Tax Policy Revisit to Two Multipliers, Tax and Government Spending, 1990–2010, in the Endogenous-Equilibrium, Using 72 Cases by Area and Country

Hideyuki Kamiryo

(Received on May 7, 2012)

1. Introduction

This chapter focuses tax policy revisit to two fiscal multipliers. A multiplier and its inverse have a deep meaning behind. A multiplier in the literature represents an accepted thought while the inverse of that multiplier reflects the thought of the endogenous system. It implies that the literature and the endogenous system are connected with each other closely by nature. In a separate paper, the author discussed the relationship between the actual statistics data and endogenous data prevailing in the endogenous system. The relationship between actual and endogenous data constitutes one aspect and, the relationship between multiplier and its inverse, the other aspect.

For tax policy, the endogenous system has realized a unique integration of economic policies among real, financial, market, central and local banks, and others. Tax policy is not a part of financial and market polices. Tax policy is attributed to real asset policy. And, tax policy presents a clue of integrated policies. Two multipliers in the literature are GDP/Taxes and GDP/government spending, where government spending is the sum of consumption and investment at the government sector; $E_G = C_G + I_G$. The corresponding ratios are; $Y_G / Y = T_{AX} / Y$ and $(C_G + I_G) / Y$, and Y = income = expenditures = output holds in the endogenous-system. The differences between the multipliers and the inverse numbers/ratios reflect the differences between the literature and the endogenous system. Conclusively speaking and abbreviating each proof in this paper, the differences are as follows:

The multipliers in the literature:

1. GDP differs from net disposable income of wages and profits.
2. Taxes are actual taxes and do not determine the size of government.
3. Government spending remains statistics data

4. Therefore, each inverse, $Taxes / GDP$ or E_G / GDP, is independent of $GDP / Taxes$ or GDP / E_G. Econometrically, variable versus independent variable exist.

The inverse numbers in the endogenous system:

1. $Y = C + S = W + \Pi$ holds and satisfies the three equality advocated by Meade, J. E., and Stone, J. R. N. (1969).
2. Taxes are endogenous taxes and endogenously determine the size of government.
3. Government spending is measured as endogenous data. The balance of payments, deficit, and the residual at the private sector are all set endogenously, each as the difference between saving and net investment by sector and, in an open economy by country.
4. Therefore, each inverse, T_{AX} / Y or E_G / Y, is exactly the same as the fiscal multiplier Y / T_{AX} or Y / E_G. There is no room for econometrics to work in the endogenous system.

From the above context, tax policy connected with fiscal multipliers may remain unsolved in the literature. And, tax policy connected with fiscal multipliers based on the endogenous system is able to serve an integrated set of policies as a core in reality. However, there is a fact proved by evidences in the endogenous system. This fact is: Actual or estimated data are always within a range of endogenous data in the endogenous-equilibrium, as theoretically and empirically proved in the author's separated papers. It is suggested: If actual or estimated data become close to endogenous data in equilibrium, actual or estimated data are useful and able to cooperate with endogenous data. For example, actual or estimated multipliers are comparable with endogenous multipliers or, actual or estimated inverse numbers with endogenous inverse numbers. In other words, fiscal multipliers or the inverse numbers are directly compared with those in the endogenous system. The direct connector between fiscal multipliers in the literature and those in the endogenous system is a moderate level of the endogenous equilibrium. This level is measured by the speed years for convergence by country, or variables simultaneously measured such as the rate of return and the growth rate of output in equilibrium. These variables are shocked suddenly by rapid changes in tax policy and lose a moderate level of endogenous equilibrium.

Section 2 compares fiscal multipliers with the inverse numbers by country using KEWT 6.12 data-sets, 1990–2010 by sector. The author selected 72 countries including three area averages, as shown in Tables 1 to 12 by country. Appendix summarizes multipliers and the inverse numbers much more broadly than fiscal multipliers in the text, with a few historical reviews. Accord-

ing to Davar Ezra (2010, 25), modern general equilibrium theory, sets investment the cause and sets national income the effect. The author's point at issue still differs from Davar Ezra's and clarifies a true story. Appendix covers essential ratios that control an integrated set of policies and corresponding evidences in equilibrium. It shows what position multipliers occupy within the endogenous system. Figure DA1 in Appendix illustrates the characters of multipliers, marginal versus average, using the plane of the y axis to the x axis. Figure DA1 is useful for readers to broadly back to the original base, compared with the points in the literature.

2. Two fiscal multipliers and implications for 72 countries, 1990–2010

Tables 1 to **12** show the trends of two fiscal multipliers, 1990–2010, by country. These are results within the same data-sets and without the use of econometrics. Two fiscal multipliers and the inverse numbers/ratios each show the same evidences. The relationship between two fiscal multipliers or two endogenous ratios complete when readers endogenously confirm the importance of each corresponding rate of technological progress, $g_A^* = i(1-\beta^*)$. The ratio of net investment to output, $i = I/Y$, and the qualitative net investment coefficient, $(1-\beta^*)$, are not directly included in two fiscal multipliers. Nevertheless, $i = I/Y$ and $(1-\beta^*)$ are involved in the speed years for convergence by country and accordingly, in fundamental variables. As the author stresses everywhere, the endogenous system measures the rate of technological progress exclusively in the literature. Then, Tables 1 to 12 each reinforce the essence of the endogenous system by country.

Selected countries in these tables are: 1) 17 Asian & Pacific, the US, Canada, Australia, New Zealand, and Mexico; 2) Bangladesh, China, India, Indonesia, Japan, Korea; 3) Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam; 4) 14 Euro area, Austria, Belgium, Finland, France, Germany; 5) Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal; 6) Slovak, Slovenia, Spain, Romania, Russia, Turkey; 7) 15 Non-Euro area, Denmark, Iceland, Norway, Sweden, Switzerland; 8) the UK, Bulgaria, Czech Republic, Hungary, Latvia, Poland; 9) Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay; 10) Peru, Iran, Kazakhstan, Kuwait, Pakistan, Saudi Arabia; 11) Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa; 12) Tanzania, Ukraine, Taiwan, Honduras, Estonia, Lithuania. Note in the above data, $72 = 6 \times 12$, three area averages are included.

First of all, endogenous taxes determine the size of government endogenously. However, it never means that the government sector is determined by the size of government. The size of

government determines a base for all the economic policies and even the future of national economic framework, robust or weak. A sincere researcher may advocate that deficit determines the government sector alone and deflation is a problem of the total economy. This must be a big mistake. The size of government dominates a decisive source of economic power.

Look at T_{AX}/Y and E_G/Y or, Y/T_{AX} and Y/E_G in Tables 1 to 12. The trends by country are stable or changing over the last 21 years. These are the results of tax policy by country and reflect some parts of national taste and culture. A problem is the relationship between tax policy and the rate of technological progress. It seems that this relationship differs significantly by country and by year and as a result, is not controllable. It seems to be true yet, an underlining truth is the existence behind the ratio of net investment to output and the qualitative net investment coefficient, $i = I/Y$ and $(1-\beta^*)$.

Endogenous equations each reduce to corresponding hyperbolas. A hyperbola, $r^*(i)$, determines the rate of inflation or deflation endogenously. A hyperbola, $\beta^*(i)$, determines the rate of rate of technological progress endogenously. Both hyperbolas are similar and each form a type of $y = (cx + d)/ax$ and, the vertical asymptote is zero while the horizontal asymptote determines either the rate of inflation/deflation or the rate of technological progress. Therefore, tax policy is involved in the rate of technological progress and its evidences.

Tax multipliers in the literature do not reveal these backgrounds. Nevertheless, actual and endogenous data of multipliers are closely related and besides, 25 statistics data are absorbed into the endogenous system. Therefore, the relationship between tax multipliers and the rate of technological progress totally reflects the results of an integrated set of economic policies, real, financial, market, and central and local banks. The author does not here indicate these performances by country. Readers are able to interpret results of T_{AX}/Y and E_G/Y or, Y/T_{AX} and Y/E_G, each shown in Tables 1 to 12.

In general, a young-developing countries have difficulties much more than those at robust stage young countries (see *PRSCE* 52 (Feb), 2012, although the aspect differs using all the basic data). This paper, using two fiscal multipliers, expresses the same phenomena as inverse ratios, with related evidences.

Next, let the author summarize the differences between Y/T_{AX} and Y/E_G or T_{AX}/Y and E_G/Y in Tables 1 to 12. The size of government is determined by T_{AX}/Y, starting with $i = I/Y$, $i_G = I_G/Y$, and accordingly, $i_{PRI} = I_{PRI}/Y$. On the other hand, Y/E_G includes net investment at the government sector in $E_G = C_G + I_G$. Net investment after capital consumption by sector is not directly expressed yet, the balance between sectors is most important. Otherwise, sustain-

able and moderate endogenous equilibrium does not hold. In this sense, the essence of two fiscal multipliers does not differ al all. It seems to have some differences striking at some countries. These results come from sudden shocks of fundamental variables. Young and weak developing countries need infrastructures to stabilize foreign direct investment for many years and during these years, developed countries need to be patient.

3. A short remarks

Financial market assets do not work always as the second best by country. Young developing countries need experiences, if possible with a bright lighthouse such as two fiscal multipliers in this paper. For country comparison, the multiplier appears sensitive much more than its inverse. Two fiscal multipliers are results but at the same time show causes when the endogenous system is used. A problem on endogenous data is that it takes many years for young developing countries to have statistics trustworthy, partly due to unpublished deficit by some reasons. Developed countries differently each have difficulties under the decrease in population in addition to a delicate relationship between voting and democracy. For developed countries, the size of government must be openly and alternatively discussed year by year towards the future drawing of the national direction.

It is true that a country is able to maintain sustainable growth in corporation with globalization. The marker principle and the price-equilibrium regrettably do not answer this truth. For example, pertinent articles appear by year from the viewpoint of economic policy.[1)] Therefore, the author advocates that the endogenous system reinforce the price-equilibrium by presenting two fiscal multipliers. Otherwise, the range of each multiplier in the literature is not appropriately settled when model parameters are set given or fixed while these parameters actually change by year.

An essence comes not from the second best but the first best based on the real assets. More improvement in the current econometrics is promising in cooperation with the endogenous system. Reinforce the SNA's records and recording objective by introducing policy-oriented subsystem, endogenously with an integrated set of economic policies, real, fiscal, financial, market, and central and local banks.

1) In American Economic Journal: Economic Policy: #3) A model-based evaluating of the debate on the size of the tax multiplier; #4) Fiscal policy multipliers on sub-national government spending; #5) Measuring tax multipliers: the narrative method in fiscal VARs.

Appendix Broader interpretation of the multipliers as the inverses of the endogenous KEWT data-sets

The purpose of this Appendix is to compare the multipliers each with its inverse (or, specified endogenous ratios each with its inverse). The author here theoretically summarizes the relationship between the multipliers and their inverses. Figure DA1 illustrates the characters of the multipliers, both marginal and average, on the plane of the y axis to the x axis. KEWT 6.12 measures all these multipliers, marginal and average. The multipliers are each exactly the inverse of the corresponding ratio at the endogenous system. Note that the multipliers in the literature are estimated using econometrics and based on actual data statistics and that these multipliers do not express a consistent relationship between the multipliers, growth rates, and the rate of return.

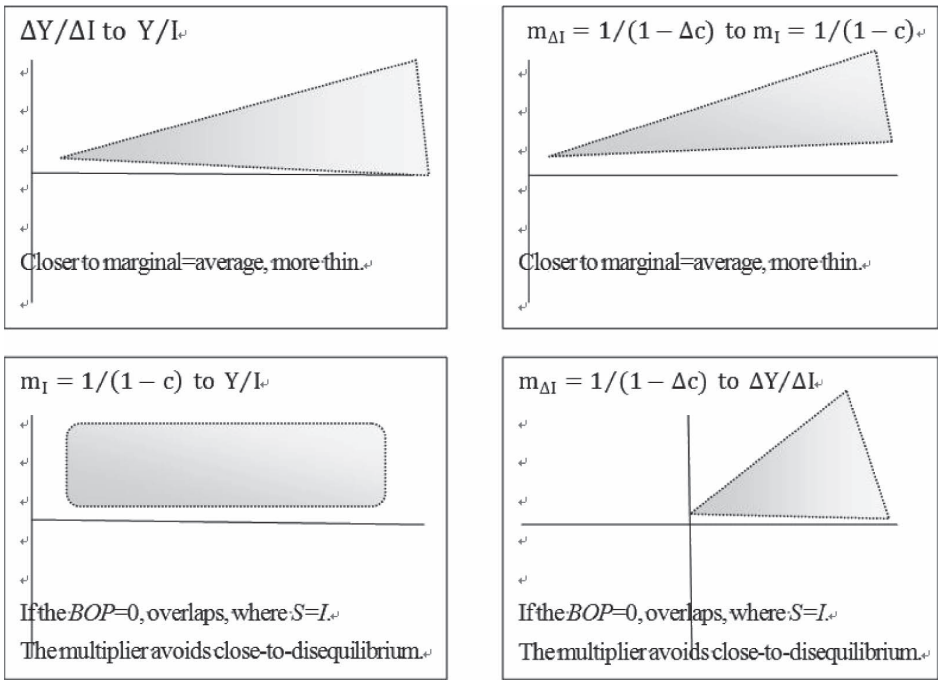
The multiplier was first presented by Samuelson, Paul (1939 a, b). Samuelson integrated the multiplier with the principle of accumulation. The principle of accumulation implies that investment is effective not only for the investment year but also for consecutive several years and, this fact has been precisely proved in the KEWT data-sets. There were no accurate national accounts data in 1939 yet, Samuelson first designed the relationship between investment and output as a general idea. Even today, for example, his concept to the multipliers is influential in the literature. For example, Keynesian multipliers set national income the cause and, set investment the effect. According to Davar Ezra (2010, 25), modern general equilibrium theory conversely sets investment the cause and, sets national income the effect.

In the endogenous data-sets, however, investment and income = output are two-ways and, causes and results march simultaneously. Further, Samuelson's principle of accumulation is connected with consecutive changes in the capital-output ratio, $\Omega = K / Y$. When econometrics inevitably formulates equations linearly based on actual data and in the continuous time, it is difficult for policy-makers to know the work of capital stock, which influences output by year and over years. In the endogenous data-sets, multipliers are broadly designed with each inverse (i.e., the corresponding endogenous ratio) and consistently measured by year and over years. Or, a multiplier remains another expression of the corresponding endogenous ratio.

Multipliers in the literature are based on the price-equilibrium and use prices but it is difficult to settle prices wholly as a system. This is because the root of the multipliers comes from the micro level. It is a fact that the aggregated amount of micro data differs from that of macro

data. The author interprets this fact such that there is no accurate utility-measure to connect micro with macro. Hence, the author created a new method to measure the utility function at the macro level and, this is the relative discount rate function of each consumer goods and capital goods to the propensity to consume; $(rho / r)(C / Y)$. This function expresses national taste/ preferences, culture, and history, by country and by sector. For the total economy by country, this function is generalized, commonly to any country and as a standard for comparison. This is because, by so doing, we are able to compare any country with others, commonly and consistently.

