Chapter 12

Revisit Two Tax Multipliers, Tax and Government Spending, by Area and by Country

Signpost to Chapter 12 and towards watershed

Chapters 12 and 13 finalize the essence of fiscal analysis and its policy, reinforced by Samuelson's two fiscal multipliers and also scientific discovery. Empirical results for fiscal policy were examined in Chapters 3, 4, and 5, by aspect. This chapter follows Samuelson (1998) and approaches the essence of macro real assets. Samuelson (1938, 1939) clarified the acceleration principle and the multiplier. Today, the multiplier is still estimated and forecasted in the literature. The multiplier of the literature and the multiplier of the endogenous system have the same root of the real assets of national accounts. Statistics databases and the endogenous KEWT database will cross soon. The crossing is the multiplier whose inverse is the corresponding endogenous data. In detail, see Appendix: Broader interpretation of the multipliers as the inverses of the endogenous KEWT data-sets at the end of this Chapter.

12.1 Introduction

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 few other chapters, 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 chapter, the differences are as follows:

Chapter 12

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 is connected with fiscal multipliers. Fiscal multipliers remain unsolved in the literature, as clarified in Chapter 13. Tax design completed by Mirrlees, J. A. (2010, 2011) requires the essence based on Samuelson's discovery (1942). And, tax policy is able to serve an integrated set of policies as a core in reality. Policy-oriented fact is proved at the endogenous system: This fact is beyond a function of time, as shown in the literature. Actual or estimated data are always within a range of endogenous data in the endogenous-equilibrium, as theoretically and empirically proved in the *EES*. 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 the KEWT database 6.12, 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. According to Davar Ezra (25, 2010), modern general equilibrium theory sets investment the cause and sets national income the effect. 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.

12.2 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 is 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=6×12, 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 $i = I/Y$, and the qualitative net investment coefficient, $(1 - \beta^*)$.

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 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 chapter, 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, sustainable 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.

12.3 A Short Remark

Financial market assets do not always work as the second best by country. Young developing countries need experiences, if possible with a bright lighthouse such as two fiscal multipliers in this chapter. For country comparison, the multiplier appears sensitive much more than its inverse. Two fiscal multipliers are the results, but at the same time are 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 republic and democracy. For developed countries, the size of government must be openly 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 sub-system, endogenously with an integrated set of economic policies, real, fiscal, financial, market, and central and local banks.

BOX 12-1 Remark on Real Business Cycle (RBC) Theory

The price-equilibrium	**The endogenous-equilibrium**
1. $g_{y(t)} = \alpha \cdot g_{r(t)} + (1-\alpha) g_{w(t)}$.	1. $g_{A(FLOW)(t^*)} = g_{TFP(STOCK)(t^*)}$.
Relative price level p=1.000, and σ=1.000 .	$g_{A(FLOW)(t^*)} = i_{t^*} \cdot (1-\beta_{(t^*)})$.
2. $g_{y(t)} = \alpha \cdot g_{r(t)} + (1-\alpha) g_{w(t)}$.	2. $A_{TFP(t^*)} = A_0 (1+g_{A(t^*)})^{1/\lambda^*}$.

[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. For VARs: See (1) Kydland, Finn, E., and Prescott, Edward, C, 1977, Rules Rather than Discretion: The Inconsistency of Optimal Plans, *Journal of Political Economy* 85 (June, 3): 473-491. (2) Engle, Robert, F., and Granger, C. W., 1987, 'Co-integration and error correction: representation, estimation, and testing,' *Econometrica* 55 (March, 2): 251-276.

Note: RBC theory remains a partial aspect. A true business cycle shows results of both equilibriums always the same under the neutrality of the financial/market assets to the real assets (see Notes, Chapters 1 and 14).

Conclusively, this chapter expresses a severe reply to Dr. Paul, where the market principles and six nature-neutrals are harmoniously united. The author could not reply without Dr. Paul's very earlier work on utility and deficit at the end of 1930s. Under the price-equilibrium, it is impossible for one to step into true solution, due to vertical price level by goods and services. The market principles are destined to show results. No one is responsible for difficult development of the market principles.

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. **BOX 12-2** 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.

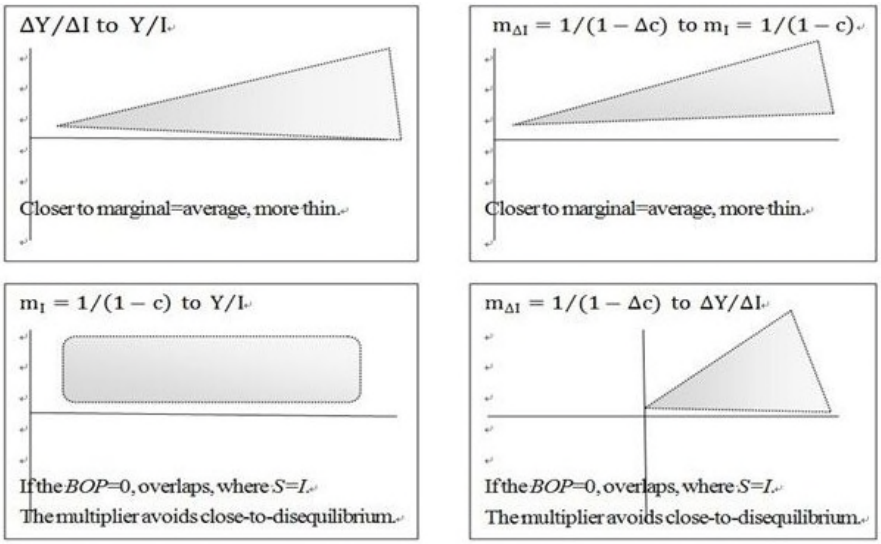
The multiplier was first presented by Samuelson, Paul (1939a, 1939b). Samuelson integrated the multiplier with the principle of accumulation. The principle of accumulation implies that investment is effective not only for the investment year but also for consecutive several years and, this fact has been 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 (25, 2010), 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. Furthermore, 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 consumption 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.

BOX 12-2 Illustrative results of multipliers and its inverse ratios common to 86 countries using panel data by area: four combinations



Data sources: KEWT 8.14, 1990-2012. 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.

Function, $(rho/r)(C/Y)$, was finally settled after a plenty of experimental tests and practices, as explained in a few chapters in the *EES*. The function is expressed as $(rho/r)(c) = 13.301c^2 - 22.608c + 10.566$ and applicable to 86 countries, except for several 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 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 principles.

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 (29, ibid.) 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 the KEWT database. According to the 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. (32-62, 1986) and also to Blinder, A. S. and Solow, R. M. (319-337, 1973). It is true that monetarists must distinguish themselves with Keynesians, as pursued by the above distinguished two articles and, also cited by Davar (29, ibid.). 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. (451-472, 1977) and now by Author's KEWT database 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 (335-336, ibid.), 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. With the increase in deficits, as stated above, 'deficit spending contracts the economy, thus enlarging the deficit and contracting the economy still more.' For necessary and sufficient conditions to equilibrium, see those discussed in Chapter 9. Blinder and Solow (336, ibid.; 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: How to initialize the starting point of time in a framework. The effects of the multipliers last at least several years even if rival capital and labor 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. In the case of the endogenous system, the problem of initialization was solved by simultaneously measuring endogenous values. Millions data are consistent each other by year, sector, and over years, starting with statistics data of *IFSY*, IMF. Causes and results change together non-linearly and dynamically.

For readers' convenience: contents of Tables hereunder

Tables M1 to M12: Multipliers and each inverse in equilibrium:
Each Table has six countries, 1990-2012. Twelve Tables show 36 countries, 1990-2012.
Data source: KEWT 6.12-1 to 6.12-3 for M1 to M11. For M12, KEWT 6.12-5 is added.

Chapter 12

Table M1 Multipliers and each inverse in equilibrium: 17 Asian & Pacific, the US, Canada, Australia, New Zealand, and Mexico, 1990-2012

17 Asian c	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	3. Australi	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1628	6.1407	4.4750	0.2235	0.0130	**1990**	0.2500	4.0000	4.3991	0.2273	0.0451
1991	0.1666	6.0018	4.4660	0.2239	0.0120	**1991**	0.2380	4.2017	4.3020	0.2324	0.0266
1992	0.1669	5.9901	4.4819	0.2231	0.0104	**1992**	0.2100	4.7619	4.2355	0.2361	0.0250
1993	0.1645	6.0779	4.5371	0.2204	0.0094	**1993**	0.2000	5.0000	4.2055	0.2378	0.0278
1994	0.1680	5.9524	4.4931	0.2226	0.0085	**1994**	0.2000	5.0000	4.2778	0.2338	0.0355
1995	0.1722	5.8060	4.4406	0.2252	0.0093	**1995**	0.2070	4.8309	4.2840	0.2334	0.0247
1996	0.1793	5.5774	4.3318	0.2309	0.0070	**1996**	0.2240	4.4643	4.2678	0.2343	0.0245
1997	0.1752	5.7078	4.6202	0.2164	0.0071	**1997**	0.2350	4.2553	4.3322	0.2308	0.0239
1998	0.1701	5.8803	3.4357	0.2911	0.0043	**1998**	0.2650	3.7736	4.2668	0.2344	0.0345
1999	0.1697	5.8925	3.9723	0.2517	0.0051	**1999**	0.2330	4.2918	4.1836	0.2390	0.0347
2000	0.1691	5.9151	3.9586	0.2526	0.0036	**2000**	0.2450	4.0816	4.2777	0.2338	0.0314
2001	0.1628	6.1438	4.4187	0.2263	0.0069	**2001**	0.2400	4.1667	4.3938	0.2276	0.0200
2002	0.1665	6.0049	4.0546	0.2466	0.0033	**2002**	0.2400	4.1667	4.4345	0.2255	0.0307
2003	0.1748	5.7220	3.9375	0.2540	0.0039	**2003**	0.2500	4.0000	4.2928	0.2329	0.0345
2004	0.1733	5.7705	4.2756	0.2339	0.0048	**2004**	0.2500	4.0000	4.3418	0.2303	0.0355
2005	0.1799	5.5583	4.3693	0.2289	0.0051	**2005**	0.2600	3.8462	4.2332	0.2362	0.0367
2006	0.1826	5.4750	4.5571	0.2194	0.0053	**2006**	0.2700	3.7037	4.2021	0.2380	0.0327
2007	0.1859	5.3797	4.8176	0.2076	0.0058	**2007**	0.2700	3.7037	4.1676	0.2399	0.0353
2008	0.1865	5.3628	4.3395	0.2304	0.0066	**2008**	0.2400	4.1667	4.7022	0.2127	0.0377
2009	0.1806	5.5357	3.5560	0.2812	0.0042	**2009**	0.2300	4.3478	4.0514	0.2468	0.0311
2010	0.1814	5.5141	3.7125	0.2694	0.0058	**2010**	0.2300	4.3478	3.8493	0.2598	0.0318
2011	0.1826	5.4768	3.7001	0.2703	0.0031	**2011**	0.2300	4.3478	3.8765	0.2580	0.0343
2012	0.1834	5.4540	3.6491	0.2740	0.0091	**2012**	0.2300	4.3478	3.8890	0.2571	0.0392

1. the US	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	4. New Ze	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2000	5.0000	4.1290	0.2422	0.0064	**1990**	0.2850	3.5088	4.1659	0.2400	0.0194
1991	0.1800	5.5556	4.3258	0.2312	0.0053	**1991**	0.2710	3.6900	4.0178	0.2489	(0.0015)
1992	0.1800	5.5556	4.3204	0.2315	0.0046	**1992**	0.2430	4.1152	3.7268	0.2683	0.0174
1993	0.1650	6.0606	4.8061	0.2081	0.0130	**1993**	0.2440	4.0984	4.1182	0.2428	0.0229
1994	0.1730	5.7803	4.8714	0.2053	0.0174	**1994**	0.2450	4.0816	4.2348	0.2361	0.0273
1995	0.1730	5.7803	5.1293	0.1950	0.0235	**1995**	0.2400	4.1667	4.2520	0.2352	0.0270
1996	0.1700	5.8824	5.3836	0.1857	0.0250	**1996**	0.2950	3.3898	4.2054	0.2378	0.0341
1997	0.1850	5.4054	5.3960	0.1853	0.0280	**1997**	0.2950	3.3898	3.9800	0.2513	0.0291
1998	0.1950	5.1282	5.3166	0.1881	0.0291	**1998**	0.2400	4.1667	4.2611	0.2347	0.0236
1999	0.1950	5.1282	5.5426	0.1804	0.0317	**1999**	0.2630	3.8023	4.1363	0.2418	0.0288
2000	0.2000	5.0000	5.7600	0.1736	0.0321	**2000**	0.2400	4.1667	4.3441	0.2302	0.0306
2001	0.1950	5.1282	5.5168	0.1813	0.0254	**2001**	0.2350	4.2553	4.3690	0.2289	0.0277
2002	0.2000	5.0000	4.6159	0.2166	0.0232	**2002**	0.2480	4.0323	4.3971	0.2274	0.0289
2003	0.1950	5.1282	4.3043	0.2323	0.0227	**2003**	0.2580	3.8760	4.3665	0.2290	0.0300
2004	0.1600	6.2500	5.0341	0.1986	0.0262	**2004**	0.2930	3.4130	3.7966	0.2634	0.0323
2005	0.1700	5.8824	5.0534	0.1979	0.0284	**2005**	0.3200	3.1250	3.7129	0.2693	0.0367
2006	0.1750	5.7143	5.1119	0.1956	0.0302	**2006**	0.3250	3.0769	2.9274	0.3416	0.0321
2007	0.2050	4.8780	4.5894	0.2179	0.0254	**2007**	0.3050	3.2787	3.1744	0.3150	0.0396
2008	0.2350	4.2553	3.7186	0.2689	0.0184	**2008**	0.3050	3.2787	3.0634	0.3264	0.0310
2009	0.2250	4.4444	2.9544	0.3385	0.0067	**2009**	0.3050	3.2787	2.5532	0.3917	0.0196
2010	0.2350	4.2553	2.9939	0.3340	0.0099	**2010**	0.3050	3.2787	2.5215	0.3966	0.0019
2011	0.2350	4.2553	3.0235	0.3307	0.0092	**2011**	0.3050	3.2787	2.5430	0.3932	0.0318
2012	0.2350	4.2553	3.0569	0.3271	0.0074	**2012**	0.3050	3.2787	2.5519	0.3919	(0.0826)

