18.26 |
| 0.69 | (0.001414) | 14 | 5 | 21 | 1988 | 4.55 | 0.5149 | 0.1564 | 0.0000 | (0.0299) | 4.1200 | 20.54 |
| 0.65 | 0.000058 | 499.024 | 6 | 768 | 1989 | 4.47 | (0.0192) | 126.0778 | (0.0085) | 0.0423 | 129.7602 | 767.72 |
| 0.68 | 0.000057 | 500 | 6 | 730 | 1990 | 4.76 | 0.0662 | 0.1511 | (0.0028) | 0.0396 | 117.9888 | 729.65 |
| 0.71 | 0.000092 | 500 | 6 | 704 | 1991 | 4.50 | (0.0546) | 0.1104 | 0.0057 | 0.0611 | 104.8030 | 704.41 |
| 0.72 | (0.000091) | 501 | 7 | 692 | 1992 | 9.75 | 1.1661 | 0.0870 | 0.0085 | (0.0675) | 110.3590 | 692.26 |
| 0.75 | 0.000065 | 501 | 7 | 671 | 1993 | 5.55 | (0.4312) | 0.0898 | 0.0028 | 0.0420 | 91.9731 | 670.77 |
| 0.74 | 0.000082 | 502 | 8 | 681 | 1994 | 5.65 | 0.0192 | 0.1079 | 0.0028 | 0.0531 | 85.1494 | 680.88 |
| 0.76 | 0.000201 | 503 | 8 | 665 | 1995 | 4.30 | (0.2390) | 0.1549 | 0.0112 | 0.1179 | 71.8047 | 664.55 |
| 0.76 | 0.000278 | 504 | 9 | 665 | 1996 | 3.70 | (0.1409) | 0.1426 | 0.0083 | 0.1559 | 65.2994 | 664.65 |
| 0.83 | 0.000372 | 505 | 9 | 608 | 1997 | 3.29 | (0.1105) | 0.1522 | 0.0082 | 0.1847 | 56.6320 | 608.37 |
| 0.90 | 0.000592 | 507 | 10 | 560 | 1998 | 2.65 | (0.1951) | 0.1435 | 0.0109 | 0.2492 | 43.7286 | 560.37 |
| 1.04 | 0.017448 | 23 | 15 | 22 | 1999 | 8.52 | 2.2181 | 0.0731 | 0.0108 | 0.2791 | 1.0969 | 22.19 |
| 1.04 | 0.025511 | 25 | 14 | 24 | 2000 | 6.88 | (0.1921) | 0.0857 | 0.0133 | 0.3803 | 1.0431 | 24.05 |
| 1.13 | 0.017294 | 28 | 16 | 25 | 2001 | 8.39 | 0.2189 | 0.1353 | 0.0184 | 0.3044 | 1.1284 | 25.30 |
| 1.20 | 0.012588 | 32 | 17 | 27 | 2002 | 9.71 | 0.1575 | 0.1469 | 0.0181 | 0.2540 | 1.2059 | 27.05 |
| 1.23 | 0.011135 | 36 | 18 | 29 | 2003 | 10.22 | 0.0533 | 0.1251 | 0.0178 | 0.2459 | 1.2485 | 29.28 |
| 1.29 | 0.010265 | 38 | 18 | 30 | 2004 | 10.81 | 0.0570 | 0.0750 | 0.0200 | 0.2333 | 1.2440 | 29.64 |
| 1.36 | 0.010289 | 40 | 19 | 30 | 2005 | 11.14 | 0.0311 | 0.0596 | 0.0171 | 0.2342 | 1.2054 | 29.73 |
| 1.38 | 0.012966 | 43 | 21 | 31 | 2006 | 10.78 | (0.0324) | 0.0574 | 0.0168 | 0.2856 | 1.0741 | 30.84 |
| 1.29 | 0.008140 | 46 | 24 | 36 | 2007 | 14.08 | 0.3061 | 0.0831 | 0.0142 | 0.2251 | 1.1334 | 35.68 |
| 1.16 | 0.001393 | 55 | 28 | 47 | 2008 | 23.91 | 0.6979 | 0.2439 | 0.0140 | 0.0613 | 1.5486 | 46.87 |
| 1 | (0.000867) | 72 | 26 | 59 | 2009 | 30.50 | 0.2757 | 0.5775 | 0.0138 | (0.0537) | 2.3958 | 58.73 |
| 1.22 | (0.001027) | 114 | 24 | 94 | 2010 | 35.09 | 0.1504 | 1.6103 | 0.0136 | (0.1066) | 4.3364 | 93.78 |
| 1.13 | (0.000498) | 131 | 22 | 115 | 2011 | 27.85 | (0.2062) | 0.6908 | 0.0134 | (0.0609) | 5.5236 | 115.21 |
| $L_G-L(W_G/W)$ | $(r/w)_G$ | $K_G=\Delta K_G/K$ | $w_G=r_G/(r/W)$ | $k_G=K_G/L_G$ | A_G | $g_{A(G)(STOCK)}$ | $k_G^*=I_G/Y_G$ | n_G | $\alpha_G=SG$ | $\Omega_G=K_G/Y_G$ | $k_G=K_G/L_G$ | |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table A1–1 Proof of no time function in the purely endogenous: using Y/K Japan 2010

| dY/dK | | $\left(\frac{u}{v}\right)' \sim \frac{u'v - uv'}{v^2}$ | | $\frac{du}{dt} \sim \frac{u(t+\Delta t) - u(t)}{\Delta t}$ | | $\frac{dv}{dt} \sim \frac{v(t+\Delta t) - v(t)}{\Delta t}$ | | | |
|------------|--------|--|---------|--|---------|--|-------|---------|--------|
| Japan 2010 | L | Y | K | | | | | | |
| | 127.45 | 408539 | 1476764 | | | | | | |
| | | 0.27664 | | | | 3.6147 | | | |
| Not fixed | | Case 1-1 (J 2010) | | average=marginal | | | | | |
| u=Y/K | dt | t | Y+ΔY | K+ΔK | ΔY | ΔK | ΔY/ΔK | inverse | |
| 0.00000 | 0.01 | 0 | 408539 | 1476764 | 0.27664 | | | | |
| 0.27664 | | 0.01 | 412625 | 1491532 | 0.27664 | 4085 | 14768 | 0.27664 | 3.6147 |
| 0.27941 | | 0.02 | 416751 | 1506447 | 0.27664 | 4126 | 14915 | 0.27664 | 3.6147 |
| 0.28221 | | 0.03 | 420918 | 1521512 | 0.27664 | 4168 | 15064 | 0.27664 | 3.6147 |
| 0.28503 | | 0.04 | 425128 | 1536727 | 0.27664 | 4209 | 15215 | 0.27664 | 3.6147 |
| 0.28788 | | 0.05 | 429379 | 1552094 | 0.27664 | 4251 | 15367 | 0.27664 | 3.6147 |
| 0.29076 | | 0.06 | 433673 | 1567615 | 0.27664 | 4294 | 15521 | 0.27664 | 3.6147 |
| 0.29366 | | 0.07 | 438009 | 1583291 | 0.27664 | 4337 | 15676 | 0.27664 | 3.6147 |
| 0.29660 | | 0.08 | 442390 | 1599124 | 0.27664 | 4380 | 15833 | 0.27664 | 3.6147 |
| 0.29957 | | 0.09 | 446813 | 1615115 | 0.27664 | 4424 | 15991 | 0.27664 | 3.6147 |
| 0.30256 | | 0.1 | 451282 | 1631267 | 0.27664 | 4468 | 16151 | 0.27664 | 3.6147 |
| 0.30559 | | 0.11 | 455794 | 1647579 | 0.27664 | 4513 | 16313 | 0.27664 | 3.6147 |
| 0.30864 | | 0.12 | 460352 | 1664055 | 0.27664 | 4558 | 16476 | 0.27664 | 3.6147 |
| 0.31173 | | 0.13 | 464956 | 1680696 | 0.27664 | 4604 | 16641 | 0.27664 | 3.6147 |
| 0.31485 | | 0.14 | 469605 | 1697503 | 0.27664 | 4650 | 16807 | 0.27664 | 3.6147 |
| 0.31800 | | 0.15 | 474301 | 1714478 | 0.27664 | 4696 | 16975 | 0.27664 | 3.6147 |
| 0.32118 | | 0.16 | 479044 | 1731622 | 0.27664 | 4743 | 17145 | 0.27664 | 3.6147 |
| 0.32439 | | 0.17 | 483835 | 1748939 | 0.27664 | 4790 | 17316 | 0.27664 | 3.6147 |
| 0.32763 | | 0.18 | 488673 | 1766428 | 0.27664 | 4838 | 17489 | 0.27664 | 3.6147 |
| 0.33091 | | 0.19 | 493560 | 1784092 | 0.27664 | 4887 | 17664 | 0.27664 | 3.6147 |
| 0.33422 | | 0.2 | 498496 | 1801933 | 0.27664 | 4936 | 17841 | 0.27664 | 3.6147 |
| 0.33756 | | 0.21 | 503481 | 1819953 | 0.27664 | 4985 | 18019 | 0.27664 | 3.6147 |
| 0.34093 | | 0.22 | 508515 | 1838152 | 0.27664 | 5035 | 18200 | 0.27664 | 3.6147 |
| 0.34434 | | 0.23 | 513601 | 1856534 | 0.27664 | 5085 | 18382 | 0.27664 | 3.6147 |
| 0.34779 | | 0.24 | 518737 | 1875099 | 0.27664 | 5136 | 18565 | 0.27664 | 3.6147 |
| 0.35127 | | 0.25 | 523924 | 1893850 | 0.27664 | 5187 | 18751 | 0.27664 | 3.6147 |
| 0.35478 | | 0.26 | 529163 | 1912788 | 0.27664 | 5239 | 18938 | 0.27664 | 3.6147 |
| 0.35833 | | 0.27 | 534455 | 1931916 | 0.27664 | 5292 | 19128 | 0.27664 | 3.6147 |
| 0.36191 | | 0.28 | 539799 | 1951235 | 0.27664 | 5345 | 19319 | 0.27664 | 3.6147 |
| 0.36553 | | 0.29 | 545197 | 1970748 | 0.27664 | 5398 | 19512 | 0.27664 | 3.6147 |
| 0.36918 | | 0.3 | 550649 | 1990455 | 0.27664 | 5452 | 19707 | 0.27664 | 3.6147 |
| 0.37288 | | 0.31 | 556156 | 2010360 | 0.27664 | 5506 | 19905 | 0.27664 | 3.6147 |
| 0.37660 | | 0.32 | 561717 | 2030463 | 0.27664 | 5562 | 20104 | 0.27664 | 3.6147 |
| 0.38037 | | 0.33 | 567335 | 2050768 | 0.27664 | 5617 | 20305 | 0.27664 | 3.6147 |
| 0.38417 | | 0.34 | 573008 | 2071276 | 0.27664 | 5673 | 20508 | 0.27664 | 3.6147 |
| 0.38802 | | 0.35 | 578738 | 2091989 | 0.27664 | 5730 | 20713 | 0.27664 | 3.6147 |
| 0.39190 | | 0.36 | 584525 | 2112908 | 0.27664 | 5787 | 20920 | 0.27664 | 3.6147 |
| 0.39581 | | 0.37 | 590371 | 2134038 | 0.27664 | 5845 | 21129 | 0.27664 | 3.6147 |
| 0.39977 | | 0.38 | 596274 | 2155378 | 0.27664 | 5904 | 21340 | 0.27664 | 3.6147 |
| 0.40377 | | 0.39 | 602237 | 2176932 | 0.27664 | 5963 | 21554 | 0.27664 | 3.6147 |
| 0.40781 | | 0.4 | 608259 | 2198701 | 0.27664 | 6022 | 21769 | 0.27664 | 3.6147 |
| 0.41189 | | 0.41 | 614342 | 2220688 | 0.27664 | 6083 | 21987 | 0.27664 | 3.6147 |
| 0.41601 | | 0.42 | 620485 | 2242895 | 0.27664 | 6143 | 22207 | 0.27664 | 3.6147 |
| 0.42017 | | 0.43 | 626690 | 2265324 | 0.27664 | 6205 | 22429 | 0.27664 | 3.6147 |
| 0.42437 | | 0.44 | 632957 | 2287977 | 0.27664 | 6267 | 22653 | 0.27664 | 3.6147 |
| 0.42861 | | 0.45 | 639287 | 2310857 | 0.27664 | 6330 | 22880 | 0.27664 | 3.6147 |
| 0.43290 | | 0.46 | 645680 | 2333965 | 0.27664 | 6393 | 23109 | 0.27664 | 3.6147 |
| 0.43723 | | 0.47 | 652136 | 2357305 | 0.27664 | 6457 | 23340 | 0.27664 | 3.6147 |
| 0.44160 | | 0.48 | 658658 | 2380878 | 0.27664 | 6521 | 23573 | 0.27664 | 3.6147 |
| 0.44601 | | 0.49 | 665244 | 2404687 | 0.27664 | 6587 | 23809 | 0.27664 | 3.6147 |
| 0.45047 | | 0.5 | 671897 | 2428734 | 0.27664 | 6652 | 24047 | 0.27664 | 3.6147 |
| 0.45498 | | 0.51 | 678616 | 2453021 | 0.27664 | 6719 | 24287 | 0.27664 | 3.6147 |
| 0.45953 | | 0.52 | 685402 | 2477551 | 0.27664 | 6786 | 24530 | 0.27664 | 3.6147 |
| 0.46412 | | 0.53 | 692256 | 2502327 | 0.27664 | 6854 | 24776 | 0.27664 | 3.6147 |
| 0.46877 | | 0.54 | 699178 | 2527350 | 0.27664 | 6923 | 25023 | 0.27664 | 3.6147 |
| 0.47345 | | 0.55 | 706170 | 2552624 | 0.27664 | 6992 | 25274 | 0.27664 | 3.6147 |
| 0.47819 | | 0.56 | 713232 | 2578150 | 0.27664 | 7062 | 25526 | 0.27664 | 3.6147 |
| 0.48297 | | 0.57 | 720364 | 2603931 | 0.27664 | 7132 | 25781 | 0.27664 | 3.6147 |
| 0.48780 | | 0.58 | 727568 | 2629971 | 0.27664 | 7204 | 26039 | 0.27664 | 3.6147 |
| 0.49268 | | 0.59 | 734844 | 2656270 | 0.27664 | 7276 | 26300 | 0.27664 | 3.6147 |
| 0.49760 | | 0.6 | 742192 | 2682833 | 0.27664 | 7348 | 26563 | 0.27664 | 3.6147 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 1–1 Continued

| | | | | | | | | | |
|--------|--|------|---------|----------|---------|-------|--------|---------|--------|
| 3.3286 | | 2.51 | 4964765 | 17946346 | 0.27664 | 49156 | 177687 | 0.27664 | 3.6147 |
| 3.3619 | | 2.52 | 5014412 | 18125810 | 0.27664 | 49648 | 179463 | 0.27664 | 3.6147 |
| 3.3955 | | 2.53 | 5064557 | 18307068 | 0.27664 | 50144 | 181258 | 0.27664 | 3.6147 |
| 3.4295 | | 2.54 | 5115202 | 18490138 | 0.27664 | 50646 | 183071 | 0.27664 | 3.6147 |
| 3.4638 | | 2.55 | 5166354 | 18675040 | 0.27664 | 51152 | 184901 | 0.27664 | 3.6147 |
| 3.4984 | | 2.56 | 5218018 | 18861790 | 0.27664 | 51664 | 186750 | 0.27664 | 3.6147 |
| 3.5334 | | 2.57 | 5270198 | 19050408 | 0.27664 | 52180 | 188618 | 0.27664 | 3.6147 |
| 3.5687 | | 2.58 | 5322900 | 19240912 | 0.27664 | 52702 | 190504 | 0.27664 | 3.6147 |
| 3.6044 | | 2.59 | 5376129 | 19433321 | 0.27664 | 53229 | 192409 | 0.27664 | 3.6147 |
| 3.6405 | | 2.6 | 5429890 | 19627654 | 0.27664 | 53761 | 194333 | 0.27664 | 3.6147 |
| 3.6769 | | 2.61 | 5484189 | 19823931 | 0.27664 | 54299 | 196277 | 0.27664 | 3.6147 |
| 3.7137 | | 2.62 | 5539031 | 20022170 | 0.27664 | 54842 | 198239 | 0.27664 | 3.6147 |
| 3.7508 | | 2.63 | 5594421 | 20222392 | 0.27664 | 55390 | 200222 | 0.27664 | 3.6147 |
| 3.7883 | | 2.64 | 5650365 | 20424616 | 0.27664 | 55944 | 202224 | 0.27664 | 3.6147 |
| 3.8262 | | 2.65 | 5706869 | 20628862 | 0.27664 | 56504 | 204246 | 0.27664 | 3.6147 |
| 3.8644 | | 2.66 | 5763938 | 20835151 | 0.27664 | 57069 | 206289 | 0.27664 | 3.6147 |
| 3.9031 | | 2.67 | 5821577 | 21043502 | 0.27664 | 57639 | 208352 | 0.27664 | 3.6147 |
| 3.9421 | | 2.68 | 5879793 | 21253937 | 0.27664 | 58216 | 210435 | 0.27664 | 3.6147 |
| 3.9815 | | 2.69 | 5938591 | 21466477 | 0.27664 | 58798 | 212539 | 0.27664 | 3.6147 |
| 4.0214 | | 2.7 | 5997977 | 21681141 | 0.27664 | 59386 | 214665 | 0.27664 | 3.6147 |
| 4.0616 | | 2.71 | 6057957 | 21897953 | 0.27664 | 59980 | 216811 | 0.27664 | 3.6147 |
| 4.1022 | | 2.72 | 6118536 | 22116932 | 0.27664 | 60580 | 218980 | 0.27664 | 3.6147 |
| 4.1432 | | 2.73 | 6179721 | 22338102 | 0.27664 | 61185 | 221169 | 0.27664 | 3.6147 |
| 4.1846 | | 2.74 | 6241519 | 22561483 | 0.27664 | 61797 | 223381 | 0.27664 | 3.6147 |
| 4.2265 | | 2.75 | 6303934 | 22787097 | 0.27664 | 62415 | 225615 | 0.27664 | 3.6147 |
| 4.2687 | | 2.76 | 6366973 | 23014968 | 0.27664 | 63039 | 227871 | 0.27664 | 3.6147 |
| 4.3114 | | 2.77 | 6430643 | 23245118 | 0.27664 | 63670 | 230150 | 0.27664 | 3.6147 |
| 4.3545 | | 2.78 | 6494049 | 23477569 | 0.27664 | 64306 | 232451 | 0.27664 | 3.6147 |
| 4.3981 | | 2.79 | 6559899 | 23712345 | 0.27664 | 64949 | 234776 | 0.27664 | 3.6147 |
| 4.4421 | | 2.8 | 6625498 | 23949468 | 0.27664 | 65599 | 237123 | 0.27664 | 3.6147 |
| 4.4865 | | 2.81 | 6691753 | 24188963 | 0.27664 | 66255 | 239495 | 0.27664 | 3.6147 |
| 4.5314 | | 2.82 | 6758670 | 24430853 | 0.27664 | 66918 | 241890 | 0.27664 | 3.6147 |
| 4.5767 | | 2.83 | 6826257 | 24675161 | 0.27664 | 67587 | 244309 | 0.27664 | 3.6147 |
| 4.6224 | | 2.84 | 6894520 | 24921913 | 0.27664 | 68263 | 246752 | 0.27664 | 3.6147 |
| 4.6687 | | 2.85 | 6963465 | 25171132 | 0.27664 | 68945 | 249219 | 0.27664 | 3.6147 |
| 4.7154 | | 2.86 | 7033100 | 25422843 | 0.27664 | 69635 | 251711 | 0.27664 | 3.6147 |
| 4.7625 | | 2.87 | 7103431 | 25677072 | 0.27664 | 70331 | 254228 | 0.27664 | 3.6147 |
| 4.8101 | | 2.88 | 7174465 | 25933843 | 0.27664 | 71034 | 256771 | 0.27664 | 3.6147 |
| 4.8582 | | 2.89 | 7246209 | 26193181 | 0.27664 | 71745 | 259338 | 0.27664 | 3.6147 |
| 4.9068 | | 2.9 | 7318672 | 26455113 | 0.27664 | 72462 | 261932 | 0.27664 | 3.6147 |
| 4.9559 | | 2.91 | 7391858 | 26719664 | 0.27664 | 73187 | 264551 | 0.27664 | 3.6147 |
| 5.0054 | | 2.92 | 7465777 | 26986861 | 0.27664 | 73919 | 267197 | 0.27664 | 3.6147 |
| 5.0555 | | 2.93 | 7540435 | 27256729 | 0.27664 | 74658 | 269869 | 0.27664 | 3.6147 |
| 5.1061 | | 2.94 | 7615839 | 27529296 | 0.27664 | 75404 | 272567 | 0.27664 | 3.6147 |
| 5.1571 | | 2.95 | 7691997 | 27804589 | 0.27664 | 76158 | 275293 | 0.27664 | 3.6147 |
| 5.2087 | | 2.96 | 7768917 | 28082635 | 0.27664 | 76920 | 278046 | 0.27664 | 3.6147 |
| 5.2608 | | 2.97 | 7846607 | 28363462 | 0.27664 | 77689 | 280826 | 0.27664 | 3.6147 |
| 5.3134 | | 2.98 | 7925073 | 28647096 | 0.27664 | 78466 | 283635 | 0.27664 | 3.6147 |
| 5.3665 | | 2.99 | 8004323 | 28933567 | 0.27664 | 79251 | 286471 | 0.27664 | 3.6147 |
| 5.4202 | | 3 | 8084367 | 29222903 | 0.27664 | 80043 | 289336 | 0.27664 | 3.6147 |
| 5.4744 | | 3.01 | 8165210 | 29515132 | 0.27664 | 80844 | 292229 | 0.27664 | 3.6147 |
| 5.5291 | | 3.02 | 8246862 | 29810283 | 0.27664 | 81652 | 295151 | 0.27664 | 3.6147 |
| 5.5844 | | 3.03 | 8329331 | 30108386 | 0.27664 | 82469 | 298103 | 0.27664 | 3.6147 |
| 5.6403 | | 3.04 | 8412624 | 30409470 | 0.27664 | 83293 | 301084 | 0.27664 | 3.6147 |
| 5.6967 | | 3.05 | 8496750 | 30713565 | 0.27664 | 84126 | 304095 | 0.27664 | 3.6147 |
| 5.7536 | | 3.06 | 8581718 | 31020700 | 0.27664 | 84968 | 307136 | 0.27664 | 3.6147 |
| 5.8112 | | 3.07 | 8667535 | 31330907 | 0.27664 | 85817 | 310207 | 0.27664 | 3.6147 |
| 5.8693 | | 3.08 | 8754211 | 31644216 | 0.27664 | 86675 | 313309 | 0.27664 | 3.6147 |
| 5.9280 | | 3.09 | 8841753 | 31960659 | 0.27664 | 87542 | 316442 | 0.27664 | 3.6147 |
| 5.9872 | | 3.1 | 8930170 | 32280265 | 0.27664 | 88418 | 319607 | 0.27664 | 3.6147 |
| 6.0471 | | 3.11 | 9019472 | 32603068 | 0.27664 | 89302 | 322803 | 0.27664 | 3.6147 |
| 6.1076 | | 3.12 | 9109667 | 32929098 | 0.27664 | 90195 | 326031 | 0.27664 | 3.6147 |
| 6.1687 | | 3.13 | 9200763 | 33258389 | 0.27664 | 91097 | 329291 | 0.27664 | 3.6147 |
| 6.2304 | | 3.14 | 9292771 | 33590973 | 0.27664 | 92008 | 332584 | 0.27664 | 3.6147 |
| 6.2927 | | 3.15 | 9385699 | 33926883 | 0.27664 | 92928 | 335910 | 0.27664 | 3.6147 |
| 6.3556 | | 3.16 | 9479556 | 34266152 | 0.27664 | 93857 | 339269 | 0.27664 | 3.6147 |
| 6.4191 | | 3.17 | 9574351 | 34608813 | 0.27664 | 94796 | 342662 | 0.27664 | 3.6147 |
| 6.4833 | | 3.18 | 9670095 | 34954902 | 0.27664 | 95744 | 346088 | 0.27664 | 3.6147 |
| 6.5482 | | 3.19 | 9766796 | 35304451 | 0.27664 | 96701 | 349549 | 0.27664 | 3.6147 |
| 6.6136 | | 3.2 | 9864464 | 35657495 | 0.27664 | 97668 | 353045 | 0.27664 | 3.6147 |
| 6.6798 | | 3.21 | 9963108 | 36014070 | 0.27664 | 98645 | 356575 | 0.27664 | 3.6147 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table A1–2 Proof of no time function in the purely endogenous: using Y/K the US 2010

| | | $\left(\frac{u}{Y}\right)'$ | $\frac{u'v - uv'}{y^2}$ | $\frac{du}{dt} \sim \frac{u(t+\Delta t) - u(t)}{\Delta t}$ | $\frac{dv}{dt} \sim \frac{v(t+\Delta t) - v(t)}{\Delta t}$ |
|-------------|-------------|-----------------------------|-------------------------|--|--|
| the US 2010 | L 317.64 | Y 12822 0.59785 | K 21446 | | 0.59785 |
| Not fixed | | | Case 1-2 (US 2010) | average=marginal | |
| u=Y/K | dt | t | Y+ΔY | K+ΔK | ΔY |
| 0.00000 | 0.01 | 0 | 12822 | 21446 | ΔK |
| 0.59785 | | 0.0100 | 12950 | 21660.51 | ΔY/ΔK |
| 0.60383 | | 0.0200 | 13079 | 21877.12 | inverse |
| 0.60987 | | 0.0300 | 13210 | 22095.89 | |
| 0.61597 | | 0.0400 | 13342 | 22316.85 | |
| 0.62213 | | 0.0500 | 13476 | 22540.01 | |
| 0.62835 | | 0.0600 | 13610 | 22765.41 | |
| 0.63463 | | 0.0700 | 13746 | 22993.07 | |
| 0.64098 | | 0.0800 | 13884 | 23223 | |
| 0.64739 | | 0.0900 | 14023 | 23455.23 | |
| 0.65386 | | 0.1000 | 14163 | 23689.78 | |
| 0.66040 | | 0.1100 | 14305 | 23926.68 | |
| 0.66701 | | 0.1200 | 14448 | 24165.95 | |
| 0.67368 | | 0.1300 | 14592 | 24407.6 | |
| 0.68041 | | 0.1400 | 14738 | 24651.68 | |
| 0.68722 | | 0.1500 | 14885 | 24898.2 | |
| 0.69409 | | 0.1600 | 15034 | 25147.18 | |
| 0.70103 | | 0.1700 | 15185 | 25398.65 | |
| 0.70804 | | 0.1800 | 15337 | 25652.64 | |
| 0.71512 | | 0.1900 | 15490 | 25909.16 | |
| 0.72227 | | 0.2000 | 15645 | 26168.26 | |
| 0.72950 | | 0.2100 | 15801 | 26429.94 | |
| 0.73679 | | 0.2200 | 15959 | 26694.24 | |
| 0.74416 | | 0.2300 | 16119 | 26961.18 | |
| 0.75160 | | 0.2400 | 16280 | 27230.79 | |
| 0.75912 | | 0.2500 | 16443 | 27503.1 | |
| 0.76671 | | 0.2600 | 16607 | 27778.13 | |
| 0.77437 | | 0.2700 | 16773 | 28055.91 | |
| 0.78212 | | 0.2800 | 16941 | 28336.47 | |
| 0.78994 | | 0.2900 | 17110 | 28619.84 | |
| 0.79784 | | 0.3000 | 17282 | 28906.03 | |
| 0.80582 | | 0.3100 | 17454 | 29195.09 | |
| 0.81387 | | 0.3200 | 17629 | 29487.05 | |
| 0.82201 | | 0.3300 | 17805 | 29781.92 | |
| 0.83023 | | 0.3400 | 17983 | 30079.74 | |
| 0.83854 | | 0.3500 | 18163 | 30380.53 | |
| 0.84692 | | 0.3600 | 18345 | 30684.34 | |
| 0.85539 | | 0.3700 | 18528 | 30991.18 | |
| 0.86394 | | 0.3800 | 18713 | 31301.09 | |
| 0.87258 | | 0.3900 | 18901 | 31614.1 | |
| 0.88131 | | 0.4000 | 19090 | 31930.25 | |
| 0.89012 | | 0.4100 | 19281 | 32249.55 | |
| 0.89902 | | 0.4200 | 19473 | 32572.04 | |
| 0.90801 | | 0.4300 | 19668 | 32897.76 | |
| 0.91709 | | 0.4400 | 19865 | 33226.74 | |
| 0.92627 | | 0.4500 | 20063 | 33559.01 | |
| 0.93553 | | 0.4600 | 20264 | 33894.6 | |
| 0.94488 | | 0.4700 | 20467 | 34233.54 | |
| 0.95433 | | 0.4800 | 20671 | 34575.88 | |
| 0.96388 | | 0.4900 | 20878 | 34921.64 | |
| 0.97351 | | 0.5000 | 21087 | 35270.86 | |
| 0.98325 | | 0.5100 | 21298 | 35623.56 | |
| 0.99308 | | 0.5200 | 21511 | 35979.8 | |
| 1.0030 | | 0.5300 | 21726 | 36339.6 | |
| 1.0130 | | 0.5400 | 21943 | 36702.99 | |
| 1.0232 | | 0.5500 | 22162 | 37070.02 | |
| 1.0334 | | 0.5600 | 22384 | 37440.72 | |
| 1.0437 | | 0.5700 | 22608 | 37815.13 | |
| 1.0542 | | 0.5800 | 22834 | 38193.28 | |
| 1.0647 | | 0.5900 | 23062 | 38575.22 | |
| 1.0754 | | 0.6000 | 23293 | 38960.97 | |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 1–2 Continued