The above function was finally settled after a plenty of experimental tests and practices, as explained in a separate paper in detail. The function is $(rho / r)(c) = 13.301c^2 - 22.608c + 10.566$ and applicable to 81 countries, except for ten countries. Exceptional countries are excessively saving-oriented and/or government leadership-oriented. The national taste function at the government sector is set $(rho_G / r_G) = 1.0$ by country. This is because government spending must be



Data sources: KEWT 6.12, 1990–2010.

Note: Four data, Y / I and $\Delta Y / \Delta I$, $m_I = 1/(1-c)$ and $m_{\Delta I} = 1/(1-\Delta c)$. For four combinations, see each box above.

Figure DA1 Illustrative results of multipliers and its inverse ratios common to 81 country using panel data by area: four combinations

neutral to the propensity to consume, C_G / Y_G. As a result, $(rho_{PRI} / r_{PRI})(C_{PRI} / Y_{PRI})$ at the private sector differs significantly by country. The multipliers in the literature do not solve a problem of national taste/preferences and culture at the macro level. The endogenous system measures the world economies in equilibrium, respecting and integrating diversification by country, with globalization. This direction matches human supreme philosophy for survival, by nature. By reinforcing the merits of the price-equilibrium, the endogenous system presents a bright lighthouse to sea routes of the market principle.

There are four multipliers at an open macro economy, investment, saving, government taxes = government output, and money. The multipliers in the endogenous data-sets are expressed each as $i = I / Y$, $s = S / Y$, $t_{AX} = Y_G / Y = T_{AX} / Y$, and M / Y or M / K. These multipliers are also expressed by sector -- for simplicity, this Appendix does not express the multipliers by sector except for $t_{AX} = Y_G / Y = T_{AX} / Y$. The multipliers in the literature start with the micro level and melt away money into the multipliers. Such direction is unavoidable since there is no theoretical/endogenous data behind. Money is macro-based yet must work with micro-based multipliers, where it is difficult to integrate macro money with multipliers.

For macro money, Davar Ezra (ibid., 29) compares four (value, commodity, circulation, and standard) function of money lying between ‘gold’ as value and ‘fiat’ money as standard money or American dollars. Davar Ezra points out several reasons why Davar is against the current stream of leading articles. The author partially agrees with his indications but not wholly. Davar’s stand point is far from the endogenous system. The author asserts that if endogenous data are used, money will remain confirmation-means or, the neutrality of money will be proved by country, as the author has already showed proofs and evidences of money, the rate of return/the cost of capital, and the exchange rate, using KEWT data-sets. According to author’s interpretation, a base for money is endogenous capital at the total economy; not gold or fiat money. Fiat money has worked since 1973 yet, repeating bubbles. However, bubbles are not the responsibility of fiat money; differently from Davar’s assertion. Gold remains the most delicate property of value/commodity yet, cannot be a base for the endogenous system. This is because the world economies should be moderate and balanced by country, sector, and year. It implies that policy-making must be dynamic, not influenced by the production of gold and their circulation quantity. Gold, nevertheless, remains the best property under any world system, which the author does not deny.

Finally, regarding the relationship between the multipliers and the inverse numbers, the author adds severe but friendly review to Friedman, M. and Schwartz, A. J. (1986, 32–62) and

also to Blinder, A. S. and Solow, R. M. (ibid., 319–337). It is true that monetarists must distinguish themselves with Keynesians, as pursued by the above distinguished two articles and, also cited by Davar (ibid., 29). Again here, the author stresses that it is not the responsibility of monetarists why bubbles are repeated a few times in a decade particularly after 1973. Rather the author respects the behavior of Friedman who had accumulated empirical experiments towards the integration of theory and practice. Under no theoretical data, money is most reliable if actions of the central bank by country or area are fair without influenced by group-oriented leaders. This comes from the neutrality of money to the real assets, as empirically proved by Friedman, M. (1977, 451–472) and now by the author's KEWT data-sets by country. In short, the financial and real assets by country constitute national accounts, actually and endogenously. Money exists rationally, regardless of whether data are actual or endogenous and, under any economic system.

Blinder and Solow (ibid., 335–336), most pertinently (as long as the author has investigated), formulated linear equations to integrate the real assets with the financial assets, introducing money equilibrium. The author was most impressively encouraged by 'the summary and conclusion' of Blinder and Solow, which universally shows the essence of fiscal policy. To the author's understanding, it implies, between the lines, that deficit = zero is most balanced in equilibrium and that an unbalanced government budget causes monetarist instability only if the current condition does not realize the necessary and sufficient condition by country: The necessary and sufficient condition is composed of an inequality that includes the basic multiplier and one parameter > zero in a stable system. If this condition is not guaranteed in the real world, the results must be; 'deficit spending contracts the economy, thus enlarging the deficit and contracting the economy still more.' The above necessary and sufficient condition matches the author's condition proposed in a separate paper. Blinder and Solow (ibid., 336; the last sentence) states that the evidence seems to require a comfortable 'yes' to the question posed in the title of 'does fiscal policy matter?'. The endogenous data always show moderate results based on non-linear equations at the endogenous system, deleting any condition and assumption, and guarantees monetarist stability as it is. In short, the moderate and balanced equilibrium always exists and is clarified, by controllable fiscal policy by country and with processes towards improved equilibrium.

A problem of the multipliers in the literature, from the viewpoint of measurement, is the initialization of each corresponding framework. The effects of the multipliers last at least several years even if rival capital and labor for policies, in the Cob-Douglas production function, are

only used. In reality, rival and non-rival (e.g., education and R & D for strategies) are mixed and influence on the effects and results by year and over years. The same is applicable to the endogenous system. In the case of the endogenous system, the problem of the above initialization was solved by simultaneously pursuing thorough endogenous variables. Millions data are even consistent each other by year, sector, and over years, starting with statistics data of *IFSY*, IMF. Anyone is able to observe, in the Excel KEWT, how one year net investment changes several year ahead all the variables at the same time, where causes and results change together non-linearly and dynamically.

References

Balassone Fabrizio, and Franco, Daniele. (2000). Public Investment, the Stability Pact and the Golden Rule," *Fiscal Studies* 21 (2): 207–229; 220–222, including a proposal by Modigliani et al, Manifesto contro la disoccupazione nell, Monetae Credito 51: 375–412.

Blinder, Alan, S., and Solow, Robert, M. (1973). Does Fiscal Policy Matter? *Journal of Public Economics*: 2 (Nov, 4): 319–337.

Davar Ezra. (2011). Flaws of Modern Economic Theory: The Origins of the Contemporary Financial – Economic Crisis. *Modern Economy* 2 (Feb, 2): 25–30. (http://www.SciRP.org/journal/me).

Friedman, Milton, A; Schwartz A. J. (1963). Money and Business Cycles," *Review of Economic Statistics* 45 (Feb, 1: suppl.): 32–64.

Friedman, Milton. (1977). Inflation and Unemployment. *Journal of Political Economy* 85 (June, 3): 451–472.

Fisher, Irving. (1907). *The rate of Interest*, 87–116, New York: Macmillan, 442p.

International Monetary Fund (IMF). *International Financial Statistics Yearbook*, by year, IMF.

Kamiryo, Hideyuki. (2010). Endogenous I-S and External L-M Diagram in Equilibrium towards Policy-Making. *International Advances in Economic Research*, 16 (Aug, 3): 282–296.

Lucas Robert, E. (1976). Economic Policy Evaluation: A Critique, 19–46. In: Brunner Karl, and Allan H., Meltzer, *The Phillips Curve and Labor Market*. North-Holland.

Meade, J. E. (1960, 1962 Revised). *A Neo-Classical Theory of Economic Growth*, 1–9. London: Unwin University Books. 185p. (1st Ed., 146p.; no revision to assumptions).

Meade, J. E., and J. R. N., Stone. (1969). The Construction of Tables of National Income, Expenditures, Savings and Investment, 320–346. In: edited by Parker, R. H. and Harcourt, G. C., *Readings in the Concept and Measurement of Income*. Cambridge: Cambridge at the University Press.

Samuelson, Paul A. (1939a). Interactions between the Acceleration and the Multiplier. *Review of Economic Statistics* 21 (1), 75–78.

Samuelson, Paul A. (1939b). A synthesis of the Principle of Acceleration and Multiplier. *Journal of Political Economy* 47 (6), 786–797.

Contents of Tables for multipliers and each inverse in equilibrium by area and Country 1990–2010

Figure DA1 Illustrative results of multipliers and its inverse ratios common to 81 country using panel data by area: four combinations

Table 1 Multipliers and each inverse in equilibrium: 17 Asian & Pacific, the US, Canada, Australia, New Zealand, and Mexico, 1990–2010

Table 2 Multipliers and each inverse in equilibrium: Bangladesh, China, India, Indonesia, Japan, Korea, 1990–2010

Table 3 Multipliers and each inverse in equilibrium: Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam

Table 4 Multipliers and each inverse in equilibrium: 14 Euro area, Austria, Belgium, Finland, France, Germany

Table 5 Multipliers and each inverse in equilibrium: Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal

Table 6 Multipliers and each inverse in equilibrium: Slovak, Slovenia, Spain, Romania, Russia, Turkey

Table 7 Multipliers and each inverse in equilibrium: 15 Non-Euro area, Denmark, Iceland, Norway, Sweden, Switzerland

Table 8 Multipliers and each inverse in equilibrium: the UK, Bulgaria, Czech Republic, Hungary, Latvia, Poland

Table 9 Multipliers and each inverse in equilibrium: Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay

Table 10 Multipliers and each inverse in equilibrium: Peru, Iran, Kazakhstan, Kuwait, Pakistan, Saudi Arabia

Table 11 Multipliers and each inverse in equilibrium: Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa

Table 12 Multipliers and each inverse in equilibrium: Tanzania, Ukraine, Taiwan, Honduras, Estonia, Lithuania

Table 1 Multipliers and each inverse in equilibrium: 17 Asian & Pacific, the US, Canada, Australia, New Zealand, and Mexico, 1990–2010

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
17 Asian counries						3. Australia					
1990	6.006	0.1665	4.358	0.2295	0.0381	1990	4.000	0.2500	4.445	0.2250	0.0342
1991	5.877	0.1701	4.363	0.2292	0.0350	1991	4.202	0.2380	4.314	0.2318	0.0048
1992	5.822	0.1718	4.335	0.2307	0.0268	1992	4.762	0.2100	4.189	0.2387	0.0073
1993	5.940	0.1684	4.396	0.2275	0.0219	1993	5.000	0.2000	4.144	0.2413	0.0128
1994	5.891	0.1698	4.397	0.2274	0.0196	1994	5.000	0.2000	4.222	0.2369	0.0245
1995	5.796	0.1725	4.366	0.2290	0.0167	1995	4.831	0.2070	4.238	0.2359	0.0080
1996	5.514	0.1814	4.227	0.2366	0.0155	1996	4.464	0.2240	4.251	0.2352	0.0100
1997	5.623	0.1778	4.504	0.2220	0.0170	1997	4.255	0.2350	4.339	0.2305	0.0106
1998	5.761	0.1736	3.289	0.3041	0.0086	1998	3.774	0.2650	4.311	0.2320	0.0392
1999	5.753	0.1738	3.815	0.2621	0.0064	1999	4.292	0.2330	4.175	0.2395	0.0365
2000	5.767	0.1734	4.017	0.2490	0.0098	2000	4.082	0.2450	4.293	0.2329	0.0341
2001	6.018	0.1662	4.146	0.2412	0.0060	2001	4.167	0.2400	4.412	0.2266	0.0248
2002	6.018	0.1662	4.055	0.2466	0.0016	2002	4.167	0.2400	4.457	0.2244	0.0321
2003	5.800	0.1724	3.961	0.2524	0.0017	2003	4.000	0.2500	4.317	0.2317	0.0396
2004	5.638	0.1774	3.927	0.2547	0.0047	2004	4.000	0.2500	4.373	0.2287	0.0411
2005	5.460	0.1831	4.008	0.2495	0.0057	2005	3.846	0.2600	4.272	0.2341	0.0415
2006	5.409	0.1849	5.015	0.1994	0.0065	2006	3.704	0.2700	4.253	0.2352	0.0500
2007	5.321	0.1879	4.558	0.2194	0.0090	2007	3.704	0.2700	4.215	0.2372	0.0486
2008	5.397	0.1853	4.512	0.2216	0.0129	2008	4.167	0.2400	4.753	0.2104	0.0523
2009	5.366	0.1864	3.575	0.2797	0.0137	2009	4.348	0.2300	4.022	0.2486	0.0373
2010	5.381	0.1858	3.663	0.2730	0.0177	2010	4.348	0.2300	3.803	0.2629	0.0385
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
1. United States						4. New Zealand					
1990	5.128	0.1950	4.216	0.2372	0.0051	1990	3.676	0.2720	4.425	0.2260	0.0310
1991	5.882	0.1700	4.521	0.2212	0.0040	1991	3.690	0.2710	4.030	0.2481	0.0081
1992	5.814	0.1720	4.475	0.2235	0.0034	1992	4.115	0.2430	3.714	0.2692	0.0232
1993	6.061	0.1650	4.799	0.2084	0.0089	1993	4.098	0.2440	4.119	0.2428	0.0336
1994	5.780	0.1730	4.866	0.2055	0.0131	1994	4.082	0.2450	4.240	0.2358	0.0412
1995	5.780	0.1730	5.111	0.1957	0.0102	1995	4.167	0.2400	4.261	0.2347	0.0229
1996	5.882	0.1700	5.371	0.1862	0.0128	1996	3.390	0.2950	4.329	0.2310	0.0260
1997	5.405	0.1850	5.396	0.1853	0.0059	1997	3.390	0.2950	4.053	0.2467	0.0221
1998	5.405	0.1850	5.619	0.1780	0.0207	1998	4.167	0.2400	4.270	0.2342	0.0166
1999	5.128	0.1950	5.543	0.1804	0.0275	1999	3.802	0.2630	4.173	0.2396	0.0225
2000	5.000	0.2000	5.754	0.1738	0.0309	2000	4.167	0.2400	4.365	0.2291	0.0221
2001	5.128	0.1950	5.518	0.1812	0.0216	2001	4.255	0.2350	4.383	0.2282	0.0241
2002	5.988	0.1670	5.435	0.1840	0.0147	2002	4.032	0.2480	4.442	0.2251	0.0243
2003	6.452	0.1550	5.175	0.1932	0.0137	2003	3.876	0.2580	4.427	0.2259	0.0303
2004	6.250	0.1600	5.008	0.1997	0.0160	2004	3.413	0.2930	3.837	0.2606	0.0353
2005	5.882	0.1700	5.028	0.1989	0.0156	2005	3.125	0.3200	3.791	0.2638	0.0313
2006	5.714	0.1750	5.103	0.1960	0.0233	2006	3.077	0.3250	2.910	0.3436	0.0267
2007	4.878	0.2050	4.593	0.2177	0.0279	2007	3.279	0.3050	3.161	0.3163	0.0302
2008	4.878	0.2050	4.195	0.2384	0.0206	2008	3.279	0.3050	3.038	0.3291	0.0209
2009	4.444	0.2250	2.929	0.3414	(0.0042)	2009	3.279	0.3050	2.497	0.4004	0.0074
2010	4.255	0.2350	2.990	0.3345	0.0015	2010	3.279	0.3050	2.477	0.4037	0.0126
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
2. Canada						5. Mexico					
1990	5.155	0.1940	4.053	0.2467	0.0449	1990	10.000	0.1000	7.844	0.1275	0.1359
1991	4.587	0.2180	3.582	0.2791	0.0352	1991	5.882	0.1700	7.224	0.1384	0.1222
1992	4.651	0.2150	3.569	0.2802	0.0368	1992	5.556	0.1800	7.411	0.1349	0.1097
1993	4.717	0.2120	3.611	0.2769	0.0299	1993	6.250	0.1600	6.475	0.1544	0.0903
1994	4.739	0.2110	3.793	0.2637	0.0335	1994	6.250	0.1600	6.239	0.1603	0.0881
1995	4.545	0.2200	3.802	0.2631	0.0136	1995	6.667	0.1500	6.415	0.1559	0.0984
1996	4.348	0.2300	3.965	0.2522	0.0107	1996	6.993	0.1430	6.877	0.1454	0.1119
1997	4.000	0.2500	4.118	0.2428	0.0205	1997	7.194	0.1390	6.636	0.1507	0.1175
1998	4.000	0.2500	4.290	0.2331	0.0191	1998	6.897	0.1450	6.223	0.1607	0.1045
1999	4.000	0.2500	4.496	0.2224	0.0201	1999	6.250	0.1600	5.657	0.1768	0.0947
2000	4.082	0.2450	4.846	0.2064	0.0229	2000	5.882	0.1700	5.447	0.1836	0.0928
2001	4.000	0.2500	4.140	0.2415	0.0164	2001	5.882	0.1700	5.623	0.1778	0.0732
2002	4.082	0.2450	4.236	0.2361	0.0173	2002	5.882	0.1700	5.288	0.1891	0.0686
2003	4.032	0.2480	4.172	0.2397	0.0179	2003	5.882	0.1700	5.533	0.1807	0.0781
2004	4.000	0.2500	4.416	0.2265	0.0206	2004	5.882	0.1700	5.573	0.1794	0.0775
2005	3.922	0.2550	4.415	0.2265	0.0231	2005	5.602	0.1785	5.383	0.1858	0.0752
2006	3.876	0.2580	4.455	0.2245	0.0275	2006	6.061	0.1650	5.535	0.1807	0.0776
2007	3.922	0.2550	4.341	0.2304	0.0311	2007	6.667	0.1500	5.993	0.1669	0.0747
2008	3.922	0.2550	3.935	0.2541	0.0312	2008	5.714	0.1750	5.283	0.1893	0.0725
2009	3.831	0.2610	3.272	0.3056	0.0178	2009	5.714	0.1750	5.112	0.1956	0.0604
2010	3.922	0.2550	3.473	0.2880	0.0212	2010	5.714	0.1750	4.991	0.2004	0.0632