2. Canada	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	5. Mexico	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1940	5.1546	4.0335	0.2479	0.0253	**1990**	0.1000	10.0000	7.7008	0.1299	0.0310
1991	0.2180	4.5872	3.5647	0.2805	0.0191	**1991**	0.1700	5.8824	7.4123	0.1349	0.0293
1992	0.2150	4.6512	3.5316	0.2832	0.0159	**1992**	0.1800	5.5556	7.7151	0.1296	0.0277
1993	0.2120	4.7170	3.5922	0.2784	0.0165	**1993**	0.1600	6.2500	6.4811	0.1543	0.0514
1994	0.2110	4.7393	3.7756	0.2649	0.0201	**1994**	0.1600	6.2500	6.2383	0.1603	0.0573
1995	0.2200	4.5455	3.8318	0.2610	0.0213	**1995**	0.1500	6.6667	6.4136	0.1559	0.0612
1996	0.2300	4.3478	3.9822	0.2511	0.0187	**1996**	0.1430	6.9930	6.8757	0.1454	0.0777
1997	0.2500	4.0000	4.1129	0.2431	0.0258	**1997**	0.1390	7.1942	6.6244	0.1510	0.0872
1998	0.2500	4.0000	4.2744	0.2340	0.0258	**1998**	0.1450	6.8966	6.2089	0.1611	0.0807
1999	0.2500	4.0000	4.4671	0.2239	0.0267	**1999**	0.1600	6.2500	5.6421	0.1772	0.0738
2000	0.2550	3.9216	4.5879	0.2180	0.0260	**2000**	0.1700	5.8824	5.4344	0.1840	0.0726
2001	0.2500	4.0000	4.1338	0.2419	0.0209	**2001**	0.1700	5.8824	5.6147	0.1781	0.0352
2002	0.2450	4.0816	4.2297	0.2364	0.0225	**2002**	0.1700	5.8824	5.2688	0.1898	0.0522
2003	0.2480	4.0323	4.1654	0.2401	0.0222	**2003**	0.1700	5.8824	5.5205	0.1811	0.0640
2004	0.2500	4.0000	4.3992	0.2273	0.0227	**2004**	0.1700	5.8824	5.5516	0.1801	0.0556
2005	0.2600	3.8462	4.3016	0.2325	0.0243	**2005**	0.1785	5.6022	5.3751	0.1860	0.0663
2006	0.2700	3.7037	4.2150	0.2372	0.0246	**2006**	0.1650	6.0606	5.5180	0.1812	0.0716
2007	0.2600	3.8462	4.2299	0.2364	0.0269	**2007**	0.1500	6.6667	5.9706	0.1675	0.0696
2008	0.2550	3.9216	3.8989	0.2565	0.0271	**2008**	0.1750	5.7143	5.2664	0.1899	0.0668
2009	0.2610	3.8314	3.3677	0.2969	0.0209	**2009**	0.1700	5.8824	5.2146	0.1918	0.0501
2010	0.2550	3.9216	3.3309	0.3002	0.0247	**2010**	0.1650	6.0606	5.2090	0.1920	0.0492
2011	0.2500	4.0000	3.5494	0.2817	0.0267	**2011**	0.1700	5.8824	5.1110	0.1957	0.0522
2012	0.2500	4.0000	3.5816	0.2792	0.0405	**2012**	0.1700	5.8824	5.1613	0.1938	0.0501

Table M2 Multipliers and each inverse in equilibrium: Bangladesh, China, India, Indonesia, Japan, Korea, 1990-2012

6. Banglad	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	9. Indones	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.0800	12.5000	11.3079	0.0884	0.0315	**1990**	0.1575	6.3492	6.5234	0.1533	0.0818
1991	0.0800	12.5000	11.7963	0.0848	0.0310	**1991**	0.1575	6.3492	6.5302	0.1531	0.0789
1992	0.0700	14.2857	12.4113	0.0806	0.0229	**1992**	0.1600	6.2500	6.0860	0.1643	0.0674
1993	0.0700	14.2857	12.6960	0.0788	0.0153	**1993**	0.1600	6.2500	6.5274	0.1532	0.0616
1994	0.0800	12.5000	12.6931	0.0788	0.0157	**1994**	0.1600	6.2500	6.6849	0.1496	0.0630
1995	0.0700	14.2857	13.3899	0.0747	0.0257	**1995**	0.1600	6.2500	7.3885	0.1353	0.0702
1996	0.0800	12.5000	12.2969	0.0813	0.0398	**1996**	0.1600	6.2500	6.7978	0.1471	0.0685
1997	0.0800	12.5000	11.2977	0.0885	0.0342	**1997**	0.1200	8.3333	7.8460	0.1275	0.0706
1998	0.0800	12.5000	11.8649	0.0843	0.0362	**1998**	0.0800	12.5000	8.8673	0.1128	0.0455
1999	0.0800	12.5000	11.7437	0.0852	0.0403	**1999**	0.0900	11.1111	9.7299	0.1028	0.0341
2000	0.0700	14.2857	13.0598	0.0766	0.0302	**2000**	0.0600	16.6667	9.5807	0.1044	0.0483
2001	0.0700	14.2857	12.8363	0.0779	0.0386	**2001**	0.0700	14.2857	10.5413	0.0949	0.0748
2002	0.0800	12.5000	12.1832	0.0821	0.0061	**2002**	0.0900	11.1111	9.6058	0.1041	0.0536
2003	0.0800	12.5000	12.2977	0.0813	0.0426	**2003**	0.1000	10.0000	8.3831	0.1193	0.0433
2004	0.0800	12.5000	11.3654	0.0880	0.0461	**2004**	0.1000	10.0000	8.7365	0.1145	0.0418
2005	0.0800	12.5000	10.8340	0.0923	0.0547	**2005**	0.1100	9.0909	8.7767	0.1139	0.0741
2006	0.0800	12.5000	10.4377	0.0958	0.0483	**2006**	0.1100	9.0909	8.2717	0.1209	0.0700
2007	0.0800	12.5000	10.5649	0.0947	0.0485	**2007**	0.1100	9.0909	8.4152	0.1188	0.0728
2008	0.0900	11.1111	9.9493	0.1005	0.0498	**2008**	0.1300	7.6923	6.6831	0.1496	0.0897
2009	0.0900	11.1111	11.1755	0.0895	0.0415	**2009**	0.1300	7.6923	6.7876	0.1473	0.0792
2010	0.0900	11.1111	11.1111	0.0900	0.0382	**2010**	0.1300	7.6923	7.3076	0.1368	0.0844
2011	0.0900	11.1111	11.1111	0.0900	0.0464	**2011**	0.1300	7.6923	6.9272	0.1444	0.0859
2012	0.0900	11.1111	11.1111	0.0900	0.0514	**2012**	0.1300	7.6923	6.6807	0.1497	0.0883

7. China	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	10. Japan	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1600	6.2500	5.9278	0.1687	0.0543	**1990**	0.1569	6.3738	4.5742	0.2186	0.0229
1991	0.1750	5.7143	5.3455	0.1871	0.0567	**1991**	0.1740	5.7471	4.2993	0.2326	0.0218
1992	0.1700	5.8824	5.5348	0.1807	0.0670	**1992**	0.1750	5.7143	4.3001	0.2326	0.0183
1993	0.1750	5.7143	5.4276	0.1842	0.0825	**1993**	0.1760	5.6818	4.2911	0.2330	0.0179
1994	0.1700	5.8824	5.4565	0.1833	0.0837	**1994**	0.1770	5.6497	4.2828	0.2335	0.0174
1995	0.1750	5.7143	5.3820	0.1858	0.0757	**1995**	0.1780	5.6180	4.2844	0.2334	0.0180
1996	0.1850	5.4054	5.1709	0.1934	0.0727	**1996**	0.1810	5.5249	4.2521	0.2352	0.0180
1997	0.1750	5.7143	5.4558	0.1833	0.0631	**1997**	0.1844	5.4233	4.3817	0.2282	0.0175
1998	0.1750	5.7143	5.3378	0.1873	0.0591	**1998**	0.1060	9.4340	4.2060	0.2378	0.0143
1999	0.1750	5.7143	5.0788	0.1969	0.0609	**1999**	0.1390	7.1942	4.3828	0.2282	0.0122
2000	0.1750	5.7143	4.9202	0.2032	0.0606	**2000**	0.1580	6.3291	4.0112	0.2493	0.0130
2001	0.1750	5.7143	4.9782	0.2009	0.0631	**2001**	0.1650	6.0606	4.2803	0.2336	0.0110
2002	0.1750	5.7143	4.8928	0.2044	0.0635	**2002**	0.1700	5.8824	3.8824	0.2576	0.0085
2003	0.1750	5.7143	5.0220	0.1991	0.0680	**2003**	0.2000	5.0000	3.4768	0.2876	0.0083
2004	0.1750	5.7143	5.2755	0.1896	0.0710	**2004**	0.1530	6.5359	4.5336	0.2206	0.0083
2005	0.1750	5.7143	5.2975	0.1888	0.0653	**2005**	0.1800	5.5556	4.2607	0.2347	0.0079
2006	0.1750	5.7143	5.4446	0.1837	0.0617	**2006**	0.1900	5.2632	4.3200	0.2315	0.0088
2007	0.1750	5.7143	5.9383	0.1684	0.0633	**2007**	0.2000	5.0000	4.4698	0.2237	0.0078
2008	0.1750	5.7143	5.5659	0.1797	0.0654	**2008**	0.1900	5.2632	4.2246	0.2367	0.0080
2009	0.1750	5.7143	4.9985	0.2001	0.0722	**2009**	0.1820	5.4945	3.3322	0.3001	0.0050
2010	0.1750	5.7143	5.1611	0.1938	0.0715	**2010**	0.1820	5.4945	3.4693	0.2882	0.0054
2011	0.1750	5.7143	5.3264	0.1877	0.0644	**2011**	0.1820	5.4945	3.4163	0.2927	0.0051
2012	0.1750	5.7143	5.1621	0.1937	0.0667	**2012**	0.1820	5.4945	3.3474	0.2987	0.0043

8. India	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	11. Korea	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1100	9.0909	5.1304	0.1949	0.0308	**1990**	0.1500	6.6667	6.3423	0.1577	0.0587
1991	0.1200	8.3333	5.5267	0.1809	0.0298	**1991**	0.1500	6.6667	5.9404	0.1683	0.0663
1992	0.1200	8.3333	5.5791	0.1792	0.0396	**1992**	0.1500	6.6667	6.4311	0.1555	0.0607
1993	0.1100	9.0909	5.3114	0.1883	0.0377	**1993**	0.1500	6.6667	6.9919	0.1430	0.0568
1994	0.1300	7.6923	5.2013	0.1923	0.0476	**1994**	0.1500	6.6667	6.8240	0.1465	0.0609
1995	0.1350	7.4074	5.2363	0.1910	0.0532	**1995**	0.1750	5.7143	5.8122	0.1721	0.1281
1996	0.1300	7.6923	5.4256	0.1843	0.0428	**1996**	0.1750	5.7143	5.7502	0.1739	0.0677
1997	0.1250	8.0000	6.3911	0.1565	0.0459	**1997**	0.1750	5.7143	5.7091	0.1752	0.0598
1998	0.1300	7.6923	5.9751	0.1674	0.0444	**1998**	0.1550	6.4516	5.3757	0.1860	0.0315
1999	0.1300	7.6923	5.9832	0.1671	0.0509	**1999**	0.1750	5.7143	4.8010	0.2083	0.0355
2000	0.1300	7.6923	5.7772	0.1731	0.0492	**2000**	0.1900	5.2632	7.1281	0.1403	0.0418
2001	0.1300	7.6923	5.5840	0.1791	0.0486	**2001**	0.1850	5.4054	6.4906	0.1541	0.0406
2002	0.1300	7.6923	5.4764	0.1826	0.0529	**2002**	0.1900	5.2632	6.7299	0.1486	0.0417
2003	0.1450	6.8966	5.3776	0.1860	0.0574	**2003**	0.1750	5.7143	6.4267	0.1556	0.0412
2004	0.1750	5.7143	4.7493	0.2106	0.0724	**2004**	0.1750	5.7143	5.7510	0.1739	0.0381
2005	0.1750	5.7143	4.7549	0.2103	0.0720	**2005**	0.1750	5.7143	6.0735	0.1646	0.0393
2006	0.1750	5.7143	5.0019	0.1999	0.0757	**2006**	0.1850	5.4054	5.8134	0.1720	0.0390
2007	0.1700	5.8824	5.0370	0.1985	0.0778	**2007**	0.2150	4.6512	5.3009	0.1886	0.0382
2008	0.1700	5.8824	4.2830	0.2335	0.0751	**2008**	0.2050	4.8780	5.3654	0.1864	0.0416
2009	0.1700	5.8824	4.1109	0.2433	0.0733	**2009**	0.2000	5.0000	5.0054	0.1998	0.0293
2010	0.1700	5.8824	4.4464	0.2249	0.0725	**2010**	0.2100	4.7619	5.2035	0.1922	0.0368
2011	0.1700	5.8824	4.5416	0.2202	0.0759	**2011**	0.2100	4.7619	5.2835	0.1893	0.0366
2012	0.1700	5.8824	4.5416	0.2202	0.0759	**2012**	0.2100	4.7619	5.3284	0.1877	0.0315

Table M3 Multipliers and each inverse in equilibrium: Malaysia, Philippines, Singapore, Sri Lanka, Thailand, Vietnam, 1990-2012

12. Malay	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	15. Sri Lar	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1750	5.7143	4.8293	0.2071	0.0488	**1990**	0.0700	14.2857	6.4531	0.1550	0.0593
1991	0.1750	5.7143	5.0837	0.1967	0.0628	**1991**	0.0670	14.9254	5.8522	0.1709	0.0554
1992	0.1900	5.2632	5.0209	0.1992	0.0541	**1992**	0.0850	11.7647	6.9347	0.1442	0.0648
1993	0.1850	5.4054	5.4730	0.1827	0.0588	**1993**	0.0800	12.5000	6.6412	0.1506	0.0667
1994	0.1850	5.4054	6.2523	0.1599	0.0609	**1994**	0.0800	12.5000	5.7509	0.1739	0.0468
1995	0.1850	5.4054	5.6913	0.1757	0.0666	**1995**	0.0800	12.5000	5.8537	0.1708	0.0672
1996	0.1750	5.7143	5.9862	0.1671	0.0573	**1996**	0.1100	9.0909	5.1095	0.1957	0.0632
1997	0.1750	5.7143	6.7173	0.1489	0.0584	**1997**	0.1100	9.0909	5.6153	0.1781	0.1007
1998	0.1750	5.7143	5.1382	0.1946	0.0236	**1998**	0.1200	8.3333	5.1005	0.1961	0.0659
1999	0.1750	5.7143	4.7607	0.2101	0.0198	**1999**	0.1200	8.3333	5.3980	0.1853	0.0711
2000	0.1750	5.7143	4.7481	0.2106	0.0328	**2000**	0.1100	9.0909	4.9185	0.2033	0.0735
2001	0.1750	5.7143	4.7695	0.2097	0.0234	**2001**	0.1100	9.0909	4.6774	0.2138	0.0445
2002	0.1750	5.7143	5.0455	0.1982	0.0279	**2002**	0.1300	7.6923	4.7203	0.2119	0.0492
2003	0.1750	5.7143	4.8975	0.2042	0.0229	**2003**	0.1300	7.6923	4.8486	0.2062	0.0448
2004	0.1750	5.7143	4.8669	0.2055	0.0246	**2004**	0.1300	7.6923	4.7285	0.2115	0.0589
2005	0.1750	5.7143	4.8332	0.2069	0.0192	**2005**	0.1300	7.6923	4.8189	0.2075	0.0686
2006	0.1750	5.7143	4.9485	0.2021	0.0177	**2006**	0.1300	7.6923	4.8431	0.2065	0.0755
2007	0.1750	5.7143	4.9762	0.2010	0.0207	**2007**	0.1300	7.6923	4.9393	0.2025	0.0772
2008	0.1750	5.7143	4.8797	0.2049	0.0203	**2008**	0.1300	7.6923	4.9265	0.2030	0.0810
2009	0.1750	5.7143	4.4638	0.2240	0.0061	**2009**	0.1300	7.6923	4.0950	0.2442	0.0627
2010	0.1650	6.0606	4.6345	0.2158	0.0224	**2010**	0.1300	7.6923	4.3643	0.2291	0.0760
2011	0.1650	6.0606	4.7815	0.2091	0.0300	**2011**	0.1300	7.6923	4.4596	0.2242	0.0828
2012	0.1650	6.0606	4.8431	0.2065	0.0810	**2012**	0.1300	7.6923	4.5888	0.2179	0.0882