| | | | | | | | | | |
|--------|--|--------|--------|----------|---------|------|------|---------|--------|
| 7.1935 | | 2.5100 | 155814 | 260622.6 | 0.59785 | 1543 | 2580 | 0.59785 | 1.6727 |
| 7.2654 | | 2.5200 | 157372 | 263228.9 | 0.59785 | 1558 | 2606 | 0.59785 | 1.6727 |
| 7.3381 | | 2.5300 | 158946 | 265861.1 | 0.59785 | 1574 | 2632 | 0.59785 | 1.6727 |
| 7.4114 | | 2.5400 | 160536 | 268519.8 | 0.59785 | 1589 | 2659 | 0.59785 | 1.6727 |
| 7.4856 | | 2.5500 | 162141 | 271205 | 0.59785 | 1605 | 2685 | 0.59785 | 1.6727 |
| 7.5604 | | 2.5600 | 163762 | 273917 | 0.59785 | 1621 | 2712 | 0.59785 | 1.6727 |
| 7.6360 | | 2.5700 | 165400 | 276656.2 | 0.59785 | 1638 | 2739 | 0.59785 | 1.6727 |
| 7.7124 | | 2.5800 | 167054 | 279422.7 | 0.59785 | 1654 | 2767 | 0.59785 | 1.6727 |
| 7.7895 | | 2.5900 | 168724 | 282217 | 0.59785 | 1671 | 2794 | 0.59785 | 1.6727 |
| 7.8674 | | 2.6000 | 170412 | 285039.1 | 0.59785 | 1687 | 2822 | 0.59785 | 1.6727 |
| 7.9461 | | 2.6100 | 172116 | 287889.5 | 0.59785 | 1704 | 2850 | 0.59785 | 1.6727 |
| 8.0255 | | 2.6200 | 173837 | 290768.4 | 0.59785 | 1721 | 2879 | 0.59785 | 1.6727 |
| 8.1058 | | 2.6300 | 175575 | 293676.1 | 0.59785 | 1738 | 2908 | 0.59785 | 1.6727 |
| 8.1868 | | 2.6400 | 177331 | 296612.9 | 0.59785 | 1756 | 2937 | 0.59785 | 1.6727 |
| 8.2687 | | 2.6500 | 179104 | 299579 | 0.59785 | 1773 | 2966 | 0.59785 | 1.6727 |
| 8.3514 | | 2.6600 | 180895 | 302574.8 | 0.59785 | 1791 | 2996 | 0.59785 | 1.6727 |
| 8.4349 | | 2.6700 | 182704 | 305600.5 | 0.59785 | 1809 | 3026 | 0.59785 | 1.6727 |
| 8.5193 | | 2.6800 | 184531 | 308656.5 | 0.59785 | 1827 | 3056 | 0.59785 | 1.6727 |
| 8.6044 | | 2.6900 | 186377 | 311743.1 | 0.59785 | 1845 | 3087 | 0.59785 | 1.6727 |
| 8.6905 | | 2.7000 | 188241 | 314860.5 | 0.59785 | 1864 | 3117 | 0.59785 | 1.6727 |
| 8.7774 | | 2.7100 | 190123 | 318009.1 | 0.59785 | 1882 | 3149 | 0.59785 | 1.6727 |
| 8.8652 | | 2.7200 | 192024 | 321189.2 | 0.59785 | 1901 | 3180 | 0.59785 | 1.6727 |
| 8.9538 | | 2.7300 | 193944 | 324401.1 | 0.59785 | 1920 | 3212 | 0.59785 | 1.6727 |
| 9.0434 | | 2.7400 | 195884 | 327645.1 | 0.59785 | 1939 | 3244 | 0.59785 | 1.6727 |
| 9.1338 | | 2.7500 | 197843 | 330921.6 | 0.59785 | 1959 | 3276 | 0.59785 | 1.6727 |
| 9.2251 | | 2.7600 | 199821 | 334230.8 | 0.59785 | 1978 | 3309 | 0.59785 | 1.6727 |
| 9.3174 | | 2.7700 | 201819 | 337573.1 | 0.59785 | 1998 | 3342 | 0.59785 | 1.6727 |
| 9.4106 | | 2.7800 | 203838 | 340948.8 | 0.59785 | 2018 | 3376 | 0.59785 | 1.6727 |
| 9.5047 | | 2.7900 | 205876 | 344358.3 | 0.59785 | 2038 | 3409 | 0.59785 | 1.6727 |
| 9.5997 | | 2.8000 | 207935 | 347801.9 | 0.59785 | 2059 | 3444 | 0.59785 | 1.6727 |
| 9.6957 | | 2.8100 | 210014 | 351279.9 | 0.59785 | 2079 | 3478 | 0.59785 | 1.6727 |
| 9.7927 | | 2.8200 | 212114 | 354792.7 | 0.59785 | 2100 | 3513 | 0.59785 | 1.6727 |
| 9.8906 | | 2.8300 | 214235 | 358340.7 | 0.59785 | 2121 | 3548 | 0.59785 | 1.6727 |
| 9.9895 | | 2.8400 | 216378 | 361924.1 | 0.59785 | 2142 | 3583 | 0.59785 | 1.6727 |
| 10.089 | | 2.8500 | 218541 | 365543.3 | 0.59785 | 2164 | 3619 | 0.59785 | 1.6727 |
| 10.190 | | 2.8600 | 220727 | 369198.7 | 0.59785 | 2185 | 3655 | 0.59785 | 1.6727 |
| 10.292 | | 2.8700 | 222934 | 372890.7 | 0.59785 | 2207 | 3692 | 0.59785 | 1.6727 |
| 10.395 | | 2.8800 | 225163 | 376619.6 | 0.59785 | 2229 | 3729 | 0.59785 | 1.6727 |
| 10.499 | | 2.8900 | 227415 | 380385.8 | 0.59785 | 2252 | 3766 | 0.59785 | 1.6727 |
| 10.604 | | 2.9000 | 229689 | 384189.7 | 0.59785 | 2274 | 3804 | 0.59785 | 1.6727 |
| 10.710 | | 2.9100 | 231986 | 388031.6 | 0.59785 | 2297 | 3842 | 0.59785 | 1.6727 |
| 10.817 | | 2.9200 | 234306 | 391911.9 | 0.59785 | 2320 | 3880 | 0.59785 | 1.6727 |
| 10.925 | | 2.9300 | 236649 | 395831 | 0.59785 | 2343 | 3919 | 0.59785 | 1.6727 |
| 11.035 | | 2.9400 | 239016 | 399789.3 | 0.59785 | 2366 | 3958 | 0.59785 | 1.6727 |
| 11.145 | | 2.9500 | 241406 | 403787.2 | 0.59785 | 2390 | 3998 | 0.59785 | 1.6727 |
| 11.256 | | 2.9600 | 243820 | 407825.1 | 0.59785 | 2414 | 4038 | 0.59785 | 1.6727 |
| 11.369 | | 2.9700 | 246258 | 411903.3 | 0.59785 | 2438 | 4078 | 0.59785 | 1.6727 |
| 11.483 | | 2.9800 | 248721 | 416022.4 | 0.59785 | 2463 | 4119 | 0.59785 | 1.6727 |
| 11.597 | | 2.9900 | 251208 | 420182.6 | 0.59785 | 2487 | 4160 | 0.59785 | 1.6727 |
| 11.713 | | 3.0000 | 253720 | 424384.4 | 0.59785 | 2512 | 4202 | 0.59785 | 1.6727 |
| 11.831 | | 3.0100 | 256257 | 428628.3 | 0.59785 | 2537 | 4244 | 0.59785 | 1.6727 |
| 11.949 | | 3.0200 | 258820 | 432914.6 | 0.59785 | 2563 | 4286 | 0.59785 | 1.6727 |
| 12.068 | | 3.0300 | 261408 | 437243.7 | 0.59785 | 2588 | 4329 | 0.59785 | 1.6727 |
| 12.189 | | 3.0400 | 264022 | 441616.1 | 0.59785 | 2614 | 4372 | 0.59785 | 1.6727 |
| 12.311 | | 3.0500 | 266662 | 446032.3 | 0.59785 | 2640 | 4416 | 0.59785 | 1.6727 |
| 12.434 | | 3.0600 | 269329 | 450492.6 | 0.59785 | 2667 | 4460 | 0.59785 | 1.6727 |
| 12.558 | | 3.0700 | 272022 | 454997.5 | 0.59785 | 2693 | 4505 | 0.59785 | 1.6727 |
| 12.684 | | 3.0800 | 274742 | 459547.5 | 0.59785 | 2720 | 4550 | 0.59785 | 1.6727 |
| 12.811 | | 3.0900 | 277490 | 464143 | 0.59785 | 2747 | 4595 | 0.59785 | 1.6727 |
| 12.939 | | 3.1000 | 280265 | 468784.4 | 0.59785 | 2775 | 4641 | 0.59785 | 1.6727 |
| 13.068 | | 3.1100 | 283067 | 473472.3 | 0.59785 | 2803 | 4688 | 0.59785 | 1.6727 |
| 13.199 | | 3.1200 | 285898 | 478207 | 0.59785 | 2831 | 4735 | 0.59785 | 1.6727 |
| 13.331 | | 3.1300 | 288757 | 482989.1 | 0.59785 | 2859 | 4782 | 0.59785 | 1.6727 |
| 13.464 | | 3.1400 | 291644 | 487819 | 0.59785 | 2888 | 4830 | 0.59785 | 1.6727 |
| 13.599 | | 3.1500 | 294561 | 492697.1 | 0.59785 | 2916 | 4878 | 0.59785 | 1.6727 |
| 13.735 | | 3.1600 | 297506 | 497624.1 | 0.59785 | 2946 | 4927 | 0.59785 | 1.6727 |
| 13.872 | | 3.1700 | 300481 | 502600.4 | 0.59785 | 2975 | 4976 | 0.59785 | 1.6727 |
| 14.011 | | 3.1800 | 303486 | 507626.4 | 0.59785 | 3005 | 5026 | 0.59785 | 1.6727 |
| 14.151 | | 3.1900 | 306521 | 512702.6 | 0.59785 | 3035 | 5076 | 0.59785 | 1.6727 |
| 14.293 | | 3.2000 | 309586 | 517829.7 | 0.59785 | 3065 | 5127 | 0.59785 | 1.6727 |
| 14.436 | | 3.2100 | 312682 | 523007.9 | 0.59785 | 3096 | 5178 | 0.59785 | 1.6727 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table A2–1 Proof of no time function in the purely endogenous: using Y/L Japan 2010

| dY/dL | | | $\left(\frac{u'}{v'}\right) = \frac{u'v' - uv'}{v'^2}$ | $\frac{du'}{dt}$ | $\frac{u(t+\Delta t) - u(t)}{\Delta t}$ | $\frac{dv'}{dt}$ | $\frac{v(t+\Delta t) - v(t)}{\Delta t}$ | | |
|------------|--------|--------|--|------------------|---|------------------|---|--------|----------|
| Japan 2010 | L | Y | K | | | | | | |
| | 127.45 | 408539 | 1476764 | | | | | | |
| | 3205.5 | | | | | | | | |
| Not fixed | | | Case 2-1 (J 2010) | | average=marginal | | | | |
| v=Y/L | dt | t | Y+ΔY | L+ΔL | Y+ΔY/(L+ΔL) | ΔY | ΔL | ΔY/ΔL | inverse |
| 0.00000 | 0.01 | 0 | 408539 | 127.45 | 3205.5 | | | | |
| 3205.5 | | 0.01 | 412625 | 128.72 | 3205.5 | 4085 | 1.2745 | 3205.5 | 0.000312 |
| 3237.5 | | 0.02 | 416751 | 130.01 | 3205.5 | 4126 | 1.2872 | 3205.5 | 0.000312 |
| 3269.9 | | 0.03 | 420918 | 131.31 | 3205.5 | 4168 | 1.3001 | 3205.5 | 0.000312 |
| 3302.6 | | 0.04 | 425128 | 132.62 | 3205.5 | 4209 | 1.3131 | 3205.5 | 0.000312 |
| 3335.6 | | 0.05 | 429379 | 133.95 | 3205.5 | 4251 | 1.3262 | 3205.5 | 0.000312 |
| 3369.0 | | 0.06 | 433673 | 135.29 | 3205.5 | 4294 | 1.3395 | 3205.5 | 0.000312 |
| 3402.7 | | 0.07 | 438009 | 136.64 | 3205.5 | 4337 | 1.3529 | 3205.5 | 0.000312 |
| 3436.7 | | 0.08 | 442390 | 138.01 | 3205.5 | 4380 | 1.3664 | 3205.5 | 0.000312 |
| 3471.1 | | 0.09 | 446813 | 139.39 | 3205.5 | 4424 | 1.3801 | 3205.5 | 0.000312 |
| 3505.8 | | 0.1 | 451282 | 140.78 | 3205.5 | 4468 | 1.3939 | 3205.5 | 0.000312 |
| 3540.9 | | 0.11 | 455794 | 142.19 | 3205.5 | 4513 | 1.4078 | 3205.5 | 0.000312 |
| 3576.3 | | 0.12 | 460352 | 143.61 | 3205.5 | 4558 | 1.4219 | 3205.5 | 0.000312 |
| 3612.0 | | 0.13 | 464956 | 145.05 | 3205.5 | 4604 | 1.4361 | 3205.5 | 0.000312 |
| 3648.1 | | 0.14 | 469605 | 146.50 | 3205.5 | 4650 | 1.4505 | 3205.5 | 0.000312 |
| 3684.6 | | 0.15 | 474301 | 147.97 | 3205.5 | 4696 | 1.4650 | 3205.5 | 0.000312 |
| 3721.5 | | 0.16 | 479044 | 149.45 | 3205.5 | 4743 | 1.4797 | 3205.5 | 0.000312 |
| 3758.7 | | 0.17 | 483835 | 150.94 | 3205.5 | 4790 | 1.4945 | 3205.5 | 0.000312 |
| 3796.3 | | 0.18 | 488673 | 152.45 | 3205.5 | 4838 | 1.5094 | 3205.5 | 0.000312 |
| 3834.2 | | 0.19 | 493560 | 153.97 | 3205.5 | 4887 | 1.5245 | 3205.5 | 0.000312 |
| 3872.6 | | 0.2 | 498496 | 155.51 | 3205.5 | 4936 | 1.5397 | 3205.5 | 0.000312 |
| 3911.3 | | 0.21 | 503481 | 157.07 | 3205.5 | 4985 | 1.5551 | 3205.5 | 0.000312 |
| 3950.4 | | 0.22 | 508515 | 158.64 | 3205.5 | 5035 | 1.5707 | 3205.5 | 0.000312 |
| 3989.9 | | 0.23 | 513601 | 160.23 | 3205.5 | 5085 | 1.5864 | 3205.5 | 0.000312 |
| 4029.8 | | 0.24 | 518737 | 161.83 | 3205.5 | 5136 | 1.6023 | 3205.5 | 0.000312 |
| 4070.1 | | 0.25 | 523924 | 163.45 | 3205.5 | 5187 | 1.6183 | 3205.5 | 0.000312 |
| 4110.8 | | 0.26 | 529163 | 165.08 | 3205.5 | 5239 | 1.6345 | 3205.5 | 0.000312 |
| 4151.9 | | 0.27 | 534455 | 166.73 | 3205.5 | 5292 | 1.6508 | 3205.5 | 0.000312 |
| 4193.4 | | 0.28 | 539799 | 168.40 | 3205.5 | 5345 | 1.6673 | 3205.5 | 0.000312 |
| 4235.4 | | 0.29 | 545197 | 170.08 | 3205.5 | 5398 | 1.6840 | 3205.5 | 0.000312 |
| 4277.7 | | 0.3 | 550649 | 171.78 | 3205.5 | 5452 | 1.7008 | 3205.5 | 0.000312 |
| 4320.5 | | 0.31 | 556156 | 173.50 | 3205.5 | 5506 | 1.7178 | 3205.5 | 0.000312 |
| 4363.7 | | 0.32 | 561717 | 175.24 | 3205.5 | 5562 | 1.7350 | 3205.5 | 0.000312 |
| 4407.4 | | 0.33 | 567335 | 176.99 | 3205.5 | 5617 | 1.7524 | 3205.5 | 0.000312 |
| 4451.4 | | 0.34 | 573008 | 178.76 | 3205.5 | 5673 | 1.7699 | 3205.5 | 0.000312 |
| 4495.9 | | 0.35 | 578738 | 180.55 | 3205.5 | 5730 | 1.7876 | 3205.5 | 0.000312 |
| 4540.9 | | 0.36 | 584525 | 182.35 | 3205.5 | 5787 | 1.8055 | 3205.5 | 0.000312 |
| 4586.3 | | 0.37 | 590371 | 184.17 | 3205.5 | 5845 | 1.8235 | 3205.5 | 0.000312 |
| 4632.2 | | 0.38 | 596274 | 186.02 | 3205.5 | 5904 | 1.8417 | 3205.5 | 0.000312 |
| 4678.5 | | 0.39 | 602237 | 187.88 | 3205.5 | 5963 | 1.8602 | 3205.5 | 0.000312 |
| 4725.3 | | 0.4 | 608259 | 189.76 | 3205.5 | 6022 | 1.8788 | 3205.5 | 0.000312 |
| 4772.5 | | 0.41 | 614342 | 191.65 | 3205.5 | 6083 | 1.8976 | 3205.5 | 0.000312 |
| 4820.3 | | 0.42 | 620485 | 193.57 | 3205.5 | 6143 | 1.9165 | 3205.5 | 0.000312 |
| 4868.5 | | 0.43 | 626690 | 195.51 | 3205.5 | 6205 | 1.9357 | 3205.5 | 0.000312 |
| 4917.1 | | 0.44 | 632957 | 197.46 | 3205.5 | 6267 | 1.9551 | 3205.5 | 0.000312 |
| 4966.3 | | 0.45 | 639287 | 199.44 | 3205.5 | 6330 | 1.9746 | 3205.5 | 0.000312 |
| 5016.0 | | 0.46 | 645680 | 201.43 | 3205.5 | 6393 | 1.9944 | 3205.5 | 0.000312 |
| 5066.1 | | 0.47 | 652136 | 203.44 | 3205.5 | 6457 | 2.0143 | 3205.5 | 0.000312 |
| 5116.8 | | 0.48 | 658658 | 205.48 | 3205.5 | 6521 | 2.0344 | 3205.5 | 0.000312 |
| 5168.0 | | 0.49 | 665244 | 207.53 | 3205.5 | 6587 | 2.0548 | 3205.5 | 0.000312 |
| 5219.6 | | 0.5 | 671897 | 209.61 | 3205.5 | 6652 | 2.0753 | 3205.5 | 0.000312 |
| 5271.8 | | 0.51 | 678616 | 211.70 | 3205.5 | 6719 | 2.0961 | 3205.5 | 0.000312 |
| 5324.6 | | 0.52 | 685402 | 213.82 | 3205.5 | 6786 | 2.1170 | 3205.5 | 0.000312 |
| 5377.8 | | 0.53 | 692256 | 215.96 | 3205.5 | 6854 | 2.1382 | 3205.5 | 0.000312 |
| 5431.6 | | 0.54 | 699178 | 218.12 | 3205.5 | 6923 | 2.1596 | 3205.5 | 0.000312 |
| 5485.9 | | 0.55 | 706170 | 220.30 | 3205.5 | 6992 | 2.1812 | 3205.5 | 0.000312 |
| 5540.8 | | 0.56 | 713232 | 222.50 | 3205.5 | 7062 | 2.2030 | 3205.5 | 0.000312 |
| 5596.2 | | 0.57 | 720364 | 224.73 | 3205.5 | 7132 | 2.2250 | 3205.5 | 0.000312 |
| 5652.1 | | 0.58 | 727568 | 226.98 | 3205.5 | 7204 | 2.2473 | 3205.5 | 0.000312 |
| 5708.7 | | 0.59 | 734844 | 229.25 | 3205.5 | 7276 | 2.2698 | 3205.5 | 0.000312 |
| 5765.7 | | 0.6 | 742192 | 231.54 | 3205.5 | 7348 | 2.2925 | 3205.5 | 0.000312 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 2–1 Continued

| | | | | | | | | | |
|-------|--|------|---------|--------|--------|-------|---------|--------|----------|
| 38569 | | 2.51 | 4964765 | 1548.8 | 3205.5 | 49156 | 15.3350 | 3205.5 | 0.000312 |
| 38955 | | 2.52 | 5014412 | 1564.3 | 3205.5 | 49648 | 15.4883 | 3205.5 | 0.000312 |
| 39344 | | 2.53 | 5064557 | 1580.0 | 3205.5 | 50144 | 15.6432 | 3205.5 | 0.000312 |
| 39738 | | 2.54 | 5115202 | 1595.8 | 3205.5 | 50646 | 15.7996 | 3205.5 | 0.000312 |
| 40135 | | 2.55 | 5166354 | 1611.7 | 3205.5 | 51152 | 15.9576 | 3205.5 | 0.000312 |
| 40536 | | 2.56 | 5218018 | 1627.8 | 3205.5 | 51664 | 16.1172 | 3205.5 | 0.000312 |
| 40942 | | 2.57 | 5270198 | 1644.1 | 3205.5 | 52180 | 16.2784 | 3205.5 | 0.000312 |
| 41351 | | 2.58 | 5322900 | 1660.6 | 3205.5 | 52702 | 16.4412 | 3205.5 | 0.000312 |
| 41765 | | 2.59 | 5376129 | 1677.2 | 3205.5 | 53229 | 16.6056 | 3205.5 | 0.000312 |
| 42182 | | 2.6 | 5429890 | 1693.9 | 3205.5 | 53761 | 16.7716 | 3205.5 | 0.000312 |
| 42604 | | 2.61 | 5484189 | 1710.9 | 3205.5 | 54299 | 16.9394 | 3205.5 | 0.000312 |
| 43030 | | 2.62 | 5539031 | 1728.0 | 3205.5 | 54842 | 17.1088 | 3205.5 | 0.000312 |
| 43460 | | 2.63 | 5594421 | 1745.3 | 3205.5 | 55390 | 17.2798 | 3205.5 | 0.000312 |
| 43895 | | 2.64 | 5650365 | 1762.7 | 3205.5 | 55944 | 17.4526 | 3205.5 | 0.000312 |
| 44334 | | 2.65 | 5706869 | 1780.3 | 3205.5 | 56504 | 17.6272 | 3205.5 | 0.000312 |
| 44777 | | 2.66 | 5763938 | 1798.1 | 3205.5 | 57069 | 17.8034 | 3205.5 | 0.000312 |
| 45225 | | 2.67 | 5821577 | 1816.1 | 3205.5 | 57639 | 17.9815 | 3205.5 | 0.000312 |
| 45677 | | 2.68 | 5879793 | 1834.3 | 3205.5 | 58216 | 18.1613 | 3205.5 | 0.000312 |
| 46134 | | 2.69 | 5938591 | 1852.6 | 3205.5 | 58798 | 18.3429 | 3205.5 | 0.000312 |
| 46595 | | 2.7 | 5997977 | 1871.2 | 3205.5 | 59386 | 18.5263 | 3205.5 | 0.000312 |
| 47061 | | 2.71 | 6057957 | 1889.9 | 3205.5 | 59980 | 18.7116 | 3205.5 | 0.000312 |
| 47532 | | 2.72 | 6118536 | 1908.8 | 3205.5 | 60580 | 18.8987 | 3205.5 | 0.000312 |
| 48007 | | 2.73 | 6179721 | 1927.9 | 3205.5 | 61185 | 19.0877 | 3205.5 | 0.000312 |
| 48487 | | 2.74 | 6241519 | 1947.1 | 3205.5 | 61797 | 19.2786 | 3205.5 | 0.000312 |
| 48972 | | 2.75 | 6303934 | 1966.6 | 3205.5 | 62415 | 19.4714 | 3205.5 | 0.000312 |
| 49462 | | 2.76 | 6366973 | 1986.3 | 3205.5 | 63039 | 19.6661 | 3205.5 | 0.000312 |
| 49957 | | 2.77 | 6430643 | 2006.1 | 3205.5 | 63670 | 19.8627 | 3205.5 | 0.000312 |
| 50456 | | 2.78 | 6494949 | 2026.2 | 3205.5 | 64306 | 20.0614 | 3205.5 | 0.000312 |
| 50961 | | 2.79 | 6559899 | 2046.5 | 3205.5 | 64949 | 20.2620 | 3205.5 | 0.000312 |
| 51470 | | 2.8 | 6625498 | 2066.9 | 3205.5 | 65599 | 20.4646 | 3205.5 | 0.000312 |
| 51985 | | 2.81 | 6691753 | 2087.6 | 3205.5 | 66255 | 20.6692 | 3205.5 | 0.000312 |
| 52505 | | 2.82 | 6758670 | 2108.5 | 3205.5 | 66918 | 20.8759 | 3205.5 | 0.000312 |
| 53030 | | 2.83 | 6826257 | 2129.6 | 3205.5 | 67587 | 21.0847 | 3205.5 | 0.000312 |
| 53560 | | 2.84 | 6894520 | 2150.8 | 3205.5 | 68263 | 21.2955 | 3205.5 | 0.000312 |
| 54096 | | 2.85 | 6963465 | 2172.4 | 3205.5 | 68945 | 21.5085 | 3205.5 | 0.000312 |
| 54637 | | 2.86 | 7033100 | 2194.1 | 3205.5 | 69635 | 21.7236 | 3205.5 | 0.000312 |
| 55183 | | 2.87 | 7103431 | 2216.0 | 3205.5 | 70331 | 21.9408 | 3205.5 | 0.000312 |
| 55735 | | 2.88 | 7174465 | 2238.2 | 3205.5 | 71034 | 22.1602 | 3205.5 | 0.000312 |
| 56292 | | 2.89 | 7246209 | 2260.6 | 3205.5 | 71745 | 22.3818 | 3205.5 | 0.000312 |
| 56855 | | 2.9 | 7318672 | 2283.2 | 3205.5 | 72462 | 22.6056 | 3205.5 | 0.000312 |
| 57424 | | 2.91 | 7391858 | 2306.0 | 3205.5 | 73187 | 22.8317 | 3205.5 | 0.000312 |
| 57998 | | 2.92 | 7465777 | 2329.1 | 3205.5 | 73919 | 23.0600 | 3205.5 | 0.000312 |
| 58578 | | 2.93 | 7540435 | 2352.4 | 3205.5 | 74658 | 23.2906 | 3205.5 | 0.000312 |
| 59164 | | 2.94 | 7615839 | 2375.9 | 3205.5 | 75404 | 23.5235 | 3205.5 | 0.000312 |
| 59756 | | 2.95 | 7691997 | 2399.6 | 3205.5 | 76158 | 23.7588 | 3205.5 | 0.000312 |
| 60353 | | 2.96 | 7768917 | 2423.6 | 3205.5 | 76920 | 23.9963 | 3205.5 | 0.000312 |
| 60957 | | 2.97 | 7846607 | 2447.9 | 3205.5 | 77689 | 24.2363 | 3205.5 | 0.000312 |
| 61566 | | 2.98 | 7925073 | 2472.3 | 3205.5 | 78466 | 24.4787 | 3205.5 | 0.000312 |
| 62182 | | 2.99 | 8004323 | 2497.1 | 3205.5 | 79251 | 24.7235 | 3205.5 | 0.000312 |
| 62804 | | 3 | 8084367 | 2522.0 | 3205.5 | 80043 | 24.9707 | 3205.5 | 0.000312 |
| 63432 | | 3.01 | 8165210 | 2547.3 | 3205.5 | 80844 | 25.2204 | 3205.5 | 0.000312 |
| 64066 | | 3.02 | 8246862 | 2572.7 | 3205.5 | 81652 | 25.4726 | 3205.5 | 0.000312 |
| 64707 | | 3.03 | 8329331 | 2598.5 | 3205.5 | 82469 | 25.7273 | 3205.5 | 0.000312 |
| 65354 | | 3.04 | 8412624 | 2624.4 | 3205.5 | 83293 | 25.9846 | 3205.5 | 0.000312 |
| 66007 | | 3.05 | 8496750 | 2650.7 | 3205.5 | 84126 | 26.2444 | 3205.5 | 0.000312 |
| 66667 | | 3.06 | 8581718 | 2677.2 | 3205.5 | 84968 | 26.5069 | 3205.5 | 0.000312 |
| 67334 | | 3.07 | 8667535 | 2704.0 | 3205.5 | 85817 | 26.7720 | 3205.5 | 0.000312 |
| 68007 | | 3.08 | 8754211 | 2731.0 | 3205.5 | 86675 | 27.0397 | 3205.5 | 0.000312 |
| 68687 | | 3.09 | 8841753 | 2758.3 | 3205.5 | 87542 | 27.3101 | 3205.5 | 0.000312 |
| 69374 | | 3.1 | 8930170 | 2785.9 | 3205.5 | 88418 | 27.5832 | 3205.5 | 0.000312 |
| 70068 | | 3.11 | 9019472 | 2813.8 | 3205.5 | 89302 | 27.8590 | 3205.5 | 0.000312 |
| 70769 | | 3.12 | 9109667 | 2841.9 | 3205.5 | 90195 | 28.1376 | 3205.5 | 0.000312 |
| 71476 | | 3.13 | 9200763 | 2870.3 | 3205.5 | 91097 | 28.4190 | 3205.5 | 0.000312 |
| 72191 | | 3.14 | 9292771 | 2899.0 | 3205.5 | 92008 | 28.7032 | 3205.5 | 0.000312 |
| 72913 | | 3.15 | 9385699 | 2928.0 | 3205.5 | 92928 | 28.9902 | 3205.5 | 0.000312 |
| 73642 | | 3.16 | 9479556 | 2957.3 | 3205.5 | 93857 | 29.2801 | 3205.5 | 0.000312 |
| 74379 | | 3.17 | 9574351 | 2986.9 | 3205.5 | 94796 | 29.5729 | 3205.5 | 0.000312 |
| 75122 | | 3.18 | 9670095 | 3016.7 | 3205.5 | 95744 | 29.8686 | 3205.5 | 0.000312 |
| 75874 | | 3.19 | 9766796 | 3046.9 | 3205.5 | 96701 | 30.1673 | 3205.5 | 0.000312 |
| 76632 | | 3.2 | 9864464 | 3077.4 | 3205.5 | 97668 | 30.4690 | 3205.5 | 0.000312 |
| 77399 | | 3.21 | 9963108 | 3108.1 | 3205.5 | 98645 | 30.7737 | 3205.5 | 0.000312 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table A2–2 Proof of no time function in the purely endogenous: using Y/L the US 2010

