



# Snatching defeat from the jaws of a presumed victory?

The Herculean labours of fiscal stringency

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March 2016

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## Abstract

In this paper we attempt to shed light on the nexus of the self-defeating nature of fiscal stringency with reference to certain Eurozone countries, and particularly Greece, which have come recently under increased pressure to redress their fiscal position and to control their public debt level by imposing fiscal austerity measures. The methodology employed permits us to endogenize the effect of fiscal policies on GDP growth by invoking the use of fiscal multipliers, and to come up with their values consistent with the given values of the fiscal variables. We then delve into the 'self-defeating' question by examining whether the macroeconomic impact of the fiscal stance is associated with negative growth rates of the GDP along with an increasing debt-to-GDP ratio, or not.

Our results tend to indicate that for some countries the adverse consequences of fiscal retrenchment seem to be short-lived whereas for Greece it is evident that the detrimental effects last much longer triggering a massive run-up in the debt ratio, thus exacerbating, *inter alia*, the debt sustainability problem. Lastly, we pinpoint the limitations of the 'self-defeating' debate and allude to avenues for a fully inclusive enquiry.

Keywords: self-defeating austerity, fiscal policy, macroeconomic effects, debt-GDP ratio, deficit.

JEL classification: E62

*The views expressed in this paper are exclusively those of the authors and do not necessarily reflect those of any other institutions nor should they be attributed to them.*

*"You will never balance the budget through measures which reduce the national income"*

*John Maynard Keynes, Radio Debate, 1933.*

## 1. Introduction

The IMF (2008) "Staff Report for the 2007 Article IV Consultation" issued in May 2008 had this to say about the state of the Greek economy: "The Greek economy has been buoyant for several years and growth is expected to remain robust for some time... The Greek banking sector appears to be sound and has thus far remained largely unaffected by the financial market turmoil...The authorities are pursuing further fiscal consolidation with the goal of achieving a balanced budget by 2010." But it was not meant to be since things did not work out as foreseen. A year later the same institution (IMF, 2009) changed tack in its fresh report. Ultimately, in May 2010 the Greek government of the time signed a deal with the Troika and the "First Adjustment programme" came into effect.

All the rest is history by now in the sense that everyone knows, albeit elliptically, what happened next. Yet, history is, occasionally, in need of forensic post-mortems. One of them is the ongoing passionate debate (as much as economists indulge in passion!) concerning the possible self-defeating nature of fiscal retrenchment. It is to this controversial subject that the following analysis addresses itself. We limit ourselves, willingly at this stage but reluctantly nevertheless, to an admittedly restricted research paradigm. Our opinion on this question is touched upon in the concluding part of the paper.

We start our mainstream (methodologically, that is) enquiry by presenting in the next section the mathematical model which enables us to approach the issue at hand. The part that follows presents and discusses the empirical findings. Part 4 concludes.

## 2. The model

*"Numbers are not impartial and straightforward; they have baggage"*

*Alex Bellos, "Alex through the looking glass: how life reflects numbers and numbers reflect life",  
Bloomsbury, London, 2014, p. 12.*

We consider the dynamic representation between the government's debt and the fiscal balance. By using the debt stock identity we write the current value of public debt ( $B_t$ ), in terms of the current fiscal balance, as well as the stock of debt. So, the evolution of public debt in nominal values is given by:

$$B_t = BAI_t + B_{t-1} + SFA_t \quad (1)$$

with  $BAL_t$  standing for the fiscal balance and  $SFA_t$  for the stock-flow adjustment. Dividing both sides of equation (1) by  $GDP$  we obtain the above equation in terms relative to  $GDP$  i.e.

$$b_t = bal_t + \frac{b_{t-1}}{N_t} + sfa_t \quad (2)$$

In equation (2) the lower case letters stand for public debt, fiscal balance and stock flow adjustment, all relative to  $GDP$ , ( $b_t$ ), ( $bal_t$ ) and ( $sfa_t$ ) respectively, while  $N_t = 1 + n_t$  with  $n_t$  representing the rate of change in nominal  $GDP$ .