13. Philipp	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	16. Thailar	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1200	8.3333	6.3145	0.1584	0.0852	**1990**	0.1900	5.2632	7.3786	0.1355	0.0565
1991	0.1200	8.3333	6.9706	0.1435	0.0424	**1991**	0.1770	5.6497	7.5488	0.1325	0.0588
1992	0.1200	8.3333	7.5118	0.1331	0.0385	**1992**	0.1900	5.2632	6.1796	0.1618	0.0567
1993	0.1200	8.3333	7.3262	0.1365	0.0485	**1993**	0.1750	5.7143	6.4319	0.1555	0.0573
1994	0.1600	6.2500	6.7517	0.1481	0.0414	**1994**	0.1750	5.7143	6.9442	0.1440	0.0598
1995	0.1600	6.2500	6.5128	0.1535	0.0505	**1995**	0.1750	5.7143	7.1851	0.1392	0.0631
1996	0.1600	6.2500	6.3776	0.1568	0.0434	**1996**	0.1750	5.7143	6.0766	0.1646	0.0604
1997	0.1600	6.2500	6.2781	0.1593	0.0495	**1997**	0.1750	5.7143	5.6011	0.1785	0.0344
1998	0.1350	7.4074	6.4169	0.1558	0.0075	**1998**	0.1750	5.7143	4.8551	0.2060	0.0188
1999	0.1050	9.5238	6.8178	0.1467	(0.0153)	**1999**	0.1750	5.7143	4.7182	0.2119	0.0187
2000	0.1010	9.9010	6.8455	0.1461	(0.0172)	**2000**	0.1750	5.7143	5.0153	0.1994	0.0230
2001	0.1020	9.8039	6.8035	0.1470	0.0159	**2001**	0.1750	5.7143	4.9961	0.2002	0.0231
2002	0.0780	12.8205	7.2740	0.1375	0.0136	**2002**	0.1750	5.7143	6.6370	0.1507	0.0234
2003	0.0900	11.1111	7.0675	0.1415	0.0469	**2003**	0.1750	5.7143	5.8971	0.1696	0.0259
2004	0.0900	11.1111	7.5378	0.1327	0.0388	**2004**	0.1750	5.7143	6.8425	0.1461	0.0320
2005	0.0900	11.1111	8.3340	0.1200	0.0371	**2005**	0.1750	5.7143	6.2034	0.1612	0.0453
2006	0.1100	9.0909	8.2318	0.1215	0.0312	**2006**	0.1750	5.7143	5.7808	0.1730	0.0430
2007	0.1050	9.5238	9.3459	0.1070	0.0266	**2007**	0.1750	5.7143	5.7840	0.1729	0.0375
2008	0.0950	10.5263	9.2286	0.1084	0.0146	**2008**	0.1850	5.4054	4.4752	0.2235	0.0466
2009	0.0680	14.7059	9.1044	0.1098	(0.0586)	**2009**	0.1850	5.4054	5.5029	0.1817	0.0278
2010	0.0740	13.5135	8.8933	0.1124	(0.0288)	**2010**	0.1820	5.4945	4.8250	0.2073	0.0391
2011	0.0900	11.1111	9.1289	0.1095	(0.0157)	**2011**	0.1820	5.4945	4.6770	0.2138	0.0402
2012	0.0980	10.2041	8.3567	0.1197	(0.0379)	**2012**	0.1820	5.4945	5.4945	0.1820	0.0455

Table M4 Multipliers and each inverse in equilibrium: 14 Euro area, Austria, Belgium, Finland, France, Germany, 1990-2012

E0. Euro A	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**3. Finland**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990						**1990**	0.2850	3.5088	3.5343	0.2829	0.0834
1991						**1991**	0.2350	4.2553	3.1779	0.3147	0.0354
1992						**1992**	0.1280	7.8125	3.4039	0.2938	0.0234
1993						**1993**	0.1180	8.4746	3.7264	0.2684	0.0120
1994						**1994**	0.1400	7.1429	3.7103	0.2695	0.0188
1995						**1995**	0.1730	5.7803	3.5894	0.2786	0.0453
1996						**1996**	0.2150	4.6512	3.5134	0.2846	0.0369
1997						**1997**	0.2500	4.0000	3.9377	0.2540	0.0410
1998						**1998**	0.2700	3.7037	3.6953	0.2706	0.0459
1999	0.2450	4.0816	3.9355	0.2541	0.0442	**1999**	0.2900	3.4483	3.6297	0.2755	0.0426
2000	0.2450	4.0816	3.9987	0.2501	0.0459	**2000**	0.3400	2.9412	3.2607	0.3067	0.0455
2001	0.2400	4.1667	3.9296	0.2545	0.0537	**2001**	0.3100	3.2258	4.0287	0.2482	0.0413
2002	0.2386	4.1915	3.8336	0.2609	0.0718	**2002**	0.3080	3.2468	3.9236	0.2549	0.0346
2003	0.2427	4.1195	3.6900	0.2710	0.0412	**2003**	0.3150	3.1746	3.5698	0.2801	0.0374
2004	0.2475	4.0412	3.6481	0.2741	0.0384	**2004**	0.2970	3.3670	3.7984	0.2633	0.0301
2005	0.2522	3.9658	3.6421	0.2746	0.0399	**2005**	0.3090	3.2362	3.6361	0.2750	0.0390
2006	0.2476	4.0381	3.8951	0.2567	0.0407	**2006**	0.3100	3.2258	3.8063	0.2627	0.0354
2007	0.2500	4.0000	4.0018	0.2499	0.0479	**2007**	0.3200	3.1250	3.9005	0.2564	0.0439
2008	0.2476	4.0381	3.7853	0.2642	0.0451	**2008**	0.3200	3.1250	3.7479	0.2668	0.0378
2009	0.2600	3.8462	3.0966	0.3229	0.0295	**2009**	0.3200	3.1250	2.9096	0.3437	0.0200
2010	0.2600	3.8462	3.0758	0.3251	0.0305	**2010**	0.2700	3.7037	3.3580	0.2978	0.0190
2011	0.2600	3.8462	3.2817	0.3047	0.0327	**2011**	0.2800	3.5714	3.4682	0.2883	0.0331
2012	0.2600	3.8462	3.3096	0.3022	0.0284	**2012**	0.2700	3.7037	3.4350	0.2911	0.0289

E1. Austri	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**4. France**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2350	4.2553	3.4743	0.2878	0.0936	**1990**	0.2300	4.3478	3.9438	0.2536	0.1181
1991	0.2350	4.2553	3.4365	0.2910	0.0899	**1991**	0.2300	4.3478	4.0951	0.2442	0.0947
1992	0.2350	4.2553	3.5618	0.2808	0.0797	**1992**	0.2000	5.0000	4.0986	0.2440	0.0743
1993	0.2350	4.2553	3.3966	0.2944	0.0697	**1993**	0.2000	5.0000	3.7904	0.2638	0.0509
1994	0.2350	4.2553	3.3236	0.3009	0.0750	**1994**	0.2000	5.0000	3.8074	0.2626	0.0540
1995	0.2300	4.3478	3.4675	0.2884	0.0523	**1995**	0.2300	4.3478	3.3105	0.3021	0.0543
1996	0.2270	4.4053	3.6513	0.2739	0.0472	**1996**	0.2500	4.0000	3.2501	0.3077	0.0427
1997	0.2240	4.4643	4.0930	0.2443	0.0441	**1997**	0.2650	3.7736	3.2956	0.3034	0.0381
1998	0.2210	4.5249	4.0377	0.2477	0.0448	**1998**	0.2650	3.7736	3.4154	0.2928	0.0439
1999	0.2180	4.5872	4.0983	0.2440	0.0517	**1999**	0.2700	3.7037	3.4503	0.2898	0.0304
2000	0.2180	4.5872	4.0926	0.2443	0.0489	**2000**	0.2800	3.5714	3.4985	0.2858	0.0417
2001	0.2300	4.3478	4.2493	0.2353	0.0422	**2001**	0.2600	3.8462	3.7330	0.2679	0.0319
2002	0.2300	4.3478	4.1446	0.2413	0.0316	**2002**	0.2600	3.8462	3.4879	0.2867	0.0294
2003	0.2300	4.3478	3.9770	0.2514	0.0319	**2003**	0.2600	3.8462	3.3803	0.2958	0.0248
2004	0.2200	4.5455	3.6193	0.2763	0.0411	**2004**	0.2600	3.8462	3.4471	0.2901	0.0244
2005	0.2200	4.5455	4.1112	0.2432	0.0410	**2005**	0.2700	3.7037	3.4379	0.2909	0.0280
2006	0.2200	4.5455	4.1070	0.2435	0.0382	**2006**	0.2700	3.7037	3.4986	0.2858	0.0302
2007	0.2300	4.3478	4.1204	0.2427	0.0397	**2007**	0.2700	3.7037	3.4564	0.2893	0.0350
2008	0.2300	4.3478	4.1168	0.2429	0.0394	**2008**	0.2650	3.7736	3.4178	0.2926	0.0337
2009	0.2300	4.3478	3.5820	0.2792	0.0321	**2009**	0.2400	4.1667	3.1813	0.3143	0.0201
2010	0.2300	4.3478	3.5063	0.2852	0.0342	**2010**	0.2300	4.3478	3.2975	0.3033	0.0206
2011	0.2300	4.3478	3.5063	0.2852	0.0349	**2011**	0.2500	4.0000	3.2976	0.3033	0.0232
2012	0.2300	4.3478	3.5063	0.2852	0.0336	**2012**	0.2500	4.0000	3.3300	0.3003	0.0198

E2. Belgiu	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**5. Germany**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1300	7.6923	5.0957	0.1962	0.0295	**1990**	0.2215	4.5147	4.1703	0.2398	0.0802
1991	0.1300	7.6923	4.9451	0.2022	0.0226	**1991**	0.2215	4.5147	4.0646	0.2460	0.0762
1992	0.1300	7.6923	4.8232	0.2073	0.0336	**1992**	0.2215	4.5147	4.0272	0.2483	0.0676
1993	0.1300	7.6923	4.9595	0.2016	0.0190	**1993**	0.2215	4.5147	4.0070	0.2496	0.0535
1994	0.1400	7.1429	5.1633	0.1937	0.0091	**1994**	0.2215	4.5147	4.2304	0.2364	0.0598
1995	0.2000	5.0000	3.8206	0.2617	0.0285	**1995**	0.2215	4.5147	4.1543	0.2407	0.0584
1996	0.2300	4.3478	3.6656	0.2728	0.0340	**1996**	0.2200	4.5455	4.1200	0.2427	0.0492
1997	0.2300	4.3478	3.8077	0.2626	0.0378	**1997**	0.2200	4.5455	4.2610	0.2347	0.0477
1998	0.2300	4.3478	3.9063	0.2560	0.0356	**1998**	0.2300	4.3478	4.1621	0.2403	0.0495
1999	0.2440	4.0984	4.0396	0.2475	0.0676	**1999**	0.2280	4.3860	4.1051	0.2436	0.0491
2000	0.2540	3.9370	3.9826	0.2511	0.0637	**2000**	0.2280	4.3860	4.1275	0.2423	0.0583
2001	0.2540	3.9370	3.9882	0.2507	0.0611	**2001**	0.2060	4.8544	4.1734	0.2396	0.0373
2002	0.2800	3.5714	3.5495	0.2817	0.0521	**2002**	0.1930	5.1813	4.2364	0.2360	0.0319
2003	0.2800	3.5714	3.5505	0.2817	0.0227	**2003**	0.1880	5.3191	4.2382	0.2359	0.0290
2004	0.2800	3.5714	3.5205	0.2840	0.0514	**2004**	0.1800	5.5556	4.4281	0.2258	0.0196
2005	0.2600	3.8462	3.4319	0.2914	0.0436	**2005**	0.1800	5.5556	4.5205	0.2212	0.0183
2006	0.2870	3.4843	3.4698	0.2882	0.0333	**2006**	0.1950	5.1282	4.6201	0.2164	0.0197
2007	0.2800	3.5714	3.5103	0.2849	0.0298	**2007**	0.2150	4.6512	4.6509	0.2150	0.0253
2008	0.2800	3.5714	3.3782	0.2960	0.0314	**2008**	0.2200	4.5455	4.4900	0.2227	0.0263
2009	0.2700	3.7037	2.9561	0.3383	0.0176	**2009**	0.1960	5.1020	4.3160	0.2317	0.0123
2010	0.2700	3.7037	3.1280	0.3197	0.0178	**2010**	0.1800	5.5556	4.3506	0.2299	0.0162
2011	0.2700	3.7037	3.1280	0.3197	0.0202	**2011**	0.2180	4.5872	4.3879	0.2279	0.0210
2012	0.2700	3.7037	3.1280	0.3197	0.0197	**2012**	0.2260	4.4248	4.3955	0.2275	0.0174

Table M5 Multipliers and each inverse in equilibrium: Greece, Ireland, Italy, Luxemburg, Netherlands, Portugal, 1990-2012

6. Greece	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	9. Luxemb	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.0500	20.0000	0.0058	171.5608	0.1616	**1990**					
1991	0.0500	20.0000	0.0062	161.8078	0.1236	**1991**					
1992	0.0800	12.5000	0.0065	154.0235	0.0733	**1992**					
1993	0.0500	20.0000	0.0065	154.9107	0.0675	**1993**					
1994	0.0050	200.0000	0.0065	155.0171	0.0766	**1994**					
1995	0.0500	20.0000	0.0058	172.1704	0.0329	**1995**	0.2140	4.6729	5.1133	0.1956	0.0134
1996	0.0800	12.5000	0.0061	163.1448	0.0527	**1996**	0.2110	4.7393	5.0204	0.1992	0.0216
1997	0.1300	7.6923	0.0066	151.7487	0.1220	**1997**	0.2470	4.0486	4.7233	0.2117	0.0456
1998	0.1700	5.8824	0.0065	153.2752	0.1157	**1998**	0.2470	4.0486	4.6578	0.2147	0.0592
1999	0.1700	5.8824	0.0065	154.6382	0.1143	**1999**	0.2450	4.0816	5.6383	0.1774	0.1355
2000	0.2000	5.0000	0.0050	199.9748	0.1505	**2000**	0.2690	3.7175	5.6199	0.1779	0.1261
2001	0.1800	5.5556	4.6372	0.2156	0.0910	**2001**	0.2800	3.5714	4.9312	0.2028	0.1072
2002	0.1800	5.5556	4.6125	0.2168	0.0736	**2002**	0.2970	3.3670	4.2089	0.2376	0.1097
2003	0.1800	5.5556	4.5002	0.2222	0.0796	**2003**	0.2690	3.7175	4.3115	0.2319	0.1048
2004	0.1600	6.2500	4.5144	0.2215	0.0323	**2004**	0.2450	4.0816	4.3454	0.2301	0.0676
2005	0.1700	5.8824	4.7923	0.2087	0.0298	**2005**	0.1990	5.0251	5.9133	0.1691	0.0683
2006	0.1800	5.5556	4.3588	0.2294	0.0414	**2006**	0.1750	5.7143	7.4573	0.1341	0.0753
2007	0.1800	5.5556	4.2059	0.2378	0.0493	**2007**	0.2500	4.0000	5.2404	0.1908	0.0620
2008	0.1750	5.7143	3.7635	0.2657	0.0420	**2008**	0.2600	3.8462	4.8065	0.2081	0.0650
2009	0.1560	6.4103	3.1375	0.3187	0.0251	**2009**	0.2600	3.8462	4.0494	0.2470	0.0545
2010	0.0700	14.2857	5.1928	0.1926	0.0231	**2010**	0.2600	3.8462	4.0132	0.2492	0.0577
2011	0.1000	10.0000	4.4709	0.2237	0.0181	**2011**	0.2600	3.8462	4.0132	0.2492	0.0590
2012	0.1000	10.0000	4.3899	0.2278	0.0042	**2012**	0.2600	3.8462	4.0132	0.2492	0.0545