| | $\left(\frac{u}{v}\right)^{\frac{1}{\sigma}}$ | $\frac{u'v - uv'}{v^2}$ | | $\frac{du}{dt} \sim \frac{u(t+\Delta t) - u(t)}{\Delta t}$ | | $\frac{dv}{dt} \sim \frac{v(t+\Delta t) - v(t)}{\Delta t}$ | |
|----------------|---|-------------------------|---------------|--|------------|--|---------------------|
| the US 2010 | L | Y | K | | | | |
| 40,365 | 317.64 | 12822 | 21446 | | | 40,365 | 0.02477 |
| Not fixed | | Case 2-2 (US 2010) | | average=marginal | | | |
| $v=Y/L$ | dt | $Y+\Delta Y$ | $L+\Delta L$ | $(Y+\Delta Y)/(L+\Delta L)$ | ΔY | ΔL | $\Delta Y/\Delta L$ |
| 0.00000 | 0.01 | 12822 | 317.64 | 40,365 | | | |
| 40,365 | | 12950 | 320.82 | 40,365 | 128 | 3,1764 | 40,365 0.02477 |
| 40,769 | | 13079 | 324.02 | 40,365 | 129 | 3,2082 | 40,365 0.02477 |
| 41,177 | | 13210 | 327.26 | 40,365 | 131 | 3,2402 | 40,365 0.02477 |
| 41,588 | | 13342 | 330.54 | 40,365 | 132 | 3,2726 | 40,365 0.02477 |
| 42,004 | | 13476 | 333.84 | 40,365 | 133 | 3,3054 | 40,365 0.02477 |
| 42,424 | | 13610 | 337.18 | 40,365 | 135 | 3,3384 | 40,365 0.02477 |
| 42,848 | | 13746 | 340.55 | 40,365 | 136 | 3,3718 | 40,365 0.02477 |
| 43,277 | | 13884 | 343.96 | 40,365 | 137 | 3,4055 | 40,365 0.02477 |
| 43,710 | | 14023 | 347.40 | 40,365 | 139 | 3,4396 | 40,365 0.02477 |
| 44,147 | | 14163 | 350.87 | 40,365 | 140 | 3,4740 | 40,365 0.02477 |
| 44,588 | | 14305 | 354.38 | 40,365 | 142 | 3,5087 | 40,365 0.02477 |
| 45,034 | | 14448 | 357.92 | 40,365 | 143 | 3,5438 | 40,365 0.02477 |
| 45,485 | | 14592 | 361.50 | 40,365 | 144 | 3,5792 | 40,365 0.02477 |
| 45,939 | | 14738 | 365.12 | 40,365 | 146 | 3,6150 | 40,365 0.02477 |
| 46,399 | | 14885 | 368.77 | 40,365 | 147 | 3,6512 | 40,365 0.02477 |
| 46,863 | | 15034 | 372.46 | 40,365 | 149 | 3,6877 | 40,365 0.02477 |
| 47,331 | | 15185 | 376.18 | 40,365 | 150 | 3,7246 | 40,365 0.02477 |
| 47,805 | | 15337 | 379.94 | 40,365 | 152 | 3,7618 | 40,365 0.02477 |
| 48,283 | | 15490 | 383.74 | 40,365 | 153 | 3,7994 | 40,365 0.02477 |
| 48,766 | | 15645 | 387.58 | 40,365 | 155 | 3,8374 | 40,365 0.02477 |
| 49,253 | | 15801 | 391.46 | 40,365 | 156 | 3,8758 | 40,365 0.02477 |
| 49,746 | | 15959 | 395.37 | 40,365 | 158 | 3,9146 | 40,365 0.02477 |
| 50,243 | | 16119 | 399.33 | 40,365 | 160 | 3,9537 | 40,365 0.02477 |
| 50,746 | | 16280 | 403.32 | 40,365 | 161 | 3,9933 | 40,365 0.02477 |
| 51,253 | | 16443 | 407.35 | 40,365 | 163 | 4,0332 | 40,365 0.02477 |
| 51,766 | | 16607 | 411.43 | 40,365 | 164 | 4,0735 | 40,365 0.02477 |
| 52,283 | | 16773 | 415.54 | 40,365 | 166 | 4,1143 | 40,365 0.02477 |
| 52,806 | | 16941 | 419.69 | 40,365 | 168 | 4,1554 | 40,365 0.02477 |
| 53,334 | | 17110 | 423.89 | 40,365 | 169 | 4,1969 | 40,365 0.02477 |
| 53,868 | | 17282 | 428.13 | 40,365 | 171 | 4,2389 | 40,365 0.02477 |
| 54,406 | | 17454 | 432.41 | 40,365 | 173 | 4,2813 | 40,365 0.02477 |
| 54,950 | | 17629 | 436.74 | 40,365 | 175 | 4,3241 | 40,365 0.02477 |
| 55,500 | | 17805 | 441.10 | 40,365 | 176 | 4,3674 | 40,365 0.02477 |
| 56,055 | | 17983 | 445.51 | 40,365 | 178 | 4,4110 | 40,365 0.02477 |
| 56,615 | | 18163 | 449.97 | 40,365 | 180 | 4,4551 | 40,365 0.02477 |
| 57,181 | | 18345 | 454.47 | 40,365 | 182 | 4,4997 | 40,365 0.02477 |
| 57,753 | | 18528 | 459.01 | 40,365 | 183 | 4,5447 | 40,365 0.02477 |
| 58,331 | | 18713 | 463.60 | 40,365 | 185 | 4,5901 | 40,365 0.02477 |
| 58,914 | | 18901 | 468.24 | 40,365 | 187 | 4,6360 | 40,365 0.02477 |
| 59,503 | | 19090 | 472.92 | 40,365 | 189 | 4,6824 | 40,365 0.02477 |
| 60,098 | | 19281 | 477.65 | 40,365 | 191 | 4,7292 | 40,365 0.02477 |
| 60,699 | | 19473 | 482.43 | 40,365 | 193 | 4,7765 | 40,365 0.02477 |
| 61,306 | | 19668 | 487.25 | 40,365 | 195 | 4,8243 | 40,365 0.02477 |
| 61,919 | | 19865 | 492.13 | 40,365 | 197 | 4,8725 | 40,365 0.02477 |
| 62,539 | | 20063 | 497.05 | 40,365 | 199 | 4,9213 | 40,365 0.02477 |
| 63,164 | | 20264 | 502.02 | 40,365 | 201 | 4,9705 | 40,365 0.02477 |
| 63,796 | | 20467 | 507.04 | 40,365 | 203 | 5,0202 | 40,365 0.02477 |
| 64,433 | | 20671 | 512.11 | 40,365 | 205 | 5,0704 | 40,365 0.02477 |
| 65,078 | | 20878 | 517.23 | 40,365 | 207 | 5,1211 | 40,365 0.02477 |
| 65,729 | | 21087 | 522.40 | 40,365 | 209 | 5,1723 | 40,365 0.02477 |
| 66,386 | | 21298 | 527.62 | 40,365 | 211 | 5,2240 | 40,365 0.02477 |
| 67,050 | | 21511 | 532.90 | 40,365 | 213 | 5,2762 | 40,365 0.02477 |
| 67,720 | | 21726 | 538.23 | 40,365 | 215 | 5,3290 | 40,365 0.02477 |
| 68,397 | | 21943 | 543.61 | 40,365 | 217 | 5,3823 | 40,365 0.02477 |
| 69,081 | | 22162 | 549.05 | 40,365 | 219 | 5,4361 | 40,365 0.02477 |
| 69,772 | | 22384 | 554.54 | 40,365 | 222 | 5,4905 | 40,365 0.02477 |
| 70,470 | | 22608 | 560.08 | 40,365 | 224 | 5,5454 | 40,365 0.02477 |
| 71,175 | | 22834 | 565.69 | 40,365 | 226 | 5,6008 | 40,365 0.02477 |
| 71,886 | | 23062 | 571.34 | 40,365 | 228 | 5,6569 | 40,365 0.02477 |
| 72,605 | | 23293 | 577.06 | 40,365 | 231 | 5,7134 | 40,365 0.02477 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table 2–2 Continued

| | | | | | | | |
|--------|--------|--------|--------|------|--------|--------|---------|
| 485.68 | 155814 | 3860.1 | 40.365 | 1543 | 38.219 | 40.365 | 0.02477 |
| 490.54 | 157372 | 3898.7 | 40.365 | 1558 | 38.601 | 40.365 | 0.02477 |
| 495.44 | 158946 | 3937.7 | 40.365 | 1574 | 38.987 | 40.365 | 0.02477 |
| 500.40 | 160536 | 3977.1 | 40.365 | 1589 | 39.377 | 40.365 | 0.02477 |
| 505.40 | 162141 | 4016.8 | 40.365 | 1605 | 39.771 | 40.365 | 0.02477 |
| 510.45 | 163762 | 4057.0 | 40.365 | 1621 | 40.168 | 40.365 | 0.02477 |
| 515.56 | 165400 | 4097.6 | 40.365 | 1638 | 40.570 | 40.365 | 0.02477 |
| 520.72 | 167054 | 4138.6 | 40.365 | 1654 | 40.976 | 40.365 | 0.02477 |
| 525.92 | 168724 | 4179.9 | 40.365 | 1671 | 41.386 | 40.365 | 0.02477 |
| 531.18 | 170412 | 4221.7 | 40.365 | 1687 | 41.799 | 40.365 | 0.02477 |
| 536.49 | 172116 | 4264.0 | 40.365 | 1704 | 42.217 | 40.365 | 0.02477 |
| 541.86 | 173837 | 4306.6 | 40.365 | 1721 | 42.640 | 40.365 | 0.02477 |
| 547.28 | 175575 | 4349.7 | 40.365 | 1738 | 43.066 | 40.365 | 0.02477 |
| 552.75 | 177331 | 4393.2 | 40.365 | 1756 | 43.497 | 40.365 | 0.02477 |
| 558.28 | 179104 | 4437.1 | 40.365 | 1773 | 43.932 | 40.365 | 0.02477 |
| 563.86 | 180895 | 4481.5 | 40.365 | 1791 | 44.371 | 40.365 | 0.02477 |
| 569.50 | 182704 | 4526.3 | 40.365 | 1809 | 44.815 | 40.365 | 0.02477 |
| 575.19 | 184531 | 4571.5 | 40.365 | 1827 | 45.263 | 40.365 | 0.02477 |
| 580.95 | 186377 | 4617.3 | 40.365 | 1845 | 45.715 | 40.365 | 0.02477 |
| 586.75 | 188241 | 4663.4 | 40.365 | 1864 | 46.173 | 40.365 | 0.02477 |
| 592.62 | 190123 | 4710.1 | 40.365 | 1882 | 46.634 | 40.365 | 0.02477 |
| 598.55 | 192024 | 4757.2 | 40.365 | 1901 | 47.101 | 40.365 | 0.02477 |
| 604.53 | 193944 | 4804.7 | 40.365 | 1920 | 47.572 | 40.365 | 0.02477 |
| 610.58 | 195884 | 4852.8 | 40.365 | 1939 | 48.047 | 40.365 | 0.02477 |
| 616.69 | 197843 | 4901.3 | 40.365 | 1959 | 48.528 | 40.365 | 0.02477 |
| 622.85 | 199821 | 4950.3 | 40.365 | 1978 | 49.013 | 40.365 | 0.02477 |
| 629.08 | 201819 | 4999.8 | 40.365 | 1998 | 49.503 | 40.365 | 0.02477 |
| 635.37 | 203838 | 5049.8 | 40.365 | 2018 | 49.998 | 40.365 | 0.02477 |
| 641.72 | 205876 | 5100.3 | 40.365 | 2038 | 50.498 | 40.365 | 0.02477 |
| 648.14 | 207935 | 5151.3 | 40.365 | 2059 | 51.003 | 40.365 | 0.02477 |
| 654.62 | 210014 | 5202.8 | 40.365 | 2079 | 51.513 | 40.365 | 0.02477 |
| 661.17 | 212114 | 5254.9 | 40.365 | 2100 | 52.028 | 40.365 | 0.02477 |
| 667.78 | 214235 | 5307.4 | 40.365 | 2121 | 52.549 | 40.365 | 0.02477 |
| 674.46 | 216378 | 5360.5 | 40.365 | 2142 | 53.074 | 40.365 | 0.02477 |
| 681.20 | 218541 | 5414.1 | 40.365 | 2164 | 53.605 | 40.365 | 0.02477 |
| 688.02 | 220727 | 5468.2 | 40.365 | 2185 | 54.141 | 40.365 | 0.02477 |
| 694.90 | 222934 | 5522.9 | 40.365 | 2207 | 54.682 | 40.365 | 0.02477 |
| 701.85 | 225163 | 5578.2 | 40.365 | 2229 | 55.229 | 40.365 | 0.02477 |
| 708.86 | 227415 | 5633.9 | 40.365 | 2252 | 55.782 | 40.365 | 0.02477 |
| 715.95 | 229689 | 5690.3 | 40.365 | 2274 | 56.339 | 40.365 | 0.02477 |
| 723.11 | 231986 | 5747.2 | 40.365 | 2297 | 56.903 | 40.365 | 0.02477 |
| 730.34 | 234306 | 5804.7 | 40.365 | 2320 | 57.472 | 40.365 | 0.02477 |
| 737.65 | 236649 | 5862.7 | 40.365 | 2343 | 58.047 | 40.365 | 0.02477 |
| 745.02 | 239016 | 5921.3 | 40.365 | 2366 | 58.627 | 40.365 | 0.02477 |
| 752.47 | 241406 | 5980.5 | 40.365 | 2390 | 59.213 | 40.365 | 0.02477 |
| 760.00 | 243820 | 6040.3 | 40.365 | 2414 | 59.805 | 40.365 | 0.02477 |
| 767.60 | 246258 | 6100.7 | 40.365 | 2438 | 60.403 | 40.365 | 0.02477 |
| 775.27 | 248721 | 6161.8 | 40.365 | 2463 | 61.007 | 40.365 | 0.02477 |
| 783.03 | 251208 | 6223.4 | 40.365 | 2487 | 61.618 | 40.365 | 0.02477 |
| 790.86 | 253720 | 6285.6 | 40.365 | 2512 | 62.234 | 40.365 | 0.02477 |
| 798.77 | 256257 | 6348.5 | 40.365 | 2537 | 62.856 | 40.365 | 0.02477 |
| 806.75 | 258820 | 6411.9 | 40.365 | 2563 | 63.485 | 40.365 | 0.02477 |
| 814.82 | 261408 | 6476.1 | 40.365 | 2588 | 64.119 | 40.365 | 0.02477 |
| 822.97 | 264022 | 6540.8 | 40.365 | 2614 | 64.761 | 40.365 | 0.02477 |
| 831.20 | 266662 | 6606.2 | 40.365 | 2640 | 65.408 | 40.365 | 0.02477 |
| 839.51 | 269329 | 6672.3 | 40.365 | 2667 | 66.062 | 40.365 | 0.02477 |
| 847.91 | 272022 | 6739.0 | 40.365 | 2693 | 66.723 | 40.365 | 0.02477 |
| 856.38 | 274742 | 6806.4 | 40.365 | 2720 | 67.390 | 40.365 | 0.02477 |
| 864.95 | 277490 | 6874.5 | 40.365 | 2747 | 68.064 | 40.365 | 0.02477 |
| 873.60 | 280265 | 6943.2 | 40.365 | 2775 | 68.745 | 40.365 | 0.02477 |
| 882.33 | 283067 | 7012.7 | 40.365 | 2803 | 69.432 | 40.365 | 0.02477 |
| 891.16 | 285898 | 7082.8 | 40.365 | 2831 | 70.127 | 40.365 | 0.02477 |
| 900.07 | 288757 | 7153.6 | 40.365 | 2859 | 70.828 | 40.365 | 0.02477 |
| 909.07 | 291644 | 7225.1 | 40.365 | 2888 | 71.536 | 40.365 | 0.02477 |
| 918.16 | 294561 | 7297.4 | 40.365 | 2916 | 72.251 | 40.365 | 0.02477 |
| 927.34 | 297506 | 7370.4 | 40.365 | 2946 | 72.974 | 40.365 | 0.02477 |
| 936.62 | 300481 | 7444.1 | 40.365 | 2975 | 73.704 | 40.365 | 0.02477 |
| 945.98 | 303486 | 7518.5 | 40.365 | 3005 | 74.441 | 40.365 | 0.02477 |
| 955.44 | 306521 | 7593.7 | 40.365 | 3035 | 75.185 | 40.365 | 0.02477 |
| 965.00 | 309586 | 7669.6 | 40.365 | 3065 | 75.937 | 40.365 | 0.02477 |
| 974.65 | 312682 | 7746.3 | 40.365 | 3096 | 76.696 | 40.365 | 0.02477 |

Data source: KEWT database, 7.13–6, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table BF-1 France: Fundamental endogenous ratios

| FRANCE | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|--------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|-------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r^{*PR} = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.1032 | 0.5752 | 0.6473 | 1.2944 | 0.0302 | 1.8592 | 0.0797 | 0.0651 | 0.0839 |
| 1961 | 0.0980 | 0.5770 | 0.6480 | 1.2946 | 0.0289 | 1.8405 | 0.0757 | 0.0576 | 0.0811 |
| 1962 | 0.1064 | 0.6173 | 0.6652 | 1.3005 | 0.0218 | 2.4523 | 0.0818 | 0.0439 | 0.0929 |
| 1963 | 0.1055 | 0.5297 | 0.6316 | 1.2885 | 0.0245 | 2.5106 | 0.0819 | 0.0103 | 0.1023 |
| 1964 | 0.0945 | 0.4787 | 0.6178 | 1.2844 | 0.0392 | 1.4905 | 0.0736 | 0.0275 | 0.0867 |
| 1965 | 0.0939 | 0.4937 | 0.6233 | 1.2903 | 0.0357 | 1.5908 | 0.0728 | 0.0139 | 0.0896 |
| 1966 | 0.0935 | 0.4884 | 0.6254 | 1.2997 | 0.0338 | 1.6566 | 0.0719 | 0.0009 | 0.0918 |
| 1967 | 0.0945 | 0.4524 | 0.6259 | 1.3255 | 0.0363 | 1.5568 | 0.0713 | (0.0283) | 0.0994 |
| 1968 | 0.0925 | 0.4123 | 0.6181 | 1.3271 | 0.0405 | 1.4109 | 0.0697 | (0.0141) | 0.0925 |
| 1969 | 0.0927 | 0.3990 | 0.6192 | 1.3394 | 0.0372 | 1.5341 | 0.0692 | 0.0774 | 0.0672 |
| 1970 | 0.0929 | 0.3779 | 0.6074 | 1.3119 | 0.0367 | 1.6347 | 0.0708 | 0.0662 | 0.0718 |
| 1971 | 0.0927 | 0.4475 | 0.6018 | 1.2562 | 0.0354 | 1.7347 | 0.0738 | 0.0125 | 0.0868 |
| 1972 | 0.0952 | 0.4753 | 0.5933 | 1.2192 | 0.0347 | 1.8786 | 0.0781 | (0.0128) | 0.0987 |
| 1973 | 0.0927 | 0.4808 | 0.5738 | 1.1669 | 0.0477 | 1.4446 | 0.0794 | (0.0010) | 0.0995 |
| 1974 | 0.1048 | 0.4706 | 0.5603 | 1.1370 | 0.0494 | 1.6648 | 0.0922 | (0.0823) | 0.1378 |
| 1975 | 0.1072 | 1.1822 | 0.5222 | 0.9839 | 0.0401 | 2.4452 | 0.1089 | (0.2902) | 0.2154 |
| 1976 | 0.0942 | 7.9054 | 0.5030 | 0.9201 | 0.0478 | 1.9456 | 0.1024 | (0.3799) | 0.2129 |
| 1977 | 0.0927 | (4.9706) | 0.4958 | 0.9038 | 0.0528 | 1.7849 | 0.1025 | (0.3935) | 0.1886 |
| 1978 | 0.0934 | (3.1656) | 0.4925 | 0.8828 | 0.0502 | 1.9184 | 0.1058 | (0.3910) | 0.1876 |
| 1979 | 0.0924 | (2.3881) | 0.4885 | 0.8552 | 0.0515 | 1.8791 | 0.1081 | (0.3925) | 0.1909 |
| 1980 | 0.0936 | 4.0433 | 0.5178 | 0.8055 | 0.0365 | 2.3890 | 0.1162 | (0.7078) | 0.2208 |
| 1981 | 0.0985 | (0.8817) | 0.4672 | 0.7809 | 0.0267 | 4.1978 | 0.1261 | (1.0887) | 0.2356 |
| 1982 | 0.1011 | (0.4878) | 0.4567 | 0.7723 | 0.0306 | 3.9348 | 0.1309 | (2.6154) | 0.2297 |
| 1983 | 0.1021 | (0.9359) | 0.4659 | 0.7674 | 0.0323 | 3.6260 | 0.1331 | (19.4305) | 0.2249 |
| 1984 | 0.1032 | (2.0705) | 0.4806 | 0.7882 | 0.0344 | 3.2456 | 0.1310 | 2.2625 | 0.2105 |
| 1985 | 0.0966 | (2.6764) | 0.4840 | 0.7902 | 0.0368 | 2.7961 | 0.1222 | 1.1311 | 0.1863 |
| 1986 | 0.1254 | (28.4983) | 0.4980 | 0.7936 | 0.0238 | 5.3143 | 0.1580 | 0.6873 | 0.2139 |
| 1987 | 0.1142 | (4.6924) | 0.4894 | 0.7858 | 0.0342 | 3.4826 | 0.1454 | 0.4310 | 0.1870 |
| 1988 | 0.1182 | (3.3492) | 0.4870 | 0.7976 | 0.0461 | 2.7023 | 0.1482 | 0.2675 | 0.1710 |
| 1989 | 0.1148 | (13.7530) | 0.4968 | 0.8278 | 0.0499 | 2.3282 | 0.1386 | 0.2039 | 0.1527 |
| 1990 | 0.1222 | (9.8919) | 0.4966 | 0.8628 | 0.0432 | 2.8666 | 0.1416 | (0.1615) | 0.0867 |
| 1991 | 0.1450 | 2.5084 | 0.5216 | 0.8777 | 0.0247 | 5.3734 | 0.1651 | (0.0311) | 0.1339 |
| 1992 | 0.1692 | 1.7531 | 0.5441 | 0.8754 | 0.0145 | 9.8049 | 0.1933 | 0.3189 | 0.2118 |
| 1993 | 0.1730 | 1.7484 | 0.5498 | 0.8611 | 0.0135 | 10.4582 | 0.2009 | 0.4305 | 0.2297 |
| 1994 | 0.1508 | 2.1132 | 0.5381 | 0.8437 | 0.0139 | 9.3168 | 0.1788 | 0.4030 | 0.2020 |
| 1995 | 0.1314 | 4.1214 | 0.5136 | 0.8435 | 0.0284 | 4.3793 | 0.1558 | 0.4846 | 0.1764 |
| 1996 | 0.1281 | 3.9229 | 0.5140 | 0.8488 | 0.0287 | 4.2129 | 0.1509 | 0.5677 | 0.1642 |
| 1997 | 0.1099 | 3.6965 | 0.5154 | 0.8471 | 0.0324 | 3.1882 | 0.1298 | (0.8951) | 0.1275 |
| 1998 | 0.1028 | 5.5092 | 0.5079 | 0.8673 | 0.0379 | 2.6293 | 0.1185 | 1.7908 | 0.0988 |
| 1999 | 0.1244 | 1.8469 | 0.5281 | 0.9092 | 0.0362 | 3.0728 | 0.1369 | 1.2075 | 0.1170 |
| 2000 | 0.1341 | 1.4138 | 0.5383 | 0.9385 | 0.0346 | 3.3289 | 0.1429 | 1.0402 | 0.1202 |
| 2001 | 0.1360 | 1.1630 | 0.5525 | 0.9663 | 0.0338 | 3.2607 | 0.1407 | 0.6806 | 0.1230 |
| 2002 | 0.1334 | 1.0324 | 0.5573 | 0.9926 | 0.0369 | 2.8678 | 0.1344 | (0.0124) | 0.1414 |
| 2003 | 0.1303 | 0.9350 | 0.5648 | 1.0171 | 0.0362 | 2.7764 | 0.1281 | (0.0696) | 0.1425 |
| 2004 | 0.1336 | 0.8355 | 0.5762 | 1.0518 | 0.0366 | 2.6819 | 0.1270 | (0.0879) | 0.1465 |
| 2005 | 0.1450 | 0.7532 | 0.5917 | 1.0959 | 0.0353 | 2.8377 | 0.1323 | (0.0971) | 0.1590 |
| 2006 | 0.1552 | 0.7297 | 0.6092 | 1.1274 | 0.0294 | 3.3868 | 0.1377 | (0.1143) | 0.1670 |
| 2007 | 0.1487 | 0.6937 | 0.6124 | 1.1504 | 0.0310 | 3.0345 | 0.1293 | (0.0533) | 0.1519 |
| 2008 | 0.1556 | 0.6665 | 0.6288 | 1.1921 | 0.0265 | 3.4671 | 0.1305 | (0.2375) | 0.1769 |
| 2009 | 0.1549 | 0.6239 | 0.6501 | 1.2623 | 0.0221 | 3.7782 | 0.1227 | (0.6406) | 0.2237 |
| 2010 | 0.1513 | 0.5904 | 0.6450 | 1.2772 | 0.0267 | 3.1213 | 0.1185 | (0.6104) | 0.2132 |
| 2011 | 0.1405 | 0.5476 | 0.6477 | 1.3172 | 0.0272 | 2.8100 | 0.1067 | (0.6110) | 0.1902 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r^{*PR} = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of
International Financial Statistics Yearbook, IMF