Table 2 Multipliers and each inverse in equilibrium: Bangladesh, China, India, Indonesia, Japan, Korea, 1990–2010

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
6. Bangladesh						9. Indonesia					
1990	11.111	0.0900	10.159	0.0984	0.0449	1990	6.349	0.1575	6.523	0.1533	0.1413
1991	11.111	0.0900	10.557	0.0947	0.0482	1991	6.349	0.1575	6.530	0.1531	0.1202
1992	11.111	0.0900	9.966	0.1003	0.0422	1992	6.250	0.1600	6.089	0.1642	0.0961
1993	11.111	0.0900	10.115	0.0989	0.0159	1993	6.250	0.1600	6.527	0.1532	0.0817
1994	9.524	0.1050	9.634	0.1038	0.0271	1994	6.250	0.1600	6.685	0.1496	0.0800
1995	11.111	0.0900	10.556	0.0947	0.0266	1995	6.250	0.1600	7.358	0.1359	0.0876
1996	10.000	0.1000	9.868	0.1013	0.0424	1996	6.250	0.1600	6.783	0.1474	0.0825
1997	9.091	0.1100	8.444	0.1184	0.0461	1997	8.333	0.1200	7.856	0.1273	0.0812
1998	9.091	0.1100	8.754	0.1142	0.0470	1998	12.500	0.0800	8.867	0.1128	0.0497
1999	9.091	0.1100	8.688	0.1151	0.0500	1999	11.111	0.0900	9.756	0.1025	0.0458
2000	9.091	0.1100	8.578	0.1166	0.0335	2000	16.667	0.0600	9.714	0.1029	0.0763
2001	14.286	0.0700	12.836	0.0779	0.0099	2001	14.286	0.0700	10.602	0.0943	0.0709
2002	14.286	0.0700	13.873	0.0721	0.0072	2002	11.111	0.0900	9.620	0.1039	0.0579
2003	10.000	0.1000	9.870	0.1013	0.0452	2003	10.000	0.1000	8.384	0.1193	0.0445
2004	10.000	0.1000	9.260	0.1080	0.0482	2004	10.000	0.1000	8.742	0.1144	0.0442
2005	10.000	0.1000	8.905	0.1123	0.0563	2005	9.091	0.1100	8.777	0.1139	0.0753
2006	10.000	0.1000	8.635	0.1158	0.0490	2006	9.091	0.1100	8.278	0.1208	0.0727
2007	10.000	0.1000	8.722	0.1147	0.0486	2007	9.091	0.1100	8.532	0.1172	0.0761
2008	10.000	0.1000	9.049	0.1105	0.0496	2008	7.692	0.1300	7.301	0.1370	0.0916
2009	10.000	0.1000	9.572	0.1045	0.0415	2009	7.692	0.1300	7.076	0.1413	0.0810
2010	10.000	0.1000	8.873	0.1127	0.0525	2010	7.692	0.1300	7.149	0.1399	0.0800
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
7. China						10. Japan					
1990	6.250	0.1600	5.953	0.1680	0.0862	1990	6.374	0.1569	4.521	0.2212	0.0468
1991	5.714	0.1750	5.373	0.1861	0.0783	1991	5.747	0.1740	4.264	0.2345	0.0438
1992	5.882	0.1700	5.555	0.1800	0.0829	1992	5.714	0.1750	4.245	0.2356	0.0336
1993	5.714	0.1750	5.449	0.1835	0.0962	1993	5.682	0.1760	4.226	0.2366	0.0285
1994	5.882	0.1700	5.485	0.1823	0.0936	1994	5.650	0.1770	4.219	0.2370	0.0256
1995	5.714	0.1750	5.407	0.1850	0.1049	1995	5.618	0.1780	4.214	0.2373	0.0258
1996	5.405	0.1850	5.193	0.1926	0.0993	1996	5.525	0.1810	4.179	0.2393	0.0244
1997	5.714	0.1750	5.482	0.1824	0.0855	1997	5.423	0.1844	4.317	0.2316	0.0241
1998	5.714	0.1750	5.376	0.1860	0.0774	1998	9.434	0.1060	4.010	0.2494	0.0141
1999	5.714	0.1750	5.139	0.1946	0.0750	1999	7.194	0.1390	4.230	0.2364	0.0096
2000	5.714	0.1750	4.990	0.2004	0.0721	2000	6.329	0.1580	4.143	0.2414	0.0127
2001	5.714	0.1750	5.043	0.1983	0.0703	2001	6.061	0.1650	4.034	0.2479	0.0083
2002	5.714	0.1750	4.964	0.2015	0.0681	2002	7.143	0.1400	4.369	0.2289	0.0028
2003	5.714	0.1750	5.082	0.1968	0.0688	2003	7.299	0.1370	4.399	0.2273	0.0013
2004	5.714	0.1750	5.314	0.1882	0.0693	2004	6.536	0.1530	4.141	0.2415	0.0030
2005	5.714	0.1750	5.336	0.1874	0.0643	2005	6.250	0.1600	4.231	0.2363	0.0039
2006	5.714	0.1750	5.472	0.1828	0.0611	2006	5.882	0.1700	5.479	0.1825	0.0036
2007	5.714	0.1750	5.915	0.1691	0.0728	2007	5.882	0.1700	4.849	0.2062	0.0035
2008	5.714	0.1750	5.580	0.1792	0.0702	2008	6.667	0.1500	5.334	0.1875	0.0062
2009	5.714	0.1750	5.062	0.1976	0.0669	2009	5.495	0.1820	3.421	0.2923	0.0074
2010	5.714	0.1750	5.212	0.1919	0.0645	2010	5.495	0.1820	3.447	0.2901	0.0103
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
8. India						11. Korea					
1990	9.091	0.1100	5.129	0.1950	0.0520	1990	6.667	0.1500	7.468	0.1339	0.1431
1991	8.333	0.1200	5.527	0.1809	0.0478	1991	6.667	0.1500	5.955	0.1679	0.1351
1992	8.333	0.1200	5.579	0.1792	0.0583	1992	6.667	0.1500	6.441	0.1553	0.1165
1993	9.091	0.1100	5.331	0.1876	0.0566	1993	6.667	0.1500	6.984	0.1432	0.0959
1994	7.692	0.1300	5.230	0.1912	0.0684	1994	6.667	0.1500	6.820	0.1466	0.0945
1995	7.407	0.1350	5.069	0.1973	0.0239	1995	5.714	0.1750	5.813	0.1720	0.1860
1996	7.692	0.1300	5.280	0.1894	0.0251	1996	5.714	0.1750	5.751	0.1739	0.0917
1997	8.000	0.1250	6.269	0.1595	0.0366	1997	5.714	0.1750	5.709	0.1752	0.0752
1998	7.692	0.1300	5.853	0.1708	0.0313	1998	6.452	0.1550	5.322	0.1879	0.0273
1999	7.692	0.1300	6.026	0.1659	0.0825	1999	6.061	0.1650	5.002	0.1999	0.0401
2000	7.692	0.1300	5.814	0.1720	0.0739	2000	5.714	0.1750	5.779	0.1731	0.0494
2001	7.692	0.1300	5.624	0.1778	0.0686	2001	5.405	0.1850	6.526	0.1532	0.0473
2002	7.692	0.1300	5.513	0.1814	0.0692	2002	5.263	0.1900	6.756	0.1480	0.0507
2003	6.897	0.1450	5.418	0.1846	0.0734	2003	5.714	0.1750	6.441	0.1553	0.0495
2004	5.714	0.1750	4.738	0.2111	0.0770	2004	5.714	0.1750	5.752	0.1739	0.0460
2005	5.714	0.1750	4.670	0.2141	0.0546	2005	5.714	0.1750	6.082	0.1644	0.0461
2006	5.714	0.1750	4.653	0.2149	0.0622	2006	5.405	0.1850	5.822	0.1718	0.0458
2007	5.714	0.1750	4.845	0.2064	0.0692	2007	4.651	0.2150	5.293	0.1889	0.0494
2008	5.714	0.1750	4.104	0.2436	0.0704	2008	4.878	0.2050	5.359	0.1866	0.0528
2009	5.714	0.1750	4.055	0.2466	0.0663	2009	4.878	0.2050	4.883	0.2048	0.0382
2010	5.714	0.1750	4.531	0.2207	0.0644	2010	4.878	0.2050	4.878	0.2050	0.0454