7. Ireland	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	10. Nether	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1750	5.7143	5.1414	0.1945	0.0732	**1990**	0.1400	7.1429	5.3003	0.1887	0.0543
1991	0.1900	5.2632	5.0158	0.1994	0.0567	**1991**	0.1400	7.1429	5.8922	0.1697	0.0491
1992	0.1700	5.8824	5.0955	0.1963	0.0461	**1992**	0.1400	7.1429	5.6661	0.1765	0.0460
1993	0.1900	5.2632	5.0231	0.1991	0.0452	**1993**	0.1800	5.5556	5.2600	0.1901	0.0386
1994	0.1900	5.2632	4.9900	0.2004	0.0454	**1994**	0.1800	5.5556	5.3965	0.1853	0.0424
1995	0.1900	5.2632	5.0751	0.1970	0.0493	**1995**	0.1530	6.5359	5.2129	0.1918	0.0384
1996	0.1900	5.2632	5.3337	0.1875	0.0522	**1996**	0.1640	6.0976	5.5686	0.1796	0.0387
1997	0.1900	5.2632	5.4398	0.1838	0.0564	**1997**	0.1640	6.0976	5.5341	0.1807	0.0391
1998	0.2150	4.6512	5.2013	0.1923	0.0595	**1998**	0.1800	5.5556	5.4172	0.1846	0.0420
1999	0.2600	3.8462	4.8439	0.2064	0.0634	**1999**	0.2900	3.4483	3.2582	0.3069	0.0379
2000	0.2550	3.9216	4.7874	0.2089	0.0642	**2000**	0.3000	3.3333	3.3223	0.3010	0.0309
2001	0.2400	4.1667	5.0577	0.1977	0.0577	**2001**	0.2850	3.5088	3.5788	0.2794	0.0364
2002	0.2300	4.3478	4.9106	0.2036	0.0554	**2002**	0.2730	3.6630	3.5068	0.2852	0.0268
2003	0.2300	4.3478	4.9894	0.2004	0.0496	**2003**	0.2660	3.7594	3.4392	0.2908	0.0242
2004	0.2300	4.3478	5.2152	0.1917	0.0471	**2004**	0.2700	3.7037	3.4969	0.2860	0.0169
2005	0.2300	4.3478	5.3189	0.1880	0.0511	**2005**	0.3000	3.3333	3.3470	0.2988	0.0243
2006	0.2500	4.0000	5.2357	0.1910	0.0516	**2006**	0.3000	3.3333	3.4303	0.2915	0.0214
2007	0.2400	4.1667	4.9124	0.2036	0.0528	**2007**	0.3100	3.2258	3.3056	0.3025	0.0269
2008	0.2200	4.5455	3.8742	0.2581	0.0443	**2008**	0.3100	3.2258	3.3733	0.2964	0.0392
2009	0.1800	5.5556	3.2074	0.3118	0.0299	**2009**	0.3100	3.2258	2.7778	0.3600	0.0330
2010	0.1700	5.8824	2.0301	0.4926	0.0214	**2010**	0.3100	3.2258	2.7964	0.3576	0.0254
2011	0.1000	10.0000	4.2314	0.2363	0.0229	**2011**	0.3000	3.3333	2.9023	0.3446	0.0199
2012	0.1600	6.2500	4.1579	0.2405	0.0195	**2012**	0.3000	3.3333	2.9425	0.3398	0.0192

8. Italy	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	11. Portug	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.0900	11.1111	4.6394	0.2155	0.0578	**1990**	0.1600	6.2500	4.7014	0.2127	0.0601
1991	0.1000	10.0000	4.5736	0.2186	0.0666	**1991**	0.1700	5.8824	4.1950	0.2384	0.0522
1992	0.1200	8.3333	4.5753	0.2186	0.0426	**1992**	0.1850	5.4054	4.7348	0.2112	0.0533
1993	0.1300	7.6923	4.7352	0.2112	0.0293	**1993**	0.1800	5.5556	3.7145	0.2692	0.0417
1994	0.1300	7.6923	4.8336	0.2069	0.0311	**1994**	0.1800	5.5556	4.2249	0.2367	0.0372
1995	0.1400	7.1429	4.5736	0.2186	0.0466	**1995**	0.1800	5.5556	4.2268	0.2366	0.0385
1996	0.1500	6.6667	4.3725	0.2287	0.0345	**1996**	0.2150	4.6512	4.1598	0.2404	0.0430
1997	0.2100	4.7619	4.4485	0.2248	0.0387	**1997**	0.2200	4.5455	4.1086	0.2434	0.0469
1998	0.2000	5.0000	4.5163	0.2214	0.0340	**1998**	0.2300	4.3478	4.0907	0.2445	0.0478
1999	0.2100	4.7619	4.7152	0.2121	0.0257	**1999**	0.2300	4.3478	3.8298	0.2611	0.0602
2000	0.2200	4.5455	4.4147	0.2265	0.0296	**2000**	0.2350	4.2553	3.9958	0.2503	0.0404
2001	0.2000	5.0000	4.1876	0.2388	0.0284	**2001**	0.2350	4.2553	3.8123	0.2623	0.0459
2002	0.2140	4.6729	4.2711	0.2341	0.0272	**2002**	0.2400	4.1667	3.8345	0.2608	0.0338
2003	0.2300	4.3478	4.2749	0.2339	0.0258	**2003**	0.2450	4.0816	3.7567	0.2662	0.0325
2004	0.2100	4.7619	4.2232	0.2368	0.0454	**2004**	0.2500	4.0000	3.6361	0.2750	0.0287
2005	0.2090	4.7847	4.0704	0.2457	0.0044	**2005**	0.2500	4.0000	3.2602	0.3067	0.0363
2006	0.2200	4.5455	4.1613	0.2403	0.0290	**2006**	0.2500	4.0000	3.4125	0.2930	0.0369
2007	0.2320	4.3103	4.0892	0.2445	0.0276	**2007**	0.2300	4.3478	3.8549	0.2594	0.0378
2008	0.2400	4.1667	3.9449	0.2535	0.0247	**2008**	0.2300	4.3478	3.6698	0.2725	0.0371
2009	0.2100	4.7619	3.6334	0.2752	0.0132	**2009**	0.2100	4.7619	3.1929	0.3132	0.0265
2010	0.2100	4.7619	3.7300	0.2681	0.0196	**2010**	0.2000	5.0000	3.4125	0.2930	0.0260
2011	0.2100	4.7619	3.7799	0.2646	0.0144	**2011**	0.2000	5.0000	4.0971	0.2441	0.0186
2012	0.2100	4.7619	3.9279	0.2546	0.0083	**2012**	0.2000	5.0000	4.0713	0.2456	0.0065

Table M6 Multipliers and each inverse in equilibrium: Slovak, Slovenia, Spain, Romania, Russia, Turkey, 1990-2012

12. Slovak	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**6. Romani**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1995	0.2770	3.6101	3.2704	0.3058	0.1000	**1995**	0.1400	7.1429	5.7362	0.1743	0.0766
1996	0.2850	3.5088	3.3373	0.2996	0.1497	**1996**	0.1440	6.9444	5.2271	0.1913	0.0849
1997	0.2770	3.6101	3.1109	0.3215	0.1339	**1997**	0.1480	6.7568	5.2124	0.1918	0.0749
1998	0.2700	3.7037	3.2169	0.3109	0.1186	**1998**	0.1520	6.5789	5.4274	0.1842	0.0773
1999	0.2500	4.0000	3.5044	0.2854	0.0995	**1999**	0.1560	6.4103	5.4596	0.1832	0.0667
2000	0.2498	4.0032	3.5377	0.2827	0.0842	**2000**	0.1650	6.0606	5.4944	0.1820	0.0760
2001	0.2570	3.8911	2.9553	0.3384	0.0977	**2001**	0.1640	6.0976	5.4988	0.1819	0.0956
2002	0.2500	4.0000	2.8530	0.3505	0.0895	**2002**	0.1750	5.7143	5.8271	0.1716	0.0950
2003	0.2580	3.8760	3.3050	0.3026	0.0658	**2003**	0.2100	4.7619	4.1013	0.2438	0.0962
2004	0.2630	3.8023	3.3123	0.3019	0.0719	**2004**	0.1780	5.6180	5.2464	0.1906	0.0937
2005	0.2650	3.7736	3.2744	0.3054	0.0799	**2005**	0.2100	4.7619	4.7927	0.2087	0.0920
2006	0.2600	3.8462	3.2267	0.3099	0.0737	**2006**	0.2050	4.8780	5.0326	0.1987	0.1121
2007	0.2550	3.9216	3.7138	0.2693	0.0703	**2007**	0.1970	5.0761	5.3832	0.1858	0.1298
2008	0.2400	4.1667	3.9719	0.2518	0.0696	**2008**	0.1950	5.1282	4.6744	0.2139	0.1248
2009	0.1800	5.5556	4.3535	0.2297	0.0001	**2009**	0.1950	5.1282	3.8650	0.2587	0.0823
2010	0.1800	5.5556	3.9118	0.2556	0.0023	**2010**	0.1950	5.1282	4.2571	0.2349	0.0826
2011	0.1800	5.5556	3.9118	0.2556	0.0026	**2011**	0.1950	5.1282	4.2571	0.2349	0.0736
2012	0.1800	5.5556	3.9118	0.2556	0.0026	**2012**	0.1950	5.1282	4.2571	0.2349	0.0680

13. Sloven	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**7. Russia**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990											
1991											
1992											
1993											
1994											
1995	0.2200	4.5455	4.4840	0.2230	0.0516	**1995**	0.2050	4.8780	3.8603	0.2590	0.0909
1996	0.2200	4.5455	4.5591	0.2193	0.0557	**1996**	0.1800	5.5556	3.8215	0.2617	0.0885
1997	0.2080	4.8077	4.4844	0.2230	0.0829	**1997**	0.2000	5.0000	3.6855	0.2713	0.0760
1998	0.2150	4.6512	4.4875	0.2228	0.0858	**1998**	0.1700	5.8824	4.4479	0.2248	0.0337
1999	0.2200	4.5455	4.3809	0.2283	0.0924	**1999**	0.1600	6.2500	5.7787	0.1730	0.0365
2000	0.2200	4.5455	4.2942	0.2329	0.0863	**2000**	0.2300	4.3478	5.2254	0.1914	0.0636
2001	0.2200	4.5455	4.3236	0.2313	0.0697	**2001**	0.2350	4.2553	4.8858	0.2047	0.0846
2002	0.2200	4.5455	4.3656	0.2291	0.0666	**2002**	0.2800	3.5714	4.9262	0.2030	0.0718
2003	0.2200	4.5455	4.2655	0.2344	0.0715	**2003**	0.2400	4.1667	4.5644	0.2191	0.0744
2004	0.2200	4.5455	4.2346	0.2361	0.0786	**2004**	0.2600	3.8462	5.1095	0.1957	0.0731
2005	0.2200	4.5455	4.2917	0.2330	0.0707	**2005**	0.2900	3.4483	4.5922	0.2178	0.0672
2006	0.2200	4.5455	4.4100	0.2268	0.0735	**2006**	0.3200	3.1250	4.5607	0.2193	0.0741
2007	0.2300	4.3478	4.7295	0.2114	0.0764	**2007**	0.2900	3.4483	4.7635	0.2099	0.0921
2008	0.2300	4.3478	4.3471	0.2300	0.0772	**2008**	0.2800	3.5714	4.5348	0.2205	0.0932
2009	0.2300	4.3478	3.3782	0.2960	0.0456	**2009**	0.2000	5.0000	3.9888	0.2507	0.0503
2010	0.2300	4.3478	3.3924	0.2948	0.0435	**2010**	0.2200	4.5455	4.2350	0.2361	0.0641
2011	0.2300	4.3478	3.3924	0.2948	0.0423	**2011**	0.2400	4.1667	5.1157	0.1955	0.0510
2012	0.2300	4.3478	3.3924	0.2948	0.0404	**2012**	0.2600	3.8462	4.3126	0.2319	0.0632

14. Spain	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**8. Turkey**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1700	5.8824	4.7733	0.2095	0.0746	**1990**	0.1600	6.2500	5.1531	0.1941	0.0941
1991	0.1700	5.8824	4.5993	0.2174	0.0854	**1991**	0.1600	6.2500	4.6182	0.2165	0.0833
1992	0.1700	5.8824	4.6078	0.2170	0.0531	**1992**	0.1600	6.2500	4.8488	0.2062	0.1007
1993	0.1350	7.4074	4.7321	0.2113	0.0362	**1993**	0.1600	6.2500	5.3960	0.1853	0.1160
1994	0.1200	8.3333	4.8737	0.2052	0.0326	**1994**	0.1550	6.4516	5.3550	0.1867	0.0799
1995	0.1700	5.8824	4.5183	0.2213	0.0396	**1995**	0.1600	6.2500	5.5105	0.1815	0.1041
1996	0.1650	6.0606	4.5796	0.2184	0.0371	**1996**	0.1700	5.8824	5.1608	0.1938	0.1338
1997	0.1900	5.2632	4.7424	0.2109	0.0377	**1997**	0.1700	5.8824	4.5926	0.2177	0.1194
1998	0.2000	5.0000	4.9147	0.2035	0.0388	**1998**	0.1800	5.5556	4.5729	0.2187	0.0980
1999	0.2000	5.0000	4.8858	0.2047	0.0393	**1999**	0.1800	5.5556	4.3344	0.2307	0.0724
2000	0.2300	4.3478	4.8656	0.2055	0.0389	**2000**	0.1760	5.6818	4.8722	0.2052	0.0857
2001	0.2400	4.1667	4.8933	0.2044	0.0293	**2001**	0.1620	6.1728	4.7938	0.2086	0.0514
2002	0.2400	4.1667	5.0606	0.1976	0.0274	**2002**	0.1800	5.5556	4.4401	0.2252	0.0622
2003	0.2500	4.0000	4.8549	0.2060	0.0249	**2003**	0.1600	6.2500	4.0746	0.2454	0.0604
2004	0.2600	3.8462	4.6658	0.2143	0.0293	**2004**	0.1750	5.7143	4.3967	0.2274	0.0719
2005	0.2700	3.7037	4.7747	0.2094	0.0394	**2005**	0.1700	5.8824	4.6991	0.2128	0.0724
2006	0.2800	3.5714	4.7936	0.2086	0.0502	**2006**	0.1820	5.4945	4.7991	0.2084	0.0828
2007	0.2800	3.5714	4.7751	0.2094	0.0503	**2007**	0.1820	5.4945	4.9565	0.2018	0.0710
2008	0.2300	4.3478	4.3116	0.2319	0.0354	**2008**	0.1800	5.5556	4.8281	0.2071	0.0723
2009	0.1800	5.5556	3.7140	0.2693	0.0179	**2009**	0.1700	5.8824	4.6156	0.2167	0.0258
2010	0.1700	5.8824	3.8575	0.2592	0.0136	**2010**	0.1400	7.1429	5.4743	0.1827	0.0536
2011	0.1500	6.6667	3.6752	0.2721	0.0046	**2011**	0.1700	5.8824	4.8513	0.2061	0.0377
2012	0.1500	6.6667	3.3593	0.2977	0.0012	**2012**	0.1700	5.8824	4.9238	0.2031	0.0498