Table BF–2 France: Neutrality of the financial/market assets to the real assets

| FRANCE | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|--------|--------------------------------|--------|---------------------|-------------------------------------|-------------------------------------|--|---|-------------------|--|
| | mK=M/K | mY=M/Y | m ₁ =M/Π | Γ _(DEBT) -Γ [*] | Γ _(DEBT) /Γ [*] | e _(US) /y ^{**} | r [*] -r ^{*(US)} | e _(US) | e _(US) /e [*] (US) |
| | M2 is used for money supply, M | | | | | y ^{**} =y [*] /y [*] (US) | e _(US) =e _(US) (Γ [*] -r _(US)) | | |
| 1960 | 0.3475 | 0.4498 | 4.3593 | (0.0220) | 0.7238 | 6.6258 | 0.0493 | 2.8531 | 0.9827 |
| 1961 | 0.3345 | 0.4330 | 4.4190 | (0.0129) | 0.8296 | 5.9344 | 0.0455 | 2.8536 | 0.9841 |
| 1962 | 0.3109 | 0.4043 | 3.8014 | (0.0228) | 0.7214 | 7.4630 | 0.0498 | 2.8523 | 0.9825 |
| 1963 | 0.3207 | 0.4133 | 3.9180 | (0.0276) | 0.6633 | 6.2433 | 0.0494 | 2.8193 | 0.9825 |
| 1964 | 0.3114 | 0.4000 | 4.2309 | (0.0138) | 0.8125 | 6.5352 | 0.0397 | 2.8298 | 0.9860 |
| 1965 | 0.3101 | 0.4002 | 4.2617 | (0.0072) | 0.9014 | 7.8506 | 0.0365 | 2.8393 | 0.9872 |
| 1966 | 0.2991 | 0.3887 | 4.1589 | (0.0025) | 0.9650 | 8.6141 | 0.0340 | 2.8242 | 0.9880 |
| 1967 | 0.3070 | 0.4069 | 4.3049 | (0.0033) | 0.9535 | 7.5076 | 0.0356 | 2.4419 | 0.9854 |
| 1968 | 0.3028 | 0.4019 | 4.3428 | 0.0058 | 1.0828 | 7.8517 | 0.0332 | 2.4176 | 0.9863 |
| 1969 | 0.2894 | 0.3876 | 4.1812 | 0.0212 | 1.3061 | 8.2480 | 0.0315 | 2.4322 | 0.9870 |
| 1970 | 0.2942 | 0.3859 | 4.1539 | 0.0214 | 1.3020 | 6.8914 | 0.0328 | 2.4265 | 0.9865 |
| 1971 | 0.3073 | 0.3861 | 4.1645 | 0.0152 | 1.2060 | 6.3193 | 0.0346 | 2.5871 | 0.9866 |
| 1972 | 0.3636 | 0.4432 | 4.6575 | 0.0109 | 1.1402 | 5.7121 | 0.0373 | 2.3854 | 0.9844 |
| 1973 | 0.4205 | 0.4907 | 5.2939 | 0.0277 | 1.3482 | 5.2260 | 0.0348 | 2.3580 | 0.9853 |
| 1974 | 0.4283 | 0.4869 | 4.6463 | 0.0555 | 1.6024 | 4.3504 | 0.0480 | 2.3965 | 0.9800 |
| 1975 | 0.4233 | 0.4165 | 3.8858 | 0.0350 | 1.3210 | 7481.0545 | 0.0625 | 2.0860 | 0.9700 |
| 1976 | 0.4228 | 0.3890 | 4.1289 | 0.0419 | 1.4090 | 23.0665 | 0.0542 | 1.7566 | 0.9692 |
| 1977 | 0.4094 | 0.3700 | 3.9920 | 0.0248 | 1.2414 | 18.3450 | 0.0525 | 1.9585 | 0.9732 |
| 1978 | 0.4164 | 0.3676 | 3.9339 | 0.0189 | 1.1781 | 18.3276 | 0.0516 | 2.0861 | 0.9753 |
| 1979 | 0.4133 | 0.3534 | 3.8245 | 0.0218 | 1.2021 | 18.2624 | 0.0510 | 2.2750 | 0.9776 |
| 1980 | 0.4436 | 0.3573 | 3.8184 | 0.0217 | 1.1870 | 34.5628 | 0.0619 | 2.4469 | 0.9747 |
| 1981 | 0.5303 | 0.4141 | 4.2062 | 0.0213 | 1.1691 | 11.6140 | 0.0681 | 1.9761 | 0.9656 |
| 1982 | 0.5476 | 0.4229 | 4.1843 | (0.0021) | 0.9842 | 7.3952 | 0.0754 | 1.6899 | 0.9554 |
| 1983 | 0.5690 | 0.4366 | 4.2755 | (0.0250) | 0.8123 | 8.1829 | 0.0747 | 1.5253 | 0.9510 |
| 1984 | 0.5858 | 0.4618 | 4.4725 | (0.0241) | 0.8161 | 8.6914 | 0.0744 | 1.2309 | 0.9395 |
| 1985 | 0.5944 | 0.4697 | 4.8644 | (0.0160) | 0.8691 | 11.1170 | 0.0646 | 1.5091 | 0.9572 |
| 1986 | 0.6827 | 0.5418 | 4.3199 | (0.0593) | 0.6245 | 14.1717 | 0.0951 | 1.5696 | 0.9394 |
| 1987 | 1.1670 | 0.9170 | 8.0268 | (0.0506) | 0.6520 | 14.7850 | 0.0815 | 1.9530 | 0.9583 |
| 1988 | 1.2152 | 0.9693 | 8.1987 | (0.0546) | 0.6315 | 12.8009 | 0.0845 | 1.8940 | 0.9554 |
| 1989 | 1.2777 | 1.0577 | 9.2170 | (0.0428) | 0.6911 | 13.0558 | 0.0759 | 1.6814 | 0.9549 |
| 1990 | 1.1337 | 0.9782 | 8.0076 | (0.0308) | 0.7826 | 9.3947 | 0.0432 | 1.9712 | 0.9781 |
| 1991 | 1.1286 | 0.9906 | 6.8342 | (0.0659) | 0.6007 | 18.2490 | 0.0760 | 1.9467 | 0.9610 |
| 1992 | 1.1225 | 0.9826 | 5.8064 | (0.1021) | 0.4718 | 43.3748 | 0.0967 | 1.6087 | 0.9399 |
| 1993 | 1.1380 | 0.9800 | 5.6646 | (0.1222) | 0.3917 | 69.7210 | 0.1141 | 1.5953 | 0.9285 |
| 1994 | 1.1440 | 0.9653 | 6.3999 | (0.0983) | 0.4503 | 38.3421 | 0.0951 | 1.6576 | 0.9426 |
| 1995 | 1.1703 | 0.9872 | 7.5107 | (0.0732) | 0.5301 | 10.7399 | 0.0973 | 1.6473 | 0.9410 |
| 1996 | 1.1925 | 1.0122 | 7.9023 | (0.0699) | 0.5367 | 13.0020 | 0.0947 | 1.7927 | 0.9472 |
| 1997 | 1.1616 | 0.9840 | 8.9502 | (0.0589) | 0.5463 | 13.9913 | 0.0776 | 1.7314 | 0.9552 |
| 1998 | 1.1483 | 0.9959 | 9.6895 | (0.0640) | 0.4599 | 12.2985 | 0.0682 | 1.7317 | 0.9606 |
| 1999 | 1.0960 | 0.9966 | 8.0079 | (0.0899) | 0.3434 | 45.0985 | 0.0873 | 1.7037 | 0.9488 |
| 2000 | 1.0930 | 1.0258 | 7.6487 | (0.0961) | 0.3275 | 281.7840 | 0.0926 | 1.5848 | 0.9416 |
| 2001 | 1.0733 | 1.0371 | 7.6274 | (0.0906) | 0.3560 | ##### | 0.0818 | 1.5322 | 0.9466 |
| 2002 | 1.0521 | 1.0443 | 7.8307 | (0.0852) | 0.3662 | 0.0000 | 0.0598 | 1.6716 | 0.9642 |
| 2003 | 1.0356 | 1.0533 | 8.0834 | (0.0823) | 0.3575 | 0.0134 | 0.0466 | 1.8313 | 0.9746 |
| 2004 | 1.0366 | 1.0903 | 8.1631 | (0.0777) | 0.3882 | 0.2077 | 0.0440 | 1.9754 | 0.9777 |
| 2005 | 1.0756 | 1.1788 | 8.1272 | (0.0877) | 0.3370 | 0.5088 | 0.0417 | 1.7636 | 0.9763 |
| 2006 | 1.1328 | 1.2772 | 8.2287 | (0.0940) | 0.3174 | 0.9470 | 0.0608 | 2.0238 | 0.9700 |
| 2007 | 1.1777 | 1.3548 | 9.1081 | (0.0789) | 0.3898 | 1.2156 | 0.0666 | 2.0700 | 0.9678 |
| 2008 | 1.2806 | 1.5266 | 9.8122 | (0.0847) | 0.3509 | 1.0886 | 0.0603 | 1.5181 | 0.9603 |
| 2009 | 0.9669 | 1.2205 | 7.8793 | (0.0862) | 0.2974 | 0.2564 | 0.0152 | 1.6347 | 0.9907 |
| 2010 | 0.9285 | 1.1859 | 7.8362 | (0.0824) | 0.3047 | 0.8462 | 0.0225 | 1.5880 | 0.9858 |
| 2011 | 0.8676 | 1.1428 | 8.1348 | (0.0755) | 0.2925 | 1.0464 | 0.0111 | 1.5372 | 0.9928 |
| | mK=M/K | mY=M/Y | m ₁ =M/Π | Γ _(DEBT) -Γ [*] | Γ _(DEBT) /Γ [*] | e _(US) /y ^{**} | r [*] -r ^{*(US)} | e _(US) | e _(US) /e [*] (US) |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BG–1 Germany: Fundamental endogenous ratios

| GERMANY | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|---------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.1030 | 0.3654 | 0.6301 | 1.4024 | 0.0527 | 1.1468 | 0.0734 | 0.1450 | 0.0611 |
| 1961 | 0.1085 | 0.3730 | 0.6379 | 1.4262 | 0.0498 | 1.2377 | 0.0761 | 0.1411 | 0.0648 |
| 1962 | 0.1058 | 0.3612 | 0.6414 | 1.4500 | 0.0486 | 1.2170 | 0.0730 | 0.1761 | 0.0539 |
| 1963 | 0.1056 | 0.3434 | 0.6484 | 1.4945 | 0.0482 | 1.1885 | 0.0707 | 0.1299 | 0.0591 |
| 1964 | 0.1320 | 0.3984 | 0.6622 | 1.4994 | 0.0539 | 1.2491 | 0.0880 | 0.1290 | 0.0796 |
| 1965 | 0.1244 | 0.3929 | 0.6684 | 1.5305 | 0.0555 | 1.1114 | 0.0813 | 0.1672 | 0.0622 |
| 1966 | 0.1117 | 0.3997 | 0.6771 | 1.5599 | 0.0499 | 1.0660 | 0.0716 | 0.1825 | 0.0460 |
| 1967 | 0.1093 | 0.3581 | 0.6715 | 1.5822 | 0.0479 | 1.1169 | 0.0691 | 0.1507 | 0.0495 |
| 1968 | 0.1004 | 0.2971 | 0.6669 | 1.6289 | 0.0455 | 1.1027 | 0.0616 | 0.1117 | 0.0501 |
| 1969 | 0.1023 | 0.3387 | 0.6790 | 1.6413 | 0.0456 | 1.0611 | 0.0623 | 0.1065 | 0.0522 |
| 1970 | 0.1232 | 0.3649 | 0.6802 | 1.6147 | 0.0528 | 1.0980 | 0.0763 | 0.1077 | 0.0683 |
| 1971 | 0.1041 | 0.3598 | 0.6796 | 1.6184 | 0.0401 | 1.2249 | 0.0643 | 0.0398 | 0.0706 |
| 1972 | 0.1011 | 0.2582 | 0.6524 | 1.5951 | 0.0403 | 1.3363 | 0.0634 | 0.0367 | 0.0703 |
| 1973 | 0.1061 | 0.2840 | 0.6464 | 1.5400 | 0.0377 | 1.5401 | 0.0689 | 0.0396 | 0.0767 |
| 1974 | 0.0972 | 0.2696 | 0.6347 | 1.4972 | 0.0489 | 1.1437 | 0.0649 | 0.0169 | 0.0783 |
| 1975 | 0.1024 | 0.3363 | 0.6269 | 1.4110 | 0.0508 | 1.2002 | 0.0726 | 0.0845 | 0.0691 |
| 1976 | 0.0925 | 0.3417 | 0.6190 | 1.3765 | 0.0491 | 1.1580 | 0.0672 | 0.1086 | 0.0548 |
| 1977 | 0.1042 | 0.3901 | 0.6245 | 1.3637 | 0.0368 | 1.7008 | 0.0764 | 0.0137 | 0.0951 |
| 1978 | 0.1053 | 0.4776 | 0.6199 | 1.2911 | 0.0257 | 2.5100 | 0.0815 | (0.0988) | 0.1379 |
| 1979 | 0.1023 | 0.3833 | 0.5882 | 1.2460 | 0.0388 | 1.8470 | 0.0821 | (0.1816) | 0.1662 |
| 1980 | 0.1033 | 0.4657 | 0.5841 | 1.1990 | 0.0451 | 1.6294 | 0.0862 | (0.2056) | 0.1816 |
| 1981 | 0.7376 | 0.8481 | 0.8283 | 1.2699 | (0.0690) | (2.2171) | 0.5808 | (0.7367) | 1.0362 |
| 1982 | 0.1261 | (15.9967) | 0.4975 | 0.8431 | 0.0421 | 3.0254 | 0.1496 | (0.3371) | 0.3176 |
| 1983 | 0.1028 | (1.9100) | 0.4844 | 0.8339 | 0.0419 | 2.6125 | 0.1233 | (0.3547) | 0.2880 |
| 1984 | 0.0931 | (1.6088) | 0.4825 | 0.8330 | 0.0454 | 2.1996 | 0.1118 | (0.2168) | 0.2249 |
| 1985 | 0.0937 | (6.0749) | 0.4951 | 0.8698 | 0.0533 | 1.7921 | 0.1077 | (0.1521) | 0.1973 |
| 1986 | 0.0938 | (298.7169) | 0.4999 | 0.8825 | 0.0431 | 2.1784 | 0.1063 | (0.0437) | 0.1578 |
| 1987 | 0.0929 | 2.0139 | 0.5235 | 0.9092 | 0.0476 | 1.7772 | 0.1022 | 0.1407 | 0.0903 |
| 1988 | 0.0926 | 1.3922 | 0.5319 | 0.9511 | 0.0543 | 1.4999 | 0.0974 | 0.2316 | 0.0583 |
| 1989 | 0.0951 | 0.9791 | 0.5471 | 1.0039 | 0.0648 | 1.2165 | 0.0948 | 0.2820 | 0.0456 |
| 1990 | 0.0940 | 0.8009 | 0.5668 | 1.0550 | 0.0648 | 1.1087 | 0.0891 | 0.1937 | 0.0616 |
| 1991 | 0.0925 | 0.6999 | 0.5787 | 1.0999 | 0.0504 | 1.3360 | 0.0841 | 0.0723 | 0.0874 |
| 1992 | 0.0963 | 0.5240 | 0.6018 | 1.2173 | 0.0451 | 1.4135 | 0.0791 | (0.1186) | 0.1314 |
| 1993 | 0.0983 | 0.4959 | 0.6239 | 1.2905 | 0.0340 | 1.7454 | 0.0762 | (0.2336) | 0.1853 |
| 1994 | 0.0929 | 0.5070 | 0.6372 | 1.3199 | 0.0366 | 1.4441 | 0.0704 | (0.1769) | 0.1735 |
| 1995 | 0.1246 | 0.5043 | 0.6086 | 1.2445 | 0.0447 | 1.7924 | 0.1001 | (0.1849) | 0.2162 |
| 1996 | 0.1141 | 0.3788 | 0.6107 | 1.3227 | 0.0414 | 1.7546 | 0.0863 | (0.0656) | 0.1437 |
| 1997 | 0.1047 | 0.2631 | 0.6038 | 1.3642 | 0.0318 | 2.1615 | 0.0768 | 0.0511 | 0.0867 |
| 1998 | 0.1066 | 0.2555 | 0.6088 | 1.3900 | 0.0327 | 2.0973 | 0.0767 | 0.1150 | 0.0607 |
| 1999 | 0.1125 | 0.2640 | 0.6113 | 1.3957 | 0.0341 | 2.0960 | 0.0806 | 0.1184 | 0.0644 |
| 2000 | 0.1220 | 0.3131 | 0.6236 | 1.4144 | 0.0365 | 2.0184 | 0.0863 | 0.1455 | 0.0621 |
| 2001 | 0.1211 | 0.3720 | 0.6447 | 1.4539 | 0.0318 | 2.0992 | 0.0833 | 0.0854 | 0.0825 |
| 2002 | 0.1119 | 0.3690 | 0.6491 | 1.4741 | 0.0270 | 2.2404 | 0.0759 | 0.0646 | 0.0804 |
| 2003 | 0.1097 | 0.4854 | 0.6794 | 1.4718 | 0.0181 | 2.8649 | 0.0745 | 0.0534 | 0.0836 |
| 2004 | 0.1244 | 0.4608 | 0.6733 | 1.4767 | 0.0226 | 2.6749 | 0.0843 | 0.0673 | 0.0924 |
| 2005 | 0.1303 | 0.4641 | 0.6770 | 1.4866 | 0.0219 | 2.8429 | 0.0877 | 0.0729 | 0.0949 |
| 2006 | 0.1519 | 0.4480 | 0.6679 | 1.4706 | 0.0241 | 3.1393 | 0.1033 | 0.0772 | 0.1163 |
| 2007 | 0.1710 | 0.4826 | 0.6764 | 1.4643 | 0.0256 | 3.1954 | 0.1168 | 0.1295 | 0.1104 |
| 2008 | 0.1547 | 0.5601 | 0.7132 | 1.4930 | 0.0185 | 3.3646 | 0.1036 | 0.1173 | 0.0970 |
| 2009 | 0.1007 | 0.5742 | 0.7457 | 1.5809 | 0.0103 | 3.3290 | 0.0637 | (0.0990) | 0.1424 |
| 2010 | 0.1204 | 0.5044 | 0.7043 | 1.5372 | 0.0186 | 2.7142 | 0.0783 | 0.0386 | 0.0975 |
| 2011 | 0.1335 | 0.4636 | 0.6904 | 1.5375 | 0.0221 | 2.7041 | 0.0869 | 0.0645 | 0.0972 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BG–2 Germany: Neutrality of the financial/market assets to the real assets

| GERMANY | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|---------|--------------------------------|--------|---------------------|----------------------------|----------------------------|----------------------|---|--------------|-----------------------|
| | mK=M/K | mY=M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*(US)$ | $e^*_{(US)}=e_{(US)}\Gamma^*(\Gamma-r^*(US))$ | | |
| 1960 | 0.4298 | 0.6027 | 5.8513 | (0.0215) | 0.7066 | 0.6961 | 0.0431 | 5.2231 | 0.9918 |
| 1961 | 0.4052 | 0.5779 | 5.3252 | (0.0228) | 0.7005 | 0.5891 | 0.0458 | 5.2308 | 0.9912 |
| 1962 | 0.5133 | 0.7442 | 7.0312 | (0.0231) | 0.6836 | 0.6881 | 0.0410 | 5.2290 | 0.9922 |
| 1963 | 0.5060 | 0.7563 | 7.1592 | (0.0214) | 0.6975 | 0.7275 | 0.0382 | 5.2382 | 0.9927 |
| 1964 | 0.4863 | 0.7291 | 5.5255 | (0.0316) | 0.6409 | 0.6476 | 0.0541 | 5.2021 | 0.9896 |
| 1965 | 0.4559 | 0.6978 | 5.6106 | (0.0195) | 0.7605 | 0.7978 | 0.0449 | 5.2249 | 0.9914 |
| 1966 | 0.4439 | 0.6925 | 6.2015 | (0.0059) | 0.9178 | 0.9186 | 0.0336 | 5.2136 | 0.9935 |
| 1967 | 0.4562 | 0.7218 | 6.6025 | (0.0085) | 0.8771 | 0.8749 | 0.0334 | 5.1984 | 0.9936 |
| 1968 | 0.4654 | 0.7580 | 7.5522 | 0.0015 | 1.0240 | 0.9744 | 0.0250 | 5.2050 | 0.9952 |
| 1969 | 0.4455 | 0.7312 | 7.1458 | 0.0075 | 1.1195 | 0.9941 | 0.0247 | 5.1947 | 0.9952 |
| 1970 | 0.4222 | 0.6817 | 5.5332 | (0.0024) | 0.9685 | 0.7683 | 0.0383 | 5.2083 | 0.9926 |
| 1971 | 0.4283 | 0.6931 | 6.6577 | 0.0080 | 1.1240 | 0.7823 | 0.0252 | 4.8902 | 0.9949 |
| 1972 | 0.4439 | 0.7080 | 7.0016 | 0.0095 | 1.1500 | 0.8330 | 0.0226 | 4.7656 | 0.9953 |
| 1973 | 0.4661 | 0.7179 | 6.7647 | 0.0050 | 1.0724 | 0.8246 | 0.0242 | 4.6117 | 0.9947 |
| 1974 | 0.4622 | 0.6921 | 7.1215 | 0.0130 | 1.2002 | 0.7165 | 0.0208 | 4.1013 | 0.9949 |
| 1975 | 0.4652 | 0.6565 | 6.4111 | 0.0153 | 1.2113 | 0.6042 | 0.0261 | 4.4116 | 0.9941 |
| 1976 | 0.4482 | 0.6169 | 6.6720 | 0.0256 | 1.3815 | 0.6140 | 0.0189 | 4.1454 | 0.9954 |
| 1977 | 0.4550 | 0.6205 | 5.9561 | 0.0210 | 1.2750 | 0.6732 | 0.0263 | 4.6958 | 0.9944 |
| 1978 | 0.5089 | 0.6570 | 6.2412 | 0.0194 | 1.2375 | 0.5706 | 0.0273 | 4.3228 | 0.9937 |
| 1979 | 0.5475 | 0.6822 | 6.6676 | 0.0226 | 1.2751 | 0.5583 | 0.0250 | 4.1715 | 0.9940 |
| 1980 | 0.5516 | 0.6613 | 6.4019 | 0.0312 | 1.3626 | 0.4416 | 0.0319 | 4.4047 | 0.9928 |
| 1981 | 0.8247 | 1.0473 | 1.4199 | (0.4459) | 0.2323 | 0.0000 | 0.5228 | 6.0938 | 0.9142 |
| 1982 | 0.8002 | 0.6746 | 5.3502 | (0.0192) | 0.8719 | 4.4073 | 0.0941 | 7.3886 | 0.9873 |
| 1983 | 0.7727 | 0.6444 | 6.2664 | (0.0003) | 0.9975 | 3.5399 | 0.0649 | 8.0659 | 0.9919 |
| 1984 | 0.7412 | 0.6174 | 6.6316 | 0.0110 | 1.0988 | 3.9290 | 0.0552 | 9.0447 | 0.9939 |
| 1985 | 0.6547 | 0.5695 | 6.0764 | 0.0232 | 1.2149 | 4.1748 | 0.0501 | 7.6656 | 0.9935 |
| 1986 | 0.6552 | 0.5783 | 6.1661 | (0.0037) | 0.9655 | 4.0736 | 0.0434 | 6.8624 | 0.9937 |
| 1987 | 0.6067 | 0.5516 | 5.9383 | 0.0146 | 1.1433 | 10.9597 | 0.0383 | 5.8863 | 0.9935 |
| 1988 | 0.5599 | 0.5325 | 5.7482 | 0.0161 | 1.1653 | 107.9545 | 0.0337 | 6.1907 | 0.9946 |
| 1989 | 0.5267 | 0.5288 | 5.5580 | 0.0170 | 1.1797 | 0.0001 | 0.0320 | 6.2590 | 0.9949 |
| 1990 | 0.4425 | 0.4668 | 4.9654 | 0.0417 | 1.4677 | 0.0614 | (0.0092) | 5.6888 | 1.0016 |
| 1991 | 0.4048 | 0.4453 | 4.8118 | 0.0228 | 1.2706 | 0.1140 | (0.0051) | 5.5244 | 1.0009 |
| 1992 | 0.3862 | 0.4701 | 4.8839 | 0.0211 | 1.2672 | 0.2924 | (0.0175) | 7.0255 | 1.0025 |
| 1993 | 0.3768 | 0.4863 | 4.9453 | 0.0092 | 1.1208 | 0.5950 | (0.0106) | 8.2929 | 1.0013 |
| 1994 | 0.3643 | 0.4809 | 5.1779 | 0.0237 | 1.3374 | 0.7109 | (0.0133) | 7.4482 | 1.0018 |
| 1995 | 0.3506 | 0.4364 | 3.5031 | 0.0023 | 1.0230 | 0.2777 | 0.0415 | 6.6997 | 0.9938 |
| 1996 | 0.3360 | 0.4445 | 3.8960 | (0.0057) | 0.9345 | 0.4179 | 0.0300 | 6.9010 | 0.9956 |
| 1997 | 0.3419 | 0.4665 | 4.4541 | (0.0107) | 0.8610 | 0.6342 | 0.0246 | 7.9016 | 0.9969 |
| 1998 | 0.3521 | 0.4894 | 4.5905 | (0.0268) | 0.6506 | 0.7053 | 0.0264 | 8.0874 | 0.9967 |
| 1999 | 0.3620 | 0.5053 | 4.4932 | (0.0308) | 0.6181 | 0.8023 | 0.0310 | 8.5560 | 0.9964 |
| 2000 | 0.3496 | 0.4945 | 4.0526 | (0.0326) | 0.6225 | 0.8689 | 0.0360 | 9.5710 | 0.9962 |
| 2001 | 0.3479 | 0.5058 | 4.1773 | (0.0322) | 0.6136 | 0.9299 | 0.0244 | 10.6919 | 0.9977 |
| 2002 | 0.3400 | 0.5012 | 4.4809 | (0.0229) | 0.6984 | 0.7524 | 0.0013 | 8.8263 | 0.9998 |
| 2003 | 0.3424 | 0.5039 | 4.5951 | (0.0281) | 0.6228 | 0.6832 | (0.0070) | 7.1822 | 1.0010 |
| 2004 | 0.3338 | 0.4929 | 3.9608 | (0.0401) | 0.5245 | 0.6318 | 0.0013 | 6.6159 | 0.9998 |
| 2005 | 0.3540 | 0.5262 | 4.0382 | (0.0539) | 0.3856 | 0.7892 | (0.0030) | 7.9554 | 1.0004 |
| 2006 | 0.3837 | 0.5643 | 3.7162 | (0.0662) | 0.3593 | 0.6380 | 0.0264 | 6.8908 | 0.9962 |
| 2007 | 0.4028 | 0.5898 | 3.4496 | (0.0751) | 0.3571 | 0.5510 | 0.0541 | 6.4677 | 0.9916 |
| 2008 | 0.4373 | 0.6529 | 4.2208 | (0.0647) | 0.3755 | 0.8894 | 0.0334 | 7.8440 | 0.9957 |
| 2009 | 0.4369 | 0.6907 | 6.8563 | (0.0312) | 0.5101 | 0.1889 | (0.0438) | 7.0727 | 1.0062 |
| 2010 | 0.4411 | 0.6781 | 5.6327 | (0.0494) | 0.3690 | 0.4375 | (0.0177) | 6.6920 | 1.0026 |
| 2011 | 0.4461 | 0.6859 | 5.1363 | (0.0608) | 0.3005 | 0.4343 | (0.0087) | 6.8790 | 1.0013 |
| | mK=M/K | mY=M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BS-1 Sweden: Fundamental endogenous ratios