Table 3 Multipliers and each inverse in equilibrium: Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
12. Malaysia						15. Sri Lanka					
1990	5.714	0.1750	4.829	0.2071	0.1130	1990	14.286	0.0700	6.453	0.1550	0.1648
1991	5.714	0.1750	5.084	0.1967	0.1229	1991	14.925	0.0670	5.852	0.1709	0.1346
1992	5.263	0.1900	5.026	0.1990	0.1024	1992	11.765	0.0850	6.935	0.1442	0.1280
1993	5.714	0.1750	5.790	0.1727	0.0962	1993	12.500	0.0800	6.641	0.1506	0.1183
1994	5.714	0.1750	6.669	0.1499	0.0924	1994	12.500	0.0800	5.751	0.1739	0.0978
1995	5.714	0.1750	6.016	0.1662	0.0993	1995	12.500	0.0800	5.854	0.1708	0.0995
1996	5.714	0.1750	5.970	0.1675	0.0815	1996	9.091	0.1100	5.110	0.1957	0.0885
1997	5.714	0.1750	6.660	0.1502	0.0770	1997	9.091	0.1100	5.615	0.1781	0.1302
1998	5.714	0.1750	5.163	0.1937	0.0355	1998	8.333	0.1200	5.100	0.1961	0.0819
1999	5.714	0.1750	4.787	0.2089	0.0285	1999	8.333	0.1200	5.398	0.1853	0.0864
2000	5.714	0.1750	4.762	0.2100	0.0398	2000	9.091	0.1100	4.918	0.2033	0.0870
2001	5.714	0.1750	4.793	0.2086	0.0352	2001	9.091	0.1100	4.677	0.2138	0.0574
2002	5.714	0.1750	5.067	0.1973	0.0357	2002	7.692	0.1300	4.720	0.2119	0.0594
2003	5.714	0.1750	4.932	0.2028	0.0321	2003	7.692	0.1300	4.849	0.2062	0.0537
2004	5.714	0.1750	4.904	0.2039	0.0337	2004	7.692	0.1300	4.729	0.2115	0.0683
2005	5.714	0.1750	4.876	0.2051	0.0288	2005	7.692	0.1300	4.819	0.2075	0.0764
2006	5.714	0.1750	4.990	0.2004	0.0282	2006	7.692	0.1300	4.843	0.2065	0.0821
2007	5.714	0.1750	5.028	0.1989	0.0331	2007	7.692	0.1300	4.939	0.2025	0.0816
2008	5.714	0.1750	4.932	0.2028	0.0304	2008	7.692	0.1300	4.926	0.2030	0.0844
2009	5.714	0.1750	4.535	0.2205	0.0179	2009	7.692	0.1300	4.095	0.2442	0.0648
2010	6.061	0.1650	4.693	0.2131	0.0318	2010	7.692	0.1300	4.165	0.2401	0.0797
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
13. Philippines						16. Thailand					
1990	5.263	0.1900	4.379	0.2284	0.0848	1990	5.263	0.1900	7.379	0.1355	0.2162
1991	5.556	0.1800	4.933	0.2027	0.0580	1991	5.650	0.1770	7.549	0.1325	0.1749
1992	5.263	0.1900	4.930	0.2028	0.0478	1992	5.263	0.1900	6.156	0.1624	0.1443
1993	5.714	0.1750	5.222	0.1915	0.0464	1993	5.714	0.1750	6.432	0.1555	0.1211
1994	5.714	0.1750	6.131	0.1631	0.0397	1994	5.714	0.1750	6.944	0.1440	0.1140
1995	5.714	0.1750	5.924	0.1688	0.0680	1995	5.714	0.1750	7.247	0.1380	0.1054
1996	5.714	0.1750	5.815	0.1720	0.0666	1996	5.714	0.1750	6.096	0.1640	0.0919
1997	5.714	0.1750	5.735	0.1744	0.1006	1997	5.714	0.1750	5.594	0.1788	0.0509
1998	5.714	0.1750	5.186	0.1928	0.0641	1998	5.714	0.1750	4.905	0.2039	0.0452
1999	5.714	0.1750	4.748	0.2106	0.0486	1999	5.714	0.1750	4.780	0.2092	0.0449
2000	6.250	0.1600	5.046	0.1982	0.0484	2000	5.714	0.1750	5.068	0.1973	0.0508
2001	6.250	0.1600	5.052	0.1979	0.0640	2001	5.714	0.1750	5.016	0.1994	0.0500
2002	6.061	0.1650	4.645	0.2153	0.0565	2002	5.714	0.1750	5.282	0.1893	0.0473
2003	6.250	0.1600	4.921	0.2032	0.0689	2003	5.714	0.1750	5.852	0.1709	0.0469
2004	6.250	0.1600	5.111	0.1956	0.0609	2004	5.714	0.1750	5.517	0.1813	0.0512
2005	6.250	0.1600	5.408	0.1849	0.0588	2005	5.714	0.1750	5.466	0.1829	0.0621
2006	6.250	0.1600	5.885	0.1699	0.0471	2006	5.714	0.1750	5.316	0.1881	0.0567
2007	6.667	0.1500	6.591	0.1517	0.0442	2007	5.714	0.1750	5.274	0.1896	0.0479
2008	7.692	0.1300	7.190	0.1391	0.0431	2008	5.405	0.1850	4.945	0.2022	0.0552
2009	7.143	0.1400	6.607	0.1514	0.0278	2009	5.405	0.1850	5.218	0.1917	0.0360
2010	7.143	0.1400	6.140	0.1629	(0.0013)	2010	5.495	0.1820	5.144	0.1944	0.0457
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
14. Singapore						17. Vietnam					
1990	3.846	0.2600	6.604	0.1514	0.0788	1990	9.091	0.1100	7.113	0.1406	0.0811
1991	3.846	0.2600	6.847	0.1460	0.0619	1991	10.000	0.1000	7.932	0.1261	0.0783
1992	3.846	0.2600	7.674	0.1303	0.0643	1992	8.333	0.1200	7.151	0.1398	0.0959
1993	3.448	0.2900	7.407	0.1350	0.0721	1993	8.000	0.1250	5.787	0.1728	0.1291
1994	3.846	0.2600	8.086	0.1237	0.0469	1994	7.143	0.1400	6.421	0.1557	0.1178
1995	4.000	0.2500	8.340	0.1199	0.0726	1995	5.714	0.1750	5.544	0.1804	0.1460
1996	3.571	0.2800	7.345	0.1362	0.0621	1996	5.714	0.1750	5.654	0.1769	0.1339
1997	4.348	0.2300	7.268	0.1376	0.0586	1997	6.061	0.1650	5.480	0.1825	0.1190
1998	3.333	0.3000	6.437	0.1554	0.0355	1998	6.061	0.1650	6.014	0.1663	0.1094
1999	4.167	0.2400	7.976	0.1254	0.0394	1999	6.250	0.1600	6.188	0.1616	0.0935
2000	3.846	0.2600	6.273	0.1594	0.0465	2000	6.250	0.1600	5.305	0.1885	0.0915
2001	6.667	0.1500	6.058	0.1651	0.0370	2001	5.882	0.1700	6.377	0.1568	0.0870
2002	7.143	0.1400	6.890	0.1451	0.0356	2002	5.714	0.1750	5.257	0.1902	0.0890
2003	4.926	0.2030	7.433	0.1345	0.0211	2003	5.714	0.1750	4.749	0.2106	0.0908
2004	5.025	0.1990	7.521	0.1330	0.0302	2004	5.714	0.1750	4.724	0.2117	0.0883
2005	4.545	0.2200	7.506	0.1332	0.0247	2005	5.714	0.1750	4.962	0.2015	0.0888
2006	4.545	0.2200	6.946	0.1440	0.0235	2006	5.714	0.1750	5.144	0.1944	0.0827
2007	3.846	0.2600	7.529	0.1328	0.0201	2007	5.714	0.1750	5.223	0.1914	0.1055
2008	4.167	0.2400	5.494	0.1820	0.0308	2008	5.714	0.1750	5.223	0.1914	0.1042
2009	5.000	0.2000	4.637	0.2157	0.0212	2009	5.714	0.1750	5.338	0.1873	0.0875
2010	5.000	0.2000	8.148	0.1227	0.0232	2010	5.714	0.1750	5.247	0.1906	0.0960

Table 4 Multipliers and each inverse in equilibrium: 14 Euro area, Austria, Belgium, Finland, France, Germany

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
E0. Euro Area using IMF data						3. Finland					
1990						1990	3.509	0.2850	3.536	0.2828	0.0878
1991						1991	4.255	0.2350	3.141	0.3184	0.0227
1992						1992	7.813	0.1280	3.316	0.3016	0.0085
1993						1993	8.475	0.1180	3.679	0.2718	0.0057
1994						1994	7.143	0.1400	3.718	0.2689	0.0285
1995						1995	5.780	0.1730	3.574	0.2798	0.0547
1996						1996	4.651	0.2150	3.504	0.2854	0.0430
1997						1997	4.000	0.2500	3.937	0.2540	0.0476
1998						1998	3.704	0.2700	3.695	0.2706	0.0535
1999	4.082	0.2450	3.935	0.2541	0.0549	1999	3.448	0.2900	3.632	0.2753	0.0501
2000	4.082	0.2450	3.999	0.2501	0.0561	2000	2.941	0.3400	3.265	0.3063	0.0534
2001	4.167	0.2400	3.936	0.2541	0.0578	2001	3.226	0.3100	3.201	0.3124	0.0481
2002	4.191	0.2386	3.837	0.2606	0.0704	2002	3.247	0.3080	3.456	0.2893	0.0387
2003	4.119	0.2427	3.695	0.2707	0.0439	2003	3.175	0.3150	3.175	0.3150	0.0416
2004	4.041	0.2475	3.639	0.2748	0.0404	2004	3.367	0.2970	3.514	0.2846	0.0284
2005	3.966	0.2522	3.638	0.2749	0.0421	2005	3.236	0.3090	3.395	0.2945	0.0391
2006	4.038	0.2476	3.888	0.2572	0.0428	2006	3.226	0.3100	3.357	0.2979	0.0349
2007	4.000	0.2500	4.001	0.2499	0.0513	2007	3.236	0.3090	3.501	0.2857	0.0497
2008	4.038	0.2476	3.795	0.2635	0.0511	2008	3.333	0.3000	3.381	0.2958	0.0415
2009	3.846	0.2600	3.096	0.3230	0.0376	2009	3.704	0.2700	3.065	0.3263	0.0175
2010	3.846	0.2600	3.103	0.3222	0.0368	2010	3.704	0.2700	3.052	0.3276	0.0261
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
E1. Austria						4. France					
1990	4.255	0.2350	3.474	0.2878	0.0553	1990	4.762	0.2100	4.261	0.2347	0.0365
1991	4.255	0.2350	3.437	0.2910	0.0566	1991	4.545	0.2200	4.258	0.2349	0.0299
1992	4.255	0.2350	3.562	0.2808	0.0544	1992	5.000	0.2000	4.064	0.2461	0.0221
1993	4.255	0.2350	3.397	0.2944	0.0491	1993	5.556	0.1800	4.051	0.2468	0.0106
1994	4.255	0.2350	3.324	0.3009	0.0548	1994	5.263	0.1900	3.912	0.2556	0.0145
1995	4.348	0.2300	3.467	0.2884	0.0391	1995	4.545	0.2200	3.377	0.2961	0.0126
1996	4.405	0.2270	3.651	0.2739	0.0353	1996	4.348	0.2300	3.437	0.2909	0.0071
1997	4.464	0.2240	4.093	0.2443	0.0332	1997	4.000	0.2500	3.443	0.2905	0.0064
1998	4.525	0.2210	4.038	0.2477	0.0354	1998	4.000	0.2500	3.582	0.2791	0.0136
1999	4.587	0.2180	4.098	0.2440	0.0386	1999	3.846	0.2600	3.564	0.2805	0.0154
2000	4.587	0.2180	4.093	0.2443	0.0370	2000	3.846	0.2600	3.608	0.2772	0.0165
2001	4.348	0.2300	4.249	0.2353	0.0320	2001	3.846	0.2600	3.715	0.2692	0.0313
2002	4.348	0.2300	4.145	0.2413	0.0239	2002	3.846	0.2600	3.470	0.2882	0.0250
2003	4.348	0.2300	3.977	0.2514	0.0239	2003	4.098	0.2440	3.546	0.2820	0.0233
2004	4.545	0.2200	3.619	0.2763	0.0320	2004	3.922	0.2550	3.474	0.2878	0.0175
2005	4.545	0.2200	4.111	0.2432	0.0326	2005	3.774	0.2650	3.471	0.2881	0.0216
2006	4.545	0.2200	4.107	0.2435	0.0308	2006	3.774	0.2650	3.541	0.2824	0.0251
2007	4.348	0.2300	4.120	0.2427	0.0324	2007	3.774	0.2650	3.501	0.2857	0.0325
2008	4.348	0.2300	4.117	0.2429	0.0327	2008	3.774	0.2650	3.399	0.2942	0.0306
2009	4.348	0.2300	3.582	0.2792	0.0269	2009	4.000	0.2500	3.051	0.3277	0.0180
2010	4.348	0.2300	3.506	0.2852	0.0288	2010	4.000	0.2500	3.104	0.3222	0.0196
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
E2. Belgium						5. Germany					
1990	7.692	0.1300	5.096	0.1962	0.0370	1990	4.515	0.2215	4.149	0.2410	0.0314
1991	7.692	0.1300	4.945	0.2022	0.0277	1991	4.515	0.2215	4.038	0.2476	0.0306
1992	7.692	0.1300	4.823	0.2073	0.0415	1992	4.515	0.2215	3.999	0.2501	0.0273
1993	7.692	0.1300	4.960	0.2016	0.0232	1993	4.515	0.2215	3.978	0.2514	0.0181
1994	7.143	0.1400	5.163	0.1937	0.0110	1994	4.515	0.2215	4.213	0.2374	0.0269
1995	5.000	0.2000	3.821	0.2617	0.0331	1995	4.515	0.2215	4.133	0.2420	0.0273
1996	4.348	0.2300	3.666	0.2728	0.0397	1996	4.545	0.2200	4.095	0.2442	0.0208
1997	4.348	0.2300	3.808	0.2626	0.0436	1997	4.545	0.2200	4.244	0.2357	0.0229
1998	4.348	0.2300	3.906	0.2560	0.0407	1998	4.348	0.2300	4.150	0.2409	0.0261
1999	4.098	0.2440	4.040	0.2475	0.0789	1999	4.386	0.2280	4.087	0.2447	0.0237
2000	3.937	0.2540	3.983	0.2511	0.0731	2000	4.386	0.2280	4.134	0.2419	0.0234
2001	3.937	0.2540	3.988	0.2507	0.0695	2001	4.854	0.2060	4.178	0.2394	0.0179
2002	3.571	0.2800	3.550	0.2817	0.0586	2002	5.181	0.1930	4.227	0.2366	0.0120
2003	3.571	0.2800	3.550	0.2817	0.0258	2003	5.319	0.1880	4.222	0.2368	0.0132
2004	3.571	0.2800	3.521	0.2840	0.0572	2004	5.495	0.1820	4.371	0.2288	0.0110
2005	3.846	0.2600	3.432	0.2914	0.0483	2005	5.405	0.1850	4.404	0.2271	0.0063
2006	3.484	0.2870	3.470	0.2882	0.0367	2006	4.975	0.2010	4.498	0.2223	0.0068
2007	3.571	0.2800	3.510	0.2849	0.0327	2007	4.673	0.2140	4.663	0.2144	0.0078
2008	3.571	0.2800	3.378	0.2960	0.0344	2008	4.608	0.2170	4.597	0.2175	0.0121
2009	3.704	0.2700	2.956	0.3383	0.0194	2009	5.000	0.2000	4.242	0.2358	0.0086
2010	3.704	0.2700	3.128	0.3197	0.0194	2010	5.000	0.2000	4.151	0.2409	0.0127