Forward iteration of equation (2) results to the dynamic path of public debt (with  $t=1, \dots, T$  denoting time) given by:

$$b_{t+T} = \begin{cases} bal_t + \frac{b_{t-1}}{N_t} + sfa_t, \text{ when } T=0 \\ bal_{t+T} + \sum_{\alpha=0}^{T-1} \frac{bal_{t+\alpha}}{\prod_{\kappa=\alpha+1}^T N_{t+\kappa}} + \frac{b_{t-1}}{\prod_{j=t}^{t+T} N_j} + \Omega, \text{ when } T \geq 1 \end{cases} \quad (3),$$

$$\Omega = \sum_{\alpha=0}^{T-1} \frac{sfa_{t+\alpha}}{\prod_{\kappa=\alpha+1}^T N_{t+\kappa}} + sfa_{t+T}$$

It has been cogently claimed that the rate of output growth cannot be regarded as exogenous, as the traditional approach theorizes, since it is affected by the fiscal policy measures and hence, by the adjustments in the budget balance (Leão, 2013, p. 451). To this view we wholeheartedly subscribe. For this to be achieved we transform equation (3) by inserting revenue ( $\tau$ ) and spending ( $g$ ) multipliers.<sup>3</sup> In this way the  $GDP$  growth rate is made dependent on the fiscal policy stance and hence, the macroeconomic impact of fiscal policy in public debt formation is endogenised. The total differentiation of equation (3) reveals the dynamic evolution of government's debt as:

$$db_t = dg - d\tau - \frac{f'_t * d\tau + f'_g * dg}{N_t^2} * b_{t-1} + sfa_t, \text{ when } T=0 \quad (4.a)$$

<sup>3</sup> Parenthetically let us add that in the last few years there has been a plethora of articles and working papers originating from academics and institutions of all sorts on fiscal policy stimulus/retrenchment and the multiplier. On the contrary, in the previous decades any relevant discussion in tandem had been relegated into a near-complete oblivion due to the fact that firstly, the multiplier hailed from the Keynesian past which had fallen, for various reasons, into disrepute and secondly, to the alleged inefficacy of any activist fiscal policy measures. However, the ongoing world economic and financial crisis has, for other reasons, rekindled the interest in Keynesian economics and more specifically, in fiscal policy and its attendant concept, the fiscal multiplier. As Müller (2014, p. 256) forcefully argues: "...irrespective of the indicator [e.g. deficit, debt level] that is ultimately viewed as the most relevant, the fiscal multiplier will always be decisive for whether austerity is self-defeating".

$$db_{t+T} = dg_{t+T} - d\tau_{t+T} - \frac{f'_t * d\tau + f'_g * dg}{N^2_{t+T}} * \left( \sum_{\alpha=0}^{T-1} \frac{bal_{t+\alpha}}{\prod_{k=\alpha+1}^{T-1} N_{t+k}} + \frac{b_{t-1}}{\prod_{j=t}^{t+T-1} N_j} \right) + \Omega \quad (4.b),$$

$$\Omega = \sum_{\alpha=0}^{T-1} \frac{sfa_{t+\alpha}}{\prod_{\kappa=\alpha+1}^{T-1} N_{t+\kappa}} + sfa_{t+T}$$

Equations (4.a and 4.b) show the way the dynamic path of government's debt is affected by the effect of fiscal policy choices. This incorporates the impact of the fiscal multiplier regarding spending ( $f'_g$ ) and revenue ( $f'_\tau$ ).<sup>2</sup> Notice that the product of the multiplier  $f'$  and the change of the fiscal policy variable show the macroeconomic impact of fiscal policy in the dynamic path of debt.<sup>3</sup> So, we can obtain, hopefully, answers to the question of self defeating fiscal austerity.