| SWEDEN | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|--------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.1030 | 0.3654 | 0.6301 | 1.4024 | 0.0527 | 1.1468 | 0.0734 | 0.1450 | 0.0611 |
| 1961 | 0.1085 | 0.3730 | 0.6379 | 1.4262 | 0.0498 | 1.2377 | 0.0761 | 0.1411 | 0.0648 |
| 1962 | 0.1058 | 0.3612 | 0.6414 | 1.4500 | 0.0486 | 1.2170 | 0.0730 | 0.1761 | 0.0539 |
| 1963 | 0.1056 | 0.3434 | 0.6484 | 1.4945 | 0.0482 | 1.1885 | 0.0707 | 0.1299 | 0.0591 |
| 1964 | 0.1320 | 0.3984 | 0.6622 | 1.4994 | 0.0539 | 1.2491 | 0.0880 | 0.1290 | 0.0796 |
| 1965 | 0.1244 | 0.3929 | 0.6684 | 1.5305 | 0.0555 | 1.1114 | 0.0813 | 0.1672 | 0.0622 |
| 1966 | 0.1117 | 0.3997 | 0.6771 | 1.5599 | 0.0499 | 1.0660 | 0.0716 | 0.1825 | 0.0460 |
| 1967 | 0.1093 | 0.3581 | 0.6715 | 1.5822 | 0.0479 | 1.1169 | 0.0691 | 0.1507 | 0.0495 |
| 1968 | 0.1004 | 0.2971 | 0.6669 | 1.6289 | 0.0455 | 1.1027 | 0.0616 | 0.1117 | 0.0501 |
| 1969 | 0.1023 | 0.3387 | 0.6790 | 1.6413 | 0.0456 | 1.0611 | 0.0623 | 0.1065 | 0.0522 |
| 1970 | 0.1232 | 0.3649 | 0.6802 | 1.6147 | 0.0528 | 1.0980 | 0.0763 | 0.1077 | 0.0683 |
| 1971 | 0.1041 | 0.3598 | 0.6796 | 1.6184 | 0.0401 | 1.2249 | 0.0643 | 0.0398 | 0.0706 |
| 1972 | 0.1011 | 0.2582 | 0.6524 | 1.5951 | 0.0403 | 1.3363 | 0.0634 | 0.0367 | 0.0703 |
| 1973 | 0.1061 | 0.2840 | 0.6464 | 1.5400 | 0.0377 | 1.5401 | 0.0689 | 0.0396 | 0.0767 |
| 1974 | 0.0972 | 0.2696 | 0.6347 | 1.4972 | 0.0489 | 1.1437 | 0.0649 | 0.0169 | 0.0783 |
| 1975 | 0.1024 | 0.3363 | 0.6269 | 1.4110 | 0.0508 | 1.2002 | 0.0726 | 0.0845 | 0.0691 |
| 1976 | 0.0925 | 0.3417 | 0.6190 | 1.3765 | 0.0491 | 1.1580 | 0.0672 | 0.1086 | 0.0548 |
| 1977 | 0.1042 | 0.3901 | 0.6245 | 1.3637 | 0.0368 | 1.7008 | 0.0764 | 0.0137 | 0.0951 |
| 1978 | 0.1053 | 0.4776 | 0.6199 | 1.2911 | 0.0257 | 2.5100 | 0.0815 | (0.0988) | 0.1379 |
| 1979 | 0.1023 | 0.3833 | 0.5882 | 1.2460 | 0.0388 | 1.8470 | 0.0821 | (0.1816) | 0.1662 |
| 1980 | 0.1033 | 0.4657 | 0.5841 | 1.1990 | 0.0451 | 1.6294 | 0.0862 | (0.2056) | 0.1816 |
| 1981 | 0.7376 | 0.8481 | 0.8283 | 1.2699 | (0.0690) | (2.2171) | 0.5808 | (0.7367) | 1.0362 |
| 1982 | 0.1261 | (15.9967) | 0.4975 | 0.8431 | 0.0421 | 3.0254 | 0.1496 | (0.3371) | 0.3176 |
| 1983 | 0.1028 | (1.9100) | 0.4844 | 0.8339 | 0.0419 | 2.6125 | 0.1233 | (0.3547) | 0.2880 |
| 1984 | 0.0931 | (1.6088) | 0.4825 | 0.8330 | 0.0454 | 2.1996 | 0.1118 | (0.2168) | 0.2249 |
| 1985 | 0.0937 | (6.0749) | 0.4951 | 0.8698 | 0.0533 | 1.7921 | 0.1077 | (0.1521) | 0.1973 |
| 1986 | 0.0938 | (298.7169) | 0.4999 | 0.8825 | 0.0431 | 2.1784 | 0.1063 | (0.0437) | 0.1578 |
| 1987 | 0.0929 | 2.0139 | 0.5235 | 0.9092 | 0.0476 | 1.7772 | 0.1022 | 0.1407 | 0.0903 |
| 1988 | 0.0926 | 1.3922 | 0.5319 | 0.9511 | 0.0543 | 1.4999 | 0.0974 | 0.2316 | 0.0583 |
| 1989 | 0.0951 | 0.9791 | 0.5471 | 1.0039 | 0.0648 | 1.2165 | 0.0948 | 0.2820 | 0.0456 |
| 1990 | 0.0940 | 0.8009 | 0.5668 | 1.0550 | 0.0648 | 1.1087 | 0.0891 | 0.1937 | 0.0616 |
| 1991 | 0.0925 | 0.6999 | 0.5787 | 1.0999 | 0.0504 | 1.3360 | 0.0841 | 0.0723 | 0.0874 |
| 1992 | 0.0963 | 0.5240 | 0.6018 | 1.2173 | 0.0451 | 1.4135 | 0.0791 | (0.1186) | 0.1314 |
| 1993 | 0.0983 | 0.4959 | 0.6239 | 1.2905 | 0.0340 | 1.7454 | 0.0762 | (0.2336) | 0.1853 |
| 1994 | 0.0929 | 0.5070 | 0.6372 | 1.3199 | 0.0366 | 1.4441 | 0.0704 | (0.1769) | 0.1735 |
| 1995 | 0.1246 | 0.5043 | 0.6086 | 1.2445 | 0.0447 | 1.7924 | 0.1001 | (0.1849) | 0.2162 |
| 1996 | 0.1141 | 0.3788 | 0.6107 | 1.3227 | 0.0414 | 1.7546 | 0.0863 | (0.0656) | 0.1437 |
| 1997 | 0.1047 | 0.2631 | 0.6038 | 1.3642 | 0.0318 | 2.1615 | 0.0768 | 0.0511 | 0.0867 |
| 1998 | 0.1066 | 0.2555 | 0.6088 | 1.3900 | 0.0327 | 2.0973 | 0.0767 | 0.1150 | 0.0607 |
| 1999 | 0.1125 | 0.2640 | 0.6113 | 1.3957 | 0.0341 | 2.0960 | 0.0806 | 0.1184 | 0.0644 |
| 2000 | 0.1220 | 0.3131 | 0.6236 | 1.4144 | 0.0365 | 2.0184 | 0.0863 | 0.1455 | 0.0621 |
| 2001 | 0.1211 | 0.3720 | 0.6447 | 1.4539 | 0.0318 | 2.0992 | 0.0833 | 0.0854 | 0.0825 |
| 2002 | 0.1119 | 0.3690 | 0.6491 | 1.4741 | 0.0270 | 2.2404 | 0.0759 | 0.0646 | 0.0804 |
| 2003 | 0.1097 | 0.4854 | 0.6794 | 1.4718 | 0.0181 | 2.8649 | 0.0745 | 0.0534 | 0.0836 |
| 2004 | 0.1244 | 0.4608 | 0.6733 | 1.4767 | 0.0226 | 2.6749 | 0.0843 | 0.0673 | 0.0924 |
| 2005 | 0.1303 | 0.4641 | 0.6770 | 1.4866 | 0.0219 | 2.8429 | 0.0877 | 0.0729 | 0.0949 |
| 2006 | 0.1519 | 0.4480 | 0.6679 | 1.4706 | 0.0241 | 3.1393 | 0.1033 | 0.0772 | 0.1163 |
| 2007 | 0.1710 | 0.4826 | 0.6764 | 1.4643 | 0.0256 | 3.1954 | 0.1168 | 0.1295 | 0.1104 |
| 2008 | 0.1547 | 0.5601 | 0.7132 | 1.4930 | 0.0185 | 3.3646 | 0.1036 | 0.1173 | 0.0970 |
| 2009 | 0.1007 | 0.5742 | 0.7457 | 1.5809 | 0.0103 | 3.3290 | 0.0637 | (0.0990) | 0.1424 |
| 2010 | 0.1204 | 0.5044 | 0.7043 | 1.5372 | 0.0186 | 2.7142 | 0.0783 | 0.0386 | 0.0975 |
| 2011 | 0.1335 | 0.4636 | 0.6904 | 1.5375 | 0.0221 | 2.7041 | 0.0869 | 0.0645 | 0.0972 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BS–2 Sweden: Neutrality of the financial/market assets to the real assets

| the UK | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|--------|--------------------------------|---------------------|---------------------|-------------------------------------|-------------------------------------|--|--|---------------------|-------------------------------------|
| | m _K =M/K | m _Y =M/Y | m _Π =M/Π | r _(DEBT) –r [*] | r _(DEBT) /r [*] | e _{(US)/y^{**}} | r ^{**} –r [*] (US) | e [*] (US) | e _{(US)/e[*](US)} |
| | M2 is used for money supply, M | | | | | y ^{**} =y [*] /y [*] (US) | e [*] (US)=e _{(US)/r[*]} (r [*] –r _(US)) | | |
| | | | | (0.0215) | 0.7066 | 0.6961 | 0.0431 | 5.2231 | 0.9918 |
| 1960 | 0.4298 | 0.6027 | 5.8513 | (0.0228) | 0.7005 | 0.5891 | 0.0458 | 5.2308 | 0.9912 |
| 1961 | 0.4052 | 0.5779 | 5.3252 | (0.0231) | 0.6836 | 0.6881 | 0.0410 | 5.2290 | 0.9922 |
| 1962 | 0.5133 | 0.7442 | 7.0312 | (0.0214) | 0.6975 | 0.7275 | 0.0382 | 5.2382 | 0.9927 |
| 1963 | 0.5060 | 0.7563 | 7.1592 | (0.0316) | 0.6409 | 0.6476 | 0.0541 | 5.2021 | 0.9896 |
| 1964 | 0.4863 | 0.7291 | 5.5255 | (0.0195) | 0.7605 | 0.7978 | 0.0449 | 5.2249 | 0.9914 |
| 1965 | 0.4559 | 0.6978 | 5.6106 | (0.0059) | 0.9178 | 0.9186 | 0.0336 | 5.2136 | 0.9935 |
| 1966 | 0.4439 | 0.6925 | 6.2015 | (0.0085) | 0.8771 | 0.8749 | 0.0334 | 5.1984 | 0.9936 |
| 1967 | 0.4562 | 0.7218 | 6.6025 | 0.0015 | 1.0240 | 0.9744 | 0.0250 | 5.2050 | 0.9952 |
| 1968 | 0.4654 | 0.7580 | 7.5522 | 0.0075 | 1.1195 | 0.9941 | 0.0247 | 5.1947 | 0.9952 |
| 1969 | 0.4455 | 0.7312 | 7.1458 | (0.0024) | 0.9685 | 0.7683 | 0.0383 | 5.2083 | 0.9926 |
| 1970 | 0.4222 | 0.6817 | 5.5332 | | | | | | |
| 1971 | 0.4283 | 0.6931 | 6.5777 | 0.0080 | 1.1240 | 0.7823 | 0.0252 | 4.8902 | 0.9949 |
| 1972 | 0.4439 | 0.7080 | 7.0016 | 0.0095 | 1.1500 | 0.8330 | 0.0226 | 4.7656 | 0.9953 |
| 1973 | 0.4661 | 0.7179 | 6.7647 | 0.0050 | 1.0724 | 0.8246 | 0.0242 | 4.6117 | 0.9947 |
| 1974 | 0.4622 | 0.6921 | 7.1215 | 0.0130 | 1.2002 | 0.7165 | 0.0208 | 4.1013 | 0.9949 |
| 1975 | 0.4652 | 0.6565 | 6.4111 | 0.0153 | 1.2113 | 0.6042 | 0.0261 | 4.4116 | 0.9941 |
| 1976 | 0.4482 | 0.6169 | 6.6720 | 0.0256 | 1.3815 | 0.6140 | 0.0189 | 4.1454 | 0.9954 |
| 1977 | 0.4550 | 0.6205 | 5.9561 | 0.0210 | 1.2750 | 0.6732 | 0.0263 | 4.6958 | 0.9944 |
| 1978 | 0.5089 | 0.6570 | 6.2412 | 0.0194 | 1.2375 | 0.5706 | 0.0273 | 4.3228 | 0.9937 |
| 1979 | 0.5475 | 0.6822 | 6.6676 | 0.0226 | 1.2751 | 0.5583 | 0.0250 | 4.1715 | 0.9940 |
| 1980 | 0.5516 | 0.6613 | 6.4019 | 0.0312 | 1.3626 | 0.4416 | 0.0319 | 4.4047 | 0.9928 |
| 1981 | 0.8247 | 1.0473 | 1.4199 | (0.4459) | 0.2323 | 0.0000 | 0.5228 | 6.0938 | 0.9142 |
| 1982 | 0.8002 | 0.6746 | 5.3502 | (0.0192) | 0.8719 | 4.4073 | 0.0941 | 7.3886 | 0.9873 |
| 1983 | 0.7727 | 0.6444 | 6.2664 | (0.0003) | 0.9975 | 3.5399 | 0.0649 | 8.0659 | 0.9919 |
| 1984 | 0.7412 | 0.6174 | 6.6316 | 0.0110 | 1.0988 | 3.9290 | 0.0552 | 9.0447 | 0.9939 |
| 1985 | 0.6547 | 0.5695 | 6.0764 | 0.0232 | 1.2149 | 4.1748 | 0.0501 | 7.6656 | 0.9935 |
| 1986 | 0.6552 | 0.5783 | 6.1661 | (0.0037) | 0.9655 | 4.0736 | 0.0434 | 6.8624 | 0.9937 |
| 1987 | 0.6067 | 0.5516 | 5.9383 | 0.0146 | 1.1433 | 10.9597 | 0.0383 | 5.8863 | 0.9935 |
| 1988 | 0.5599 | 0.5325 | 5.7482 | 0.0161 | 1.1653 | 107.9545 | 0.0337 | 6.1907 | 0.9946 |
| 1989 | 0.5267 | 0.5288 | 5.5580 | 0.0170 | 1.1797 | 0.0001 | 0.0320 | 6.2590 | 0.9949 |
| 1990 | 0.4425 | 0.4668 | 4.9654 | 0.0417 | 1.4677 | 0.0614 | (0.0092) | 5.6888 | 1.0016 |
| 1991 | 0.4048 | 0.4453 | 4.8118 | 0.0228 | 1.2706 | 0.1140 | (0.0051) | 5.5244 | 1.0009 |
| 1992 | 0.3862 | 0.4701 | 4.8839 | 0.0211 | 1.2672 | 0.2924 | (0.0175) | 7.0255 | 1.0025 |
| 1993 | 0.3768 | 0.4863 | 4.9453 | 0.0092 | 1.1208 | 0.5950 | (0.0106) | 8.2929 | 1.0013 |
| 1994 | 0.3643 | 0.4809 | 5.1779 | 0.0237 | 1.3374 | 0.7109 | (0.0133) | 7.4482 | 1.0018 |
| 1995 | 0.3506 | 0.4364 | 3.5031 | 0.0023 | 1.0230 | 0.2777 | 0.0415 | 6.6997 | 0.9938 |
| 1996 | 0.3360 | 0.4445 | 3.8960 | (0.0057) | 0.9345 | 0.4179 | 0.0300 | 6.9010 | 0.9956 |
| 1997 | 0.3419 | 0.4665 | 4.4541 | (0.0107) | 0.8610 | 0.6342 | 0.0246 | 7.9016 | 0.9969 |
| 1998 | 0.3521 | 0.4894 | 4.5905 | (0.0268) | 0.6506 | 0.7053 | 0.0264 | 8.0874 | 0.9967 |
| 1999 | 0.3620 | 0.5053 | 4.4932 | (0.0308) | 0.6181 | 0.8023 | 0.0310 | 8.5560 | 0.9964 |
| 2000 | 0.3496 | 0.4945 | 4.0526 | (0.0326) | 0.6225 | 0.8689 | 0.0360 | 9.5710 | 0.9962 |
| 2001 | 0.3479 | 0.5058 | 4.1773 | (0.0322) | 0.6136 | 0.9299 | 0.0244 | 10.6919 | 0.9977 |
| 2002 | 0.3400 | 0.5012 | 4.4809 | (0.0229) | 0.6984 | 0.7524 | 0.0013 | 8.8263 | 0.9998 |
| 2003 | 0.3424 | 0.5039 | 4.5951 | (0.0281) | 0.6228 | 0.6832 | (0.0070) | 7.1822 | 1.0010 |
| 2004 | 0.3338 | 0.4929 | 3.9608 | (0.0401) | 0.5245 | 0.6318 | 0.0013 | 6.6159 | 0.9998 |
| 2005 | 0.3540 | 0.5262 | 4.0382 | (0.0539) | 0.3856 | 0.7892 | (0.0030) | 7.9554 | 1.0004 |
| 2006 | 0.3837 | 0.5643 | 3.7162 | (0.0662) | 0.3593 | 0.6380 | 0.0264 | 6.8908 | 0.9962 |
| 2007 | 0.4028 | 0.5898 | 3.4496 | (0.0751) | 0.3571 | 0.5510 | 0.0541 | 6.4677 | 0.9916 |
| 2008 | 0.4373 | 0.6529 | 4.2208 | (0.0647) | 0.3755 | 0.8894 | 0.0334 | 7.8440 | 0.9957 |
| 2009 | 0.4369 | 0.6907 | 6.8563 | (0.0312) | 0.5101 | 0.1889 | (0.0438) | 7.0727 | 1.0062 |
| 2010 | 0.4411 | 0.6781 | 5.6327 | (0.0494) | 0.3690 | 0.4375 | (0.0177) | 6.6920 | 1.0026 |
| 2011 | 0.4461 | 0.6859 | 5.1363 | (0.0608) | 0.3005 | 0.4343 | (0.0087) | 6.8790 | 1.0013 |
| | m _K =M/K | m _Y =M/Y | m _Π =M/Π | r _(DEBT) –r [*] | r _(DEBT) /r [*] | e _{(US)/y^{**}} | r ^{**} –r [*] (US) | e [*] (US) | e _{(US)/e[*](US)} |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BU–1 the UK: Fundamental endogenous ratios

| the UK | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|--------|----------|------------|-----------|----------|------------------------|----------------------------------|-------------------------|-------------------------------|-----------------------------|
| | α | δ_0 | β^+ | Ω | $g_A^+ = i(1-\beta^+)$ | $x = r^+ / g_Y^+$ | $r^+ = \alpha / \Omega$ | $r_G^+ = \alpha_G / \Omega_G$ | $r_{PRI}^+ = ap / \Omega_P$ |
| | | | | | | $x = \alpha / (i \cdot \beta^+)$ | | G | PRI |
| 1960 | 0.1032 | 0.5752 | 0.6473 | 1.2944 | 0.0302 | 1.8592 | 0.0797 | 0.0651 | 0.0839 |
| 1961 | 0.0980 | 0.5770 | 0.6480 | 1.2946 | 0.0289 | 1.8405 | 0.0757 | 0.0576 | 0.0811 |
| 1962 | 0.1064 | 0.6173 | 0.6652 | 1.3005 | 0.0218 | 2.4523 | 0.0818 | 0.0439 | 0.0929 |
| 1963 | 0.1055 | 0.5297 | 0.6316 | 1.2885 | 0.0245 | 2.5106 | 0.0819 | 0.0103 | 0.1023 |
| 1964 | 0.0945 | 0.4787 | 0.6178 | 1.2844 | 0.0392 | 1.4905 | 0.0736 | 0.0275 | 0.0867 |
| 1965 | 0.0939 | 0.4937 | 0.6233 | 1.2903 | 0.0357 | 1.5908 | 0.0728 | 0.0139 | 0.0896 |
| 1966 | 0.0935 | 0.4884 | 0.6254 | 1.2997 | 0.0338 | 1.6566 | 0.0719 | 0.0009 | 0.0918 |
| 1967 | 0.0945 | 0.4524 | 0.6259 | 1.3255 | 0.0363 | 1.5568 | 0.0713 | (0.0283) | 0.0994 |
| 1968 | 0.0925 | 0.4123 | 0.6181 | 1.3271 | 0.0405 | 1.4109 | 0.0697 | (0.0141) | 0.0925 |
| 1969 | 0.0927 | 0.3990 | 0.6192 | 1.3394 | 0.0372 | 1.5341 | 0.0692 | 0.0774 | 0.0672 |
| 1970 | 0.0929 | 0.3779 | 0.6074 | 1.3119 | 0.0367 | 1.6347 | 0.0708 | 0.0662 | 0.0718 |
| 1971 | 0.0927 | 0.4475 | 0.6018 | 1.2562 | 0.0354 | 1.7347 | 0.0738 | 0.0125 | 0.0868 |
| 1972 | 0.0952 | 0.4753 | 0.5933 | 1.2192 | 0.0347 | 1.8786 | 0.0781 | (0.0128) | 0.0987 |
| 1973 | 0.0927 | 0.4808 | 0.5738 | 1.1669 | 0.0477 | 1.4446 | 0.0794 | (0.0010) | 0.0995 |
| 1974 | 0.1048 | 0.4706 | 0.5603 | 1.1370 | 0.0494 | 1.6648 | 0.0922 | (0.0823) | 0.1378 |
| 1975 | 0.1072 | 1.1822 | 0.5222 | 0.9839 | 0.0401 | 2.4452 | 0.1089 | (0.2902) | 0.2154 |
| 1976 | 0.0942 | 7.9054 | 0.5030 | 0.9201 | 0.0478 | 1.9456 | 0.1024 | (0.3799) | 0.2129 |
| 1977 | 0.0927 | (4.9706) | 0.4958 | 0.9038 | 0.0528 | 1.7849 | 0.1025 | (0.3935) | 0.1886 |
| 1978 | 0.0934 | (3.1656) | 0.4925 | 0.8828 | 0.0502 | 1.9184 | 0.1058 | (0.3910) | 0.1876 |
| 1979 | 0.0924 | (2.3881) | 0.4885 | 0.8552 | 0.0515 | 1.8791 | 0.1081 | (0.3925) | 0.1909 |
| 1980 | 0.0936 | 4.0433 | 0.5178 | 0.8055 | 0.0365 | 2.3890 | 0.1162 | (0.7078) | 0.2208 |
| 1981 | 0.0985 | (0.8817) | 0.4672 | 0.7809 | 0.0267 | 4.1978 | 0.1261 | (1.0887) | 0.2356 |
| 1982 | 0.1011 | (0.4878) | 0.4567 | 0.7723 | 0.0306 | 3.9348 | 0.1309 | (2.6154) | 0.2297 |
| 1983 | 0.1021 | (0.9359) | 0.4659 | 0.7674 | 0.0323 | 3.6260 | 0.1331 | (19.4305) | 0.2249 |
| 1984 | 0.1032 | (2.0705) | 0.4806 | 0.7882 | 0.0344 | 3.2456 | 0.1310 | 2.2625 | 0.2105 |
| 1985 | 0.0966 | (2.6764) | 0.4840 | 0.7902 | 0.0368 | 2.7961 | 0.1222 | 1.1311 | 0.1863 |
| 1986 | 0.1254 | (28.4983) | 0.4980 | 0.7936 | 0.0238 | 5.3143 | 0.1580 | 0.6873 | 0.2139 |
| 1987 | 0.1142 | (4.6924) | 0.4894 | 0.7858 | 0.0342 | 3.4826 | 0.1454 | 0.4310 | 0.1870 |
| 1988 | 0.1182 | (3.3492) | 0.4870 | 0.7976 | 0.0461 | 2.7023 | 0.1482 | 0.2675 | 0.1710 |
| 1989 | 0.1148 | (13.7530) | 0.4968 | 0.8278 | 0.0499 | 2.3282 | 0.1386 | 0.2039 | 0.1527 |
| 1990 | 0.1222 | (9.8919) | 0.4966 | 0.8628 | 0.0432 | 2.8666 | 0.1416 | (0.1615) | 0.0867 |
| 1991 | 0.1450 | 2.5084 | 0.5216 | 0.8777 | 0.0247 | 5.3734 | 0.1651 | (0.0311) | 0.1339 |
| 1992 | 0.1692 | 1.7531 | 0.5441 | 0.8754 | 0.0145 | 9.8049 | 0.1933 | 0.3189 | 0.2118 |
| 1993 | 0.1730 | 1.7484 | 0.5498 | 0.8611 | 0.0135 | 10.4582 | 0.2009 | 0.4305 | 0.2297 |
| 1994 | 0.1508 | 2.1132 | 0.5381 | 0.8437 | 0.0139 | 9.3168 | 0.1788 | 0.4030 | 0.2020 |
| 1995 | 0.1314 | 4.1214 | 0.5136 | 0.8435 | 0.0284 | 4.3793 | 0.1558 | 0.4846 | 0.1764 |
| 1996 | 0.1281 | 3.9229 | 0.5140 | 0.8488 | 0.0287 | 4.2129 | 0.1509 | 0.5677 | 0.1642 |
| 1997 | 0.1099 | 3.6965 | 0.5154 | 0.8471 | 0.0324 | 3.1882 | 0.1298 | (0.8951) | 0.1275 |
| 1998 | 0.1028 | 5.5092 | 0.5079 | 0.8673 | 0.0379 | 2.6293 | 0.1185 | 1.7908 | 0.0988 |
| 1999 | 0.1244 | 1.8469 | 0.5281 | 0.9092 | 0.0362 | 3.0728 | 0.1369 | 1.2075 | 0.1170 |
| 2000 | 0.1341 | 1.4138 | 0.5383 | 0.9385 | 0.0346 | 3.3289 | 0.1429 | 1.0402 | 0.1202 |
| 2001 | 0.1360 | 1.1630 | 0.5525 | 0.9663 | 0.0338 | 3.2607 | 0.1407 | 0.6806 | 0.1230 |
| 2002 | 0.1334 | 1.0324 | 0.5573 | 0.9926 | 0.0369 | 2.8678 | 0.1344 | (0.0124) | 0.1414 |
| 2003 | 0.1303 | 0.9350 | 0.5648 | 1.0171 | 0.0362 | 2.7764 | 0.1281 | (0.0696) | 0.1425 |
| 2004 | 0.1336 | 0.8355 | 0.5762 | 1.0518 | 0.0366 | 2.6819 | 0.1270 | (0.0879) | 0.1465 |
| 2005 | 0.1450 | 0.7532 | 0.5917 | 1.0959 | 0.0353 | 2.8377 | 0.1323 | (0.0971) | 0.1590 |
| 2006 | 0.1552 | 0.7297 | 0.6092 | 1.1274 | 0.0294 | 3.3868 | 0.1377 | (0.1143) | 0.1670 |
| 2007 | 0.1487 | 0.6937 | 0.6124 | 1.1504 | 0.0310 | 3.0345 | 0.1293 | (0.0533) | 0.1519 |
| 2008 | 0.1556 | 0.6665 | 0.6288 | 1.1921 | 0.0265 | 3.4671 | 0.1305 | (0.2375) | 0.1769 |
| 2009 | 0.1549 | 0.6239 | 0.6501 | 1.2623 | 0.0221 | 3.7782 | 0.1227 | (0.6406) | 0.2237 |
| 2010 | 0.1513 | 0.5904 | 0.6450 | 1.2772 | 0.0267 | 3.1213 | 0.1185 | (0.6104) | 0.2132 |
| 2011 | 0.1405 | 0.5476 | 0.6477 | 1.3172 | 0.0272 | 2.8100 | 0.1067 | (0.6110) | 0.1902 |
| | α | δ_0 | β^+ | Ω | $g_A^+ = i(1-\beta^+)$ | $x = r^+ / g_Y^+$ | $r^+ = \alpha / \Omega$ | $r_G^+ = \alpha_G / \Omega_G$ | $r_{PRI}^+ = ap / \Omega_P$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BU–2 the UK: Neutrality of the financial/market assets to the real assets