Table 5 Multipliers and each inverse in equilibrium: Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
6. Greece						9. Luxemburg					
1990	40.000	0.0250	5.606	0.1784	0.0366	1990					
1991	22.222	0.0450	6.006	0.1665	0.0479	1991					
1992	13.333	0.0750	6.418	0.1558	0.0344	1992					
1993	25.000	0.0400	5.952	0.1680	0.0364	1993					
1994	30.303	0.0330	5.744	0.1741	0.0472	1994					
1995	14.286	0.0700	5.040	0.1984	0.0181	1995	4.673	0.2140	5.113	0.1956	0.0139
1996	15.385	0.0650	5.787	0.1728	0.0359	1996	4.739	0.2110	5.027	0.1989	0.0110
1997	10.000	0.1000	5.767	0.1734	0.0980	1997	4.049	0.2470	4.781	0.2092	0.0148
1998	7.692	0.1300	5.341	0.1872	0.0966	1998	4.049	0.2470	4.738	0.2111	0.0163
1999	7.143	0.1400	6.508	0.1537	0.0979	1999	4.082	0.2450	5.769	0.1733	0.1101
2000	5.000	0.2000	3.804	0.2629	0.0595	2000	3.717	0.2690	5.877	0.1702	0.1041
2001	5.882	0.1700	5.473	0.1827	0.1228	2001	3.571	0.2800	5.097	0.1962	0.0893
2002	5.556	0.1800	5.136	0.1947	0.0929	2002	3.367	0.2970	4.301	0.2325	0.0993
2003	5.556	0.1800	4.930	0.2028	0.0996	2003	3.717	0.2690	4.371	0.2288	0.1016
2004	6.250	0.1600	4.929	0.2029	0.0400	2004	4.082	0.2450	4.355	0.2296	0.0684
2005	5.882	0.1700	5.058	0.1977	0.0220	2005	5.025	0.1990	5.976	0.1673	0.0665
2006	5.556	0.1800	4.778	0.2093	0.0424	2006	5.714	0.1750	7.595	0.1317	0.0781
2007	5.556	0.1800	4.628	0.2161	0.0467	2007	4.000	0.2500	5.318	0.1880	0.0649
2008	5.714	0.1750	4.106	0.2435	0.0388	2008	3.846	0.2600	4.864	0.2056	0.0692
2009	6.410	0.1560	3.384	0.2955	0.0241	2009	3.846	0.2600	4.059	0.2463	0.0587
2010	6.410	0.1560	4.153	0.2408	0.0185	2010	3.846	0.2600	4.021	0.2487	0.0610
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
7. Ireland						10. Netherlands					
1990	5.714	0.1750	5.141	0.1945	0.2128	1990	7.143	0.1400	5.269	0.1898	0.0758
1991	5.263	0.1900	5.016	0.1994	0.1521	1991	7.143	0.1400	5.880	0.1701	0.0704
1992	5.882	0.1700	5.095	0.1963	0.1147	1992	7.143	0.1400	5.653	0.1769	0.0634
1993	5.263	0.1900	5.023	0.1991	0.0975	1993	5.556	0.1800	5.254	0.1903	0.0475
1994	5.263	0.1900	4.990	0.2004	0.0900	1994	5.556	0.1800	5.379	0.1859	0.0187
1995	5.263	0.1900	5.075	0.1970	0.0948	1995	6.536	0.1530	5.170	0.1934	0.0429
1996	5.263	0.1900	5.334	0.1875	0.0911	1996	6.098	0.1640	5.549	0.1802	0.0431
1997	5.263	0.1900	5.440	0.1838	0.0913	1997	6.098	0.1640	5.503	0.1817	0.0365
1998	4.651	0.2150	5.201	0.1923	0.0903	1998	5.556	0.1800	5.409	0.1849	0.0450
1999	3.846	0.2600	4.844	0.2064	0.0911	1999	3.448	0.2900	3.252	0.3075	0.0344
2000	3.922	0.2550	5.774	0.1732	0.0872	2000	3.333	0.3000	3.322	0.3010	0.0255
2001	4.167	0.2400	5.184	0.1929	0.0755	2001	3.509	0.2850	3.398	0.2943	0.0209
2002	4.348	0.2300	5.018	0.1993	0.0697	2002	3.663	0.2730	3.445	0.2903	0.0206
2003	4.348	0.2300	5.104	0.1959	0.0594	2003	3.759	0.2660	3.423	0.2922	0.0176
2004	4.348	0.2300	5.344	0.1871	0.0565	2004	3.704	0.2700	3.426	0.2918	0.0179
2005	4.348	0.2300	5.428	0.1842	0.0573	2005	3.390	0.2950	3.388	0.2952	0.0190
2006	4.000	0.2500	5.332	0.1875	0.0561	2006	3.125	0.3200	3.213	0.3112	0.0227
2007	4.167	0.2400	5.011	0.1996	0.0545	2007	3.226	0.3100	3.213	0.3112	0.0290
2008	4.545	0.2200	3.892	0.2569	0.0455	2008	4.762	0.2100	2.680	0.3731	0.0457
2009	4.762	0.2100	2.936	0.3405	0.0307	2009	3.125	0.3200	3.324	0.3009	0.0415
2010	4.762	0.2100	1.822	0.5487	0.0191	2010	3.125	0.3200	2.739	0.3651	0.0269
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
8. Italy						11. Portugal					
1990	11.111	0.0900	4.692	0.2131	0.0845	1990	6.250	0.1600	4.647	0.2152	0.1366
1991	10.000	0.1000	4.625	0.2162	0.0864	1991	5.882	0.1700	4.174	0.2396	0.1189
1992	8.333	0.1200	4.627	0.2161	0.0579	1992	5.405	0.1850	4.728	0.2115	0.1114
1993	7.692	0.1300	4.788	0.2088	0.0399	1993	5.556	0.1800	3.755	0.2663	0.1085
1994	7.692	0.1300	4.888	0.2046	0.0411	1994	5.556	0.1800	4.290	0.2331	0.1076
1995	7.143	0.1400	4.625	0.2162	0.0596	1995	5.556	0.1800	4.322	0.2314	0.1135
1996	6.667	0.1500	4.323	0.2313	0.0434	1996	4.651	0.2150	4.192	0.2385	0.0989
1997	4.762	0.2100	4.399	0.2273	0.0465	1997	4.545	0.2200	4.134	0.2419	0.0932
1998	5.000	0.2000	4.425	0.2260	0.0412	1998	4.348	0.2300	4.087	0.2447	0.0585
1999	4.762	0.2100	4.521	0.2212	0.0312	1999	4.348	0.2300	3.822	0.2616	0.0730
2000	4.545	0.2200	4.253	0.2351	0.0335	2000	4.255	0.2350	3.729	0.2681	0.0685
2001	5.000	0.2000	4.401	0.2272	0.0338	2001	4.255	0.2350	3.524	0.2838	0.0628
2002	4.673	0.2140	4.032	0.2480	0.0338	2002	4.167	0.2400	3.669	0.2726	0.0511
2003	4.348	0.2300	3.808	0.2626	0.0298	2003	4.082	0.2450	3.804	0.2629	0.0391
2004	4.762	0.2100	4.105	0.2436	0.0286	2004	4.000	0.2500	3.667	0.2727	0.0384
2005	4.785	0.2090	3.946	0.2534	0.0261	2005	3.922	0.2550	3.218	0.3108	0.0457
2006	4.484	0.2230	3.915	0.2554	0.0302	2006	4.008	0.2495	3.495	0.2861	0.0375
2007	4.310	0.2320	4.109	0.2434	0.0307	2007	4.008	0.2495	3.650	0.2740	0.0366
2008	4.310	0.2320	3.857	0.2593	0.0311	2008	4.348	0.2300	3.736	0.2677	0.0354
2009	4.310	0.2320	3.470	0.2882	0.0188	2009	4.348	0.2300	3.725	0.2685	0.0221
2010	4.310	0.2320	3.517	0.2844	0.0233	2010	4.348	0.2300	3.737	0.2676	0.0223

Table 6 Multipliers and each inverse in equilibrium: Slovak, Slovenia, Spain, Romania, Russia, Turkey

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
12. Slovak						6. Romania					
1995	3.610	0.2770	3.263	0.3064	0.0987	1995	7.143	0.1400	5.736	0.1743	0.0828
1996	3.509	0.2850	3.334	0.3000	0.1549	1996	6.944	0.1440	5.227	0.1913	0.0896
1997	3.610	0.2770	3.101	0.3225	0.1384	1997	6.757	0.1480	5.212	0.1918	0.0768
1998	3.704	0.2700	3.207	0.3118	0.1207	1998	6.579	0.1520	5.427	0.1842	0.0787
1999	4.000	0.2500	3.489	0.2866	0.0770	1999	6.410	0.1560	5.460	0.1832	0.0674
2000	4.003	0.2498	3.528	0.2834	0.0699	2000	6.061	0.1650	5.494	0.1820	0.0766
2001	3.891	0.2570	2.939	0.3402	0.0847	2001	6.098	0.1640	5.499	0.1819	0.0961
2002	4.000	0.2500	2.830	0.3534	0.0765	2002	5.714	0.1750	5.827	0.1716	0.0954
2003	3.876	0.2580	3.294	0.3036	0.0565	2003	4.762	0.2100	4.101	0.2438	0.0965
2004	3.802	0.2630	3.303	0.3028	0.0638	2004	5.618	0.1780	5.246	0.1906	0.0939
2005	3.774	0.2650	3.265	0.3063	0.0733	2005	4.762	0.2100	4.793	0.2087	0.0922
2006	3.846	0.2600	3.215	0.3111	0.0676	2006	4.878	0.2050	5.033	0.1987	0.1123
2007	3.922	0.2550	3.709	0.2696	0.0656	2007	5.076	0.1970	5.383	0.1858	0.1300
2008	4.167	0.2400	3.970	0.2519	0.0685	2008	5.128	0.1950	4.674	0.2139	0.1249
2009	5.556	0.1800	4.364	0.2291	0.0406	2009	5.128	0.1950	3.865	0.2587	0.0824
2010	5.556	0.1800	3.925	0.2548	0.0545	2010	5.128	0.1950	4.257	0.2349	0.0826
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
13. Slovenia						7. Russia					
1990											
1991											
1992											
1993											
1994											
1995	4.545	0.2200	4.489	0.2228	0.1050	1995	4.878	0.2050	3.823	0.2616	0.0675
1996	4.545	0.2200	4.558	0.2194	0.0990	1996	5.000	0.2000	3.509	0.2850	0.0688
1997	4.808	0.2080	4.511	0.2217	0.1136	1997	5.000	0.2000	3.652	0.2738	0.0596
1998	4.651	0.2150	4.503	0.2221	0.1096	1998	5.650	0.1770	4.279	0.2337	0.0160
1999	4.545	0.2200	4.394	0.2276	0.1061	1999	5.882	0.1700	5.450	0.1835	0.0154
2000	4.545	0.2200	4.313	0.2318	0.0965	2000	4.762	0.2100	5.464	0.1830	0.0533
2001	4.545	0.2200	4.340	0.2304	0.0803	2001	4.255	0.2350	4.996	0.2002	0.0764
2002	4.545	0.2200	4.377	0.2285	0.0736	2002	4.348	0.2300	4.732	0.2113	0.0692
2003	4.545	0.2200	4.283	0.2335	0.0750	2003	4.167	0.2400	4.673	0.2140	0.0835
2004	4.545	0.2200	4.253	0.2352	0.0768	2004	3.846	0.2600	4.830	0.2070	0.0852
2005	4.545	0.2200	4.307	0.2322	0.0693	2005	3.448	0.2900	4.820	0.2075	0.0755
2006	4.545	0.2200	4.420	0.2262	0.0694	2006	3.448	0.2900	4.805	0.2081	0.0823
2007	4.348	0.2300	4.708	0.2124	0.0779	2007	3.448	0.2900	4.498	0.2223	0.0928
2008	4.348	0.2300	4.347	0.2300	0.0780	2008	3.571	0.2800	4.387	0.2280	0.0943
2009	4.348	0.2300	3.426	0.2918	0.0539	2009	4.348	0.2300	3.602	0.2776	0.0513
2010	4.348	0.2300	3.440	0.2907	0.0510	2010	4.348	0.2300	3.594	0.2782	0.0668
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
14. Spain						8. Turkey					
1990	5.882	0.1700	4.827	0.2072	0.0976	1990	6.250	0.1600	5.153	0.1941	0.0402
1991	5.882	0.1700	4.909	0.2037	0.1066	1991	6.250	0.1600	4.618	0.2165	0.0523
1992	5.882	0.1700	4.582	0.2183	0.0647	1992	6.250	0.1600	4.837	0.2068	0.0713
1993	7.407	0.1350	4.679	0.2137	0.0443	1993	6.250	0.1600	5.388	0.1856	0.0945
1994	8.333	0.1200	4.792	0.2087	0.0398	1994	6.452	0.1550	5.345	0.1871	0.0671
1995	5.882	0.1700	4.435	0.2255	0.0453	1995	6.250	0.1600	5.503	0.1817	0.0938
1996	6.061	0.1650	4.477	0.2234	0.0437	1996	5.882	0.1700	5.154	0.1940	0.1264
1997	5.263	0.1900	4.624	0.2162	0.0430	1997	5.882	0.1700	4.581	0.2183	0.1131
1998	5.000	0.2000	4.749	0.2106	0.0441	1998	5.556	0.1800	4.564	0.2191	0.0920
1999	5.000	0.2000	4.609	0.2169	0.0418	1999	5.556	0.1800	4.375	0.2286	0.0989
2000	4.762	0.2100	4.925	0.2031	0.0405	2000	5.682	0.1760	4.864	0.2056	0.0771
2001	4.762	0.2100	5.115	0.1955	0.0327	2001	6.173	0.1620	4.817	0.2076	0.0549
2002	4.545	0.2200	4.979	0.2008	0.0309	2002	5.556	0.1800	4.430	0.2257	0.0536
2003	4.444	0.2250	4.917	0.2034	0.0282	2003	5.495	0.1820	3.726	0.2684	0.0527
2004	4.348	0.2300	4.722	0.2118	0.0328	2004	5.495	0.1820	4.255	0.2350	0.0653
2005	4.082	0.2450	4.776	0.2094	0.0436	2005	5.495	0.1820	4.439	0.2253	0.0665
2006	3.922	0.2550	4.848	0.2063	0.0546	2006	5.495	0.1820	4.792	0.2087	0.0780
2007	3.704	0.2700	4.599	0.2174	0.0553	2007	5.495	0.1820	4.951	0.2020	0.0665
2008	4.348	0.2300	3.962	0.2524	0.0391	2008	5.128	0.1950	4.502	0.2221	0.0743
2009	5.263	0.1900	3.425	0.2919	0.0225	2009	5.128	0.1950	4.147	0.2411	0.0328
2010	5.263	0.1900	3.587	0.2787	0.0154	2010	5.128	0.1950	4.220	0.2370	0.0643

Table 7 Multipliers and each inverse in equilibrium: 15 Non-Euro area, Denmark, Iceland, Norway, Sweden, Switzerland