Furthermore, in the case of public debt remaining constant ( $db_t = 0$ ) equation (4a) implies:

$$dg - d\tau \equiv dbal_t = \frac{f'_t * d\tau + f'_g * dg}{N^2_t} * b_{t-1} - sfa_t \quad (5)$$

From the above expression it is made clear that the public debt is sustainable when the fiscal measures adopted by the government mirrored in the change of the fiscal balance ( $dbal_t$ ) do not exceed the macroeconomic cost of fiscal measures in terms of debt accumulation net of the (exogenous)  $sfa$ , i.e. the (RHS) of equation (5). If however  $dbal_t > RHS$  then public debt increases while if  $dbal_t < RHS$  it is reduced.

In the same vein, the dynamic representation of the public debt accumulation (Equation 4b) incorporates the impact of the accumulation of the fiscal balance indicating the importance of the macroeconomic consequences caused by the past fiscal policy choices. Yet, in this dynamic framework sustainability implies:

<sup>2</sup> In our model the multipliers refer to the expected impact on GDP growth rate due to 1 percent change in tax revenue and government expenditure as a percentage of GDP. It is widely accepted that discrepancies between fiscal multiplier estimates in the literature are due, among a host of other reasons, to the different definitions adopted (e.g. Bi et al., 2013, p. 6 and Van Brusselen, 2009, p. 13).

<sup>3</sup> In the relevant literature, certain debt dynamic equations do include explicitly the effect of fiscal multipliers but in a rather *ad hoc* and intuitive manner (e.g. Eyraud and Weber, 2013, pp. 4, 22 and IMF, 2015, p. 63). This is in contrast with the present study where the impact of fiscal policy, through the rate of output growth, on the evolution of the debt-to-GDP ratio, results directly from the debt stock identity.

$$dg_{t+T} - d\tau_{t+T} \equiv dbal_{t+T} = \frac{f'_g * d_g + f'_\tau * d_\tau}{N^2_{t+T}} * \left( \sum_{\alpha=0}^{T-1} \frac{bal_{t+\alpha}}{\prod_{k=\alpha+1}^{T-1} N_{t+k}} + \frac{b_{t-1}}{\prod_{j=t}^{t+T-1} N_j} \right) + \Omega, \text{ when } T \geq 1$$

(6)

$$\Omega = \sum_{\alpha=0}^{T-1} \frac{sfa_{t+\alpha}}{\prod_{\kappa=\alpha+1}^T N_{t+\kappa}} - sfa_{t+T}$$

In other words, the above expressions indicate that public debt will not be stabilized when the fiscal measures cause an impact in GDP growth (as this indicated by the RHS in both expressions), that is greater than the improvement in the fiscal balance i.e. the objective of the measures.

### 3. The impact of fiscal measures and “self-defeating” austerity

*“Countries set on charting an independent course for themselves have to contend with predacious assessments of their public debt profile. To diverge from the say-so of the creditor class is to indulge in high-risk behavior as defined by the actuarial logic that holds sway over so much of our political life”*

Andrew Ross, “Calculating the debt gap”, *Antipode*, [published on line](#) 9 September 2015

In this section we focus on the effect of fiscal austerity on various macroeconomic variables with special emphasis to the Greek case. To this end we start by making use of Eq. (4a) which endogenizes the effect of fiscal manoeuvre on GDP growth. In this paper our definition of “self-defeating” austerity implies that the macroeconomic impact of the fiscal stance is associated with negative growth rates of the GDP along with an increasing debt-to-GDP ratio.<sup>4</sup> As already stated, the macroeconomic impact is captured by the numerator of the ratio in the RHS of Eq. (4a). The fiscal multipliers, as previously defined, are obtained through the use of “Excel Solver” which enables us to estimate their optimal values which are, that is, consistent with the given values of the fiscal variables (revenues, expenditures and the fiscal balance), public debt, nominal

