

“Fiscal Trap”, the case of Greece

By

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Keywords: Fiscal Policy, Laffer curve, sovereign debt, tax compliance

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Abstract

Present research aims at the introduction of the term “*Fiscal Trap*” in economic literature, as a comprehensive definition of the economic situation in which any available combination of fiscal-only policy measures (tax increases and austerity measures), would fail to fulfill fiscal targets during periods of recession. Using recent experience from the case of Greece, an ex-post evaluation of adopted policy effectiveness is pursued. Fiscal austerity and increased taxation enforced in Greece during the years 2009-2012, resulted in decreased tax revenues, lower GDP and increased debt-to-GDP ratio. In order to slip away from the vicious cycle generated by austerity and tax hikes, policymakers might need the help of an appropriate monetary stimulus.

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1. Introduction

Policymakers have two major available instruments, monetary and fiscal. Monetary instruments allow for changes in the supply, availability and cost of money in order to promote economic growth, employment and price stability. Even though monetary policy is usually exercised by “*independent*” institutions as the Central Banks, they are assumed to conform with and serve the economic interests of society. On the fiscal side, the two main instruments of fiscal policy are government taxation and expenditure. Changes in the level and composition of taxation and government spending can impact aggregate demand, the level of economic activity, income distribution and resource allocation.

Fiscal policy can be characterized as neutral, expansionary or contractionary, when expenditure equals, exceeds or falls short of tax revenue respectively. Expansionary fiscal policy can be used to boost the level of economic activity. Alternatively, when the economy may be doing a little too well, the need of slowing down can be attained by a contractionary fiscal policy.

Fiscal policy has been in the midst of political and theoretical debate, since the outbreak of the global financial crisis. Debate focuses on the effectiveness of fiscal policy under conditions of recession, global financial crisis and increased sovereign debt. Fiscal conservatives advocate budget balancing to be the superior goal for any prudent fiscal policy, while (post) Keynesian economists argue that reducing budget deficit when the economy is already depressed, produces a negative self-reinforced spiral effect on tax base. Present research aims at the introduction of the term “*Fiscal Trap*” in economic literature, as a comprehensive definition of the economic situation in which any available combination of fiscal-only policy measures, would fail to fulfill fiscal targets during periods of recession. Using recent experience from Greece, an ex-post evaluation of adopted policy effectiveness is pursued.

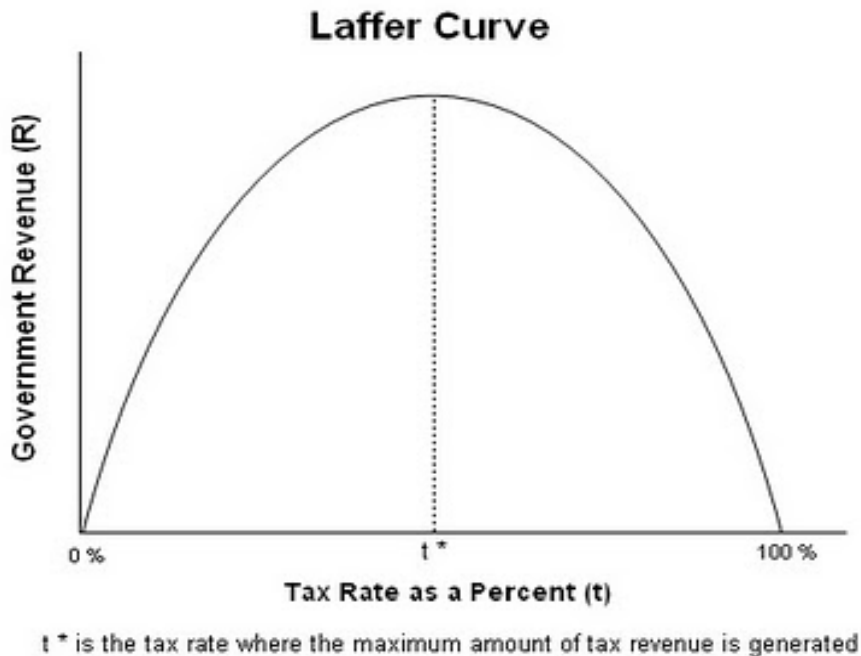
The rest of the paper is organized as follows: Part two explores the Fiscal Trap within the context of the Laffer curve literature, part three discusses fiscal policy limitations within the EMU framework, part four presents evidence from Greece and part five concludes.