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
15 Europe except for Euro Area						3. Norway					
1990	4.473	0.2236	4.362	0.2292	0.0485	1990	5.000	0.2000	5.168	0.1935	0.0485
1991	4.562	0.2192	4.060	0.2463	0.0380	1991	4.762	0.2100	4.075	0.2454	0.0377
1992	5.283	0.1893	4.337	0.2306	(0.0713)	1992	5.000	0.2000	3.563	0.2807	0.0253
1993	5.120	0.1953	3.762	0.2658	0.0408	1993	4.545	0.2200	3.482	0.2872	0.0321
1994	5.051	0.1980	3.907	0.2559	(0.1991)	1994	3.846	0.2600	3.532	0.2831	0.0342
1995	4.843	0.2065	4.094	0.2442	0.0730	1995	3.333	0.3000	3.558	0.2810	0.0210
1996	4.748	0.2106	4.131	0.2420	0.0879	1996	3.571	0.2800	3.672	0.2723	0.0236
1997	4.566	0.2190	4.032	0.2480	0.0779	1997	3.571	0.2800	3.697	0.2705	0.0366
1998	4.434	0.2255	3.962	0.2524	0.0839	1998	3.846	0.2600	3.394	0.2947	0.0517
1999	4.452	0.2246	3.838	0.2605	0.0847	1999	3.846	0.2600	3.264	0.3064	0.0288
2000	4.313	0.2319	3.941	0.2537	0.0784	2000	3.817	0.2620	3.818	0.2619	0.0332
2001	4.403	0.2271	3.870	0.2584	0.0715	2001	3.846	0.2600	3.849	0.2598	0.0316
2002	4.420	0.2262	3.907	0.2559	0.0670	2002	4.484	0.2230	4.487	0.2229	0.0202
2003	4.278	0.2337	3.359	0.2977	0.0679	2003	4.348	0.2300	4.341	0.2304	0.0287
2004	4.342	0.2303	3.762	0.2658	0.0766	2004	4.695	0.2130	4.792	0.2087	0.0211
2005	3.943	0.2536	3.612	0.2769	0.0771	2005	3.846	0.2600	3.931	0.2544	0.0295
2006	3.995	0.2503	3.803	0.2630	0.0928	2006	3.846	0.2600	4.011	0.2493	0.0340
2007	3.982	0.2511	3.894	0.2568	0.0928	2007	3.846	0.2600	3.880	0.2578	0.0529
2008	4.113	0.2431	3.795	0.2635	0.0978	2008	3.846	0.2600	3.883	0.2576	0.0493
2009	4.486	0.2229	3.661	0.2732	0.0554	2009	3.774	0.2650	4.006	0.2496	0.0398
2010	4.486	0.2229	3.772	0.2651	0.0714	2010	3.774	0.2650	3.894	0.2568	0.0395
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
1. Denmark						4. Sweden					
1990	3.226	0.3100	3.140	0.3185	0.0229	1990	2.899	0.3450	3.000	0.3334	0.0448
1991	3.300	0.3030	3.154	0.3171	0.0212	1991	3.175	0.3150	3.006	0.3327	0.0282
1992	3.367	0.2970	3.166	0.3159	0.0112	1992	3.401	0.2940	2.925	0.3419	0.0247
1993	3.448	0.2900	3.160	0.3164	0.0155	1993	5.882	0.1700	2.915	0.3430	0.0110
1994	3.534	0.2830	3.216	0.3109	0.0111	1994	5.556	0.1800	3.050	0.3278	0.0145
1995	3.472	0.2880	3.160	0.3165	0.0126	1995	4.255	0.2350	2.987	0.3348	0.0235
1996	3.185	0.3140	3.149	0.3176	0.0070	1996	3.373	0.2965	3.000	0.3334	0.0217
1997	3.003	0.3330	3.133	0.3192	0.0225	1997	3.145	0.3180	3.048	0.3281	0.0188
1998	2.874	0.3480	3.054	0.3275	0.0271	1998	3.030	0.3300	3.067	0.3261	0.0221
1999	3.049	0.3280	3.157	0.3167	0.0168	1999	2.778	0.3600	2.912	0.3434	0.0239
2000	2.899	0.3450	3.109	0.3216	0.0204	2000	2.604	0.3840	2.959	0.3380	0.0266
2001	2.941	0.3400	3.052	0.3277	0.0221	2001	2.941	0.3400	3.169	0.3156	0.0181
2002	2.874	0.3480	2.882	0.3470	0.0201	2002	2.967	0.3370	2.896	0.3454	0.0155
2003	2.907	0.3440	2.868	0.3487	0.0148	2003	3.226	0.3100	3.150	0.3175	0.0140
2004	2.762	0.3620	2.927	0.3417	0.0563	2004	3.300	0.3030	3.433	0.2913	0.0139
2005	2.625	0.3810	3.065	0.3262	0.0412	2005	2.994	0.3340	3.284	0.3045	0.0127
2006	2.564	0.3900	2.999	0.3334	0.0573	2006	2.985	0.3350	3.313	0.3019	0.0251
2007	2.632	0.3800	3.032	0.3299	0.0785	2007	2.899	0.3450	3.379	0.2959	0.0283
2008	2.632	0.3800	2.904	0.3443	0.0628	2008	2.817	0.3550	3.116	0.3209	0.0217
2009	2.632	0.3800	2.450	0.4082	0.0414	2009	3.650	0.2740	3.652	0.2739	0.0117
2010	2.632	0.3800	2.450	0.4082	0.0371	2010	3.650	0.2740	3.753	0.2665	0.0216
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
2. Iceland						5. Switzerland					
1990	4.545	0.2200	4.017	0.2489	0.0309	1990	5.000	0.2000	5.117	0.1954	0.0654
1991	4.545	0.2200	3.684	0.2714	0.0339	1991	5.000	0.2000	4.734	0.2112	0.0459
1992	4.545	0.2200	3.892	0.2569	0.0225	1992	5.263	0.1900	5.051	0.1980	0.0332
1993	4.808	0.2080	3.904	0.2562	0.0152	1993	5.882	0.1700	5.073	0.1971	0.0190
1994	5.208	0.1920	3.977	0.2515	0.0118	1994	5.556	0.1800	5.155	0.1940	0.0304
1995	4.525	0.2210	3.634	0.2751	0.0111	1995	7.143	0.1400	6.430	0.1555	0.0309
1996	3.846	0.2600	3.693	0.2708	0.0291	1996	6.667	0.1500	6.126	0.1632	0.0511
1997	3.597	0.2780	3.653	0.2737	0.0236	1997	6.667	0.1500	6.083	0.1644	0.0546
1998	3.125	0.3200	3.486	0.2869	0.0505	1998	6.667	0.1500	6.713	0.1490	0.0513
1999	3.049	0.3280	3.458	0.2892	0.0330	1999	6.667	0.1500	6.382	0.1567	0.0450
2000	3.125	0.3200	3.299	0.3031	0.0391	2000	6.667	0.1500	6.243	0.1602	0.0446
2001	3.571	0.2800	3.132	0.3193	0.0446	2001	6.667	0.1500	6.829	0.1464	0.0411
2002	3.125	0.3200	3.071	0.3256	0.0387	2002	6.667	0.1500	6.238	0.1603	0.0331
2003	2.857	0.3500	2.997	0.3337	0.0321	2003	6.667	0.1500	6.346	0.1576	0.0292
2004	3.356	0.2980	3.360	0.2976	0.0616	2004	6.667	0.1500	6.378	0.1568	0.0301
2005	2.174	0.4600	2.797	0.3576	0.0771	2005	6.667	0.1500	6.624	0.1510	0.0305
2006	2.532	0.3950	3.022	0.3309	0.1223	2006	6.667	0.1500	6.915	0.1446	0.0322
2007	2.500	0.4000	3.063	0.3265	0.0799	2007	6.667	0.1500	5.953	0.1680	0.0303
2008	3.333	0.3000	2.137	0.4679	0.0974	2008	6.667	0.1500	5.953	0.1680	0.0273
2009	3.571	0.2800	2.591	0.3859	0.0647	2009	6.667	0.1500	7.036	0.1421	0.0233
2010	3.571	0.2800	3.013	0.3319	0.0301	2010	6.667	0.1500	6.855	0.1459	0.0206

Table 8 Multipliers and each inverse in equilibrium: the UK, Bulgaria, Czech Republic, Hungary, Latvia, Poland

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
6. United Kigdom						3. Hungary					
1990	3.891	0.2570	4.020	0.2488	0.0245	1990	7.692	0.1300	6.916	0.1446	0.0856
1991	4.082	0.2450	3.903	0.2562	0.0139	1991	7.692	0.1300	6.385	0.1566	0.0603
1992	4.950	0.2020	3.862	0.2589	0.0089	1992	7.692	0.1300	6.097	0.1640	0.0676
1993	5.128	0.1950	3.729	0.2681	0.0083	1993	7.692	0.1300	4.874	0.2052	0.0542
1994	5.025	0.1990	3.881	0.2576	0.0087	1994	7.937	0.1260	5.126	0.1951	0.0696
1995	5.025	0.1990	3.837	0.2606	0.0191	1995	9.091	0.1100	5.446	0.1836	0.0631
1996	4.890	0.2045	4.079	0.2452	0.0198	1996	8.264	0.1210	6.301	0.1587	0.0595
1997	4.831	0.2070	4.367	0.2290	0.0227	1997	9.091	0.1100	6.069	0.1648	0.0673
1998	4.608	0.2170	4.743	0.2108	0.0277	1998	10.989	0.0910	5.976	0.1673	0.0827
1999	4.405	0.2270	4.675	0.2139	0.0268	1999	8.475	0.1180	4.830	0.2070	0.0783
2000	4.255	0.2350	4.593	0.2177	0.0239	2000	8.547	0.1170	6.072	0.1647	0.0875
2001	4.255	0.2350	4.488	0.2228	0.0220	2001	8.621	0.1160	5.955	0.1679	0.0607
2002	4.556	0.2195	4.249	0.2353	0.0203	2002	14.286	0.0700	6.281	0.1592	0.0690
2003	4.505	0.2220	3.968	0.2520	0.0204	2003	10.000	0.1000	5.324	0.1878	0.0467
2004	4.454	0.2245	3.949	0.2532	0.0208	2004	11.111	0.0900	5.955	0.1679	0.0543
2005	4.405	0.2270	3.740	0.2674	0.0192	2005	11.111	0.0900	5.655	0.1768	0.0393
2006	4.357	0.2295	3.999	0.2501	0.0197	2006	9.091	0.1100	4.954	0.2019	0.0762
2007	4.310	0.2320	3.949	0.2532	0.0180	2007	8.000	0.1250	5.654	0.1769	0.0597
2008	4.608	0.2170	3.879	0.2578	0.0116	2008	7.692	0.1300	5.606	0.1784	0.0589
2009	6.061	0.1650	3.691	0.2710	0.0072	2009	9.091	0.1100	6.186	0.1616	0.0347
2010	6.061	0.1650	3.818	0.2619	0.0098	2010	9.091	0.1100	5.761	0.1736	0.0285
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
1. Bulgaria						4. Latvia					
1995	7.692	0.1300	5.541	0.1805	0.1870	1995	3.571	0.2800	3.466	0.2885	0.0338
1996	9.091	0.1100	7.818	0.1279	0.1234	1996	4.000	0.2500	3.765	0.2656	0.0574
1997	5.780	0.1730	6.645	0.1505	0.0343	1997	3.846	0.2600	3.954	0.2529	0.0723
1998	4.545	0.2200	5.255	0.1903	0.0883	1998	3.448	0.2900	3.466	0.2885	0.0949
1999	4.545	0.2200	4.909	0.2037	0.0815	1999	3.953	0.2530	2.930	0.3413	0.0814
2000	4.545	0.2200	4.682	0.2136	0.0877	2000	3.922	0.2550	3.077	0.3250	0.0811
2001	4.545	0.2200	5.020	0.1992	0.0959	2001	3.922	0.2550	3.204	0.3121	0.0890
2002	4.762	0.2100	4.754	0.2103	0.0504	2002	3.861	0.2590	3.147	0.3178	0.0875
2003	4.167	0.2400	4.314	0.2318	0.0678	2003	3.922	0.2550	3.496	0.2860	0.0960
2004	3.774	0.2650	4.390	0.2278	0.0925	2004	3.636	0.2750	3.513	0.2846	0.1183
2005	3.333	0.3000	4.341	0.2304	0.1018	2005	3.774	0.2650	3.707	0.2698	0.1201
2006	3.774	0.2650	4.385	0.2281	0.1208	2006	3.745	0.2670	4.043	0.2473	0.1418
2007	4.000	0.2500	4.739	0.2110	0.1061	2007	3.717	0.2690	4.297	0.2327	0.1448
2008	4.000	0.2500	4.536	0.2204	0.1450	2008	3.846	0.2600	3.510	0.2849	0.1065
2009	4.000	0.2500	3.966	0.2522	0.0949	2009	5.000	0.2000	3.357	0.2979	0.0118
2010	4.000	0.2500	3.383	0.2956	0.0722	2010	5.000	0.2000	3.570	0.2801	0.0307
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
2. Czech Republic						5. Poland					
						1990	5.263	0.1900	4.144	0.2413	0.1401
						1991	5.263	0.1900	3.681	0.2716	0.0853
						1992	5.000	0.2000	4.093	0.2443	0.0610
						1993	5.000	0.2000	4.249	0.2354	0.0583
						1994	5.348	0.1870	4.726	0.2116	0.0748
1995	3.448	0.2900	3.509	0.2850	0.2657	1995	5.000	0.2000	4.558	0.2194	0.0603
1996	3.846	0.2600	3.830	0.2611	0.2013	1996	5.025	0.1990	4.537	0.2204	0.0650
1997	3.846	0.2600	3.711	0.2694	0.1447	1997	5.051	0.1980	4.616	0.2166	0.0831
1998	3.984	0.2510	3.730	0.2681	0.0958	1998	5.076	0.1970	4.758	0.2102	0.0909
1999	3.953	0.2530	3.727	0.2683	0.1090	1999	5.988	0.1670	5.878	0.1701	0.0861
2000	3.922	0.2550	3.607	0.2772	0.1094	2000	5.405	0.1850	5.872	0.1703	0.0787
2001	3.891	0.2570	3.475	0.2878	0.0997	2001	5.155	0.1940	4.190	0.2386	0.0482
2002	3.861	0.2590	3.571	0.2800	0.0829	2002	5.181	0.1930	4.075	0.2454	0.0328
2003	3.831	0.2610	3.256	0.3071	0.0816	2003	5.208	0.1920	4.107	0.2435	0.0331
2004	3.802	0.2630	3.336	0.2998	0.0766	2004	5.236	0.1910	4.065	0.2460	0.0416
2005	3.774	0.2650	3.500	0.2857	0.0626	2005	5.263	0.1900	4.348	0.2300	0.0362
2006	3.745	0.2670	3.485	0.2869	0.0618	2006	5.291	0.1890	4.355	0.2296	0.0466
2007	3.745	0.2670	3.713	0.2693	0.0610	2007	5.000	0.2000	4.602	0.2173	0.0833
2008	3.745	0.2670	3.342	0.2992	0.0499	2008	5.319	0.1880	4.470	0.2237	0.0789
2009	3.846	0.2600	3.045	0.3284	0.0430	2009	5.263	0.1900	3.941	0.2538	0.0537
2010	3.846	0.2600	3.117	0.3208	0.0452	2010	5.263	0.1900	4.009	0.2495	0.0541