| the UK | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|--------|--------------------------------|---------------------|---------------------|----------------------------|----------------------------|----------------------|---|--------------|-----------------------|
| | m _K =M/K | m _T =M/Y | m _I =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*(US)$ | $e^*_{(US)}=e_{(US)}\Gamma^*(\Gamma^*-r^*(US))$ | | |
| 1960 | 0.3475 | 0.4498 | 4.3593 | (0.0220) | 0.7238 | 6.6258 | 0.0493 | 2.8531 | 0.9827 |
| 1961 | 0.3345 | 0.4330 | 4.4190 | (0.0129) | 0.8296 | 5.9344 | 0.0455 | 2.8536 | 0.9841 |
| 1962 | 0.3109 | 0.4043 | 3.8014 | (0.0228) | 0.7214 | 7.4630 | 0.0498 | 2.8523 | 0.9825 |
| 1963 | 0.3207 | 0.4133 | 3.9180 | (0.0276) | 0.6633 | 6.2433 | 0.0494 | 2.8193 | 0.9825 |
| 1964 | 0.3114 | 0.4000 | 4.2309 | (0.0138) | 0.8125 | 6.5352 | 0.0397 | 2.8298 | 0.9860 |
| 1965 | 0.3101 | 0.4002 | 4.2617 | (0.0072) | 0.9014 | 7.8506 | 0.0365 | 2.8393 | 0.9872 |
| 1966 | 0.2991 | 0.3887 | 4.1589 | (0.0025) | 0.9650 | 8.6141 | 0.0340 | 2.8242 | 0.9880 |
| 1967 | 0.3070 | 0.4069 | 4.3049 | (0.0033) | 0.9535 | 7.5076 | 0.0356 | 2.4419 | 0.9854 |
| 1968 | 0.3028 | 0.4019 | 4.3428 | 0.0058 | 1.0828 | 7.8517 | 0.0332 | 2.4176 | 0.9863 |
| 1969 | 0.2894 | 0.3876 | 4.1812 | 0.0212 | 1.3061 | 8.2480 | 0.0315 | 2.4322 | 0.9870 |
| 1970 | 0.2942 | 0.3859 | 4.1539 | 0.0214 | 1.3020 | 6.8914 | 0.0328 | 2.4265 | 0.9865 |
| 1971 | 0.3073 | 0.3861 | 4.1645 | 0.0152 | 1.2060 | 6.3193 | 0.0346 | 2.5871 | 0.9866 |
| 1972 | 0.3636 | 0.4432 | 4.6575 | 0.0109 | 1.1402 | 5.7121 | 0.0373 | 2.3854 | 0.9844 |
| 1973 | 0.4205 | 0.4907 | 5.2939 | 0.0277 | 1.3482 | 5.2260 | 0.0348 | 2.3580 | 0.9853 |
| 1974 | 0.4283 | 0.4869 | 4.6463 | 0.0555 | 1.6024 | 4.3504 | 0.0480 | 2.3965 | 0.9800 |
| 1975 | 0.4233 | 0.4165 | 3.8858 | 0.0350 | 1.3210 | 7481.0545 | 0.0625 | 2.0860 | 0.9700 |
| 1976 | 0.4228 | 0.3890 | 4.1289 | 0.0419 | 1.4090 | 23.0665 | 0.0542 | 1.7566 | 0.9692 |
| 1977 | 0.4094 | 0.3700 | 3.9920 | 0.0248 | 1.2414 | 18.3450 | 0.0525 | 1.9585 | 0.9732 |
| 1978 | 0.4164 | 0.3676 | 3.9339 | 0.0189 | 1.1781 | 18.3276 | 0.0516 | 2.0861 | 0.9753 |
| 1979 | 0.4133 | 0.3534 | 3.8245 | 0.0218 | 1.2021 | 18.2624 | 0.0510 | 2.2750 | 0.9776 |
| 1980 | 0.4436 | 0.3573 | 3.8184 | 0.0217 | 1.1870 | 34.5628 | 0.0619 | 2.4469 | 0.9747 |
| 1981 | 0.5303 | 0.4141 | 4.2062 | 0.0213 | 1.1691 | 11.6140 | 0.0681 | 1.9761 | 0.9656 |
| 1982 | 0.5476 | 0.4229 | 4.1843 | (0.0021) | 0.9842 | 7.3952 | 0.0754 | 1.6899 | 0.9554 |
| 1983 | 0.5690 | 0.4366 | 4.2755 | (0.0250) | 0.8123 | 8.1829 | 0.0747 | 1.5253 | 0.9510 |
| 1984 | 0.5858 | 0.4618 | 4.4725 | (0.0241) | 0.8161 | 8.6914 | 0.0744 | 1.2309 | 0.9395 |
| 1985 | 0.5944 | 0.4697 | 4.8644 | (0.0160) | 0.8691 | 11.1170 | 0.0646 | 1.5091 | 0.9572 |
| 1986 | 0.6827 | 0.5418 | 4.3199 | (0.0593) | 0.6245 | 14.1717 | 0.0951 | 1.5696 | 0.9394 |
| 1987 | 1.1670 | 0.9170 | 8.0268 | (0.0506) | 0.6520 | 14.7850 | 0.0815 | 1.9530 | 0.9583 |
| 1988 | 1.2152 | 0.9693 | 8.1987 | (0.0546) | 0.6315 | 12.8009 | 0.0845 | 1.8940 | 0.9554 |
| 1989 | 1.2777 | 1.0577 | 9.2170 | (0.0428) | 0.6911 | 13.0558 | 0.0759 | 1.6814 | 0.9549 |
| 1990 | 1.1337 | 0.9782 | 8.0076 | (0.0308) | 0.7826 | 9.3947 | 0.0432 | 1.9712 | 0.9781 |
| 1991 | 1.1286 | 0.9906 | 6.8342 | (0.0659) | 0.6007 | 18.2490 | 0.0760 | 1.9467 | 0.9610 |
| 1992 | 1.1225 | 0.9826 | 5.8064 | (0.1021) | 0.4718 | 43.3748 | 0.0967 | 1.6087 | 0.9399 |
| 1993 | 1.1380 | 0.9800 | 5.6646 | (0.1222) | 0.3917 | 69.7210 | 0.1141 | 1.5953 | 0.9285 |
| 1994 | 1.1440 | 0.9653 | 6.3999 | (0.0983) | 0.4503 | 38.3421 | 0.0951 | 1.6576 | 0.9426 |
| 1995 | 1.1703 | 0.9872 | 7.5107 | (0.0732) | 0.5301 | 10.7399 | 0.0973 | 1.6473 | 0.9410 |
| 1996 | 1.1925 | 1.0122 | 7.9023 | (0.0699) | 0.5367 | 13.0020 | 0.0947 | 1.7927 | 0.9472 |
| 1997 | 1.1616 | 0.9840 | 8.9502 | (0.0589) | 0.5463 | 13.9913 | 0.0776 | 1.7314 | 0.9552 |
| 1998 | 1.1483 | 0.9959 | 9.6895 | (0.0640) | 0.4599 | 12.2985 | 0.0682 | 1.7317 | 0.9606 |
| 1999 | 1.0960 | 0.9966 | 8.0079 | (0.0899) | 0.3434 | 45.0985 | 0.0873 | 1.7037 | 0.9488 |
| 2000 | 1.0930 | 1.0258 | 7.6487 | (0.0961) | 0.3275 | 281.7840 | 0.0926 | 1.5848 | 0.9416 |
| 2001 | 1.0733 | 1.0371 | 7.6274 | (0.0906) | 0.3560 | ##### | 0.0818 | 1.5322 | 0.9466 |
| 2002 | 1.0521 | 1.0443 | 7.8307 | (0.0852) | 0.3662 | 0.0000 | 0.0598 | 1.6716 | 0.9642 |
| 2003 | 1.0356 | 1.0533 | 8.0834 | (0.0823) | 0.3575 | 0.0134 | 0.0466 | 1.8313 | 0.9746 |
| 2004 | 1.0366 | 1.0903 | 8.1631 | (0.0777) | 0.3882 | 0.2077 | 0.0440 | 1.9754 | 0.9777 |
| 2005 | 1.0756 | 1.1788 | 8.1272 | (0.0877) | 0.3370 | 0.5088 | 0.0417 | 1.7636 | 0.9763 |
| 2006 | 1.1328 | 1.2772 | 8.2287 | (0.0940) | 0.3174 | 0.9470 | 0.0608 | 2.0238 | 0.9700 |
| 2007 | 1.1777 | 1.3548 | 9.1081 | (0.0789) | 0.3898 | 1.2156 | 0.0666 | 2.0700 | 0.9678 |
| 2008 | 1.2806 | 1.5266 | 9.8122 | (0.0847) | 0.3509 | 1.0886 | 0.0603 | 1.5181 | 0.9603 |
| 2009 | 0.9669 | 1.2205 | 7.8793 | (0.0862) | 0.2974 | 0.2564 | 0.0152 | 1.6347 | 0.9907 |
| 2010 | 0.9285 | 1.1859 | 7.8362 | (0.0824) | 0.3047 | 0.8462 | 0.0225 | 1.5880 | 0.9858 |
| 2011 | 0.8676 | 1.1428 | 8.1348 | (0.0755) | 0.2925 | 1.0464 | 0.0111 | 1.5372 | 0.9928 |
| | m _K =M/K | m _T =M/Y | m _I =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BSp-1 Spain: Fundamental endogenous ratios

| SPAIN | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|-------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r^*_{PRI} = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.0993 | (0.1282) | 0.1570 | 0.1501 | 0.0843 | 6.3244 | 0.6615 | 0.8935 | (0.1257) |
| 1961 | 0.1049 | (0.1848) | 0.2473 | 0.2675 | 0.1021 | 3.1287 | 0.3923 | 0.5065 | (0.0206) |
| 1962 | 0.1111 | (0.2826) | 0.3247 | 0.3910 | 0.1077 | 2.1445 | 0.2841 | 0.3674 | 0.0428 |
| 1963 | 0.0986 | (0.3978) | 0.3763 | 0.4934 | 0.1011 | 1.6162 | 0.1997 | 0.2650 | 0.0510 |
| 1964 | 0.0982 | (0.5441) | 0.4031 | 0.5453 | 0.0893 | 1.6282 | 0.1800 | 0.2704 | (0.0816) |
| 1965 | 0.1041 | (0.9178) | 0.4407 | 0.6330 | 0.0920 | 1.4359 | 0.1644 | 0.2252 | (0.0213) |
| 1966 | 0.1031 | (1.8342) | 0.4704 | 0.7148 | 0.0885 | 1.3107 | 0.1442 | 0.1922 | (0.0059) |
| 1967 | 0.1012 | (54.9612) | 0.4990 | 0.7906 | 0.0775 | 1.3105 | 0.1280 | 0.1616 | 0.0243 |
| 1968 | 0.0978 | 2.7918 | 0.5210 | 0.8601 | 0.0740 | 1.2145 | 0.1137 | 0.1510 | (0.0055) |
| 1969 | 0.1151 | 1.3803 | 0.5433 | 0.9361 | 0.0822 | 1.1770 | 0.1229 | 0.1658 | (0.0126) |
| 1970 | 0.1137 | 0.9634 | 0.5644 | 1.0095 | 0.0730 | 1.2020 | 0.1126 | 0.1515 | (0.0076) |
| 1971 | 0.1118 | 0.8841 | 0.5748 | 1.0356 | 0.0616 | 1.3416 | 0.1080 | 0.1306 | 0.0335 |
| 1972 | 0.1150 | 0.8357 | 0.5561 | 1.0377 | 0.0695 | 1.3204 | 0.1108 | 0.1333 | 0.0406 |
| 1973 | 0.1167 | 0.8958 | 0.5646 | 1.0275 | 0.0728 | 1.2364 | 0.1136 | 0.1379 | 0.0448 |
| 1974 | 0.1116 | 0.8751 | 0.5682 | 1.0349 | 0.0869 | 0.9764 | 0.1079 | 0.1400 | 0.0303 |
| 1975 | 0.1047 | 0.8313 | 0.5915 | 1.0645 | 0.0764 | 0.9458 | 0.0983 | 0.1078 | 0.0788 |
| 1976 | 0.0941 | 0.8046 | 0.5705 | 1.0570 | 0.0737 | 0.9623 | 0.0891 | 0.0908 | 0.0861 |
| 1977 | 0.0932 | 1.0857 | 0.5558 | 0.9810 | 0.0657 | 1.1342 | 0.0950 | 0.1000 | 0.0876 |
| 1978 | 0.0947 | 1.4781 | 0.5408 | 0.9247 | 0.0565 | 1.4228 | 0.1024 | 0.0973 | 0.1102 |
| 1979 | 0.0926 | 1.6739 | 0.5353 | 0.9092 | 0.0550 | 1.4629 | 0.1019 | 0.0871 | 0.1263 |
| 1980 | 0.0948 | 1.2578 | 0.5570 | 0.9426 | 0.0698 | 1.0794 | 0.1006 | 0.0515 | 0.1738 |
| 1981 | 0.0926 | 1.0827 | 0.5417 | 0.9863 | 0.0653 | 1.2012 | 0.0939 | 0.0399 | 0.1730 |
| 1982 | 0.0926 | 1.0146 | 0.5446 | 0.9974 | 0.0642 | 1.2046 | 0.0928 | 0.0358 | 0.1760 |
| 1983 | 0.0925 | 0.9573 | 0.5457 | 1.0079 | 0.0591 | 1.3022 | 0.0918 | 0.0256 | 0.1919 |
| 1984 | 0.0949 | 0.9604 | 0.5463 | 1.0074 | 0.0522 | 1.5120 | 0.0943 | 0.0269 | 0.2159 |
| 1985 | 0.0953 | 0.9329 | 0.5464 | 1.0126 | 0.0524 | 1.5095 | 0.0941 | 0.0097 | 0.2529 |
| 1986 | 0.0956 | 0.9746 | 0.5462 | 1.0047 | 0.0504 | 1.5748 | 0.0952 | 0.0081 | 0.2466 |
| 1987 | 0.0940 | 0.8623 | 0.5477 | 1.0267 | 0.0583 | 1.3330 | 0.0916 | 0.0004 | 0.2298 |
| 1988 | 0.0987 | 0.6550 | 0.5557 | 1.0802 | 0.0689 | 1.1448 | 0.0913 | 0.0059 | 0.2007 |
| 1989 | 0.1499 | 0.5106 | 0.5851 | 1.1832 | 0.0911 | 1.1661 | 0.1266 | 0.0068 | 0.2443 |
| 1990 | 0.0999 | 0.4109 | 0.5871 | 1.2305 | 0.0746 | 0.9411 | 0.0812 | (0.0057) | 0.1523 |
| 1991 | 0.1441 | 0.4254 | 0.6061 | 1.2810 | 0.0854 | 1.0965 | 0.1125 | (0.0004) | 0.1878 |
| 1992 | 0.0949 | 0.2804 | 0.6188 | 1.4173 | 0.0531 | 1.1017 | 0.0670 | (0.0428) | 0.1339 |
| 1993 | 0.1003 | 0.3011 | 0.6371 | 1.4820 | 0.0362 | 1.5797 | 0.0677 | (0.1201) | 0.1745 |
| 1994 | 0.1068 | 0.3118 | 0.6472 | 1.5182 | 0.0326 | 1.7844 | 0.0703 | (0.1449) | 0.1855 |
| 1995 | 0.0925 | 0.3355 | 0.6259 | 1.4077 | 0.0396 | 1.3942 | 0.0657 | (0.0783) | 0.1384 |
| 1996 | 0.0924 | 0.3221 | 0.6299 | 1.4341 | 0.0371 | 1.4655 | 0.0645 | (0.0900) | 0.1384 |
| 1997 | 0.0925 | 0.2970 | 0.6301 | 1.4540 | 0.0377 | 1.4394 | 0.0636 | (0.0250) | 0.1037 |
| 1998 | 0.0924 | 0.2827 | 0.6394 | 1.5083 | 0.0388 | 1.3408 | 0.0612 | (0.0067) | 0.0895 |
| 1999 | 0.0984 | 0.3299 | 0.6321 | 1.4374 | 0.0393 | 1.4577 | 0.0685 | (0.0236) | 0.0856 |
| 2000 | 0.1088 | 0.3733 | 0.6448 | 1.4530 | 0.0389 | 1.5421 | 0.0749 | 0.0132 | 0.0850 |
| 2001 | 0.1143 | 0.5352 | 0.6937 | 1.4622 | 0.0293 | 1.7205 | 0.0781 | 0.0035 | 0.0884 |
| 2002 | 0.1116 | 0.5745 | 0.7114 | 1.4680 | 0.0274 | 1.6522 | 0.0761 | 0.0537 | 0.0786 |
| 2003 | 0.1184 | 0.6017 | 0.7270 | 1.4770 | 0.0249 | 1.7844 | 0.0802 | 0.0568 | 0.0824 |
| 2004 | 0.1267 | 0.5834 | 0.7180 | 1.4759 | 0.0293 | 1.7009 | 0.0858 | 0.0662 | 0.0874 |
| 2005 | 0.1150 | 0.5270 | 0.6955 | 1.4780 | 0.0394 | 1.2773 | 0.0778 | 0.2795 | 0.0663 |
| 2006 | 0.1026 | 0.4587 | 0.6806 | 1.5060 | 0.0502 | 0.9592 | 0.0682 | 0.6429 | 0.0470 |
| 2007 | 0.1020 | 0.4217 | 0.6844 | 1.5646 | 0.0511 | 0.9201 | 0.0652 | 1.0783 | 0.0360 |
| 2008 | 0.1262 | 0.4449 | 0.7143 | 1.6633 | 0.0357 | 1.4116 | 0.0759 | (0.1841) | 0.0851 |
| 2009 | 0.1220 | 0.4764 | 0.7509 | 1.7822 | 0.0201 | 2.0148 | 0.0684 | (0.7766) | 0.1135 |
| 2010 | 0.1427 | 0.4932 | 0.7696 | 1.8430 | 0.0152 | 2.8138 | 0.0774 | (0.5993) | 0.1211 |
| 2011 | 0.1377 | 0.5047 | 0.7773 | 1.8573 | 0.0116 | 3.3959 | 0.0741 | (0.3902) | 0.1139 |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of International Financial Statistics Yearbook, IMF

Table BSp–2 Spain: Neutrality of the financial/market assets to the real assets

| SPAIN | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|-------|--------------------------------|---------------------|---------------------|----------------------------|----------------------------|----------------------|------------------------------------|------------|--------------------|
| | m _K =M/K | m _T =M/Y | m _H =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e_{(US)}$ | $e_{(US)}/e^*(US)$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*(US)$ | $e_{(US)}=e_{(US)}^*(r^*-r^*(US))$ | | |
| | | | | (0.6615) | 0.0000 | 7.1423 | 0.6311 | 60.7811 | 0.9896 |
| 1960 | 2.1931 | 0.3292 | 3.3155 | (0.3923) | 0.0000 | 5.9741 | 0.3621 | 60.3621 | 0.9940 |
| 1961 | 1.3161 | 0.3520 | 3.3546 | (0.2841) | 0.0000 | 6.7140 | 0.2522 | 60.2322 | 0.9958 |
| 1962 | 0.9530 | 0.3726 | 3.3543 | (0.1997) | 0.0000 | 6.6855 | 0.1673 | 60.1273 | 0.9972 |
| 1963 | 0.7592 | 0.3746 | 3.8010 | (0.1800) | 0.0000 | 6.3174 | 0.1461 | 60.0961 | 0.9976 |
| 1964 | 0.6815 | 0.3716 | 3.7860 | (0.1644) | 0.0000 | 7.7433 | 0.1281 | 60.1181 | 0.9979 |
| 1965 | 0.6073 | 0.3844 | 3.6933 | (0.1442) | 0.0000 | 9.1530 | 0.1063 | 60.1063 | 0.9982 |
| 1966 | 0.5412 | 0.3869 | 3.7531 | (0.1280) | 0.0000 | 13.8416 | 0.0923 | 69.7923 | 0.9987 |
| 1967 | 0.5087 | 0.4022 | 3.9743 | (0.1137) | 0.0000 | 27.1814 | 0.0771 | 69.8971 | 0.9989 |
| 1968 | 0.5188 | 0.4462 | 4.5631 | (0.1229) | 0.0000 | 820.2888 | 0.0853 | 70.1453 | 0.9988 |
| 1969 | 0.5107 | 0.4781 | 4.1544 | (0.1126) | 0.0000 | 0.0153 | 0.0746 | 69.7946 | 0.9989 |
| 1970 | 0.5174 | 0.5223 | 4.5957 | (0.1080) | 0.0000 | 0.0888 | 0.0700 | 63.6400 | 0.9989 |
| 1971 | 0.6364 | 0.6591 | 5.8943 | (0.1136) | 0.0000 | 0.0533 | 0.0689 | 57.0189 | 0.9988 |
| 1972 | 0.6698 | 0.6951 | 6.0440 | (0.1079) | 0.0000 | 0.0987 | 0.0637 | 56.1737 | 0.9989 |
| 1973 | 0.6778 | 0.6965 | 5.9666 | (0.0983) | 0.0000 | 0.4225 | 0.0519 | 59.8219 | 0.9991 |
| 1974 | 0.6307 | 0.6527 | 5.8473 | (0.0891) | 0.0000 | 0.3335 | 0.0408 | 68.3308 | 0.9994 |
| 1975 | 0.6203 | 0.6602 | 6.3084 | (0.0950) | 0.0000 | 0.0000 | 0.0449 | 80.9549 | 0.9994 |
| 1976 | 0.6277 | 0.6635 | 7.0478 | (0.1024) | 0.0000 | 202.5431 | 0.0482 | 70.1582 | 0.9993 |
| 1977 | 0.6317 | 0.6197 | 6.6498 | 0.0312 | 1.3065 | 55.7824 | 0.0448 | 66.1948 | 0.9993 |
| 1978 | 0.6408 | 0.5926 | 6.2581 | 0.0590 | 1.5870 | ##### | 0.0463 | 79.2963 | 0.9994 |
| 1979 | 0.6209 | 0.5646 | 6.0953 | 0.0642 | 1.6830 | #DIV/0! | 0.0359 | 97.4859 | 0.9996 |
| 1980 | 0.5765 | 0.5434 | 5.7322 | 0.0671 | 1.7232 | 0.0000 | 0.0373 | 125.6373 | 0.9997 |
| 1981 | 0.5509 | 0.5434 | 5.8648 | 0.0773 | 1.8426 | 0.0019 | 0.0334 | 156.7334 | 0.9998 |
| 1982 | 0.5144 | 0.5131 | 5.5433 | 0.0709 | 1.7528 | 0.0016 | 0.0377 | 173.4377 | 0.9998 |
| 1983 | 0.4874 | 0.4913 | 5.3112 | 0.0396 | 1.4204 | 0.0059 | 0.0365 | 154.1865 | 0.9998 |
| 1984 | 0.4641 | 0.4675 | 4.9240 | 0.0184 | 1.1939 | 0.0004 | 0.0323 | 132.4323 | 0.9998 |
| 1985 | 0.4606 | 0.4663 | 4.8928 | 0.0365 | 1.3988 | 0.0409 | 0.0277 | 109.0277 | 0.9997 |
| 1986 | 0.4646 | 0.4668 | 4.8831 | 0.0261 | 1.2855 | 0.5074 | 0.0276 | 113.4776 | 0.9998 |
| 1987 | 0.4563 | 0.4685 | 4.9831 | 0.0104 | 1.0817 | 0.7887 | 0.0639 | 109.7839 | 0.9994 |
| 1988 | 0.4552 | 0.4918 | 4.9846 | 0.0535 | 1.8081 | 0.0535 | (10.0336) | 86.8764 | 1.1155 |
| 1989 | 0.4140 | 0.4899 | 3.2688 | 0.0118 | 1.1052 | 0.0438 | (9.6758) | 87.0142 | 1.1112 |
| 1990 | 0.4148 | 0.5105 | 5.1097 | 0.0547 | 1.8175 | 0.0715 | (10.1278) | 104.4922 | 1.0969 |
| 1991 | 0.3859 | 0.4944 | 3.4315 | 0.0339 | 1.5017 | 0.0914 | (9.1036) | 133.1064 | 1.0684 |
| 1992 | 0.3466 | 0.4912 | 5.1761 | 0.0266 | 1.3777 | #VALUE! | (6.5687) | 125.1713 | 1.0525 |
| 1993 | 0.3393 | 0.5029 | 5.0158 | 0.0447 | 1.6808 | #VALUE! | (3.3414) | 118.0686 | 1.0283 |
| 1994 | 0.3398 | 0.5159 | 4.8310 | 0.0173 | 1.2689 | #DIV/0! | (4.0481) | 127.2319 | 1.0318 |
| 1995 | 0.3239 | 0.4559 | 4.9309 | (0.0052) | 0.9179 | 0.0884 | (2.8892) | 148.8108 | 1.0194 |
| 1996 | 0.3224 | 0.4624 | 5.0013 | (0.0157) | 0.7429 | 0.0918 | (2.8932) | 139.7168 | 1.0207 |
| 1997 | 0.3354 | 0.4876 | 5.2715 | (0.0255) | 0.6282 | 0.0810 | (2.9343) | (1.9389) | (0.5134) |
| 1998 | 0.3565 | 0.5377 | 5.8205 | (0.0213) | 0.7156 | 0.0769 | (2.8451) | (1.7704) | (0.6070) |
| 1999 | 0.0000 | 0.0000 | 0.0000 | (0.0269) | 0.6553 | 0.0880 | (3.5508) | (2.4161) | (0.4696) |
| 2000 | 0.0000 | 0.0000 | 0.0000 | (0.0265) | 0.6522 | 0.0648 | (3.4085) | (2.4549) | (0.3885) |
| 2001 | 0.0000 | 0.0000 | 0.0000 | (0.0390) | 0.5140 | 0.0527 | (3.1311) | (2.3393) | (0.3385) |
| 2002 | 0.0000 | 0.0000 | 0.0000 | (0.0448) | 0.4776 | 0.0456 | (2.9749) | (2.2407) | (0.3277) |
| 2003 | 0.0000 | 0.0000 | 0.0000 | (0.0439) | 0.4358 | 0.0440 | (3.2748) | (2.4271) | (0.3493) |
| 2004 | 0.0000 | 0.0000 | 0.0000 | (0.0303) | 0.5560 | 0.0356 | (3.3620) | (2.6027) | (0.2917) |
| 2005 | 0.0000 | 0.0000 | 0.0000 | (0.0221) | 0.6609 | 0.0370 | (4.6187) | (3.9394) | (0.1724) |
| 2006 | 0.0000 | 0.0000 | 0.0000 | (0.0322) | 0.5760 | 0.0409 | (5.0697) | (4.3512) | (0.1651) |
| 2007 | 0.0000 | 0.0000 | 0.0000 | (0.0286) | 0.5815 | 0.0436 | (5.0133) | (4.3191) | (0.1607) |
| 2008 | 0.0000 | 0.0000 | 0.0000 | (0.0349) | 0.5489 | 0.0436 | (4.5276) | (3.7792) | (0.1980) |
| 2009 | 0.0000 | 0.0000 | 0.0000 | (0.0197) | 0.7338 | 0.0473 | (4.5309) | (3.7580) | (0.2057) |
| 2010 | 0.0000 | 0.0000 | 0.0000 | | | | | | |
| 2011 | 0.0000 | 0.0000 | 0.0000 | | | | | | |
| | m _K =M/K | m _T =M/Y | m _H =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e_{(US)}$ | $e_{(US)}/e^*(US)$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BIt-1 Italy: Fundamental endogenous ratios