<sup>4</sup> Alternative definitions are provided, indicatively, by: a. The ECB (2014, p. 84): « Consolidation is described as ‘self-defeating’ if the resulting debt-to-GDP ratio is higher than it is in the baseline scenario (where there is no consolidation)”, b. Warmedinger et al. (2015, pp. 4, 16): “...the paper estimates threshold multipliers that would lead to self-defeating consolidation in the sense of driving the public debt-to-GDP ratio up, to the point where it is unsustainable”, (p. 6) “...in the sense of putting the public debt ratio on an unfavourable path...” and (p. 19) “...debt-to-GDP ratio higher than in the no-consolidation baseline”, c. Berti et al. (2013, p. 2): “...‘self-defeating’ fiscal consolidation (i.e. fiscal consolidation leading to temporary increase in the debt-to-GDP ratio)...” and d. Holland and Portes (2015, p. F4): when “...debt to output ratios might increase rather than decrease”.

GDP and lastly, of the stock-flow adjustment.<sup>5</sup> Debt sustainability implies that the change of the fiscal balance ( $dbal_t$ ) should be equal or smaller than the RHS of Eq. (5). In Table 1 we present our estimates along with the statistical values of the relevant variables for Greece, Ireland, Portugal, Spain and Germany, the last one being an adamant proponent and paragon of putative fiscal rectitude/sound finance/monetary probity and the country that calls the tune in European economic affairs.<sup>6</sup> The years under examination span the period 2008 to 2016 and the data are sourced from the AMECO statistical base (October/November 2015).

The following general remarks are in order:

First, as a consistency check for our results it is to be noticed that the validity of Eq. (5) is borne out in all cases. In other words, whenever the RHS is smaller than the  $dbal_t$  then the debt-to-GDP ratio goes up and contrariwise.

Second, fiscal policy for Greece, Ireland, Spain and Portugal is connected to a negative macroeconomic impact for most years whereas for Germany this applies to two years only, namely 2009 and 2011. In addition, it should be stressed that for Greece (2010-2013) the fiscal retrenchment produced a spectacular negative macroeconomic impact. So was the case for Ireland (2009 and 2011) while for Portugal and Spain the negative impact was of a milder magnitude.

Third, a comparison between the total macroeconomic impact of fiscal policy and the GDP rate of growth reveals that in certain cases the negative contribution of the impact has reinforced the decline of this rate whereas in other cases the negative contribution is mitigated or even overturned. These disparate phenomena could be attributed to the different policy instruments composition of the fiscal package adopted and/or to other idiosyncratic economic characteristics enhancing or reducing the GDP rate of growth of each national economy (e.g. credit squeeze or credit liquidity provision, potential output, hysteresis effects, strength of the export sector, vulnerability to the fiscal retrenchment occurring contemporaneously in Europe or in other trade partners) or to different socio-political traits and events.

Turning now our attention specifically to the Greek case it is evident from Table 1 that the debt-to-GDP ratio follows an inexorable upward path (so is observed for Spain but with much shorter leaps), barring 2012 the year a PSI took effect, estimated to reach in 2016 the 200% mark. No sign of any reversal, within a few years from the start of the "Adjustment Programme" as false hopefulness proclaimed, is yet apparent. In other words, fiscal austerity measures have failed to return the exorbitant debt level to a sustainable path. Also, in the period 2010-2013 the total macroeconomic impact of

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<sup>5</sup> Eyraud and Weber (2013, p. 4, fn. 5) have remarked that when multipliers are calculated using nominal variables then they may be larger than multipliers calculated in real terms. This is due to the deceleration of inflation when GDP declines with fiscal tightening: "thus the decline in nominal GDP is larger than the decline in real GDP".

<sup>6</sup> Greece has only recently entered the 3<sup>rd</sup> "Adjustment programme" (the 1<sup>st</sup> dating from 2010) while Ireland remained in a programme from late 2010 to late 2013 and Portugal from mid-2011 to mid-2014.



fiscal retrenchment was heavily negative exceeding the corresponding figures for the same years of all other countries of Table 1 except for Ireland (2011).<sup>7</sup> Evidently, this contractionary impact contributed mightily to the decline of the nominal rate of growth.<sup>8</sup> Moreover, it is worth mentioning that for the years 2010 and 2011 the reduction of the fiscal deficit did not prevent the debt-to-GDP ratio from rising due to the momentous decline of the denominator, whereas for 2014 and 2016, in spite of the fact that the nominal contraction was milder (or, is predicted to be), the ratio did not stop climbing up.