Table 9 Multipliers and each inverse in equilibrium: Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
1. Argentina						4. Chile					
1990	6.667	0.1500	6.537	0.1530	0.0485	1990	4.762	0.2100	4.969	0.2013	0.1221
1991	6.452	0.1550	6.256	0.1598	0.0631	1991	5.714	0.1750	6.318	0.1583	0.1033
1992	6.250	0.1600	6.238	0.1603	0.0581	1992	5.263	0.1900	6.024	0.1660	0.1104
1993	5.714	0.1750	5.483	0.1824	0.0690	1993	5.714	0.1750	6.475	0.1544	0.1145
1994	5.714	0.1750	5.460	0.1831	0.0677	1994	5.714	0.1750	6.327	0.1580	0.1037
1995	5.797	0.1725	5.614	0.1781	0.0919	1995	5.714	0.1750	6.880	0.1454	0.0391
1996	5.882	0.1700	5.274	0.1896	0.0887	1996	5.714	0.1750	6.676	0.1498	0.0656
1997	5.882	0.1700	5.400	0.1852	0.0878	1997	5.714	0.1750	6.508	0.1536	0.0679
1998	5.714	0.1750	5.285	0.1892	0.0795	1998	5.714	0.1750	5.856	0.1708	0.0604
1999	5.714	0.1750	4.892	0.2044	0.0601	1999	5.714	0.1750	5.230	0.1912	0.0275
2000	5.714	0.1750	5.009	0.1996	0.0544	2000	5.714	0.1750	5.769	0.1733	0.0348
2001	5.714	0.1750	4.796	0.2085	0.0431	2001	5.714	0.1750	5.853	0.1709	0.0350
2002	6.061	0.1650	4.713	0.2122	0.0389	2002	5.714	0.1750	5.567	0.1796	0.0321
2003	5.714	0.1750	4.912	0.2036	0.0498	2003	5.714	0.1750	5.788	0.1728	0.0009
2004	5.714	0.1750	5.565	0.1797	0.0625	2004	5.263	0.1900	6.383	0.1567	(0.0168)
2005	5.714	0.1750	5.399	0.1852	0.0616	2005	4.762	0.2100	7.128	0.1403	0.0479
2006	5.618	0.1780	5.040	0.1984	0.0637	2006	4.167	0.2400	7.569	0.1321	0.0195
2007	5.556	0.1800	4.818	0.2076	0.0680	2007	4.000	0.2500	7.730	0.1294	0.0297
2008	5.263	0.1900	4.450	0.2247	0.0697	2008	4.545	0.2200	6.866	0.1456	0.0595
2009	6.452	0.1550	3.922	0.2550	0.0475	2009	5.263	0.1900	4.714	0.2121	0.0321
2010	6.452	0.1550	4.890	0.2045	0.0705	2010	5.263	0.1900	5.947	0.1681	0.0420
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
2. Bolivia						5. Colombia					
1990	10.526	0.0950	6.555	0.1526	0.0080	1990	6.667	0.1500	6.290	0.1590	0.0944
1991	7.692	0.1300	5.486	0.1823	0.0282	1991	6.250	0.1600	6.292	0.1589	0.0528
1992	7.143	0.1400	5.250	0.1905	0.0353	1992	5.556	0.1800	4.625	0.2162	0.0741
1993	6.667	0.1500	4.932	0.2027	0.0340	1993	5.556	0.1800	5.310	0.1883	0.0812
1994	6.667	0.1500	5.369	0.1863	0.0206	1994	5.882	0.1700	5.376	0.1860	0.1513
1995	6.250	0.1600	5.434	0.1840	0.0273	1995	5.714	0.1750	5.072	0.1972	0.1707
1996	6.250	0.1600	5.384	0.1857	0.0340	1996	5.714	0.1750	4.720	0.2119	0.1256
1997	6.250	0.1600	4.818	0.2076	0.0543	1997	5.405	0.1850	4.513	0.2216	0.1113
1998	5.556	0.1800	4.425	0.2260	0.0680	1998	5.000	0.2000	4.021	0.2487	0.0992
1999	5.556	0.1800	4.426	0.2259	0.0377	1999	5.000	0.2000	3.709	0.2696	0.0580
2000	5.882	0.1700	4.543	0.2201	0.0334	2000	5.714	0.1750	0.020	51.1530	0.0612
2001	8.000	0.1250	4.836	0.2068	0.0107	2001	5.714	0.1750	4.792	0.2087	0.0628
2002	7.692	0.1300	4.287	0.2333	0.0327	2002	5.714	0.1750	4.408	0.2269	0.0681
2003	8.333	0.1200	5.027	0.1989	0.0046	2003	5.714	0.1750	4.987	0.2005	0.0739
2004	8.993	0.1112	5.590	0.1789	0.0116	2004	5.714	0.1750	3.884	0.2575	0.0566
2005	6.250	0.1600	5.261	0.1901	0.0069	2005	5.714	0.1750	19.968	0.0501	0.0500
2006	4.762	0.2100	5.850	0.1709	0.0058	2006	4.348	0.2300	6.079	0.1645	0.0609
2007	5.000	0.2000	5.729	0.1746	0.0215	2007	4.348	0.2300	4.091	0.2444	0.0638
2008	5.000	0.2000	5.973	0.1674	0.0376	2008	4.348	0.2300	3.510	0.2849	0.0615
2009						2009	4.348	0.2300	3.615	0.2766	0.0559
2010						2010	4.348	0.2300	3.750	0.2667	0.0578
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
3. Brazil						6. Paraguay					
1990	5.495	0.1820	4.163	0.2402	0.1163	1990	5.882	0.1700	7.220	0.1385	0.1451
1991	5.000	0.2000	4.246	0.2355	0.1707	1991	6.061	0.1650	6.000	0.1667	0.1408
1992	5.263	0.1900	4.511	0.2217	0.1197	1992	6.897	0.1450	7.333	0.1364	0.1148
1993	5.882	0.1700	4.037	0.2477	0.1018	1993	6.250	0.1600	6.777	0.1476	0.1030
1994	5.556	0.1800	4.249	0.2354	0.1260	1994	6.250	0.1600	6.544	0.1528	0.0960
1995	5.155	0.1940	4.349	0.2299	0.0604	1995	5.882	0.1700	6.055	0.1651	0.0900
1996	5.714	0.1750	4.482	0.2231	0.0782	1996	5.882	0.1700	5.901	0.1695	0.0879
1997	5.714	0.1750	4.097	0.2441	0.0760	1997	5.882	0.1700	5.829	0.1716	0.0698
1998	5.714	0.1750	4.016	0.2490	0.0640	1998	5.882	0.1700	5.795	0.1726	0.0626
1999	4.762	0.2100	4.019	0.2488	0.0648	1999	6.667	0.1500	5.538	0.1806	0.0445
2000	4.348	0.2300	4.189	0.2387	0.0645	2000	6.897	0.1450	5.338	0.1873	0.0367
2001	3.704	0.2700	3.428	0.2917	0.0583	2001	6.250	0.1600	5.906	0.1693	0.0374
2002	3.636	0.2750	3.482	0.2872	0.0520	2002	6.897	0.1450	5.539	0.1805	0.0304
2003	4.545	0.2200	3.773	0.2650	0.0504	2003	6.250	0.1600	5.980	0.1672	0.0362
2004	4.167	0.2400	3.858	0.2592	0.0554	2004	5.556	0.1800	6.191	0.1615	0.0430
2005	4.167	0.2400	3.608	0.2771	0.0527	2005	5.556	0.1800	5.801	0.1724	0.0580
2006	3.846	0.2600	3.544	0.2822	0.0542	2006	5.556	0.1800	5.775	0.1732	0.0557
2007	4.167	0.2400	3.989	0.2507	0.0606	2007	5.556	0.1800	5.956	0.1679	0.0500
2008	3.922	0.2550	3.526	0.2836	0.0694	2008	5.714	0.1750	6.707	0.1491	0.0487
2009	3.922	0.2550	3.576	0.2797	0.0551	2009	5.714	0.1750	(0.774)	(1.2928)	0.0181
2010	3.922	0.2550	3.856	0.2593	0.0636	2010	5.714	0.1750	43.848	0.0228	0.0214

Table 10 Multipliers and each inverse in equilibrium: Peru, Iran, Kazakhstan, Kuwait, Pakistan, Saudi Arabia

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
7. Peru						10. Kuwait					
1990	12.500	0.0800	6.017	0.1662	0.0893	1990	100.000	0.0100	1.908	0.5242	(0.1697)
1991	9.091	0.1100	7.427	0.1346	0.0880	1991	20.000	0.0500	2.424	0.4125	0.1763
1992	11.111	0.0900	7.681	0.1302	0.0953	1992	5.882	0.1700	1.639	0.6101	0.1112
1993	11.111	0.0900	8.123	0.1231	0.0972	1993	10.000	0.1000	2.901	0.3448	0.0221
1994	8.000	0.1250	9.923	0.1008	0.0981	1994	5.263	0.1900	3.222	0.3103	(0.0195)
1995	7.692	0.1300	5.964	0.1677	0.1072	1995	4.348	0.2300	3.336	0.2998	(0.0149)
1996	7.692	0.1300	6.846	0.1461	0.0891	1996	3.571	0.2800	5.505	0.1817	0.0188
1997	7.692	0.1300	7.199	0.1389	0.0875	1997	2.941	0.3400	4.167	0.2400	(0.0057)
1998	9.091	0.1100	8.158	0.1226	0.0789	1998	5.882	0.1700	3.090	0.3236	(0.0238)
1999	10.000	0.1000	7.405	0.1350	0.0598	1999	3.571	0.2800	4.486	0.2229	(0.0133)
2000	10.000	0.1000	7.563	0.1322	0.0373	2000	2.326	0.4300	3.527	0.2835	(0.0096)
2001	7.692	0.1300	6.203	0.1612	0.0427	2001	2.000	0.5000	4.369	0.2289	0.0036
2002	7.692	0.1300	6.501	0.1538	0.0413	2002	2.500	0.4000	3.499	0.2858	0.0017
2003	7.692	0.1300	6.689	0.1495	0.0406	2003	2.500	0.4000	3.217	0.3108	0.0074
2004	7.692	0.1300	6.949	0.1439	0.0367	2004	2.857	0.3500	3.568	0.2802	0.0221
2005	7.143	0.1400	6.767	0.1478	0.0360	2005	2.703	0.3700	3.694	0.2707	0.0247
2006	7.407	0.1350	8.377	0.1194	0.0480	2006	1.818	0.5500	4.484	0.2230	0.0263
2007	6.452	0.1550	7.407	0.1350	0.0612	2007	2.222	0.4500	4.166	0.2400	0.0271
2008	6.061	0.1650	7.080	0.1412	0.0781	2008	2.500	0.4000	9.949	0.1005	0.0362
2009	6.061	0.1650	6.932	0.1443	0.0551	2009	2.857	0.3500	4.145	0.2413	0.0210
2010	6.061	0.1650	6.343	0.1577	0.0660	2010					
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
8. Iran						11. Pakistan					
1990	5.263	0.1900	4.763	0.2100	0.2007	1990	7.692	0.1300	5.259	0.1902	0.0176
1991	5.814	0.1720	5.080	0.1968	0.1974	1991	10.000	0.1000	5.427	0.1843	0.0314
1992	5.263	0.1900	4.944	0.2022	0.1549	1992	11.111	0.0900	5.619	0.1780	0.0479
1993	5.263	0.1900	5.055	0.1978	0.0883	1993	9.091	0.1100	4.780	0.2092	0.0503
1994	5.405	0.1850	5.485	0.1823	0.0549	1994	10.000	0.1000	5.531	0.1808	0.0464
1995	5.714	0.1750	5.758	0.1737	0.1036	1995	10.000	0.1000	5.873	0.1703	0.0620
1996	5.714	0.1750	5.780	0.1730	0.1329	1996	10.000	0.1000	5.384	0.1857	0.0620
1997	5.714	0.1750	5.392	0.1855	0.1229	1997	10.000	0.1000	5.424	0.1844	0.0524
1998	5.714	0.1750	4.393	0.2276	0.1062	1998	10.000	0.1000	5.899	0.1695	0.0501
1999	5.714	0.1750	5.646	0.1771	0.0917	1999	10.000	0.1000	5.742	0.1742	0.0388
2000	5.714	0.1750	5.499	0.1819	0.1026	2000	10.526	0.0950	6.887	0.1452	0.0426
2001	5.714	0.1750	5.592	0.1788	0.1030	2001	10.526	0.0950	7.332	0.1364	0.0412
2002	5.714	0.1750	5.067	0.1974	0.1067	2002	10.526	0.0950	7.940	0.1260	0.0369
2003	5.714	0.1750	4.923	0.2031	0.1077	2003	10.526	0.0950	7.979	0.1253	0.0379
2004	5.714	0.1750	4.919	0.2033	0.1038	2004	10.526	0.0950	8.648	0.1156	0.0401
2005	5.714	0.1750	4.779	0.2092	0.0827	2005	11.111	0.0900	8.073	0.1239	0.0539
2006	5.714	0.1750	4.110	0.2433	0.0807	2006	11.111	0.0900	7.424	0.1347	0.0697
2007	5.714	0.1750	4.777	0.2094	0.0809	2007	10.526	0.0950	7.173	0.1394	0.0670
2008						2008	10.000	0.1000	5.530	0.1808	0.0522
2009						2009	11.111	0.0900	7.100	0.1408	0.0435
2010						2010	11.111	0.0900	6.940	0.1441	0.0252
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
9. Kazakhstan						12. Saudi Arabia					
						1990	2.941	0.3400	2.715	0.3683	0.0246
						1991	2.381	0.4200	2.221	0.4502	0.0326
						1992	2.632	0.3800	2.478	0.4036	0.0614
						1993	2.941	0.3400	2.666	0.3750	0.0567
						1994	3.030	0.3300	2.762	0.3621	0.0389
1995	5.714	0.1750	4.959	0.2017	0.0841	1995	4.000	0.2500	3.556	0.2812	0.0185
1996	5.882	0.1700	4.591	0.2178	0.0669	1996	3.636	0.2750	3.228	0.3098	0.0094
1997	5.882	0.1700	4.687	0.2133	0.0660	1997	3.448	0.2900	3.119	0.3206	0.0084
1998	6.250	0.1600	4.821	0.2074	0.0539	1998	3.125	0.3200	2.788	0.3587	0.0098
1999	6.061	0.1650	4.951	0.2020	0.0446	1999	4.348	0.2300	3.167	0.3158	0.0040
2000	5.714	0.1750	5.669	0.1764	0.0472	2000	3.636	0.2750	3.219	0.3107	0.0180
2001	5.714	0.1750	5.566	0.1797	0.0940	2001	3.448	0.2900	2.998	0.3336	0.0154
2002	5.714	0.1750	5.579	0.1792	0.0909	2002	3.448	0.2900	3.109	0.3217	0.0224
2003	5.263	0.1900	4.950	0.2020	0.0745	2003	2.857	0.3500	3.321	0.3011	0.0244
2004	5.263	0.1900	5.164	0.1937	0.0810	2004	2.500	0.4000	3.557	0.2811	0.0219
2005	5.263	0.1900	5.465	0.1830	0.0986	2005	2.222	0.4500	3.986	0.2509	0.0258
2006	5.000	0.2000	5.239	0.1909	0.1101	2006	2.041	0.4900	3.802	0.2630	0.0259
2007	6.250	0.1600	5.594	0.1788	0.1265	2007	2.500	0.4000	3.781	0.2645	0.0299
2008	5.263	0.1900	7.245	0.1380	0.0768	2008	3.448	0.2900	3.336	0.2998	0.0328
2009	5.714	0.1750	5.226	0.1913	0.0816	2009	3.448	0.2900	2.793	0.3580	0.0441
2010	5.714	0.1750	5.236	0.1910	0.0997	2010	3.448	0.2900	2.775	0.3604	0.0205