| ITALY | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|-------|----------|------------|-----------|----------|------------------------|--------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(1-\beta^*)$ | | G | PRI |
| 1960 | 0.1072 | 0.3739 | 0.6567 | 1.5007 | 0.0550 | 1.0185 | 0.0715 | 0.1481 | 0.0474 |
| 1961 | 0.1197 | 0.3491 | 0.6554 | 1.5196 | 0.0586 | 1.0747 | 0.0788 | 0.1376 | 0.0584 |
| 1962 | 0.1124 | 0.3435 | 0.6546 | 1.5214 | 0.0584 | 1.0167 | 0.0739 | 0.1178 | 0.0572 |
| 1963 | 0.0964 | 0.3281 | 0.6451 | 1.4939 | 0.0589 | 0.9013 | 0.0645 | 0.0682 | 0.0631 |
| 1964 | 0.0971 | 0.3366 | 0.6490 | 1.5035 | 0.0486 | 1.0798 | 0.0646 | 0.0586 | 0.0670 |
| 1965 | 0.0941 | 0.3772 | 0.6582 | 1.5041 | 0.0365 | 1.3388 | 0.0625 | 0.0365 | 0.0743 |
| 1966 | 0.0924 | 0.4032 | 0.6612 | 1.4904 | 0.0346 | 1.3667 | 0.0620 | 0.0415 | 0.0719 |
| 1967 | 0.0927 | 0.3875 | 0.6513 | 1.4661 | 0.0395 | 1.2574 | 0.0633 | 0.0507 | 0.0697 |
| 1968 | 0.0961 | 0.3860 | 0.6502 | 1.4632 | 0.0386 | 1.3387 | 0.0657 | 0.0465 | 0.0765 |
| 1969 | 0.1004 | 0.3827 | 0.6462 | 1.4503 | 0.0443 | 1.2422 | 0.0692 | 0.0848 | 0.0595 |
| 1970 | 0.0980 | 0.3854 | 0.6397 | 1.4230 | 0.0483 | 1.1419 | 0.0689 | 0.0876 | 0.0550 |
| 1971 | 0.1305 | 0.4253 | 0.6376 | 1.3836 | 0.0572 | 1.2974 | 0.0943 | 0.0555 | 0.1267 |
| 1972 | 0.1157 | 0.4176 | 0.6440 | 1.4123 | 0.0523 | 1.2229 | 0.0819 | 0.0415 | 0.1201 |
| 1973 | 0.1222 | 0.4272 | 0.6283 | 1.3507 | 0.0690 | 1.0482 | 0.0905 | 0.0534 | 0.1299 |
| 1974 | 0.1353 | 0.4419 | 0.6133 | 1.2934 | 0.0867 | 0.9846 | 0.1046 | 0.0655 | 0.1475 |
| 1975 | 0.1065 | 0.4291 | 0.6116 | 1.2960 | 0.0606 | 1.1166 | 0.0822 | 0.0270 | 0.1577 |
| 1976 | 0.1291 | 0.4988 | 0.5996 | 1.2243 | 0.0788 | 1.0934 | 0.1055 | 0.0252 | 0.2147 |
| 1977 | 0.1261 | 0.5566 | 0.5846 | 1.1635 | 0.0685 | 1.3085 | 0.1084 | 0.0200 | 0.2452 |
| 1978 | 0.1303 | 0.5875 | 0.5797 | 1.1418 | 0.0664 | 1.4237 | 0.1141 | 0.0133 | 0.3133 |
| 1979 | 0.1203 | 0.6566 | 0.5632 | 1.0912 | 0.0685 | 1.3618 | 0.1102 | 0.0082 | 0.3211 |
| 1980 | 0.1062 | 0.7210 | 0.5481 | 1.0553 | 0.0828 | 1.0571 | 0.1006 | 0.0052 | 0.2866 |
| 1981 | 0.0967 | 0.7149 | 0.5417 | 1.0489 | 0.0766 | 1.0670 | 0.0922 | (0.0149) | 0.3068 |
| 1982 | 0.0942 | 0.7363 | 0.5449 | 1.0486 | 0.0709 | 1.1100 | 0.0898 | (0.0150) | 0.3335 |
| 1983 | 0.0938 | 0.8087 | 0.5472 | 1.0369 | 0.0609 | 1.2750 | 0.0905 | (0.0188) | 0.4076 |
| 1984 | 0.0954 | 0.7359 | 0.5475 | 1.0516 | 0.0672 | 1.1738 | 0.0907 | (0.0166) | 0.4403 |
| 1985 | 0.0935 | 0.6151 | 0.5534 | 1.0860 | 0.0648 | 1.1656 | 0.0861 | (0.0175) | 0.5091 |
| 1986 | 0.0927 | 0.5189 | 0.5594 | 1.1218 | 0.0560 | 1.3034 | 0.0826 | (0.0171) | 0.5405 |
| 1987 | 0.0925 | 0.5011 | 0.5686 | 1.1478 | 0.0515 | 1.3614 | 0.0806 | (0.0223) | 0.5879 |
| 1988 | 0.0924 | 0.4485 | 0.5687 | 1.1649 | 0.0549 | 1.2756 | 0.0793 | (0.0247) | 0.5941 |
| 1989 | 0.0925 | 0.4023 | 0.5742 | 1.1957 | 0.0570 | 1.2031 | 0.0773 | (0.0218) | 0.5496 |
| 1990 | 0.0933 | 0.4197 | 0.5813 | 1.2098 | 0.0578 | 1.1623 | 0.0771 | (0.0197) | 0.6516 |
| 1991 | 0.0925 | (2.7247) | 0.5149 | 1.2480 | 0.0666 | 1.3076 | 0.0741 | (0.0164) | 0.4737 |
| 1992 | 0.0931 | 0.3475 | 0.5968 | 1.2914 | 0.0426 | 1.4765 | 0.0721 | (0.0963) | 0.3651 |
| 1993 | 0.0925 | 0.4112 | 0.6183 | 1.3285 | 0.0293 | 1.9450 | 0.0696 | (0.0853) | 0.3078 |
| 1994 | 0.0924 | 0.3737 | 0.6140 | 1.3373 | 0.0311 | 1.8705 | 0.0691 | (0.0813) | 0.2753 |
| 1995 | 0.1129 | 0.3417 | 0.6109 | 1.3458 | 0.0466 | 1.5430 | 0.0839 | (0.0803) | 0.2766 |
| 1996 | 0.0991 | 0.3040 | 0.6143 | 1.3826 | 0.0345 | 1.8038 | 0.0717 | (0.0764) | 0.2347 |
| 1997 | 0.0967 | (0.0822) | 0.5749 | 1.3861 | 0.0387 | 1.8506 | 0.0698 | 0.0027 | 0.1378 |
| 1998 | 0.0927 | 0.1591 | 0.6048 | 1.4304 | 0.0340 | 1.7790 | 0.0648 | (0.0111) | 0.1365 |
| 1999 | 0.0991 | 0.2071 | 0.6162 | 1.4557 | 0.0257 | 2.4016 | 0.0681 | (0.0177) | 0.0824 |
| 2000 | 0.1029 | 0.1882 | 0.6129 | 1.4519 | 0.0296 | 2.1966 | 0.0709 | 0.0190 | 0.0801 |
| 2001 | 0.0976 | 0.3655 | 0.6440 | 1.4568 | 0.0284 | 1.8993 | 0.0670 | (0.0883) | 0.0968 |
| 2002 | 0.0985 | 0.4376 | 0.6714 | 1.4947 | 0.0272 | 1.7698 | 0.0659 | (0.0392) | 0.0869 |
| 2003 | 0.1053 | 0.3849 | 0.6660 | 1.5290 | 0.0258 | 2.0436 | 0.0689 | 0.0013 | 0.0825 |
| 2004 | 0.1030 | 2.2128 | 0.4117 | 1.5421 | 0.0439 | 3.3539 | 0.0668 | (0.0819) | 0.0973 |
| 2005 | 0.1101 | 0.8957 | 0.9868 | 1.5691 | 0.0009 | 1.5985 | 0.0702 | (0.1008) | 0.1067 |
| 2006 | 0.1079 | 0.4317 | 0.6926 | 1.5865 | 0.0240 | 1.9962 | 0.0680 | (0.0411) | 0.0916 |
| 2007 | 0.1050 | 0.4086 | 0.6934 | 1.6203 | 0.0263 | 1.7671 | 0.0648 | 0.0040 | 0.0786 |
| 2008 | 0.1158 | 0.3886 | 0.7013 | 1.6850 | 0.0257 | 1.9182 | 0.0687 | (0.0148) | 0.0888 |
| 2009 | 0.1519 | 0.4837 | 0.7558 | 1.7921 | 0.0111 | 4.4180 | 0.0848 | (0.0554) | 0.1218 |
| 2010 | 0.1529 | 0.3982 | 0.7294 | 1.8160 | 0.0167 | 3.3931 | 0.0842 | (0.0439) | 0.1201 |
| 2011 | 0.1536 | 0.3725 | 0.7256 | 1.8407 | 0.0158 | 3.6685 | 0.0835 | (0.0253) | 0.1152 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of

International Financial Statistics Yearbook, IMF

Table B1t–2 Italy: Neutrality of the financial/market assets to the real assets

| ITALY | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|-------|--------------------------------|---------------------|---------------------|----------------------------|----------------------------|----------------------|-------------------------------------|--------------|-----------------------|
| | m _K =M/K | m _Y =M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*(US)$ | $e^*_{(US)}=e_{(US)}/(r^*-r^*(US))$ | | |
| 1960 | 0.1769 | 0.2655 | 2.4755 | (0.0189) | 0.7362 | 1827.5022 | 0.0411 | 620.6411 | 0.9999 |
| 1961 | 0.1821 | 0.2767 | 2.3105 | (0.0291) | 0.6307 | 1465.2577 | 0.0486 | 620.6486 | 0.9999 |
| 1962 | 0.1903 | 0.2896 | 2.5752 | (0.0234) | 0.6832 | 1650.0534 | 0.0420 | 620.6420 | 0.9999 |
| 1963 | 0.2563 | 0.3829 | 3.9712 | (0.0126) | 0.8042 | 1642.6168 | 0.0321 | 622.4321 | 0.9999 |
| 1964 | 0.2558 | 0.3846 | 3.9607 | (0.0072) | 0.8888 | 1650.5167 | 0.0307 | 624.8307 | 1.0000 |
| 1965 | 0.2727 | 0.4102 | 4.3615 | (0.0086) | 0.8619 | 1962.4290 | 0.0262 | 624.7262 | 1.0000 |
| 1966 | 0.2901 | 0.4323 | 4.6788 | (0.0071) | 0.8855 | 2099.9792 | 0.0241 | 624.5241 | 1.0000 |
| 1967 | 0.2987 | 0.4379 | 4.7218 | (0.0074) | 0.8836 | 1913.8820 | 0.0275 | 623.9275 | 1.0000 |
| 1968 | 0.3064 | 0.4483 | 4.6646 | (0.0096) | 0.8542 | 1956.9857 | 0.0291 | 623.5291 | 1.0000 |
| 1969 | 0.2995 | 0.4344 | 4.3255 | (0.0112) | 0.8376 | 1902.3882 | 0.0316 | 625.5316 | 0.9999 |
| 1970 | 0.2669 | 0.3798 | 3.7558 | 0.0084 | 1.1225 | 1569.7746 | 0.0309 | 623.0309 | 1.0000 |
| 1971 | 0.2709 | 0.3749 | 2.8733 | (0.0243) | 0.7423 | 1173.0140 | 0.0551 | 594.0551 | 0.9999 |
| 1972 | 0.2899 | 0.4095 | 3.5403 | (0.0160) | 0.8047 | 1416.8025 | 0.0411 | 582.5411 | 0.9999 |
| 1973 | 0.3038 | 0.4103 | 3.3578 | (0.0213) | 0.7649 | 1324.8158 | 0.0458 | 607.9458 | 0.9999 |
| 1974 | 0.3082 | 0.3987 | 2.9466 | (0.0085) | 0.9187 | 1040.9660 | 0.0605 | 649.4605 | 0.9999 |
| 1975 | 0.3766 | 0.4880 | 4.5821 | 0.0182 | 1.2217 | 1131.9165 | 0.0358 | 683.6358 | 0.9999 |
| 1976 | 0.3856 | 0.4721 | 3.6565 | 0.0211 | 1.2005 | 1029.9555 | 0.0572 | 875.0572 | 0.9999 |
| 1977 | 0.4037 | 0.4697 | 3.7239 | 0.0387 | 1.3569 | 741.4969 | 0.0584 | 871.6584 | 0.9999 |
| 1978 | 0.4150 | 0.4739 | 3.6358 | 0.0164 | 1.1433 | 576.9298 | 0.0599 | 829.8599 | 0.9999 |
| 1979 | 0.4152 | 0.4530 | 3.7667 | 0.0200 | 1.1813 | 323.6656 | 0.0531 | 804.0531 | 0.9999 |
| 1980 | 0.3838 | 0.4050 | 3.8153 | 0.0519 | 1.5160 | 161.0886 | 0.0463 | 930.5463 | 1.0000 |
| 1981 | 0.3540 | 0.3713 | 3.8418 | 0.1014 | 2.1008 | 210.4893 | 0.0341 | ##### | 1.0000 |
| 1982 | 0.3609 | 0.3785 | 4.0174 | 0.1124 | 2.2506 | 184.5421 | 0.0344 | ##### | 1.0000 |
| 1983 | 0.3504 | 0.3633 | 3.8726 | 0.0925 | 2.0225 | 98.5653 | 0.0321 | ##### | 1.0000 |
| 1984 | 0.3364 | 0.3538 | 3.7084 | 0.0653 | 1.7195 | 269.6556 | 0.0341 | ##### | 1.0000 |
| 1985 | 0.3259 | 0.3539 | 3.7836 | 0.0510 | 1.5917 | 587.0318 | 0.0285 | ##### | 1.0000 |
| 1986 | 0.3117 | 0.3497 | 3.7736 | 0.0321 | 1.3886 | 699.2085 | 0.0197 | ##### | 1.0000 |
| 1987 | 0.3056 | 0.3507 | 3.7927 | 0.0252 | 1.3132 | 660.3823 | 0.0167 | ##### | 1.0000 |
| 1988 | 0.2985 | 0.3477 | 3.7617 | 0.0261 | 1.3284 | 805.5282 | 0.0156 | ##### | 1.0000 |
| 1989 | 0.2932 | 0.3505 | 3.7907 | 0.0388 | 1.5012 | 854.6568 | 0.0146 | ##### | 1.0000 |
| 1990 | 0.2552 | 0.3088 | 3.3108 | 0.0380 | 1.4930 | 32.7436 | (7.6358) | ##### | 1.0068 |
| 1991 | 0.2877 | 0.3590 | 3.8832 | 0.0577 | 1.7792 | 119.4851 | (6.5019) | ##### | 1.0057 |
| 1992 | 0.3091 | 0.3992 | 4.2891 | 0.0606 | 1.8412 | 33.6822 | (5.5282) | ##### | 1.0038 |
| 1993 | 0.3231 | 0.4292 | 4.6418 | 0.0435 | 1.6250 | 35.1805 | (5.3500) | ##### | 1.0031 |
| 1994 | 0.3367 | 0.4503 | 4.8743 | 0.0365 | 1.5287 | 32.7576 | (4.7836) | ##### | 1.0029 |
| 1995 | 0.3853 | 0.5186 | 4.5951 | 0.0359 | 1.4287 | 27.8267 | (4.2672) | ##### | 1.0027 |
| 1996 | 0.3730 | 0.5157 | 5.2032 | 0.0176 | 1.2457 | 28.6724 | (4.4286) | ##### | 1.0029 |
| 1997 | 0.3758 | 0.5210 | 5.3849 | (0.0051) | 0.9270 | 80.3052 | 29.5405 | ##### | 0.9835 |
| 1998 | 0.3700 | 0.5293 | 5.7124 | (0.0193) | 0.7024 | 65.4274 | (3.6688) | ##### | 1.0022 |
| 1999 | 0.0000 | 0.0000 | 0.0000 | (0.0277) | 0.5932 | 0.0624 | (4.3794) | (3.3840) | (0.2942) |
| 2000 | 0.0000 | 0.0000 | 0.0000 | (0.0180) | 0.7461 | 0.0620 | (3.9744) | (2.8997) | (0.3706) |
| 2001 | 0.0000 | 0.0000 | 0.0000 | (0.0206) | 0.6926 | 0.0574 | (2.9613) | (1.8266) | (0.6212) |
| 2002 | 0.0000 | 0.0000 | 0.0000 | (0.0211) | 0.6796 | 0.0411 | (3.0017) | (2.0481) | (0.4656) |
| 2003 | 0.0000 | 0.0000 | 0.0000 | (0.0353) | 0.4878 | 0.0305 | 0.9188 | 1.7106 | 0.4629 |
| 2004 | 0.0000 | 0.0000 | 0.0000 | (0.0334) | 0.5002 | 0.2183 | (1.6506) | (0.9164) | (0.8012) |
| 2005 | 0.0000 | 0.0000 | 0.0000 | (0.0412) | 0.4131 | 0.1335 | (2.0186) | (1.1709) | (0.7240) |
| 2006 | 0.0000 | 0.0000 | 0.0000 | (0.0309) | 0.5453 | 0.0311 | (1.7600) | (1.0007) | (0.7588) |
| 2007 | 0.0000 | 0.0000 | 0.0000 | (0.0221) | 0.6590 | 0.0332 | (3.6798) | (3.0005) | (0.2264) |
| 2008 | 0.0000 | 0.0000 | 0.0000 | (0.0258) | 0.6241 | 0.0351 | (4.3723) | (3.6538) | (0.1966) |
| 2009 | 0.0000 | 0.0000 | 0.0000 | (0.0531) | 0.3739 | 0.0359 | (3.5705) | (2.8763) | (0.2414) |
| 2010 | 0.0000 | 0.0000 | 0.0000 | (0.0552) | 0.3444 | 0.0288 | (21.4060) | (20.6576) | (0.0362) |
| 2011 | 0.0000 | 0.0000 | 0.0000 | (0.0367) | 0.5608 | 0.0286 | (21.4068) | (20.6339) | (0.0375) |
| | m _K =M/K | m _Y =M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}-\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^*-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of International Financial Statistics Yearbook, IMF

Table BGr-1 Greece: Fundamental endogenous ratios

| GREECE | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|--------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.2436 | 2.1296 | 0.7227 | 0.3388 | 0.0119 | 7.8217 | 0.7190 | 0.4699 | 0.9251 |
| 1961 | 0.1711 | (0.4980) | 0.3430 | 0.3777 | 0.0507 | 6.4600 | 0.4528 | 0.3319 | 0.6418 |
| 1962 | 0.1694 | (0.5199) | 0.3664 | 0.4349 | 0.0503 | 5.8260 | 0.3895 | 0.2367 | 0.7664 |
| 1963 | 0.1297 | (0.3696) | 0.3779 | 0.5054 | 0.0723 | 2.9539 | 0.2566 | 0.1820 | 0.4392 |
| 1964 | 0.1119 | (0.4492) | 0.4138 | 0.6037 | 0.0899 | 1.7640 | 0.1854 | 0.1797 | 0.1979 |
| 1965 | 0.1179 | (0.9289) | 0.4531 | 0.6956 | 0.0903 | 1.5757 | 0.1695 | 0.1345 | 0.2310 |
| 1966 | 0.1132 | (3.2348) | 0.4833 | 0.7531 | 0.0660 | 1.8330 | 0.1503 | 0.1249 | 0.1927 |
| 1967 | 0.1295 | 2.6387 | 0.5325 | 0.8080 | 0.0519 | 2.1901 | 0.1602 | 0.0912 | 0.2718 |
| 1968 | 0.1204 | 5.4146 | 0.5074 | 0.8771 | 0.0654 | 1.7861 | 0.1372 | 0.0889 | 0.2103 |
| 1969 | 0.0965 | 1.7426 | 0.5204 | 0.9412 | 0.0811 | 1.0964 | 0.1025 | 0.1241 | 0.0716 |
| 1970 | 0.0961 | 0.9793 | 0.5331 | 1.0028 | 0.0764 | 1.1018 | 0.0958 | 0.1200 | 0.0624 |
| 1971 | 0.0925 | 0.6776 | 0.5569 | 1.0765 | 0.0749 | 0.9821 | 0.0859 | 0.0997 | 0.0680 |
| 1972 | 0.1011 | 0.5817 | 0.5780 | 1.1407 | 0.0841 | 0.8780 | 0.0886 | 0.1037 | 0.0703 |
| 1973 | 0.1364 | 0.5710 | 0.5807 | 1.1500 | 0.1090 | 0.9032 | 0.1186 | 0.1241 | 0.1129 |
| 1974 | 0.0950 | 0.5047 | 0.5712 | 1.1527 | 0.0712 | 1.0015 | 0.0824 | 0.0789 | 0.0859 |
| 1975 | 0.1015 | 0.6699 | 0.5902 | 1.1280 | 0.0658 | 1.0714 | 0.0900 | 0.0555 | 0.1247 |
| 1976 | 0.0929 | 0.7839 | 0.5871 | 1.0791 | 0.0661 | 0.9893 | 0.0861 | 0.0430 | 0.1272 |
| 1977 | 0.0963 | 0.7852 | 0.5811 | 1.0729 | 0.0625 | 1.1112 | 0.0897 | 0.0251 | 0.1470 |
| 1978 | 0.0936 | 0.8697 | 0.5678 | 1.0362 | 0.0631 | 1.1291 | 0.0903 | 0.0272 | 0.1431 |
| 1979 | 0.0928 | 0.9577 | 0.5564 | 1.0096 | 0.0742 | 0.9969 | 0.0919 | 0.0080 | 0.1534 |
| 1980 | 0.0931 | 1.0876 | 0.5963 | 0.9664 | 0.0498 | 1.2663 | 0.0964 | 0.0080 | 0.1573 |
| 1981 | 0.1297 | 1.4877 | 0.5551 | 0.8977 | 0.0406 | 2.5627 | 0.1445 | (0.0752) | 0.3172 |
| 1982 | 0.1326 | 3.4265 | 0.5164 | 0.8526 | 0.0666 | 1.8643 | 0.1556 | (0.0935) | 0.3347 |
| 1983 | 0.1306 | 3.0212 | 0.5178 | 0.8658 | 0.0737 | 1.6493 | 0.1508 | (0.1731) | 0.3617 |
| 1984 | 0.1140 | 6.6440 | 0.5069 | 0.8564 | 0.0771 | 1.4378 | 0.1331 | (0.2140) | 0.3317 |
| 1985 | (0.0150) | (0.2009) | 0.4755 | 0.8888 | 0.0957 | (0.1724) | (0.0168) | (0.2384) | 0.1088 |
| 1986 | 0.0078 | 0.0031 | 0.2751 | 0.3806 | (0.2697) | (0.0762) | 0.0205 | (0.4504) | 1.0453 |
| 1987 | 0.0464 | (0.6383) | (0.0877) | (0.0772) | (0.4479) | 1.2849 | (0.6015) | (0.6459) | (0.6342) |
| 1988 | (0.0125) | (0.0553) | (1.0372) | (0.5156) | (0.9428) | (0.0260) | 0.0242 | (1.0413) | (0.1970) |
| 1989 | 0.0115 | (1.6073) | (11.8152) | (0.9076) | (6.0698) | 0.0021 | (0.0127) | (1.5305) | (0.1744) |
| 1990 | 0.0198 | (0.3978) | (2.0899) | (0.6320) | 0.1616 | (0.1811) | (0.0313) | (0.9776) | (0.1849) |
| 1991 | 0.0029 | (0.0860) | (0.6899) | (0.3768) | 0.1236 | (0.0573) | (0.0077) | (0.3739) | (0.1171) |
| 1992 | 0.0116 | (0.1801) | (0.3121) | (0.2139) | 0.0733 | (0.6632) | (0.0541) | (0.1131) | (0.0824) |
| 1993 | 0.0220 | (0.7462) | (0.0812) | (0.0674) | 0.0675 | (4.3330) | (0.3259) | (0.0829) | (0.1300) |
| 1994 | 0.0057 | (0.0311) | 0.0928 | 0.0953 | 0.0766 | 0.7236 | 0.0595 | (0.2685) | (0.3790) |
| 1995 | (0.0183) | (0.9798) | 0.3714 | 0.3529 | 0.0329 | (0.9425) | (0.0519) | 0.0114 | 0.2273 |
| 1996 | 0.0143 | (0.2058) | 0.3229 | 0.4096 | 0.0527 | 0.5689 | 0.0349 | (0.1291) | (1.1493) |
| 1997 | 0.1169 | (0.3719) | 0.3834 | 0.5212 | 0.1220 | 1.5409 | 0.2244 | 0.0490 | 1.8980 |
| 1998 | 0.1195 | (0.8081) | 0.4487 | 0.6892 | 0.1157 | 1.2689 | 0.1734 | 0.0422 | 0.5547 |
| 1999 | 0.1320 | 3.3040 | 0.5136 | 0.8818 | 0.1143 | 1.0941 | 0.1497 | 0.0369 | 0.3371 |
| 2000 | 0.1729 | (0.0465) | 0.0062 | 0.0049 | 0.1505 | 184.5372 | 35.1827 | 0.0207 | 39.9679 |
| 2001 | 0.1129 | 0.2055 | 0.6837 | 1.8449 | 0.0904 | 0.5781 | 0.0612 | (0.0322) | 0.0770 |
| 2002 | 0.0952 | 0.1688 | 0.7059 | 2.0701 | 0.0724 | 0.5476 | 0.0460 | (0.1092) | 0.0703 |
| 2003 | 0.0948 | 0.1587 | 0.7130 | 2.1503 | 0.0775 | 0.4924 | 0.0441 | (0.0553) | 0.0595 |
| 2004 | 0.2117 | 0.3062 | 0.7464 | 2.1149 | 0.0304 | 2.3695 | 0.1001 | (0.1278) | 0.1366 |
| 2005 | 0.2234 | 0.2989 | 0.7486 | 2.1492 | 0.0285 | 2.6353 | 0.1039 | (0.1163) | 0.1432 |
| 2006 | 0.1978 | 0.2782 | 0.7415 | 2.1399 | 0.0399 | 1.7286 | 0.0924 | (0.0444) | 0.1187 |
| 2007 | 0.2008 | 0.2685 | 0.7427 | 2.1716 | 0.0484 | 1.4378 | 0.0925 | (0.0622) | 0.1233 |
| 2008 | 0.2612 | 0.3034 | 0.7618 | 2.2475 | 0.0405 | 2.0163 | 0.1162 | (0.0795) | 0.1571 |
| 2009 | 0.2879 | 0.3431 | 0.7853 | 2.3440 | 0.0235 | 3.3552 | 0.1228 | (0.1728) | 0.1883 |
| 2010 | 0.2806 | 0.3214 | 0.7920 | 2.4773 | 0.0185 | 3.9830 | 0.1133 | (0.2811) | 0.2074 |
| 2011 | 0.2846 | 0.3177 | 0.8103 | 2.6932 | 0.0143 | 4.6562 | 0.1057 | (0.1799) | 0.1761 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of