2. Fiscal Trap in the Laffer curve context

Fiscal Trap can be seen as a special type of Laffer effect. The Laffer curve (Fig. 1) depicts the relationship between tax rates and tax revenues. As tax rates increase from 0 to 100 percent, tax revenues increase from zero to a maximum level (at t^*) and then fall back towards zero. Laffer’s reasoning was that lower tax rates stimulate incentives to work resulting in expansion of real output and income. To the contrary, higher tax rates discourage economic activity, thereby shrinking the tax base. A marginal tax rate increase would produce tax revenue increase only if the initial tax rate was lower than the

optimum t^* . Starting from a tax rate higher than t^* , any marginal tax rate increase would decrease total tax revenue.

FIGURE 1: LAFFER CURVE



Busato, Chiarini & Rey (2009), study the equilibrium effects of fiscal policy disturbances within a dynamic general equilibrium model where tax evasion and underground activities are explicitly incorporated. They find income elasticity to tax rate increases under tax evasion to be almost zero.

Vogel (2012) adds an informal sector in the form of home production as alternative to activity in the official sector. Contrary to the results of Busato et al (2009), he concludes that higher substitutability between market and home production “flattens” the Laffer curves for labor and corporate taxation, reducing the effectiveness of tax increases.

Papp & Takats (2008) argue that tax rate cuts may increase revenues by improving tax compliance. Small tax rate cuts decreasing incentives to evade taxes, can lead to increased revenues. Their model is consistent with what happened in Russia, when tax revenues increased substantially and almost immediately after the introduction of flat taxes, and effective personal income tax rate cuts.

3. Fiscal Policy, Sovereign Debt and the European Monetary Union

Within European Union, available government intervention tools vary across countries. Countries with own currency such as Great Britain and Sweden can use both fiscal and monetary tools. Monetary policy is not an instrument available to policymakers in countries belonging to the European Monetary Union (EMU). As such, the only available policy instruments engaged by local EMU national governments are fiscal.

Becsi (2000) relates the outcome of tax rate changes with changes in the pattern of government spending, providing a higher multiplier effect on capital spending compared to consumption. He concludes that raising public investment relative to public consumption will tend to add to tax revenues by increasing the tax base. The implications for the debt burdened countries are obvious. Increase in tax rates directed towards the repayment of debt has no multiplier effect, shifting the Laffer curve downwards and producing lower tax revenues.

Trabandt & Uhlig (2010) present Laffer curves for labor and corporate income taxation in a neoclassical growth model with perfect competition. They derive Laffer curves for the US, the EU aggregate and individual EU member states. Trabandt & Uhlig (2012) while extending their work of 2010, find that following the Eurozone crisis, all EU 14 countries moved closer to the peak of the labor tax Laffer curve, limiting the ability to further raise taxes.

New Keynesian proponents as Hannsgen (2012) argue that Europe is “*now stuck in a fiscal trap, brought about by the failure of orthodox economics to provide an effective strategy for economic growth*”. While there might not be enough evidence for the positioning of the whole of European economy within the “*Fiscal Trap*”, there is plenty of such evidence for Greece.

Excess sovereign debt accumulation, in Greece and most of the South European countries, stems from chronic government overspending. Increased debt service burden necessitates fiscal action such as tax revenue increases and/or government spending cuts. Both policies increase the probability for the instigation of a negative spiraling effect resulting in further deterioration of the causal effects. Fiscal stimuli might be effective up to the point their marginal multiplicative output effect equals the corresponding marginal debt service increase.