Table M7 Multipliers and each inverse in equilibrium: 15 Non-Euro area, Denmark, Iceland, Norway, Sweden, Switzerland, 1990-2012

15 Europe	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	3. Norway	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2227	4.4910	4.3823	0.2282	0.0383	**1990**	0.2000	5.0000	5.1548	0.1940	0.0612
1991	0.2194	4.5570	4.0678	0.2458	0.0330	**1991**	0.2100	4.7619	4.1217	0.2426	0.0520
1992	0.1872	5.3419	4.3961	0.2275	(0.1055)	**1992**	0.2000	5.0000	3.6455	0.2743	0.0430
1993	0.2018	4.9554	3.6939	0.2707	0.0369	**1993**	0.2200	4.5455	3.5473	0.2819	0.0465
1994	0.2010	4.9751	3.8791	0.2578	(0.2537)	**1994**	0.2600	3.8462	3.5550	0.2813	0.0470
1995	0.2047	4.8860	4.1338	0.2419	0.0764	**1995**	0.3000	3.3333	3.5367	0.2827	0.0404
1996	0.2076	4.8170	4.1897	0.2387	0.0899	**1996**	0.2800	3.5714	3.6642	0.2729	0.0373
1997	0.2176	4.5956	4.0581	0.2464	0.0799	**1997**	0.2800	3.5714	3.6880	0.2711	0.0419
1998	0.2225	4.4937	4.0125	0.2492	0.0864	**1998**	0.2600	3.8462	3.4252	0.2920	0.0549
1999	0.2221	4.5018	3.8643	0.2588	0.0713	**1999**	0.2600	3.8462	3.3027	0.3028	0.0384
2000	0.2307	4.3353	3.9671	0.2521	0.0827	**2000**	0.2620	3.8168	3.8179	0.2619	0.0345
2001	0.2265	4.4144	3.8742	0.2581	0.0659	**2001**	0.2600	3.8462	3.8485	0.2598	0.0237
2002	0.2252	4.4398	3.9430	0.2536	0.0717	**2002**	0.2230	4.4843	4.4866	0.2229	0.0224
2003	0.2283	4.3796	3.4242	0.2920	0.0719	**2003**	0.2300	4.3478	4.3411	0.2304	0.0201
2004	0.2323	4.3048	3.7405	0.2673	0.0798	**2004**	0.2130	4.6948	4.7872	0.2089	0.0268
2005	0.2473	4.0437	3.6952	0.2706	0.0799	**2005**	0.2600	3.8462	3.9284	0.2546	0.0292
2006	0.2490	4.0166	3.8294	0.2611	0.0947	**2006**	0.2600	3.8462	4.0048	0.2497	0.0318
2007	0.2481	4.0301	3.9451	0.2535	0.0942	**2007**	0.2600	3.8462	3.8795	0.2578	0.0413
2008	0.2360	4.2373	3.9057	0.2560	0.0957	**2008**	0.2600	3.8462	3.8823	0.2576	0.0415
2009	0.2130	4.6948	3.7934	0.2636	0.0508	**2009**	0.2650	3.7736	4.0035	0.2498	0.0250
2010	0.2097	4.7695	3.9766	0.2515	0.0650	**2010**	0.2650	3.7736	3.8927	0.2569	0.0297
2011	0.2127	4.7022	4.0195	0.2488	0.0534	**2011**	0.2650	3.7736	3.8532	0.2595	0.1951
2012	0.2140	4.6729	4.0294	0.2482	0.0585	**2012**	0.2650	3.7736	3.9106	0.2557	0.1556

1. Denmar	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	4. Sweden	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.3100	3.2258	3.1466	0.3178	0.0590	**1990**	0.3500	2.8571	2.9520	0.3388	0.0597
1991	0.3000	3.3333	3.1936	0.3131	0.0508	**1991**	0.3200	3.1250	2.9685	0.3369	0.0467
1992	0.2900	3.4483	3.2513	0.3076	0.0409	**1992**	0.2800	3.5714	3.0695	0.3258	0.0419
1993	0.2900	3.4483	3.1712	0.3153	0.0306	**1993**	0.1900	5.2632	2.8288	0.3535	0.0316
1994	0.2800	3.5714	3.2633	0.3064	0.0322	**1994**	0.2000	5.0000	2.9438	0.3397	0.0342
1995	0.2800	3.5714	3.2668	0.3061	0.0453	**1995**	0.2300	4.3478	3.0850	0.3241	0.0423
1996	0.3100	3.2258	3.1925	0.3132	0.0436	**1996**	0.2900	3.4483	3.0783	0.3249	0.0394
1997	0.3100	3.2258	3.3629	0.2974	0.0509	**1997**	0.3200	3.1250	3.0329	0.3297	0.0304
1998	0.3200	3.1250	3.3202	0.3012	0.0510	**1998**	0.3200	3.1250	3.1628	0.3162	0.0313
1999	0.3200	3.1250	3.2297	0.3096	0.0424	**1999**	0.3400	2.9412	3.0868	0.3240	0.0327
2000	0.3400	2.9412	3.1345	0.3190	0.0493	**2000**	0.3500	2.8571	3.2720	0.3056	0.0351
2001	0.3200	3.1250	3.2395	0.3087	0.0426	**2001**	0.3300	3.0303	3.2609	0.3067	0.0305
2002	0.3200	3.1250	3.1337	0.3191	0.0398	**2002**	0.3200	3.1250	3.0484	0.3280	0.0260
2003	0.3200	3.1250	3.0830	0.3244	0.0345	**2003**	0.3250	3.0769	3.0088	0.3324	0.0173
2004	0.3400	2.9412	3.1303	0.3195	0.0320	**2004**	0.3300	3.0303	3.1382	0.3187	0.0217
2005	0.3600	2.7778	3.2696	0.3058	0.0301	**2005**	0.3350	2.9851	3.2632	0.3064	0.0211
2006	0.3600	2.7778	3.3028	0.3028	0.0350	**2006**	0.3300	3.0303	3.3650	0.2972	0.0232
2007	0.3600	2.7778	3.2688	0.3059	0.0376	**2007**	0.3400	2.9412	3.4341	0.2912	0.0248
2008	0.3500	2.8571	3.2063	0.3119	0.0278	**2008**	0.3400	2.9412	3.2590	0.3068	0.0178
2009	0.3200	3.1250	2.8623	0.3494	0.0133	**2009**	0.3250	3.0769	3.0737	0.3253	0.0098
2010	0.3200	3.1250	2.8764	0.3477	0.0131	**2010**	0.3250	3.0769	3.1866	0.3138	0.0175
2011	0.3100	3.2258	3.0370	0.3293	0.0118	**2011**	0.3200	3.1250	3.2401	0.3086	0.0160
2012	0.2900	3.4483	3.0253	0.3305	0.0095	**2012**	0.3200	3.1250	3.1677	0.3157	0.0144

2. Iceland	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	5. Switzerl	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2200	4.5455	4.0381	0.2476	0.0416	**1990**	0.2000	5.0000	5.1169	0.1954	0.0629
1991	0.2200	4.5455	3.7159	0.2691	0.0439	**1991**	0.2000	5.0000	4.7342	0.2112	0.0478
1992	0.2200	4.5455	3.9173	0.2553	0.0335	**1992**	0.1900	5.2632	5.0506	0.1980	0.0370
1993	0.2080	4.8077	3.9371	0.2540	0.0271	**1993**	0.1700	5.8824	5.0728	0.1971	0.0291
1994	0.1920	5.2083	4.0192	0.2488	0.0242	**1994**	0.1800	5.5556	5.1553	0.1940	0.0335
1995	0.2210	4.5249	3.6742	0.2722	0.0267	**1995**	0.1400	7.1429	6.4302	0.1555	0.0320
1996	0.2600	3.8462	3.6993	0.2703	0.0365	**1996**	0.1500	6.6667	6.1263	0.1632	0.0360
1997	0.2780	3.5971	3.6493	0.2740	0.0399	**1997**	0.1500	6.6667	6.0832	0.1644	0.0425
1998	0.3200	3.1250	3.4624	0.2888	0.0579	**1998**	0.1500	6.6667	6.7128	0.1490	0.0383
1999	0.3280	3.0488	3.4294	0.2916	0.0459	**1999**	0.1500	6.6667	6.3820	0.1567	0.0341
2000	0.3200	3.1250	3.2861	0.3043	0.0531	**2000**	0.1500	6.6667	6.2434	0.1602	0.0341
2001	0.3000	3.3333	3.5876	0.2787	0.0487	**2001**	0.1500	6.6667	6.8292	0.1464	0.0315
2002	0.3000	3.3333	3.3033	0.3027	0.0241	**2002**	0.1500	6.6667	6.2375	0.1603	0.0254
2003	0.3000	3.3333	3.2038	0.3121	0.0325	**2003**	0.1500	6.6667	6.3463	0.1576	0.0223
2004	0.3300	3.0303	3.2581	0.3069	0.0564	**2004**	0.1500	6.6667	6.3783	0.1568	0.0236
2005	0.4000	2.5000	3.4233	0.2921	0.0700	**2005**	0.1500	6.6667	6.6243	0.1510	0.0242
2006	0.4000	2.5000	3.2764	0.3052	0.1004	**2006**	0.1500	6.6667	6.9152	0.1446	0.0260
2007	0.4000	2.5000	3.2079	0.3117	0.0755	**2007**	0.1500	6.6667	5.9532	0.1680	0.0249
2008	0.3000	3.3333	3.5278	0.2835	0.1114	**2008**	0.1500	6.6667	5.9532	0.1680	0.0205
2009	0.2800	3.5714	2.7511	0.3635	0.0603	**2009**	0.1500	6.6667	7.0356	0.1421	0.0168
2010	0.2800	3.5714	2.8858	0.3465	0.0450	**2010**	0.1500	6.6667	6.8531	0.1459	0.0173
2011	0.2800	3.5714	3.0446	0.3285	0.0400	**2011**	0.1500	6.6667	6.8483	0.1460	0.0180
2012	0.2800	3.5714	3.0371	0.3293	0.0455	**2012**	0.1500	6.6667	6.8483	0.1460	0.0206

Table M8 Multipliers and each inverse in equilibrium: the UK, Bulgaria, Czech Republic, Hungary, Latvia, Poland, 1990-2012

6. the UK	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	3. Hungary	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2440	4.0984	4.2417	0.2358	0.0405	**1990**	0.1300	7.6923	6.9155	0.1446	0.0527
1991	0.2450	4.0816	3.9027	0.2562	0.0236	**1991**	0.1300	7.6923	6.3853	0.1566	0.0397
1992	0.2020	4.9505	3.8623	0.2589	0.0137	**1992**	0.1300	7.6923	6.0972	0.1640	0.0486
1993	0.1800	5.5556	3.9503	0.2531	0.0129	**1993**	0.1300	7.6923	4.8736	0.2052	0.0395
1994	0.1900	5.2632	4.0218	0.2486	0.0133	**1994**	0.1260	7.9365	5.1264	0.1951	0.0542
1995	0.1850	5.4054	4.0623	0.2462	0.0309	**1995**	0.1100	9.0909	5.4457	0.1836	0.0502
1996	0.1900	5.2632	4.3374	0.2306	0.0290	**1996**	0.1210	8.2645	6.3013	0.1587	0.0503
1997	0.2070	4.8309	4.3651	0.2291	0.0289	**1997**	0.1100	9.0909	6.0689	0.1648	0.0585
1998	0.2170	4.6083	4.7455	0.2107	0.0288	**1998**	0.0910	10.9890	5.9757	0.1673	0.0739
1999	0.2270	4.4053	4.6760	0.2139	0.0342	**1999**	0.1180	8.4746	4.8303	0.2070	0.0711
2000	0.2350	4.2553	4.5808	0.2183	0.0321	**2000**	0.1170	8.5470	6.0724	0.1647	0.0807
2001	0.2350	4.2553	4.4896	0.2227	0.0255	**2001**	0.1160	8.6207	5.9546	0.1679	0.0567
2002	0.2195	4.5558	4.2237	0.2368	0.0183	**2002**	0.0700	14.2857	6.2814	0.1592	0.0650
2003	0.2220	4.5045	3.9402	0.2538	0.0164	**2003**	0.1000	10.0000	5.3241	0.1878	0.0442
2004	0.2245	4.4543	3.9239	0.2548	0.0171	**2004**	0.0900	11.1111	5.9549	0.1679	0.0518
2005	0.2245	4.4543	3.7496	0.2667	0.0156	**2005**	0.0900	11.1111	5.6550	0.1768	0.0375
2006	0.2295	4.3573	3.9820	0.2511	0.0240	**2006**	0.1100	9.0909	4.9540	0.2019	0.0734
2007	0.2320	4.3103	3.9421	0.2537	0.0241	**2007**	0.1250	8.0000	5.6544	0.1769	0.0576
2008	0.2200	4.5455	3.8067	0.2627	0.0122	**2008**	0.1300	7.6923	5.6063	0.1784	0.0570
2009	0.1600	6.2500	3.6793	0.2718	0.0021	**2009**	0.1100	9.0909	6.1865	0.1616	0.0336
2010	0.1700	5.8824	3.7067	0.2698	0.0084	**2010**	0.1100	9.0909	5.7612	0.1736	0.0277
2011	0.1800	5.5556	3.8909	0.2570	0.0022	**2011**	0.1100	9.0909	5.7612	0.1736	0.0258
2012	0.2000	5.0000	3.8340	0.2608	0.0080	**2012**	0.1100	9.0909	5.7612	0.1736	0.0251