Table 11 Multipliers and each inverse in equilibrium: Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
13. Algeria						16. Morocco					
1990	4.348	0.2300	3.703	0.2701	0.1364	1990	4.545	0.2200	4.102	0.2438	0.0742
1991	4.545	0.2200	3.965	0.2522	0.1340	1991	5.000	0.2000	4.498	0.2223	0.0504
1992	4.950	0.2020	4.109	0.2434	0.1151	1992	4.762	0.2100	4.440	0.2252	0.0230
1993	5.128	0.1950	4.059	0.2464	0.0962	1993	4.762	0.2100	4.189	0.2387	0.0263
1994	5.025	0.1990	4.105	0.2436	0.1116	1994	5.263	0.1900	4.443	0.2251	0.0201
1995	5.025	0.1990	4.666	0.2143	0.1136	1995	5.556	0.1800	4.381	0.2282	0.0253
1996	4.890	0.2045	4.641	0.2155	0.0755	1996	5.882	0.1700	4.935	0.2026	0.0100
1997	5.263	0.1900	4.588	0.2180	0.0588	1997	4.831	0.2070	4.662	0.2145	0.0247
1998	5.556	0.1800	4.569	0.2189	0.0771	1998	4.762	0.2100	4.338	0.2305	0.0008
1999	4.444	0.2250	4.370	0.2288	0.0646	1999	5.000	0.2000	4.464	0.2240	0.0589
2000	3.846	0.2600	6.570	0.1522	0.0496	2000	4.545	0.2200	3.588	0.2787	0.0487
2001	4.255	0.2350	5.362	0.1865	0.0595	2001	4.762	0.2100	3.815	0.2621	0.0381
2002	4.444	0.2250	4.715	0.2121	0.0690	2002	4.556	0.2195	3.747	0.2669	0.0403
2003	4.082	0.2450	5.401	0.1852	0.0674	2003	4.505	0.2220	3.707	0.2698	0.0442
2004	3.846	0.2600	4.959	0.2017	0.0693	2004	4.454	0.2245	3.749	0.2667	0.0472
2005	3.509	0.2850	7.016	0.1425	0.0617	2005	4.405	0.2270	3.597	0.2780	0.0400
2006	3.509	0.2850	7.215	0.1386	0.0522	2006	4.357	0.2295	3.955	0.2528	0.0407
2007	4.000	0.2500	5.435	0.1840	0.0566	2007	4.310	0.2320	3.971	0.2518	0.0482
2008	4.000	0.2500	6.686	0.1496	0.0607	2008	4.310	0.2320	3.903	0.2562	0.0720
2009	4.000	0.2500	3.316	0.3016	0.0775	2009	4.310	0.2320	3.821	0.2617	0.0767
2010						2010	4.762	0.2100	4.061	0.2463	0.0723
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
14. Egypt						17. Nigeria					
1990	9.091	0.1100	5.763	0.1735	0.1090						
1991	7.407	0.1350	6.871	0.1455	0.0709						
1992	6.897	0.1450	5.472	0.1828	0.0667						
1993	6.897	0.1450	7.933	0.1261	0.0606						
1994	6.897	0.1450	7.079	0.1413	0.0528						
1995	6.897	0.1450	7.405	0.1350	0.0270	1995	11.111	0.0900	11.182	0.0894	0.0297
1996	6.897	0.1450	6.002	0.1666	0.0332	1996	12.500	0.0800	15.220	0.0657	0.0329
1997	6.897	0.1450	5.963	0.1677	0.0505	1997	13.333	0.0750	13.013	0.0768	0.0388
1998	6.897	0.1450	6.451	0.1550	0.0275	1998	31.250	0.0320	12.226	0.0818	0.0274
1999	6.667	0.1500	6.632	0.1508	0.0505	1999	28.571	0.0350	7.818	0.1279	0.0228
2000	6.897	0.1450	6.305	0.1586	0.0395	2000	22.222	0.0450	14.788	0.0676	0.0192
2001	10.000	0.1000	6.198	0.1613	0.0320	2001	16.667	0.0600	9.147	0.1093	0.0420
2002	10.000	0.1000	5.716	0.1749	0.0300	2002	16.667	0.0600	9.456	0.1058	0.0308
2003	10.000	0.1000	6.074	0.1646	0.0251	2003	16.667	0.0600	11.659	0.0858	0.0313
2004	10.000	0.1000	6.160	0.1623	0.0274	2004	14.286	0.0700	11.964	0.0836	0.0261
2005	10.000	0.1000	6.177	0.1619	0.0331	2005	14.286	0.0700	12.228	0.0818	0.0106
2006	11.765	0.0850	5.937	0.1684	0.0479	2006	16.667	0.0600	18.795	0.0532	0.0229
2007	10.000	0.1000	6.360	0.1572	0.0503	2007	11.111	0.0900	10.410	0.0961	0.0594
2008	10.000	0.1000	5.939	0.1684	0.0734	2008	10.000	0.1000	8.967	0.1115	0.0564
2009	10.000	0.1000	5.836	0.1713	0.0527	2009	10.000	0.1000	9.761	0.1024	0.0818
2010	10.000	0.1000	5.431	0.1841	0.0550	2010	10.000	0.1000	9.029	0.1108	0.0780
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
15. Kenya						18. South Africa					
1990	5.263	0.1900	4.209	0.2376	0.1695	1990	5.405	0.1850	4.453	0.2246	0.0291
1991	5.714	0.1750	4.327	0.2311	0.0970	1991	5.714	0.1750	4.534	0.2206	0.0432
1992	5.263	0.1900	4.899	0.2041	0.0961	1992	6.250	0.1600	4.229	0.2364	0.0442
1993	6.024	0.1660	4.611	0.2169	0.0535	1993	6.250	0.1600	4.320	0.2315	0.0558
1994	6.897	0.1450	4.730	0.2114	0.0701	1994	6.250	0.1600	4.065	0.2460	0.0629
1995	5.714	0.1750	5.271	0.1897	0.1283	1995	6.250	0.1600	4.856	0.2059	0.0750
1996	5.714	0.1750	6.032	0.1658	0.0695	1996	5.556	0.1800	4.353	0.2297	0.0804
1997	5.714	0.1750	5.187	0.1928	0.0732	1997	5.263	0.1900	4.482	0.2231	0.0740
1998	5.882	0.1700	5.674	0.1762	0.0597	1998	5.000	0.2000	4.393	0.2276	0.0707
1999	6.250	0.1600	6.152	0.1626	0.0467	1999	5.051	0.1980	4.652	0.2149	0.0727
2000	5.882	0.1700	6.167	0.1621	0.0608	2000	5.000	0.2000	4.521	0.2212	0.0702
2001	5.882	0.1700	5.465	0.1830	0.0621	2001	5.000	0.2000	4.779	0.2092	0.0657
2002	5.714	0.1750	4.964	0.2014	0.0340	2002	5.000	0.2000	4.782	0.2091	0.0656
2003	5.714	0.1750	4.836	0.2068	0.0343	2003	5.000	0.2000	4.405	0.2270	0.0648
2004	5.155	0.1940	5.055	0.1978	0.0497	2004	4.762	0.2100	4.263	0.2346	0.0709
2005	5.155	0.1940	5.181	0.1930	0.0559	2005	4.545	0.2200	4.452	0.2246	0.0662
2006	5.882	0.1700	5.266	0.1899	0.0610	2006	4.348	0.2300	4.417	0.2264	0.0712
2007	5.405	0.1850	4.909	0.2037	0.0564	2007	4.167	0.2400	4.323	0.2313	0.0830
2008	5.882	0.1700	4.938	0.2025	0.0702	2008	4.348	0.2300	4.164	0.2402	0.0849
2009	5.882	0.1700	4.609	0.2170	0.0552	2009	5.556	0.1800	3.992	0.2505	0.0519
2010	5.882	0.1700	4.683	0.2135	0.0445	2010	5.000	0.2000	4.031	0.2481	0.0555

Table 12 Multipliers and each inverse in equilibrium: Tanzania, Ukraine, Taiwan, Honduras, Estonia, Lithuania

	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
19. Tanzania						Honduras 7.62					
1990						1990	7.692	0.1300	5.621	0.1779	0.0826
1991	(0.3068)	0.4128	27	74	0.1411	1991	7.692	0.1300	6.214	0.1609	0.0919
1992	0.0052	(0.8895)	27	18	0.1401	1992	7.692	0.1300	5.531	0.1808	0.0926
1993	(0.1072)	1.2746	21	93	0.1283	1993	7.692	0.1300	5.042	0.1983	0.1079
1994	(0.2530)	0.4348	9	114	0.1056	1994	7.692	0.1300	5.435	0.1840	0.1107
1995	0.4119	0.0705	57	122	0.0615	1995	7.692	0.1300	5.955	0.1679	0.0927
1996	(6.9628)	5.8089	81	102	0.0714	1996	7.692	0.1300	6.100	0.1639	0.0924
1997	1.2285	0.1956	198	121	0.0699	1997	7.692	0.1300	6.598	0.1516	0.0925
1998	1.2462	(0.5217)	95	164	0.0765	1998	7.692	0.1300	7.457	0.1341	0.0863
1999	0.8478	0.0361	192	168	0.0692	1999	6.250	0.1600	5.355	0.1868	0.1112
2000	1.3539	(0.2028)	71	186	0.0671	2000	6.250	0.1600	5.290	0.1890	0.1011
2001	0.6681	0.4858	139	235	0.0651	2001	6.250	0.1600	5.129	0.1950	0.0867
2002	0.5085	0.1746	224	264	0.0615	2002	6.250	0.1600	4.994	0.2002	0.0754
2003	(20.9158)	(0.1170)	116	264	0.0664	2003	6.250	0.1600	4.708	0.2124	0.0752
2004	(11.9408)	8.3193	(16)	355	0.0579	2004	6.250	0.1600	5.255	0.1903	0.0852
2005	(0.4570)	0.8892	(73)	467	0.0624	2005	6.250	0.1600	5.351	0.1869	0.0764
2006						2006	6.250	0.1600	5.766	0.1734	0.0734
2007						2007	6.250	0.1600	5.207	0.1920	0.0851
2008						2008	6.250	0.1600	5.376	0.1860	0.0882
2009						2009	6.667	0.1500	4.510	0.2217	0.0400
2010						2010	6.667	0.1500	4.240	0.2358	0.0477
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
9. Ukraine						Estonia 1.34					
						1990	5.714	0.1750			
						1991	5.714	0.1750	5.743	0.1741	0.1851
1992						1992	5.128	0.1950	5.144	0.1944	0.1139
1993	4.762	0.2100	3.748	0.2668	(0.0003)	1993	4.000	0.2500	4.138	0.2417	0.1342
1994	4.587	0.2180	4.405	0.2270	0.0119	1994	3.846	0.2600	3.609	0.2771	0.1330
1995	5.025	0.1990	3.669	0.2725	0.0523	1995	3.226	0.3100	3.348	0.2987	0.0986
1996	5.000	0.2000	3.907	0.2559	0.0658	1996	3.448	0.2900	3.390	0.2950	0.1123
1997	5.000	0.2000	4.138	0.2416	0.0679	1997	3.704	0.2700	3.603	0.2775	0.0997
1998	5.000	0.2000	4.301	0.2325	0.0530	1998	3.333	0.3000	3.632	0.2753	0.1307
1999	5.025	0.1990	4.515	0.2215	0.0403	1999	4.000	0.2500	3.991	0.2506	0.1258
2000	5.025	0.1990	4.810	0.2079	0.0533	2000	4.000	0.2500	4.021	0.2487	0.1156
2001	5.025	0.1990	4.680	0.2137	0.0595	2001	4.000	0.2500	4.026	0.2484	0.1061
2002	4.545	0.2200	4.649	0.2151	0.0513	2002	4.000	0.2500	4.043	0.2473	0.1089
2003	4.545	0.2200	4.486	0.2229	0.0593	2003	4.000	0.2500	4.048	0.2470	0.1094
2004	5.000	0.2000	4.361	0.2293	0.0557	2004	4.000	0.2500	4.038	0.2477	0.0957
2005	5.000	0.2000	4.564	0.2191	0.0708	2005	4.000	0.2500	4.041	0.2475	0.0892
2006	4.545	0.2200	4.398	0.2274	0.0854	2006	4.000	0.2500	4.058	0.2465	0.1001
2007	4.545	0.2200	4.296	0.2328	0.0994	2007	4.000	0.2500	4.066	0.2459	0.1031
2008	4.545	0.2200	4.320	0.2315	0.1029	2008	4.000	0.2500	4.008	0.2495	0.0751
2009	5.000	0.2000	4.170	0.2398	0.0474	2009	3.774	0.2650	3.783	0.2644	0.0400
2010	5.000	0.2000	4.378	0.2284	0.0573	2010	4.000	0.2500	4.003	0.2498	0.0429
	m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)		m Y/TAX	TAX/Y	m Y/(CG+IG)	(CG+IG)/Y	gA*=i(1-β*)
Taiwan						Lithuania 3.26					
1990	5.405	0.1850	4.948	0.2021	0.1390	1990					
1991	5.405	0.1850	4.940	0.2024	0.1198	1991					
1992	5.714	0.1750	5.141	0.1945	0.1166	1992					
1993	5.882	0.1700	5.278	0.1895	0.1046	1993	4.348	0.2300	3.482	0.2872	0.0747
1994	5.882	0.1700	5.235	0.1910	0.0921	1994	4.348	0.2300	3.631	0.2754	0.0803
1995	5.882	0.1700	5.282	0.1893	0.0848	1995	4.348	0.2300	3.610	0.2770	0.1127
1996	5.882	0.1700	5.249	0.1905	0.0716	1996	4.348	0.2300	3.759	0.2660	0.1069
1997	5.882	0.1700	5.402	0.1851	0.0701	1997	4.310	0.2320	3.982	0.2511	0.1083
1998	6.250	0.1600	5.783	0.1729	0.0696	1998	4.032	0.2480	3.964	0.2523	0.0966
1999	6.667	0.1500	6.120	0.1634	0.0640	1999	4.348	0.2300	3.328	0.3005	0.0808
2000	6.667	0.1500	5.142	0.1945	0.0622	2000	4.082	0.2450	3.850	0.2598	0.0690
2001	6.667	0.1500	4.581	0.2183	0.0419	2001	4.000	0.2500	3.934	0.2542	0.0671
2002	6.667	0.1500	5.537	0.1806	0.0383	2002	4.348	0.2300	4.141	0.2415	0.0684
2003	6.667	0.1500	5.726	0.1746	0.0385	2003	4.348	0.2300	4.299	0.2326	0.0732
2004	6.667	0.1500	5.663	0.1766	0.0493	2004	4.348	0.2300	4.075	0.2454	0.0727
2005	6.667	0.1500	6.526	0.1532	0.0448	2005	4.348	0.2300	4.159	0.2404	0.0780
2006	6.667	0.1500	6.567	0.1523	0.0408	2006	4.348	0.2300	4.348	0.2300	0.0883
2007	6.667	0.1500	6.561	0.1524	0.0377	2007	4.348	0.2300	4.255	0.2350	0.1035
2008	6.667	0.1500	6.284	0.1591	0.0384	2008	4.348	0.2300	3.902	0.2563	0.0922
2009	6.667	0.1500	5.280	0.1894	0.0250	2009	4.348	0.2300	3.145	0.3179	0.0340
2010	6.667	0.1500	5.569	0.1796	0.0367	2010	4.348	0.2300	3.374	0.2964	0.0469