4. A brief chronology of events, the case of Greece

While sustaining a steady growth during the 1990's, Greece was awarded the 2004 Olympic Games in 1999, was accepted to the EMU in 2000 and adopted the Euro on January 1st, 2002. Since entering the Euro-zone in 2002 and until 2007, Greek public debt while increasing in nominal amount was kept almost constant as a percentage of GDP, mainly due to strong domestic GDP growth. During the same period, debt service

cost decreased significantly, due to the decrease in effective bond yields. Greek bond spreads over German bond yields were contained within thirty (30) basis points. While debt seemed to be manageable up to that point, the situation deteriorated drastically in 2008 and 2009, when Greece added fifty six billion euro (€56 B) to its debt, while facing a global prolonged recession. Global economic crisis, stemming from the default of the subprime mortgage market in the US, had a dual economic impact on Greece. First, increased borrowing (by approximately €28 B) in order to provide necessary liquidity to banks; and second, increased effective borrowing rates due to global credit rationing. The effect of rising borrowing rates was augmented by subsequent rating downgrades, making the burden of Greek debt non-manageable within markets.

As a result, on April 23, 2010, Greek government called for a joint Eurozone – IMF rescue plan, inaugurating the first Greek debt crisis. On May 2, 2010, Eurozone finance ministers agreed to rescue Greece providing one hundred ten billion euro (€10 B) loan facility to be disbursed over the following three years, under the conditions of strict fiscal policy as dictated in the “*Memorandum of Economic and Financial Policies*” (MEFP) signed by the minister of Finance and the governor of The Central Bank of Greece. Following the MEFP agreement, a first wave of austerity measures was taken, while corresponding legislation facilitating the implementation of such measures were enacted.

While most of the market participants were satisfied with the bailout plan, several others viewed the measures with skepticism. The skepticism was based on the observation that domestic economy was predominately “*government fed*”, and austerity measures would deteriorate unemployment, blowing downwards consumption and GDP. Also, relative rigidity of expenses might result in further deterioration of public deficit and the debt burden itself. Actually, not a year later (April 23, 2011), the European Commission announced that Greek public deficit for 2010 was worse than initially expected (at 13.6% of GDP) and austerity measures of the MEFP were ineffective.

Responding to pressure from the Lenders, Greek Parliament enacted a second set of austerity measures on June 29, 2011, increasing various types of direct and indirect taxes, while cutting further wages, expenses in the government sector and public investment. Furthermore, in order to increase labor productivity, measures were extended to private sector.

The two waves of austerity imposed on May 2010 and June 2011, proved inadequate and ineffective in bringing the targeted fiscal results. The second phase of the crisis continued until a new agreement was reached between the Greek government, European Commission and IMF on February 21 2012, calling for a 53.5% “haircut” in the nominal face value of Greek debt held by private investors. Along with debt haircut, a new set of loans was arranged, totaling one hundred thirty billion euro (€130 B), needed in time between other, to refinance fourteen billion euro (€14 B) of government bonds expiring on March 20 2012, as well as to finance current budget deficit. In return for the above, a third wave of austerity measures including 22% cuts off the minimum wage, 15% off pensions and 15,000 public sector jobs was undertaken. Official unemployment rose to

22%, a new record of all times, while real unemployment devastated over one third of work force.

Fiscal austerity enforced in Greece during the years 2009-2012, resulted in increased debt, decreased GDP and decreased tax revenues, as shown in the appendix tables. The main negative social effect of the policies adopted was the unprecedented increase in unemployment (26.8% Eurostat, Dec 2012). The results shown are characteristic of the ineffectiveness of fiscal-only policy measures under conditions of recession, providing for a “*textbook*” Laffer effect. In particular, the effective income tax rate (table 2) increased between 29% and 1000% in the main categories (income less than €26.000), while VAT tax increased between 21% and 44% (table 3) depending on the category of goods. Increased tax rates as shown above combined with introduction of new taxes, actually managed to produce 7.6% net tax revenue decrease, while plummeting real GDP by almost 20% and skyrocketing debt-to-GDP ratio at 170%.