1. Bulgaria	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	4. Latvia	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1995	0.1300	7.6923	5.5408	0.1805	0.1579	**1995**	0.2800	3.5714	3.4662	0.2885	0.0467
1996	0.1100	9.0909	7.8180	0.1279	0.1140	**1996**	0.2500	4.0000	3.7655	0.2656	0.0781
1997	0.1730	5.7803	6.6453	0.1505	0.0340	**1997**	0.2600	3.8462	3.9540	0.2529	0.0938
1998	0.2200	4.5455	5.2547	0.1903	0.0876	**1998**	0.2900	3.4483	3.4660	0.2885	0.1174
1999	0.2200	4.5455	4.9088	0.2037	0.0809	**1999**	0.2530	3.9526	2.9296	0.3413	0.0984
2000	0.2200	4.5455	4.6824	0.2136	0.0872	**2000**	0.2550	3.9216	3.0773	0.3250	0.0947
2001	0.2200	4.5455	5.0201	0.1992	0.0954	**2001**	0.2550	3.9216	3.2038	0.3121	0.1022
2002	0.2100	4.7619	4.7543	0.2103	0.0501	**2002**	0.2590	3.8610	3.1469	0.3178	0.0979
2003	0.2400	4.1667	4.3140	0.2318	0.0675	**2003**	0.2550	3.9216	3.4962	0.2860	0.1058
2004	0.2650	3.7736	4.3900	0.2278	0.0922	**2004**	0.2750	3.6364	3.5132	0.2846	0.1283
2005	0.3000	3.3333	4.3408	0.2304	0.1015	**2005**	0.2650	3.7736	3.7065	0.2698	0.1278
2006	0.2650	3.7736	4.3845	0.2281	0.1205	**2006**	0.2670	3.7453	4.0429	0.2473	0.1491
2007	0.2500	4.0000	4.7387	0.2110	0.1059	**2007**	0.2690	3.7175	4.2967	0.2327	0.1502
2008	0.2500	4.0000	4.5364	0.2204	0.1448	**2008**	0.2600	3.8462	3.5100	0.2849	0.1099
2009	0.2500	4.0000	3.9656	0.2522	0.0948	**2009**	0.2000	5.0000	3.3573	0.2979	0.0121
2010	0.2500	4.0000	3.3830	0.2956	0.0721	**2010**	0.2000	5.0000	3.5697	0.2801	0.0316
2011	0.2500	4.0000	3.3830	0.2956	0.0632	**2011**	0.2000	5.0000	3.5697	0.2801	0.0278
2012	0.2500	4.0000	3.3830	0.2956	0.0590	**2012**	0.2000	5.0000	3.5697	0.2801	0.0270

2. Czech R	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	5. Poland	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
						1990	0.1900	5.2632	4.1439	0.2413	0.0571
						1991	0.1900	5.2632	3.6814	0.2716	0.0484
						1992	0.2000	5.0000	4.0929	0.2443	0.0403
						1993	0.2000	5.0000	4.2487	0.2354	0.0427
						1994	0.1870	5.3476	4.7261	0.2116	0.0599
1995	0.2900	3.4483	3.5094	0.2850	0.1885	**1995**	0.2000	5.0000	4.5575	0.2194	0.0519
1996	0.2600	3.8462	3.8297	0.2611	0.1613	**1996**	0.1990	5.0251	4.5369	0.2204	0.0576
1997	0.2600	3.8462	3.7114	0.2694	0.1221	**1997**	0.1980	5.0505	4.6162	0.2166	0.0757
1998	0.2510	3.9841	3.7301	0.2681	0.0836	**1998**	0.1970	5.0761	4.7577	0.2102	0.0843
1999	0.2530	3.9526	3.7265	0.2683	0.0969	**1999**	0.1670	5.9880	5.8778	0.1701	0.0808
2000	0.2550	3.9216	3.6074	0.2772	0.0989	**2000**	0.1850	5.4054	5.8724	0.1703	0.0745
2001	0.2570	3.8911	3.4747	0.2878	0.0913	**2001**	0.1940	5.1546	4.1904	0.2386	0.0459
2002	0.2590	3.8610	3.5708	0.2800	0.0769	**2002**	0.1930	5.1813	4.0748	0.2454	0.0312
2003	0.2610	3.8314	3.2559	0.3071	0.0763	**2003**	0.1920	5.2083	4.1074	0.2435	0.0317
2004	0.2630	3.8023	3.3355	0.2998	0.0720	**2004**	0.1910	5.2356	4.0655	0.2460	0.0399
2005	0.2650	3.7736	3.5000	0.2857	0.0591	**2005**	0.1900	5.2632	4.3475	0.2300	0.0349
2006	0.2670	3.7453	3.4850	0.2869	0.0586	**2006**	0.1890	5.2910	4.3546	0.2296	0.0451
2007	0.2670	3.7453	3.7127	0.2693	0.0581	**2007**	0.2000	5.0000	4.6015	0.2173	0.0810
2008	0.2670	3.7453	3.3421	0.2992	0.0477	**2008**	0.1880	5.3191	4.4695	0.2237	0.0770
2009	0.2600	3.8462	3.0451	0.3284	0.0412	**2009**	0.1900	5.2632	3.9408	0.2538	0.0525
2010	0.2600	3.8462	3.1171	0.3208	0.0434	**2010**	0.1900	5.2632	4.0088	0.2495	0.0530
2011	0.2600	3.8462	3.1171	0.3208	0.0437	**2011**	0.1900	5.2632	4.0088	0.2495	0.0497
2012	0.2600	3.8462	3.1171	0.3208	0.0415	**2012**	0.1900	5.2632	4.0088	0.2495	0.0471

Table M9 Multipliers and each inverse in equilibrium: Argentina, Bolivia, Brazil, Chile, Colombia, Paraguay, 1990-2012

1. Argenti	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	4. Chile	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1500	6.6667	6.5784	0.1520	(0.0452)	**1990**	0.2000	5.0000	5.2337	0.1911	0.0588
1991	0.1500	6.6667	6.4168	0.1558	(0.0706)	**1991**	0.1750	5.7143	6.3326	0.1579	0.0547
1992	0.1500	6.6667	6.6510	0.1504	(0.0599)	**1992**	0.1900	5.2632	6.0434	0.1655	0.0684
1993	0.1500	6.6667	6.3535	0.1574	0.0935	**1993**	0.1750	5.7143	6.4748	0.1544	0.0825
1994	0.1500	6.6667	6.3236	0.1581	0.0879	**1994**	0.1750	5.7143	6.3274	0.1580	0.0793
1995	0.1500	6.6667	6.4045	0.1561	0.0712	**1995**	0.1750	5.7143	6.7197	0.1488	0.0607
1996	0.1500	6.6667	5.8354	0.1714	0.0752	**1996**	0.1750	5.7143	6.5962	0.1516	0.0696
1997	0.1500	6.6667	6.0049	0.1665	0.0782	**1997**	0.1750	5.7143	6.4493	0.1551	0.0692
1998	0.1500	6.6667	6.0453	0.1654	0.0736	**1998**	0.1750	5.7143	5.8482	0.1710	0.0614
1999	0.1500	6.6667	5.4992	0.1818	0.0502	**1999**	0.1750	5.7143	5.2623	0.1900	0.0406
2000	0.1500	6.6667	5.6608	0.1767	0.0456	**2000**	0.1750	5.7143	5.7652	0.1735	0.0462
2001	0.1100	9.0909	1.0491	0.9532	0.0342	**2001**	0.1750	5.7143	6.2814	0.1592	0.0537
2002	0.1000	10.0000	1.1057	0.9044	0.0333	**2002**	0.1750	5.7143	5.9651	0.1676	0.0527
2003	0.1500	6.6667	1.9217	0.5204	0.0464	**2003**	0.1750	5.7143	6.1457	0.1627	0.0532
2004	0.1500	6.6667	3.2107	0.3115	0.0669	**2004**	0.1900	5.2632	6.5225	0.1533	0.0536
2005	0.0300	33.3333	1.0946	0.9136	0.0654	**2005**	0.2100	4.7619	6.7416	0.1483	0.0575
2006	0.0500	20.0000	2.4133	0.4144	0.0701	**2006**	0.2400	4.1667	6.7070	0.1491	0.0541
2007	0.1500	6.6667	2.3581	0.4241	0.0747	**2007**	0.2500	4.0000	6.9321	0.1443	0.0521
2008	0.1500	6.6667	2.5871	0.3865	0.0778	**2008**	0.2200	4.5455	6.3700	0.1570	0.0610
2009	0.1500	6.6667	2.0097	0.4976	0.0379	**2009**	0.1900	5.2632	4.5785	0.2184	0.0389
2010	0.1500	6.6667	5.4729	0.1827	0.0611	**2010**	0.1900	5.2632	5.6293	0.1776	0.0475
2011	0.1500	6.6667	4.0124	0.2492	0.0707	**2011**	0.1900	5.2632	5.9831	0.1671	0.0493
2012	0.1500	6.6667	4.9667	0.2013	0.0643	**2012**	0.1900	5.2632	6.0804	0.1645	0.0516

2. Bolivia	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	5. Colombi	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.0800	12.5000	7.2356	0.1382	(0.0003)	**1990**	0.1500	6.6667	6.2896	0.1590	0.0563
1991	0.1000	10.0000	6.5421	0.1529	0.0184	**1991**	0.1600	6.2500	6.2922	0.1589	0.0337
1992	0.1000	10.0000	6.6208	0.1510	0.0257	**1992**	0.1500	6.6667	5.3464	0.1870	0.0433
1993	0.1000	10.0000	6.5217	0.1533	0.0253	**1993**	0.1600	6.2500	5.9406	0.1683	0.0652
1994	0.1200	8.3333	6.3827	0.1567	0.0128	**1994**	0.1700	5.8824	5.3504	0.1869	0.1120
1995	0.1400	7.1429	6.0866	0.1643	0.0197	**1995**	0.1750	5.7143	4.9869	0.2005	0.1063
1996	0.1400	7.1429	6.0237	0.1660	0.0268	**1996**	0.1750	5.7143	4.6146	0.2167	0.0820
1997	0.1400	7.1429	5.3161	0.1881	0.0478	**1997**	0.1850	5.4054	4.4225	0.2261	0.0730
1998	0.1400	7.1429	5.3763	0.1860	0.0677	**1998**	0.2000	5.0000	3.9232	0.2549	0.0620
1999	0.1400	7.1429	5.3780	0.1859	0.0375	**1999**	0.2000	5.0000	3.6056	0.2773	0.0210
2000	0.1200	8.3333	5.8777	0.1701	0.0332	**2000**	0.2000	5.0000	3.9023	0.2563	0.0319
2001	0.1100	9.0909	5.2143	0.1918	0.0023	**2001**	0.2000	5.0000	4.2169	0.2371	0.0354
2002	0.1000	10.0000	4.8645	0.2056	0.0218	**2002**	0.2000	5.0000	3.8799	0.2577	0.0432
2003	0.1100	9.0909	5.2927	0.1889	0.0054	**2003**	0.2000	5.0000	4.3798	0.2283	0.0585
2004	0.1200	8.3333	5.3493	0.1869	0.0177	**2004**	0.2400	4.1667	3.0126	0.3319	0.0257
2005	0.1900	5.2632	5.3909	0.1855	0.0130	**2005**	0.3230	3.0960	5.4167	0.1846	0.0209
2006	0.2100	4.7619	6.1879	0.1616	0.0121	**2006**	0.2200	4.5455	3.4180	0.2926	0.0415
2007	0.2000	5.0000	5.7811	0.1730	0.0216	**2007**	0.2200	4.5455	4.2375	0.2360	0.0488
2008	0.2000	5.0000	6.5065	0.1537	0.0379	**2008**	0.2200	4.5455	4.7707	0.2096	0.0495
2009	0.1450	6.8966	5.8516	0.1709	0.0248	**2009**	0.2200	4.5455	4.1372	0.2417	0.0507
2010	0.1450	6.8966	6.1749	0.1619	0.0253	**2010**	0.2200	4.5455	4.4256	0.2260	0.0426
2011	0.1500	6.6667	5.5583	0.1799	0.0413	**2011**	0.2200	4.5455	4.3566	0.2295	0.0537
2012	0.2000	5.0000	6.1118	0.1636	0.0303	**2012**	0.2200	4.5455	4.2244	0.2367	0.0516

3. Brazil	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	6. Paragua	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1800	5.5556	4.0873	0.2447	0.0787	**1990**	0.1700	5.8824	7.2748	0.1375	0.0401
1991	0.1800	5.5556	4.3982	0.2274	0.0724	**1991**	0.1650	6.0606	5.9977	0.1667	0.0599
1992	0.1700	5.8824	4.7119	0.2122	0.0620	**1992**	0.1450	6.8966	7.3490	0.1361	0.0548
1993	0.1300	7.6923	4.2800	0.2336	0.0263	**1993**	0.1600	6.2500	6.7959	0.1471	0.0564
1994	0.1600	6.2500	4.3922	0.2277	0.0585	**1994**	0.1600	6.2500	6.5542	0.1526	0.0583
1995	0.1800	5.5556	4.5586	0.2194	(0.0194)	**1995**	0.1700	5.8824	6.0614	0.1650	0.0592
1996	0.1700	5.8824	4.4911	0.2227	0.0101	**1996**	0.1700	5.8824	5.9018	0.1694	0.0583
1997	0.1500	6.6667	4.4381	0.2253	0.0127	**1997**	0.1700	5.8824	5.8278	0.1716	0.0539
1998	0.1500	6.6667	4.3399	0.2304	0.0102	**1998**	0.1700	5.8824	5.7924	0.1726	0.0451
1999	0.1700	5.8824	4.7230	0.2117	0.0149	**1999**	0.1500	6.6667	5.5274	0.1809	0.0374
2000	0.2300	4.3478	4.1768	0.2394	0.0125	**2000**	0.1450	6.8966	5.3050	0.1885	0.0240
2001	0.2200	4.5455	4.1108	0.2433	0.0075	**2001**	0.1600	6.2500	5.8989	0.1695	0.0278
2002	0.2300	4.3478	4.1141	0.2431	0.0053	**2002**	0.1450	6.8966	5.5151	0.1813	0.0213
2003	0.1800	5.5556	4.3782	0.2284	0.0072	**2003**	0.1600	6.2500	5.9773	0.1673	0.0317
2004	0.2100	4.7619	4.3343	0.2307	0.0139	**2004**	0.1800	5.5556	6.1991	0.1613	0.0388
2005	0.2000	5.0000	4.1659	0.2400	0.0129	**2005**	0.1800	5.5556	5.8123	0.1720	0.0415
2006	0.2200	4.5455	4.0983	0.2440	0.0161	**2006**	0.1800	5.5556	5.7855	0.1728	0.0405
2007	0.2400	4.1667	3.9731	0.2517	0.0230	**2007**	0.1800	5.5556	5.9756	0.1673	0.0348
2008	0.2400	4.1667	3.6842	0.2714	0.0334	**2008**	0.1750	5.7143	6.7590	0.1480	0.0335
2009	0.2400	4.1667	3.7500	0.2667	0.0236	**2009**	0.1300	7.6923	7.7707	0.1287	0.0138
2010	0.2600	3.8462	3.7787	0.2646	0.0346	**2010**	0.1750	5.7143	6.2245	0.1607	0.0302
2011	0.2500	4.0000	3.7791	0.2646	0.0260	**2011**	0.1500	6.6667	7.1803	0.1393	0.0308
2012	0.2550	3.9216	3.8132	0.2622	(0.0064)	**2012**	0.1750	5.7143	6.0564	0.1651	0.0971

Table M10 Multipliers and each inverse in equilibrium: Peru, Iran, Kazakhstan, Kuwait, Pakistan, Saudi Arabia, 1990-2012