In view of these developments it would take an inordinate dose of audacity from someone to maintain that the adjustment programmes imposed on Greece and executed accordingly from 2010 onwards are not responsible for the severe economic slump that the country is experiencing. Indeed, it is an ironic fact that even some of the most fervent supporters of the austerity measures have on occasion, reluctantly perhaps, admitted that various facets of the programmes have been ill-conceived and ill-designed.<sup>9</sup> On top of that, pieces of IMF research (e.g. Callegari et al., 2012, Eyraud and Weber, 2013 and Blanchard and Leigh, 2013 just to name a few) have repeatedly acknowledged that inflicting austerity in a weak economy is self-defeating.<sup>10</sup> Likewise, in the plain words of Mody (2015):

"As the budget deficit is reduced, the economy slows down, and the ability to repay debt is undermined. Indeed, austerity can be self-defeating".

One should also note that the findings of a recent paper by Fatas and Summers (2015), based on a model firstly introduced by DeLong and Summers (2012), suggest that attempts to reduce public debt via reductions in spending or increases in taxation lead likely to a higher debt-to-GDP ratio because of the negative impact on GDP. More particularly: "Countries that implemented large fiscal consolidations in 2010-11 might have found themselves in 2012 with a depressed economy that might have required even larger adjustments in fiscal policy that further depressed growth" (p. 24), thus, adding more insult to deep injury. Furthermore, Jordà and Taylor (2016, p. 219) argue that "...austerity is always a drag on growth, and especially so in depressed economies...". Finally, it is to be remembered that the Greek GDP deflator has been

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<sup>7</sup> We have estimated that the average macroeconomic impact of fiscal tightening (2010-2015) accounted for approximately 68% of the average negative rate of GDP change in Greece. Along the same line, Jordà and Taylor (2016, p. 247) calculate that almost 78% of the "dismal performance" of the UK economy between 2007 and 2013 could be attributed to fiscal austerity.

<sup>8</sup> According to the Hellenic Statistical Authority (13.10.2015), the cumulative loss of nominal GDP amounted to 21.4% and 26.6% for the periods 2010-14 and 2008-14, respectively.

<sup>9</sup> Relatedly, the two most recent reportings are those by the IMF (2016, 2015) on the myopic and compliant handling of the Greek debt restructuring issue and its ensuing (un)sustainability. It is to be noted however, that the 2016 announcement refers to a report dated 9 April 2015.

<sup>10</sup> "...imposing restrictive fiscal policies to a country already in recession may unleash a vicious cycle of consolidation followed by contraction, which requires further consolidation and so on." and "Internal devaluation depresses growth, and the absence of growth requires further austerity for governments to regain their fiscal credibility, thus generating a vicious cycle." (Armingeon and Baccaro, 2012, pp. 269, 275).

falling for the last three years (2012-2014).<sup>11</sup> In such a debilitating deflationary environment, investment and consumption are held back while the government's revenue is diminished "making debt repayment even harder" (Mody, 2015) and thus the country has been caught in a pernicious debt-deflation spiral along with a higher debt level in real terms as well as higher real interest rates.<sup>12</sup>