5. Conclusions

Fiscal Trap is introduced as a special Laffer effect during recessionary periods, taking into consideration the extent of sovereign debt burden and the availability of alternative policy measures. Present research establishes the term “*Fiscal Trap*” as the comprehensive definition of that economic situation in which contractionary combinations of fiscal-only policy measures (tax increases and/or austerity measures), would fail to accomplish fiscal targets during recession.

Existence of increased government debt carries a built-in perverse incentive implying that government would be less inclined to adopt a fiscal stimulus and could, instead, be forced to raise tax rates in order to accommodate for the increased debt burden. At the same time, in an effort to drive towards a balanced budget, austerity measures can be imposed, cutting public investment and spending. Both government initiatives taken in an open economy deprived of its sovereign monetary policy may easily end up not attaining the intended purpose. When all the above measures are taken within the term of a global recession, then the situation provides the conditions for the development of an effective Fiscal Trap.

Fiscal developments in Greece, where tax rate increases combined with austerity measures resulted in decreasing tax revenues and increasing debt burden, provide proof of existence for the Fiscal Trap. Implications for policymakers in countries with increased sovereign debt are obvious. Fiscal-only policy measures are unable to fulfill satisfactory fiscal targets, especially during a period of recession. In order to slip away from the vicious cycle generated by austerity and tax hikes, policymakers might need the help of an appropriate monetary stimulus.

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APPENDIX OF TABLES

Table 1: Key Economic Indicators

In current €Billion	2004	2005	2006	2007	2008	2009	2010	2011	2012*
GDP	185	193	209	223	232	231	227	215	201.4
TAX REVENUE	70.5	75.3	81.9	91.0	94.7	88.6	90.2	87.9	87.5
TOTAL DEBT	183.2	212.3	224.7	239.9	263	299	329	355	344
AS % OF GDP	98.9%	110.0%	107.7%	107.5%	113%	129%	145%	165%	170%
BUDGET DEFICIT % of GDP	7.5%	5.2%	5.7%	6.5%	9.8%	15.6%	10.3%	9.1%	7.5%

*estimates

Table 2: Taxation increase per income bracket

in €	2009		2012		2010-2014		2009- 2012
Income	Tax	Effective Tax Rate	Tax	Effective Tax Rate	Additional Excise Tax	Effective Tax Rate	Eff. Rate Increase
5,000	0	0%	0	0%	0	0%	0%
12,000	0	0%	700	6%	0	0%	999%
16,000	720	5%	1,420	9%	40	0%	103%
26,000	3,200	12%	3,920	15%	200	1%	29%
40,000	8,000	20%	8,820	22%	480	1%	16%
60,000	15,600	26%	16,420	27%	980	2%	12%
100,000	31,600	32%	32,420	32%	2,180	2%	9%

Table 3: Change in VAT tax per product category

	HIGH	REGULAR	LOW	SUBSIDIZED
1987-1992	36%	18%	8%	4%
1992-03/2005		18%	8%	4%
04/2005-03/2010		19%	9%	4.5%
04/2010-06/2010		21%	10%	5%
07/2010-12/2010		23%	11%	5.5%
2011		23%	13%	6.5%
% Change 2010-2011		21%	44%	44%

Table 4: Table of changes in debt, GDP and tax revenue

ECONOMIC FIGURES CHANGE BETWEEN 2008 and 2012*			
	%** DEBT / GDP	% Change Tax Revenue	% Change GDP***
GREECE	58.1%	-7.6%	-18.3%

Data source: IMF

*2012 figures are estimates

**2012% minus 2008%

***Constant prices