7. Peru	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**10. Kuwait**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.0800	12.5000	9.5694	0.1045	0.0210	**1990**	0.3000	3.3333	1.4035	0.7125	(0.1493)
1991	0.0800	12.5000	9.5558	0.1046	0.0384	**1991**	0.3000	3.3333	1.5187	0.6585	0.2066
1992	0.0600	16.6667	9.8932	0.1011	0.0473	**1992**	0.3000	3.3333	1.4766	0.6772	0.1331
1993	0.0800	12.5000	8.8409	0.1131	0.0721	**1993**	0.3000	3.3333	1.6558	0.6039	(0.0486)
1994	0.1250	8.0000	9.8963	0.1010	0.0846	**1994**	0.4000	2.5000	1.8333	0.5455	(0.0743)
1995	0.1000	10.0000	7.2630	0.1377	0.0889	**1995**	0.5000	2.0000	1.7112	0.5844	(0.0855)
1996	0.1000	10.0000	8.6157	0.1161	0.0774	**1996**	0.6000	1.6667	2.0785	0.4811	(0.0595)
1997	0.1300	7.6923	7.1993	0.1389	0.0773	**1997**	0.6000	1.6667	2.1067	0.4747	(0.1114)
1998	0.1100	9.0909	8.1585	0.1226	0.0711	**1998**	0.6000	1.6667	1.2728	0.7857	(0.1047)
1999	0.1000	10.0000	7.4047	0.1350	0.0541	**1999**	0.8000	1.2500	1.3680	0.7310	(0.0986)
2000	0.1000	10.0000	7.6254	0.1311	0.0477	**2000**	0.8000	1.2500	1.6178	0.6181	(0.1488)
2001	0.1000	10.0000	7.6212	0.1312	0.0385	**2001**	0.9000	1.1111	1.7486	0.5719	(0.0894)
2002	0.1000	10.0000	8.0764	0.1238	0.0376	**2002**	0.8000	1.2500	1.4817	0.6749	(0.0096)
2003	0.1000	10.0000	8.3677	0.1195	0.0374	**2003**	0.8000	1.2500	1.4214	0.7036	0.0028
2004	0.1200	8.3333	7.4681	0.1339	0.0342	**2004**	0.8000	1.2500	1.3869	0.7210	0.0025
2005	0.1300	7.6923	7.2584	0.1378	0.0338	**2005**	1.1000	0.9091	1.0139	0.9863	(0.0074)
2006	0.1350	7.4074	8.3890	0.1192	0.0421	**2006**	1.1000	0.9091	1.4047	0.7119	(0.0404)
2007	0.1500	6.6667	7.7178	0.1296	0.0532	**2007**	1.1000	0.9091	1.1596	0.8623	0.0070
2008	0.1500	6.6667	7.9709	0.1255	0.0690	**2008**	0.8000	1.2500	2.2327	0.4479	0.0138
2009	0.1500	6.6667	7.7922	0.1283	0.0423	**2009**	0.8000	1.2500	1.4893	0.6715	0.0236
2010	0.1500	6.6667	7.0259	0.1423	0.0574	**2010**	0.8000	1.2500	1.9997	0.5001	0.0421
2011	0.1300	7.6923	8.1746	0.1223	0.0340	**2011**	0.8000	1.2500	1.8867	0.5300	(0.0042)
2012	0.1500	6.6667	6.9858	0.1431	0.0356	**2012**	0.8000	1.2500	1.3938	0.7175	0.0097

8. Iran	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**11. Pakist**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1900	5.2632	4.7628	0.2100	0.1155	**1990**	0.1300	7.6923	5.2586	0.1902	0.0180
1991	0.1720	5.8140	5.0803	0.1968	0.1380	**1991**	0.1000	10.0000	5.4270	0.1843	0.0319
1992	0.1900	5.2632	4.9377	0.2025	0.1191	**1992**	0.0900	11.1111	5.6190	0.1780	0.0484
1993	0.1900	5.2632	5.0575	0.1977	0.0766	**1993**	0.1100	9.0909	4.7800	0.2092	0.0508
1994	0.1850	5.4054	5.4852	0.1823	0.0468	**1994**	0.1000	10.0000	5.5307	0.1808	0.0468
1995	0.1750	5.7143	5.7625	0.1735	0.0651	**1995**	0.1000	10.0000	5.7575	0.1737	0.0387
1996	0.1750	5.7143	5.7872	0.1728	0.1103	**1996**	0.1000	10.0000	5.2962	0.1888	0.0470
1997	0.1750	5.7143	5.3586	0.1866	0.1080	**1997**	0.1000	10.0000	5.3521	0.1868	0.0414
1998	0.1750	5.7143	4.2817	0.2336	0.0896	**1998**	0.1000	10.0000	5.8363	0.1713	0.0418
1999	0.1750	5.7143	5.6383	0.1774	0.0765	**1999**	0.1000	10.0000	5.6692	0.1764	0.0280
2000	0.1750	5.7143	5.4758	0.1826	0.0940	**2000**	0.0950	10.5263	6.8769	0.1454	0.0450
2001	0.1750	5.7143	5.5787	0.1793	0.0991	**2001**	0.0950	10.5263	7.3181	0.1366	0.0554
2002	0.1750	5.7143	5.0143	0.1994	0.1104	**2002**	0.0950	10.5263	7.8901	0.1267	0.0293
2003	0.1750	5.7143	4.8633	0.2056	0.1145	**2003**	0.0950	10.5263	7.8715	0.1270	0.0155
2004	0.1750	5.7143	4.8567	0.2059	0.1088	**2004**	0.0950	10.5263	8.5699	0.1167	0.0213
2005	0.1750	5.7143	4.7189	0.2119	0.0841	**2005**	0.0850	11.7647	8.2925	0.1206	0.0379
2006	0.1750	5.7143	4.0217	0.2487	0.0822	**2006**	0.0900	11.1111	7.2997	0.1370	0.0566
2007	0.1750	5.7143	4.7163	0.2120	0.0841	**2007**	0.0850	11.7647	7.6117	0.1314	0.0584
2008	0.1750	5.7143	#DIV/0!	#DIV/0!	#DIV/0!	**2008**	0.0800	12.5000	6.1490	0.1626	0.0521
2009	0.1750	5.7143	#DIV/0!	#DIV/0!	#DIV/0!	**2009**	0.0500	20.0000	9.7197	0.1029	0.0276
2010	0.1750	5.7143	#DIV/0!	#DIV/0!	#DIV/0!	**2010**	0.0450	22.2222	9.9328	0.1007	0.0054
2011	0.1750	5.7143	4.7163	0.2120	0.0962	**2011**	0.0250	40.0000	10.3069	0.0970	(0.0151)
2012	0.1750	5.7143	4.7163	0.2120	0.0691	**2012**	0.0350	28.5714	9.7803	0.1022	(0.0216)

9. Kazakhs	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	**12. Saudi A**	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
						1990	0.3400	2.9412	2.7148	0.3683	0.0190
						1991	0.4200	2.3810	2.2214	0.4502	0.0241
						1992	0.3800	2.6316	2.4746	0.4041	0.0490
						1993	0.3400	2.9412	2.6663	0.3750	0.0513
						1994	0.3300	3.0303	2.7617	0.3621	0.0350
1995	0.1750	5.7143	4.9585	0.2017	0.0541	**1995**	0.2500	4.0000	3.5426	0.2823	0.0060
1996	0.1700	5.8824	4.5685	0.2189	0.0411	**1996**	0.2750	3.6364	3.2279	0.3098	0.0074
1997	0.1700	5.8824	4.6661	0.2143	0.0421	**1997**	0.2900	3.4483	3.1194	0.3206	0.0064
1998	0.1600	6.2500	4.7971	0.2085	0.0341	**1998**	0.3200	3.1250	2.8044	0.3566	0.0247
1999	0.1650	6.0606	4.9512	0.2020	0.0371	**1999**	0.2300	4.3478	3.2155	0.3110	0.0185
2000	0.1750	5.7143	5.6687	0.1764	0.0392	**2000**	0.2750	3.6364	3.2186	0.3107	0.0151
2001	0.1750	5.7143	5.5687	0.1796	0.1268	**2001**	0.2900	3.4483	2.9980	0.3336	0.0128
2002	0.1750	5.7143	5.5836	0.1791	0.1044	**2002**	0.2900	3.4483	3.1035	0.3222	0.0152
2003	0.1900	5.2632	4.9630	0.2015	0.0929	**2003**	0.3500	2.8571	3.3301	0.3003	0.0178
2004	0.1900	5.2632	5.1670	0.1935	0.0944	**2004**	0.4000	2.5000	3.5822	0.2792	0.0159
2005	0.1900	5.2632	5.4576	0.1832	0.1160	**2005**	0.4500	2.2222	4.0758	0.2454	0.0175
2006	0.2000	5.0000	5.2311	0.1912	0.1241	**2006**	0.4900	2.0408	3.8952	0.2567	0.0178
2007	0.1600	6.2500	5.5871	0.1790	0.1269	**2007**	0.4000	2.5000	3.8136	0.2622	0.0253
2008	0.1900	5.2632	7.2823	0.1373	0.0954	**2008**	0.2900	3.4483	3.3339	0.3000	0.0287
2009	0.1750	5.7143	5.2488	0.1905	0.0815	**2009**	0.2900	3.4483	2.7842	0.3592	0.0409
2010	0.1750	5.7143	5.4593	0.1832	0.0857	**2010**	0.2900	3.4483	2.7657	0.3616	0.0163
2011	0.1750	5.7143	5.6582	0.1767	0.0677	**2011**	0.2900	3.4483	2.7842	0.3592	0.0578
2012	0.1750	5.7143	6.0898	0.1642	0.1064	**2012**	0.2900	3.4483	2.7842	0.3592	0.0437

Table M11 Multipliers and each inverse in equilibrium: Algeria, Egypt, Kenya, Morocco, Nigeria, South Africa, 1990-2012

13. Algeri	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	16. Moroc	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2300	4.3478	3.7026	0.2701	0.0511	**1990**	0.2200	4.5455	4.0841	0.2449	0.0342
1991	0.2200	4.5455	3.9648	0.2522	0.0701	**1991**	0.2000	5.0000	4.4782	0.2233	0.0182
1992	0.2020	4.9505	4.1092	0.2434	0.0699	**1992**	0.2100	4.7619	4.4364	0.2254	0.0105
1993	0.1950	5.1282	4.0590	0.2464	0.0629	**1993**	0.2100	4.7619	4.1838	0.2390	0.0139
1994	0.1990	5.0251	4.0969	0.2441	0.0784	**1994**	0.1900	5.2632	4.4353	0.2255	0.0092
1995	0.1990	5.0251	4.6587	0.2147	0.0845	**1995**	0.1800	5.5556	4.3712	0.2288	0.0150
1996	0.2045	4.8900	4.6380	0.2156	0.0595	**1996**	0.1700	5.8824	4.9261	0.2030	0.0016
1997	0.1900	5.2632	4.5877	0.2180	0.0501	**1997**	0.2070	4.8309	4.6580	0.2147	0.0101
1998	0.1800	5.5556	4.5511	0.2197	0.0609	**1998**	0.2100	4.7619	4.3255	0.2312	(0.0266)
1999	0.2250	4.4444	4.3698	0.2288	0.0581	**1999**	0.2000	5.0000	4.4592	0.2243	0.0490
2000	0.2600	3.8462	6.5696	0.1522	0.0451	**2000**	0.2200	4.5455	3.5884	0.2787	0.0443
2001	0.2350	4.2553	5.3618	0.1865	0.0548	**2001**	0.2100	4.7619	3.8151	0.2621	0.0348
2002	0.2250	4.4444	4.7153	0.2121	0.0643	**2002**	0.2195	4.5558	3.7468	0.2669	0.0371
2003	0.2450	4.0816	5.4401	0.1838	0.0592	**2003**	0.2220	4.5045	3.7068	0.2698	0.0410
2004	0.2600	3.8462	4.9747	0.2010	0.0646	**2004**	0.2245	4.4543	3.7492	0.2667	0.0441
2005	0.2850	3.5088	7.3420	0.1362	0.0537	**2005**	0.2270	4.4053	3.5965	0.2780	0.0375
2006	0.2850	3.5088	7.5706	0.1321	0.0461	**2006**	0.2295	4.3573	3.9554	0.2528	0.0384
2007	0.2500	4.0000	5.5230	0.1811	0.0525	**2007**	0.2320	4.3103	3.9708	0.2518	0.0458
2008	0.2500	4.0000	6.8392	0.1462	0.0593	**2008**	0.2320	4.3103	3.9033	0.2562	0.0689
2009	0.2500	4.0000	3.2968	0.3033	0.0778	**2009**	0.2320	4.3103	3.8211	0.2617	0.0739
2010	0.2500	4.0000	#DIV/0!	#DIV/0!	#DIV/0!	**2010**	0.2100	4.7619	4.0607	0.2463	0.0699
2011	0.2500	4.0000	3.2968	0.3033	0.0844	**2011**	0.2320	4.3103	3.8211	0.2617	0.0757
2012	0.2500	4.0000	3.2968	0.3033	0.0677	**2012**	0.2320	4.3103	3.8211	0.2617	0.0626

14. Egypt	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	17. Nigeri	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1100	9.0909	5.7630	0.1735	0.1059						
1991	0.1350	7.4074	6.8710	0.1455	0.0690						
1992	0.1450	6.8966	5.4469	0.1836	0.0551						
1993	0.1450	6.8966	7.9326	0.1261	0.0603						
1994	0.1450	6.8966	7.0791	0.1413	0.0526						
1995	0.1450	6.8966	7.4050	0.1350	0.0268	**1995**	0.0900	11.1111	11.1809	0.0894	0.0619
1996	0.1450	6.8966	6.0109	0.1664	0.0384	**1996**	0.0800	12.5000	15.2852	0.0654	0.0334
1997	0.1450	6.8966	5.9720	0.1674	0.0551	**1997**	0.0750	13.3333	13.0057	0.0769	0.0404
1998	0.1450	6.8966	6.4509	0.1550	0.0264	**1998**	0.0320	31.2500	11.9841	0.0834	0.0205
1999	0.1500	6.6667	6.6315	0.1508	0.0498	**1999**	0.0350	28.5714	7.6694	0.1304	0.0185
2000	0.1450	6.8966	6.3054	0.1586	0.0390	**2000**	0.0450	22.2222	14.6736	0.0681	0.0181
2001	0.1000	10.0000	6.1984	0.1613	0.0316	**2001**	0.0600	16.6667	9.0501	0.1105	0.0390
2002	0.1000	10.0000	5.7160	0.1749	0.0296	**2002**	0.0600	16.6667	9.3473	0.1070	0.0192
2003	0.1000	10.0000	6.0744	0.1646	0.0248	**2003**	0.0600	16.6667	11.6587	0.0858	0.0399
2004	0.1000	10.0000	6.1599	0.1623	0.0270	**2004**	0.0700	14.2857	11.9643	0.0836	0.0318
2005	0.1000	10.0000	6.1766	0.1619	0.0328	**2005**	0.0700	14.2857	12.1696	0.0822	(0.0138)
2006	0.0850	11.7647	5.8727	0.1703	0.0379	**2006**	0.0600	16.6667	18.8622	0.0530	0.0067
2007	0.1000	10.0000	6.3600	0.1572	0.0507	**2007**	0.0900	11.1111	10.4030	0.0961	0.0633
2008	0.1000	10.0000	5.8594	0.1707	0.0597	**2008**	0.1000	10.0000	8.9566	0.1116	0.0597
2009	0.1000	10.0000	5.7830	0.1729	0.0438	**2009**	0.1000	10.0000	9.7588	0.1025	0.0896
2010	0.1000	10.0000	5.3759	0.1860	0.0469	**2010**	0.1000	10.0000	9.0000	0.1111	0.0808
2011	0.1000	10.0000	5.3759	0.1860	0.0519	**2011**	0.1000	10.0000	9.7588	0.1025	0.0798
2012	0.1000	10.0000	5.3759	0.1860	0.0490	**2012**	0.1000	10.0000	9.7588	0.1025	0.0628