On the other hand, even a cursory look at the data of Ireland and Portugal tends to indicate that the phenomenon of self-defeating austerity seems to be only temporary while favourable long-run effects of fiscal consolidation on growth are distinguished as the ECB (2012, p. 85) maintains.<sup>13</sup> Also, in Warmedinger et al.: "...an increase in the debt ratio following episodes of fiscal consolidation is likely to be short-lived." (2015, p. 3) and "...increases in the debt ratio following consolidation...are expected to fade within maximum three years from the beginning of the consolidation programme, when financial markets behave normally." (Berti et al., 2013, p.3). In Ireland the debt/GDP ratio peaked in 2012-2013 and in Portugal in 2013-2014, dropping thereafter. Moreover, in the former from 2014 the nominal GDP rate of growth started reaching impressive levels while in the latter the last year of a negative rate was back in 2012.<sup>14</sup> As already observed, in Greece for four consecutive years (2010-2013) the macroeconomic impact of the fiscal austerity was severely negative when on the other hand, not so much in Portugal and Ireland (except that for 2011). In Greece this outcome originated mainly from the revenue side while the opposite occurred in the other two countries.<sup>15</sup> More specifically, the Greek increase of the government's Revenues/GDP ratio for both 2011 and 2012 was the highest of all other countries (2008-2016) and this was combined with the highest revenue multipliers, except those of Germany (2009) and Portugal (2008, a date preceding by almost three years the imposition of the austerity programme).

Finally, it should be stressed that as the IMF (2012, pp. 15, 41) remarks:

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<sup>11</sup> For 2015 a rate of -1.1% is expected.

<sup>12</sup> A brief literature review on the "self-defeating" properties of fiscal contraction is provided in McCausland and Theodossiou (2014). It is noteworthy that the authors, in addition, examine the impact of government fiscal stance on public debt for eleven OECD countries over the long period 1881-2011. Their econometric results point out that fiscal contraction worsens the debt-to-GDP ratio as it also creates negative effects on employment levels. Conversely, increases in government expenditure reduce the national debt (see also fn. 15) whereas increases in primary deficits are associated with falls in the unemployment rate. DeLong and Summers (2012) and Rendahl (2014) argue along similar lines.

<sup>13</sup> "Nobody has ever said that austerity policies mean that the economy will never grow again. In fact, the standard view among Keynesians is that, unless there are strong hysteresis effects, the economy will eventually recover to its old growth trend even if austerity is never reversed –which means that somewhere along the way there will be some quarters not just of growth but of above-average growth" (Krugman, 2013). Likewise, "But every downturn comes to an end. Success should not be measured by the fact that recovery eventually occurs, but by how quickly it takes hold and how extensive the damage caused by the slump...To say that the medicine is working because the unemployment rate has decreased by a couple of percentage points, or because one can see a glimmer of meager growth, is akin to a medieval barber saying that a bloodletting is working, because the patient has not died yet" (Stiglitz, 2014).

<sup>14</sup> This also applies to the growth rate in real terms for both countries.

<sup>15</sup> At this point let us mention the *prima facie* paradoxical, yet analytically convincing, empirical finding by Leão (2013) that an increase in government spending, below full employment conditions, decreases the debt-to-GDP ratio. To the best of our knowledge, no challenge whatsoever to this claim has been attempted so far.

"In downturns, fiscal consolidation measures reinforce the economic cycle and thereby exacerbate the slump in growth, making an up-front fiscal contraction particularly harmful..., simulations show that when the output gap is initially negative, fiscal adjustment implemented gradually has a smaller negative impact on growth (cumulative over two and one-half years) than does an up-front consolidation of the same overall size. This suggests that when feasible, a more gradual fiscal consolidation is likely to prove preferable to an approach that aims at 'getting it over with quickly'...In Greece, Portugal, and Spain, fiscal consolidation was significantly front-loaded, with a view to restoring confidence amid deteriorating market conditions".<sup>16</sup>

It is noteworthy, at this point, to recall that in "Greece: First Review Under the Stand-By Arrangement" (IMF, 2010a, p. 26) the output gap for 2009 was estimated at 4% whereas in accordance to the "program" it was reduced to -1.1% for 2010 and projected to much higher negative values (in absolute terms) until 2015. So, despite the existence of negative output gaps, it was not deemed, presumably, 'feasible' to adopt a 'more gradual fiscal consolidation'. The reason for the lack of 'feasibility' is made abundantly clear by Blanchard who argues:

"'Less fiscal austerity', i.e., slower fiscal adjustment, would have required even more financing cum debt restructuring, and there was a political limit to what official creditors could ask their own citizens to contribute."<sup>17</sup>