International Financial Statistics Yearbook, IMF

Table BGR–2 Greece: Neutrality of the financial/market assets to the real assets

| GREECE | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|--------|--------------------------------|---------------------|---------------------|----------------------------------|----------------------------|-------------------------|--|--------------|-----------------------|
| | m _K =M/K | m _T =M/Y | m _H =M/Π | $\Gamma_{(DEBT)} \cdot \Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^{**}-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*_{(US)}$ | $e^*_{(US)}=e_{(US)}/(r^*-r^*_{(US)})$ | | |
| | | | | (0.6390) | 0.1113 | 9.4772 | 0.6886 | 30.6886 | 0.9776 |
| 1960 | 0.4333 | 0.1468 | 0.6027 | (0.3928) | 0.1325 | 5.4576 | 0.4226 | 30.4226 | 0.9861 |
| 1961 | 0.4191 | 0.1583 | 0.9256 | (0.3095) | 0.2054 | 6.2654 | 0.3575 | 30.3575 | 0.9882 |
| 1962 | 0.4278 | 0.1861 | 1.0984 | (0.1741) | 0.3215 | 5.7337 | 0.2242 | 30.2242 | 0.9926 |
| 1963 | 0.4013 | 0.2028 | 1.5639 | (0.0954) | 0.4855 | 5.9387 | 0.1515 | 30.1515 | 0.9950 |
| 1964 | 0.3355 | 0.2025 | 1.8099 | (0.0795) | 0.5311 | 7.8638 | 0.1332 | 30.1332 | 0.9956 |
| 1965 | 0.2745 | 0.1910 | 1.6198 | (0.0603) | 0.5988 | 10.9938 | 0.1123 | 30.1123 | 0.9963 |
| 1966 | 0.2752 | 0.2072 | 1.8308 | (0.0702) | 0.5617 | 29.8769 | 0.1245 | 30.1245 | 0.9959 |
| 1967 | 0.2615 | 0.2113 | 1.6324 | 0.7378 | 6.3762 | 18.0969 | 0.1007 | 30.1007 | 0.9967 |
| 1968 | 0.2776 | 0.2434 | 2.0225 | (0.0225) | 0.7806 | 61.5258 | 0.0648 | 30.0648 | 0.9978 |
| 1969 | 0.2822 | 0.2656 | 2.7533 | (0.0158) | 0.8348 | 0.0000 | 0.0578 | 30.0578 | 0.9981 |
| 1970 | 0.2906 | 0.2914 | 3.0327 | (0.0059) | 0.9311 | 0.6740 | 0.0468 | 30.0468 | 0.9984 |
| 1971 | 0.3087 | 0.3324 | 3.5931 | (0.0086) | 0.9025 | 1.3575 | 0.0479 | 30.0479 | 0.9984 |
| 1972 | 0.3247 | 0.3704 | 3.6629 | (0.0286) | 0.7589 | 1.0403 | 0.0739 | 29.7739 | 0.9975 |
| 1973 | 0.2860 | 0.3289 | 2.4116 | 0.0359 | 1.4361 | 1.4233 | 0.0383 | 30.0383 | 0.9987 |
| 1974 | 0.2956 | 0.3407 | 3.5880 | 0.0288 | 1.3206 | 1.0510 | 0.0435 | 35.6935 | 0.9988 |
| 1975 | 0.3272 | 0.3691 | 3.6375 | 0.0289 | 1.3353 | 0.7471 | 0.0379 | 37.0689 | 0.9990 |
| 1976 | 0.3489 | 0.3764 | 4.0506 | 0.0303 | 1.3371 | 0.5815 | 0.0397 | 35.5457 | 0.9989 |
| 1977 | 0.3781 | 0.4056 | 4.2124 | 0.0443 | 1.4905 | 0.1950 | 0.0361 | 36.0411 | 0.9990 |
| 1978 | 0.4049 | 0.4195 | 4.4833 | 0.0752 | 1.8178 | 0.0131 | 0.0348 | 38.3178 | 0.9991 |
| 1979 | 0.3969 | 0.4008 | 4.3180 | 0.1161 | 2.2051 | 0.2253 | 0.0421 | 46.5771 | 0.9991 |
| 1980 | 0.4282 | 0.4138 | 4.4432 | 0.0688 | 1.4766 | 680.3947 | 0.0864 | 57.7164 | 0.9985 |
| 1981 | 0.5219 | 0.4685 | 3.6128 | 0.0494 | 1.3177 | 20.7271 | 0.1001 | 70.6701 | 0.9986 |
| 1982 | 0.5657 | 0.4823 | 3.6359 | 0.0542 | 1.3590 | 29.8722 | 0.0925 | 98.7625 | 0.9991 |
| 1983 | 0.5764 | 0.4990 | 3.8212 | 0.0719 | 1.5399 | 24.9095 | 0.0766 | 128.5566 | 0.9994 |
| 1984 | 0.6027 | 0.5162 | 4.5276 | 0.2218 | (12.1846) | 9.5802 | (0.0744) | 147.6856 | 1.0005 |
| 1985 | 0.5985 | 0.5319 | (35.5719) | 0.1845 | 10.0123 | 5.0867 | (0.0424) | 138.7176 | 1.0003 |
| 1986 | 1.4140 | 0.5381 | 69.0613 | 0.8197 | (0.3627) | #NUM! | (0.6655) | 125.2595 | 1.0053 |
| 1987 | (7.7236) | 0.5961 | 12.8396 | 0.2047 | 9.4723 | #NUM! | (0.0396) | 143.0604 | 1.0003 |
| 1988 | 0.0000 | 0.0000 | 0.0000 | 0.2455 | (18.3417) | #NUM! | (0.0754) | 157.7146 | 1.0005 |
| 1989 | 0.0000 | 0.0000 | 0.0000 | 0.3075 | (8.8184) | #NUM! | (58.3076) | 99.3224 | 1.5871 |
| 1990 | 0.0000 | 0.0000 | 0.0000 | 0.3022 | (38.3445) | #NUM! | (13.4439) | 161.8361 | 1.0831 |
| 1991 | 0.0000 | 0.0000 | 0.0000 | 0.3412 | (5.3091) | #NUM! | (0.4551) | 214.1249 | 1.0021 |
| 1992 | 0.0000 | 0.0000 | 0.0000 | 0.6115 | (0.8764) | #NUM! | 13.4226 | 262.6426 | 0.9489 |
| 1993 | 0.0000 | 0.0000 | 0.0000 | 0.2149 | 4.6109 | #VALUE! | (4.3810) | 235.7190 | 1.0186 |
| 1994 | 0.0000 | 0.0000 | 0.0000 | 0.2824 | (4.4427) | #VALUE! | 139.4791 | 376.5191 | 0.6296 |
| 1995 | 0.0000 | 0.0000 | 0.0000 | 0.1747 | 6.0051 | #DIV/0! | 20.1338 | 267.1538 | 0.9246 |
| 1996 | 0.0000 | 0.0000 | 0.0000 | (0.0744) | 0.6685 | 0.1849 | 29.9264 | 312.5364 | 0.9042 |
| 1997 | 0.0000 | 0.0000 | 0.0000 | (0.0886) | 0.4890 | 0.2239 | 15.7405 | 298.3105 | 0.9472 |
| 1998 | 0.0000 | 0.0000 | 0.0000 | (0.0867) | 0.4208 | 0.6241 | 34.1371 | 362.5771 | 0.9058 |
| 1999 | 0.0000 | 0.0000 | 0.0000 | (35.1217) | 0.0017 | 0.1379 | 40.6621 | 406.2821 | 0.8999 |
| 2000 | 0.0000 | 0.0000 | 0.0000 | (0.0082) | 0.8658 | 0.1028 | (53.4543) | (52.3196) | (0.0217) |
| 2001 | 0.0000 | 0.0000 | 0.0000 | 0.0052 | 1.1138 | 0.0761 | 14.4427 | 15.3963 | 0.0619 |
| 2002 | 0.0000 | 0.0000 | 0.0000 | (0.0014) | 0.9688 | 0.0552 | 3.2243 | 4.0161 | 0.1972 |
| 2003 | 0.0000 | 0.0000 | 0.0000 | (0.0575) | 0.4256 | 0.0352 | 6.8612 | 7.5954 | 0.0967 |
| 2004 | 0.0000 | 0.0000 | 0.0000 | (0.0680) | 0.3454 | 0.0369 | (24.9221) | (24.0744) | (0.0352) |
| 2005 | 0.0000 | 0.0000 | 0.0000 | (0.0517) | 0.4404 | 0.0338 | 0.3616 | 1.1209 | 0.6774 |
| 2006 | 0.0000 | 0.0000 | 0.0000 | (0.0475) | 0.4867 | 0.0337 | (1.7275) | (1.0482) | (0.6481) |
| 2007 | 0.0000 | 0.0000 | 0.0000 | (0.0682) | 0.4130 | 0.0275 | (1.6579) | (0.9394) | (0.7649) |
| 2008 | 0.0000 | 0.0000 | 0.0000 | (0.0711) | 0.4209 | 0.0228 | (1.5513) | (0.8571) | (0.8099) |
| 2009 | 0.0000 | 0.0000 | 0.0000 | (0.0224) | 0.8024 | 0.0237 | (1.3332) | (0.5848) | (1.2797) |
| 2010 | 0.0000 | 0.0000 | 0.0000 | 0.0518 | 1.4906 | 0.0275 | (1.3408) | (0.5679) | (1.3609) |
| 2011 | 0.0000 | 0.0000 | 0.0000 | $\Gamma_{(DEBT)} \cdot \Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^{**}-r^*_{(US)}$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF

Table B1r-1 Ireland: Fundamental endogenous ratios

| IRELAND | EL | ER | EP | EM | ES | EW | EV | FV | HV |
|---------|----------|------------|-----------|----------|------------------------|--------------------------------|-----------------------|-----------------------------|---------------------------------|
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |
| | | | | | | $x = \alpha/(i \cdot \beta^*)$ | | G | PRI |
| 1960 | 0.1881 | (0.1052) | 0.1030 | 0.0914 | 0.0378 | 43.4206 | 2.0587 | 0.0059 | (0.0118) |
| 1961 | 0.1604 | (0.0580) | 0.1355 | 0.1407 | 0.0482 | 21.2118 | 1.1395 | 0.0064 | (0.0097) |
| 1962 | 0.1540 | (0.1611) | 0.2061 | 0.2089 | 0.0628 | 9.4447 | 0.7371 | 0.0067 | (0.0099) |
| 1963 | 0.1482 | (0.2534) | 0.2690 | 0.2856 | 0.0666 | 6.0448 | 0.5190 | 0.0056 | (0.0115) |
| 1964 | 0.1360 | (0.2259) | 0.3019 | 0.3579 | 0.0748 | 4.2049 | 0.3801 | 0.0053 | (0.0125) |
| 1965 | 0.1278 | (0.3895) | 0.3631 | 0.4580 | 0.0776 | 2.8905 | 0.2790 | 0.0052 | (0.0125) |
| 1966 | 0.1273 | (0.4274) | 0.3899 | 0.5278 | 0.0569 | 3.5005 | 0.2413 | 0.0055 | (0.0131) |
| 1967 | 0.1078 | (0.4575) | 0.4030 | 0.5640 | 0.0479 | 3.3327 | 0.1912 | 0.0062 | (0.0107) |
| 1968 | 0.1172 | (0.5402) | 0.4188 | 0.6037 | 0.0604 | 2.6905 | 0.1941 | 0.0068 | (0.0140) |
| 1969 | 0.1057 | (0.9229) | 0.4491 | 0.6752 | 0.0843 | 1.5381 | 0.1565 | 0.0111 | (0.0099) |
| 1970 | 0.1080 | (1.9913) | 0.4750 | 0.7411 | 0.0742 | 1.6094 | 0.1457 | 0.0097 | (0.0146) |
| 1971 | 0.1063 | 50.8298 | 0.5012 | 0.7868 | 0.0693 | 1.5263 | 0.1351 | 0.0070 | (0.0213) |
| 1972 | 0.0924 | 6.2445 | 0.5104 | 0.8039 | 0.0745 | 1.1899 | 0.1149 | 0.0081 | (0.0215) |
| 1973 | 0.0942 | 2.5687 | 0.5259 | 0.8500 | 0.0907 | 0.9366 | 0.1108 | 0.0090 | (0.0289) |
| 1974 | 0.1303 | 1.0402 | 0.6179 | 0.9809 | 0.0783 | 1.0289 | 0.1329 | 0.0033 | (0.0596) |
| 1975 | 0.1016 | 2.6307 | 0.5144 | 0.9102 | 0.0663 | 1.4465 | 0.1116 | (0.0104) | (0.0807) |
| 1976 | 0.1005 | 1.5031 | 0.5407 | 0.9212 | 0.0824 | 1.0353 | 0.1091 | (0.0142) | (0.1092) |
| 1977 | 0.0938 | 1.1529 | 0.5467 | 0.9717 | 0.0998 | 0.7798 | 0.0966 | (0.0105) | (0.1336) |
| 1978 | 0.0930 | 0.7561 | 0.5680 | 1.0690 | 0.1075 | 0.6583 | 0.0870 | (0.0121) | (0.1935) |
| 1979 | 0.1067 | 0.5793 | 0.6104 | 1.2080 | 0.1152 | 0.5916 | 0.0884 | (0.0202) | (0.4291) |
| 1980 | 0.1326 | 0.4973 | 0.6137 | 1.2621 | 0.0929 | 0.8981 | 0.1050 | (0.0364) | (1.3834) |
| 1981 | 0.1351 | 0.5002 | 0.6260 | 1.2936 | 0.0948 | 0.8513 | 0.1044 | (0.0401) | 9.1334 |
| 1982 | 0.0930 | 0.3946 | 0.6278 | 1.3725 | 0.1022 | 0.5398 | 0.0678 | (0.0414) | 0.8242 |
| 1983 | 0.0948 | 0.2908 | 0.6360 | 1.4854 | 0.0883 | 0.6143 | 0.0638 | (0.0380) | 0.4558 |
| 1984 | 0.1081 | 0.3067 | 0.6621 | 1.5940 | 0.0872 | 0.6328 | 0.0678 | (0.0326) | 0.3251 |
| 1985 | 0.1029 | 0.2076 | 0.6651 | 1.7225 | 0.0803 | 0.6448 | 0.0597 | (0.0320) | 0.2505 |
| 1986 | 0.0925 | 0.1974 | 0.6687 | 1.7569 | 0.0647 | 0.7082 | 0.0526 | (0.0355) | 0.1456 |
| 1987 | 0.0955 | 0.0828 | 0.6573 | 1.8171 | 0.0598 | 0.8323 | 0.0526 | (0.0284) | 0.1064 |
| 1988 | 0.1012 | 0.1458 | 0.6751 | 1.8678 | 0.0592 | 0.8228 | 0.0542 | (0.0073) | 0.0910 |
| 1989 | 0.1209 | 0.0239 | 0.6575 | 1.8901 | 0.0756 | 0.8330 | 0.0639 | 0.0003 | (0.0056) |
| 1990 | 0.1410 | 0.1420 | 0.6924 | 2.0056 | 0.0734 | 0.8532 | 0.0703 | 0.0003 | (0.0072) |
| 1991 | 0.1157 | 0.2190 | 0.7259 | 2.1396 | 0.0569 | 0.7682 | 0.0541 | 0.0006 | (0.0059) |
| 1992 | 0.1091 | 0.2591 | 0.7428 | 2.1942 | 0.0463 | 0.8165 | 0.0497 | (0.0006) | (0.0073) |
| 1993 | 0.1326 | 0.1994 | 0.7291 | 2.2092 | 0.0454 | 1.0859 | 0.0600 | 0.0005 | (0.0082) |
| 1994 | 0.1284 | 0.1953 | 0.7282 | 2.2101 | 0.0455 | 1.0534 | 0.0581 | 0.0006 | (0.0085) |
| 1995 | 0.2003 | 0.3557 | 0.7545 | 2.0612 | 0.0495 | 1.3172 | 0.0972 | 0.0016 | (0.0154) |
| 1996 | 0.2299 | 0.3436 | 0.7536 | 2.0828 | 0.0523 | 1.4369 | 0.1104 | 0.0024 | (0.0194) |
| 1997 | 0.3155 | 0.4024 | 0.7680 | 2.0450 | 0.0565 | 1.6866 | 0.1543 | 0.0033 | (0.0322) |
| 1998 | 0.3380 | 0.4278 | 0.7780 | 2.0495 | 0.0596 | 1.6180 | 0.1649 | 0.0057 | (0.0387) |
| 1999 | 0.3218 | 0.4636 | 0.7491 | 1.7980 | 0.0634 | 1.6994 | 0.1790 | 0.2545 | 0.1648 |
| 2000 | 0.4236 | 0.5268 | 0.7829 | 1.8351 | 0.0642 | 1.8279 | 0.2308 | 0.3646 | 0.2082 |
| 2001 | 0.4258 | 0.5279 | 0.8021 | 1.9360 | 0.0577 | 1.8216 | 0.2200 | 0.2697 | 0.2119 |
| 2002 | 0.4359 | 0.5156 | 0.8128 | 2.0364 | 0.0553 | 1.8168 | 0.2141 | 0.2107 | 0.2146 |
| 2003 | 0.4347 | 0.4972 | 0.8248 | 2.1788 | 0.0494 | 1.8706 | 0.1995 | 0.1969 | 0.1999 |
| 2004 | 0.4424 | 0.4899 | 0.8403 | 2.3330 | 0.0468 | 1.7979 | 0.1896 | 0.1875 | 0.1899 |
| 2005 | 0.4600 | 0.4678 | 0.8463 | 2.4786 | 0.0507 | 1.6484 | 0.1856 | 0.1943 | 0.1845 |
| 2006 | 0.4533 | 0.4493 | 0.8514 | 2.6149 | 0.0509 | 1.5547 | 0.1734 | 0.2659 | 0.1628 |
| 2007 | 0.3809 | 0.3867 | 0.8417 | 2.7865 | 0.0525 | 1.3636 | 0.1367 | 0.1986 | 0.1300 |
| 2008 | 0.2285 | 0.2966 | 0.8401 | 3.2125 | 0.0435 | 0.9997 | 0.0711 | 0.0396 | 0.0749 |
| 2009 | 0.2031 | 0.2903 | 0.8690 | 3.8293 | 0.0300 | 1.0211 | 0.0530 | (0.0224) | 0.0644 |
| 2010 | 0.2295 | 0.3143 | 0.8883 | 4.1443 | 0.0226 | 1.2797 | 0.0554 | (0.0246) | 0.0752 |
| 2011 | 0.2800 | 0.3148 | 0.8956 | 4.3621 | 0.0240 | 1.3611 | 0.0642 | (0.0110) | 0.0848 |
| | α | δ_0 | β^* | Ω | $g_A^* = i(1-\beta^*)$ | $x = r^*/g_Y^*$ | $r^* = \alpha/\Omega$ | $r_G^* = \alpha_G/\Omega_G$ | $r_{PRI}^* = \alpha_P/\Omega_P$ |

Data source: KEWT database II, 7.13-2 & 3, 1960-2011, based on original data of

International Financial Statistics Yearbook, IMF

Table B1r–2 Ireland: Neutrality of the financial/market assets to the real assets

| IRELAND | IF | IG | IH | IT | IU | IV | JD | JE | JF |
|---------|--------------------------------|--------|---------------------|---------------------------|----------------------------|-------------------------|--|--------------|-----------------------|
| | mK=M/K | mY=M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^{**}-r^*(US)$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |
| | M2 is used for money supply, M | | | | | $y^{**}=y^*/y^*_{(US)}$ | $e^*_{(US)}=e_{(US)}/(r^*-r^*_{(US)})$ | | |
| 1960 | 4046 | 370 | 1965 | (2.0042) | 0.0265 | 24.6129 | 2.0283 | 4.8321 | 0.5802 |
| 1961 | 2616 | 368 | 2296 | (1.0791) | 0.0530 | 19.1456 | 1.1092 | 3.9173 | 0.7168 |
| 1962 | 1741 | 364 | 2362 | (0.6765) | 0.0822 | 26.8666 | 0.7051 | 3.5076 | 0.7990 |
| 1963 | 1185 | 339 | 2284 | (0.4642) | 0.1056 | 30.1033 | 0.4866 | 3.2832 | 0.8518 |
| 1964 | 886 | 317 | 2330 | (0.3208) | 0.1560 | 27.8794 | 0.3462 | 3.1363 | 0.8896 |
| 1965 | 693 | 317 | 2484 | (0.2166) | 0.2236 | 37.8919 | 0.2427 | 3.0455 | 0.9203 |
| 1966 | 635 | 335 | 2632 | (0.1717) | 0.2884 | 41.1600 | 0.2034 | 2.9936 | 0.9321 |
| 1967 | 629 | 355 | 3288 | (0.1213) | 0.3656 | 34.6463 | 0.1555 | 2.5618 | 0.9393 |
| 1968 | 634 | 383 | 3268 | (0.1205) | 0.3792 | 35.1575 | 0.1575 | 2.5419 | 0.9380 |
| 1969 | 553 | 374 | 3537 | (0.0594) | 0.6205 | 39.2697 | 0.1188 | 2.5195 | 0.9528 |
| 1970 | 501 | 371 | 3435 | (0.0471) | 0.6765 | 39.6049 | 0.1078 | 2.5015 | 0.9569 |
| 1971 | 456 | 359 | 3374 | (0.0503) | 0.6278 | 58.8583 | 0.0959 | 2.6484 | 0.9638 |
| 1972 | 404 | 325 | 3516 | (0.0203) | 0.8231 | 66.1744 | 0.0741 | 2.4222 | 0.9694 |
| 1973 | 395 | 335 | 3560 | 0.0125 | 1.1125 | 112.1359 | 0.0662 | 2.3894 | 0.9723 |
| 1974 | 395 | 387 | 2970 | 0.0357 | 1.2688 | 2.4522 | 0.0888 | 2.4373 | 0.9636 |
| 1975 | 412 | 375 | 3693 | 0.0348 | 1.3119 | 73.7574 | 0.0652 | 2.0887 | 0.9688 |
| 1976 | 367 | 338 | 3368 | 0.0458 | 1.4202 | 578.6563 | 0.0608 | 1.7632 | 0.9655 |
| 1977 | 339 | 330 | 3515 | 0.0164 | 1.1702 | ##### | 0.0465 | 1.9525 | 0.9762 |
| 1978 | 315 | 337 | 3618 | 0.0413 | 1.4742 | 1.7278 | 0.0328 | 2.0673 | 0.9841 |
| 1979 | 279 | 337 | 3155 | 0.0623 | 1.7054 | 5.5292 | 0.0313 | 2.1763 | 0.9856 |
| 1980 | 281 | 355 | 2680 | 0.0485 | 1.4616 | 4.2911 | 0.0507 | 1.9482 | 0.9740 |
| 1981 | 260 | 336 | 2491 | 0.0682 | 1.6530 | 3.8294 | 0.0464 | 1.6264 | 0.9715 |
| 1982 | 224 | 307 | 3298 | 0.1028 | 2.5166 | 3.9618 | 0.0123 | 1.4088 | 0.9912 |
| 1983 | 195 | 290 | 3059 | 0.0752 | 2.1789 | 3.6282 | 0.0054 | 1.1404 | 0.9952 |
| 1984 | 178 | 283 | 2621 | 0.0784 | 2.1564 | 3.3021 | 0.0112 | 1.0027 | 0.9888 |
| 1985 | 163 | 281 | 2730 | 0.0667 | 2.1169 | 4.3877 | 0.0021 | 1.2456 | 0.9983 |
| 1986 | 177 | 311 | 3366 | 0.0581 | 2.1031 | 4.7588 | (0.0103) | 1.3892 | 1.0074 |
| 1987 | 173 | 314 | 3289 | 0.0601 | 2.1441 | 5.8367 | (0.0114) | 1.6641 | 1.0068 |
| 1988 | 166 | 310 | 3060 | 0.0407 | 1.7524 | 4.9395 | (0.0096) | 1.4979 | 1.0064 |
| 1989 | 169 | 320 | 2650 | 0.0256 | 1.3996 | 4.8222 | 0.0012 | 1.5575 | 0.9992 |
| 1990 | 0.0000 | 0.0000 | 0.0000 | 0.0305 | 1.4335 | 0.0271 | (2.7679) | (2.2047) | (0.2555) |
| 1991 | 0.0000 | 0.0000 | 0.0000 | 0.0376 | 1.6958 | 0.0323 | (1.9640) | (1.3925) | (0.4104) |
| 1992 | 0.0000 | 0.0000 | 0.0000 | 0.0414 | 1.8319 | 0.0333 | (2.0848) | (1.4711) | (0.4172) |
| 1993 | 0.0000 | 0.0000 | 0.0000 | 0.0172 | 1.2863 | 0.0264 | (0.8070) | (0.0982) | (7.2167) |
| 1994 | 0.0000 | 0.0000 | 0.0000 | 0.0238 | 1.4098 | #VALUE! | (1.3833) | (0.7370) | (0.8771) |
| 1995 | 0.0000 | 0.0000 | 0.0000 | (0.0142) | 0.8542 | #VALUE! | (0.1006) | 0.5223 | 1.1925 |
| 1996 | 0.0000 | 0.0000 | 0.0000 | (0.0356) | 0.6775 | #DIV/0! | (0.8965) | (0.3016) | (1.9721) |
| 1997 | 0.0000 | 0.0000 | 0.0000 | (0.0894) | 0.4207 | 0.0312 | (1.7389) | (1.0398) | (0.6724) |
| 1998 | 0.0000 | 0.0000 | 0.0000 | 0.0037 | 1.0223 | 0.0270 | (2.2095) | (1.5371) | (0.4374) |
| 1999 | 0.0000 | 0.0000 | 0.0000 | (0.0326) | 0.8179 | 0.0220 | (1.3246) | (0.3291) | (3.0243) |
| 2000 | 0.0000 | 0.0000 | 0.0000 | (0.0759) | 0.6711 | 0.0105 | (1.2905) | (0.2158) | (4.9796) |
| 2001 | 0.0000 | 0.0000 | 0.0000 | (0.1070) | 0.5137 | 0.0128 | (1.5562) | (0.4215) | (2.6918) |
| 2002 | 0.0000 | 0.0000 | 0.0000 | (0.0858) | 0.5994 | 0.0081 | (1.2801) | (0.3266) | (2.9201) |
| 2003 | 0.0000 | 0.0000 | 0.0000 | (0.0488) | 0.7553 | 0.0069 | (1.0760) | (0.2842) | (2.7858) |
| 2004 | 0.0000 | 0.0000 | 0.0000 | (0.0361) | 0.8095 | 0.0073 | (1.0759) | (0.3418) | (2.1482) |
| 2005 | 0.0000 | 0.0000 | 0.0000 | (0.0130) | 0.9301 | 0.0065 | (1.2549) | (0.4073) | (2.0813) |
| 2006 | 0.0000 | 0.0000 | 0.0000 | (0.0028) | 0.9840 | 0.0059 | (1.0702) | (0.3109) | (2.4422) |
| 2007 | 0.0000 | 0.0000 | 0.0000 | 0.0023 | 1.0169 | 0.0093 | (1.1029) | (0.4236) | (1.6035) |
| 2008 | 0.0000 | 0.0000 | 0.0000 | 0.0751 | 2.0557 | 0.0212 | (1.1118) | (0.3933) | (1.8268) |
| 2009 | 0.0000 | 0.0000 | 0.0000 | 0.0734 | 2.3834 | 0.0446 | (1.0908) | 0.1527 | 8.1431 |
| 2010 | 0.0000 | 0.0000 | 0.0000 | 0.0020 | 1.0364 | 0.0260 | (1.0519) | (0.3035) | (2.4659) |
| 2011 | 0.0000 | 0.0000 | 0.0000 | 0.0318 | 1.4955 | 0.0234 | (1.0431) | (0.2702) | (2.8606) |
| | mK=M/K | mY=M/Y | m ₁ =M/Π | $\Gamma_{(DEBT)}\Gamma^*$ | $\Gamma_{(DEBT)}/\Gamma^*$ | $e_{(US)}/y^{**}$ | $r^{**}-r^*_{(US)}$ | $e^*_{(US)}$ | $e_{(US)}/e^*_{(US)}$ |

Data source: KEWT database II, 7.13–2 & 3, 1960–2011, based on original data of

International Financial Statistics Yearbook, IMF