15. Kenya	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	18. S.Afric	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1900	5.2632	4.2090	0.2376	0.1074	**1990**	0.1850	5.4054	4.4427	0.2251	0.0163
1991	0.1750	5.7143	4.3271	0.2311	0.0302	**1991**	0.1750	5.7143	4.5083	0.2218	0.0246
1992	0.1900	5.2632	4.8915	0.2044	0.0575	**1992**	0.1600	6.2500	4.1863	0.2389	0.0245
1993	0.1660	6.0241	4.6355	0.2157	0.0223	**1993**	0.1600	6.2500	4.2753	0.2339	0.0369
1994	0.1450	6.8966	4.7636	0.2099	0.0507	**1994**	0.1600	6.2500	4.0134	0.2492	0.0451
1995	0.1750	5.7143	5.2707	0.1897	0.1140	**1995**	0.1600	6.2500	4.8177	0.2076	0.0617
1996	0.1750	5.7143	6.0627	0.1649	0.0140	**1996**	0.1800	5.5556	4.3223	0.2314	0.0527
1997	0.1750	5.7143	5.1381	0.1946	0.0169	**1997**	0.1900	5.2632	4.4600	0.2242	0.0506
1998	0.1700	5.8824	5.6521	0.1769	0.0062	**1998**	0.2000	5.0000	4.3767	0.2285	0.0512
1999	0.1600	6.2500	6.1424	0.1628	0.0029	**1999**	0.1980	5.0505	4.6321	0.2159	0.0445
2000	0.1700	5.8824	6.1971	0.1614	0.0207	**2000**	0.2000	5.0000	4.4970	0.2224	0.0462
2001	0.1700	5.8824	5.4267	0.1843	0.0266	**2001**	0.2000	5.0000	4.7675	0.2098	0.0424
2002	0.1750	5.7143	4.9004	0.2041	(0.0002)	**2002**	0.2000	5.0000	4.7706	0.2096	0.0459
2003	0.1750	5.7143	4.7593	0.2101	(0.0018)	**2003**	0.2000	5.0000	4.3757	0.2285	0.0455
2004	0.1940	5.1546	5.0451	0.1982	0.0190	**2004**	0.2100	4.7619	4.2721	0.2341	0.0558
2005	0.1940	5.1546	5.1837	0.1929	0.0280	**2005**	0.2200	4.5455	4.5041	0.2220	0.0502
2006	0.1700	5.8824	5.2072	0.1920	0.0348	**2006**	0.2300	4.3478	4.4601	0.2242	0.0572
2007	0.1850	5.4054	4.8638	0.2056	0.0342	**2007**	0.2400	4.1667	4.4720	0.2236	0.0727
2008	0.1700	5.8824	4.8689	0.2054	0.0587	**2008**	0.2300	4.3478	4.2177	0.2371	0.0771
2009	0.1700	5.8824	4.5114	0.2217	0.0346	**2009**	0.1900	5.2632	4.0838	0.2449	0.0506
2010	0.1700	5.8824	4.5893	0.2179	0.0226	**2010**	0.2300	4.3478	3.8283	0.2612	0.0524
2011	0.1700	5.8824	4.5893	0.2179	0.0315	**2011**	0.2000	5.0000	4.0555	0.2466	0.0547
2012	0.1700	5.8824	4.5893	0.2179	0.0301	**2012**	0.2180	4.5872	3.9492	0.2532	0.0523

Table M12 Multipliers and each inverse in equilibrium: Tanzania, Ukraine, Taiwan, Honduras, Estonia, Lithuania, 1990-2012

19. Tanzar	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	Honduras	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.2200	4.5455	4.1577	0.2405	0.1112	**1990**	0.1300	7.6923	5.6214	0.1779	0.0611
1991	0.2100	4.7619	3.8699	0.2584	0.0883	**1991**	0.1300	7.6923	6.2145	0.1609	0.0731
1992	0.2100	4.7619	4.9453	0.2022	0.0915	**1992**	0.1300	7.6923	5.5310	0.1808	0.0766
1993	0.2000	5.0000	4.0576	0.2465	0.0855	**1993**	0.1300	7.6923	5.0424	0.1983	0.0933
1994	0.1700	5.8824	4.5348	0.2205	0.0628	**1994**	0.1300	7.6923	5.4352	0.1840	0.0991
1995	0.1670	5.9880	5.2425	0.1907	0.0270	**1995**	0.1300	7.6923	5.9554	0.1679	0.0847
1996	0.1370	7.2993	6.9797	0.1433	0.0400	**1996**	0.1300	7.6923	6.1005	0.1639	0.0860
1997	0.1300	7.6923	8.9464	0.1118	0.0389	**1997**	0.1300	7.6923	6.5980	0.1516	0.0875
1998	0.0950	10.5263	9.2090	0.1086	0.0484	**1998**	0.1300	7.6923	7.4568	0.1341	0.0824
1999	0.1000	10.0000	10.4404	0.0958	0.0411	**1999**	0.1600	6.2500	5.3547	0.1868	0.0928
2000	0.0770	12.9870	10.5821	0.0945	0.0467	**2000**	0.1600	6.2500	5.2902	0.1890	0.0883
2001	0.0800	12.5000	10.7653	0.0929	0.0459	**2001**	0.1600	6.2500	5.1293	0.1950	0.0770
2002	0.0900	11.1111	10.5596	0.0947	0.0539	**2002**	0.1600	6.2500	4.9941	0.2002	0.0678
2003	0.0800	12.5000	10.4833	0.0954	0.0609	**2003**	0.1600	6.2500	4.7080	0.2124	0.0685
2004	0.0700	14.2857	9.6766	0.1033	0.0485	**2004**	0.1600	6.2500	5.2555	0.1903	0.0787
2005	0.0700	14.2857	8.9132	0.1122	0.0546	**2005**	0.1600	6.2500	5.3505	0.1869	0.0714
2006	0.0850	11.7647	#DIV/0!	#DIV/0!	#DIV/0!	**2006**	0.1600	6.2500	5.7663	0.1734	0.0691
2007	0.0850	11.7647	#DIV/0!	#DIV/0!	#DIV/0!	**2007**	0.1600	6.2500	5.2074	0.1920	0.0810
2008	0.0850	11.7647	#DIV/0!	#DIV/0!	#DIV/0!	**2008**	0.1600	6.2500	5.3765	0.1860	0.0846
2009	0.0850	11.7647	#DIV/0!	#DIV/0!	#DIV/0!	**2009**	0.1500	6.6667	4.5100	0.2217	0.0382
2010	0.0850	11.7647	#DIV/0!	#DIV/0!	#DIV/0!	**2010**	0.1500	6.6667	4.2403	0.2358	0.0458
2011	0.0700	14.2857	8.9132	0.1122	#DIV/0!	**2011**	0.1500	6.6667	4.2403	0.2358	0.0556
2012	0.0700	14.2857	8.9132	0.1122	0.0576	**2012**	0.1500	6.6667	4.2403	0.2358	0.0522

9. Ukraine	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	Estonia 1.3	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
						1990	0.1750	5.7143	#DIV/0!	#DIV/0!	#DIV/0!
						1991	0.1750	5.7143	5.7431	0.1741	0.0196
						1992	0.1950	5.1282	5.1442	0.1944	0.0227
1993	0.2700	3.7037	3.5573	0.2811	0.0017	**1993**	0.2500	4.0000	4.1376	0.2417	0.0381
1994	0.2400	4.1667	4.0194	0.2488	0.0264	**1994**	0.2600	3.8462	3.6094	0.2771	0.0461
1995	0.1990	5.0251	3.6988	0.2704	0.0916	**1995**	0.3100	3.2258	3.3481	0.2987	0.0389
1996	0.2000	5.0000	3.9288	0.2545	0.1016	**1996**	0.2900	3.4483	3.3904	0.2950	0.0512
1997	0.2000	5.0000	4.1384	0.2416	0.0970	**1997**	0.2700	3.7037	3.6033	0.2775	0.0560
1998	0.2000	5.0000	4.3013	0.2325	0.0653	**1998**	0.3000	3.3333	3.6319	0.2753	0.0778
1999	0.2000	5.0000	4.4945	0.2225	0.0504	**1999**	0.2500	4.0000	3.9906	0.2506	0.0916
2000	0.2000	5.0000	4.7874	0.2089	0.0654	**2000**	0.2500	4.0000	4.0209	0.2487	0.0850
2001	0.2000	5.0000	4.6578	0.2147	0.0693	**2001**	0.2500	4.0000	4.0260	0.2484	0.0819
2002	0.2200	4.5455	4.6494	0.2151	0.0604	**2002**	0.2500	4.0000	4.0432	0.2473	0.0867
2003	0.2200	4.5455	4.4861	0.2229	0.0686	**2003**	0.2500	4.0000	4.0478	0.2470	0.0910
2004	0.2000	5.0000	4.3611	0.2293	0.0632	**2004**	0.2500	4.0000	4.0378	0.2477	0.0811
2005	0.2000	5.0000	4.5636	0.2191	0.0778	**2005**	0.2500	4.0000	4.0406	0.2475	0.0774
2006	0.2000	5.0000	4.8228	0.2074	0.0920	**2006**	0.2500	4.0000	4.0575	0.2465	0.0889
2007	0.2000	5.0000	4.6993	0.2128	0.1051	**2007**	0.2500	4.0000	4.0665	0.2459	0.0936
2008	0.1700	5.8824	5.5101	0.1815	0.1070	**2008**	0.2500	4.0000	4.0084	0.2495	0.0689
2009	0.1200	8.3333	6.2567	0.1598	0.0486	**2009**	0.2650	3.7736	3.7827	0.2644	0.0368
2010	0.0700	14.2857	7.4277	0.1346	0.0488	**2010**	0.2500	4.0000	4.0031	0.2498	0.0396
2011	0.0700	14.2857	11.6412	0.0859	0.0720	**2011**	0.2500	4.0000	4.0031	0.2498	0.0365
2012	0.0700	14.2857	10.8792	0.0919	(0.1283)	**2012**	0.2500	4.0000	4.0031	0.2498	0.0345

Taiwan	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$	Lithuania 3	$m_{(Y/TAX)}$	T_{AX}/Y	$m_{(Y/(CG+IG))}$	$(C_G+I_G)/Y$	$g_A^*=i(1-\beta^*)$
1990	0.1850	5.4054	4.9485	0.2021	0.1157	**1990**	0.2300	4.3478	#DIV/0!	#DIV/0!	#DIV/0!
1991	0.1850	5.4054	4.9397	0.2024	0.1036	**1991**	0.2300	4.3478	#DIV/0!	#DIV/0!	#DIV/0!
1992	0.1750	5.7143	5.1405	0.1945	0.1040	**1992**	0.2300	4.3478	#DIV/0!	#DIV/0!	#DIV/0!
1993	0.1700	5.8824	5.2781	0.1895	0.0953	**1993**	0.2300	4.3478	3.4816	0.2872	0.0263
1994	0.1700	5.8824	5.2350	0.1910	0.0852	**1994**	0.2300	4.3478	3.6313	0.2754	0.0327
1995	0.1700	5.8824	5.2823	0.1893	0.0793	**1995**	0.2300	4.3478	3.6098	0.2770	0.0535
1996	0.1700	5.8824	5.2490	0.1905	0.0677	**1996**	0.2300	4.3478	3.7589	0.2660	0.0563
1997	0.1700	5.8824	5.4016	0.1851	0.0666	**1997**	0.2320	4.3103	3.9820	0.2511	0.0631
1998	0.1600	6.2500	5.7830	0.1729	0.0665	**1998**	0.2480	4.0323	3.9639	0.2523	0.0614
1999	0.1500	6.6667	6.1200	0.1634	0.0583	**1999**	0.2300	4.3478	3.3279	0.3005	0.0580
2000	0.1500	6.6667	5.1418	0.1945	0.0571	**2000**	0.2450	4.0816	3.8498	0.2598	0.0508
2001	0.1500	6.6667	4.5810	0.2183	0.0388	**2001**	0.2500	4.0000	3.9344	0.2542	0.0503
2002	0.1500	6.6667	5.5374	0.1806	0.0356	**2002**	0.2300	4.3478	4.1413	0.2415	0.0526
2003	0.1500	6.6667	5.7264	0.1746	0.0359	**2003**	0.2300	4.3478	4.2994	0.2326	0.0581
2004	0.1500	6.6667	5.6626	0.1766	0.0463	**2004**	0.2300	4.3478	4.0747	0.2454	0.0584
2005	0.1500	6.6667	6.5257	0.1532	0.0423	**2005**	0.2300	4.3478	4.1594	0.2404	0.0647
2006	0.1500	6.6667	6.5666	0.1523	0.0386	**2006**	0.2300	4.3478	4.3481	0.2300	0.0752
2007	0.1500	6.6667	6.5608	0.1524	0.0359	**2007**	0.2300	4.3478	4.2546	0.2350	0.0900
2008	0.1500	6.6667	6.2838	0.1591	0.0366	**2008**	0.2300	4.3478	3.9019	0.2563	0.0820
2009	0.1500	6.6667	5.2800	0.1894	0.0239	**2009**	0.2300	4.3478	3.1453	0.3179	0.0307
2010	0.1500	6.6667	5.5691	0.1796	0.0351	**2010**	0.2300	4.3478	3.3740	0.2964	0.0422
2011	0.1500	6.6667	5.5691	0.1796	0.0344	**2011**	0.2300	4.3478	3.3740	0.2964	0.0342
						2012	0.2300	4.3478	3.3740	0.2964	0.0329

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

Engle, Robert, F., and Granger, C. W. (1987). Co-integration and Error Correction: Representation, Estimation, and Testing. *Econometrica* 55 (March, 2): 251-276.

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

Kydland, Finn, E., and Prescott, Edward, C. (1977). Rules Rather than Discretion: The Inconsistency of Optimal Plans. *Journal of Political Economy* 85 (June, 3): 473-491.

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., 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.

Mirrlees, J. A. (1975). Optimal Commodity Taxation in a Two-Class Economy. *Journal of Public Economics* (Feb, 2): 27-33.

Mirrlees, James, A. (2010). *Dimensions of Tax Design*. The Mirrlees review / chair, Sir James Mirrlees; Editors: Stuart Adam ... [et al.] For the Institute for Fiscal Studies Oxford and New York: Oxford University Press, xii, 1347 p. Includes bibliographical references and index.

Mirrlees, James, A. (2011). *Tax by Design.* The Mirrlees review/chair, Sir James Mirrlees; Stuart Adam. [et al.] For the Institute for Fiscal Studies. Oxford and New York: Oxford University Press, xvii, 533p. Bibliographical references (p.504-524) and index included.

Salant, Walter, S. (1975). Taxes, the Multiplier, and the Inflationary Gap. *History of Political Economy* 7 (Spring, 1): 19-27.

Salant, Walter, S. (1975). The Balanced Budget Multiplier as the Sum of an Infinite Series. *History of Political Economy* 7 (Spring, 1): 28-31.

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.

Samuelson, P. A. (1942). Fiscal Policy and Income Determination. *Quarterly Journal of Economics* 56 (Aug, 4): 575-605.

Samuelson, Paul, P. (1975). The Balanced-Budget Multiplier: A Case Study in the Sociology and Psychology of Scientific Discovery. *History of Political Economy* 7 (Spring, 1): 43-55.