[\(http://blog-imfdirect.imf.org/2015/07/09/greece-past-critiques-and-the-path-forward/\)](http://blog-imfdirect.imf.org/2015/07/09/greece-past-critiques-and-the-path-forward/)

And:

"Greece...Fiscal projections assume a strong front-loaded fiscal adjustment in 2010, followed by further measures in 2011–13. Growth is expected to bottom out in late 2010 and gradually rebound after that, coming into positive territory in 2012." (IMF, 2010b, p. 165)

Patently, at first view, this blissful fantasy proved to be an abysmal failure since market conditions kept deteriorating vertiginously and consequently, no confidence ('confidence fairy' à la Krugman) was ever restored.<sup>18</sup>

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<sup>16</sup> In the same vein, the main empirical finding of Pennings and Pérez Ruiz (2013) is that episodes of fast (front-loaded) fiscal consolidation have higher multipliers than gradual consolidations. In parallel, Dell'Erba et al. (2014) argue that their results point out that in times of persistently low growth and high unemployment fiscal consolidation plans to reduce public debt levels should proceed gradually. Even a recent paper of the ECB research team has frankly acknowledged that "...our results...[show that]... the large negative effects of consolidation in closed economies under recession would call for postponing fiscal consolidation..." (Cugnasca and Rother, 2015, p.3). Finally, according to Gechert and Rannenberg (2015) almost 80% of the negative impact on GDP is due to the frontloading of fiscal measures in Greece. In addition, by gradually implementing fiscal consolidation, they maintain, the effect on the primary balance would have been more favourable. However, the results of our analysis are at odds with their findings with regards to the importance of the revenue-led retrenchment as opposed to that of the spending-led one.

<sup>17</sup> And see pithy words by Wren-Lewis (2015, pp. 18, 19): "...the default position is to view government deficits as a problem that needs to be tackled sooner rather than later".

#### 4. Conclusions

*"...a more balanced budget for a more unequal society."*

Gary Younge, *"Despite class war, Democrats just dither"*, *The Guardian Weekly*, 8 June 2012, p. 19.

It appears then, at first sight and up to this point in time, that the "self-defeating" properties of fiscal policy activated by the "Adjustment Programmes" are to be seen only in the case of Greece. Is the full evidence at hand? Is then the jury still out on the subject?

We are of the opinion that the documentation is fragmentary and that most of the mainstream discussion, to which ourselves participate with the present paper, on "self-defeating austerity" or its polar opposite, "paying-off austerity", takes place within a partial analysis framework. This is so because:

Firstly, what is mostly eschewed is any substantive and inclusive reference to the issues of "hysteresis" effects and mechanisms which may brand an economy with long-lasting scars. Fiscal austerity measures might have persistent effects on output (actual and potential) as well as on employment and the labour market.<sup>19</sup>

Secondly, the channels (e.g. deteriorating maldistribution of income) through which the negative impact due to fiscal austerity impinges upon the rate of GDP growth are never given proper consideration in the "self-defeating" literature, seemingly because their importance as transmission mechanisms is either seriously underestimated or entirely written-off.<sup>20</sup>

Thirdly, is there a reason why the definition of "self-defeating": (i) is restricted to the "accepted" macrovariables, and (ii) remains silent on who bears the burden and on who reaps the benefits of austerity? Is there a rationale why socio-economic indicators (e.g. poverty rates, infant mortality, life expectancy, emigration of young people, suicide rates etc) do not deserve to be included in the estimates?<sup>21</sup>

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<sup>18</sup> "The current deflationary adjustment forced on...Greece, Italy, Portugal, and Spain is self-destructive: it is a 'confidence killer', not only deepening the free fall of southern European incomes but also damaging their productive base and productivity growth" (Storm and Naastepad, 2015, p. 959).

<sup>19</sup> Ball (2014) estimates that the only country, among 23 OECD members, with a negative growth rate of potential output for 2014-5 is Greece. In addition, its loss in potential output since 2008-9 reached a staggering 35.4%, the greatest long-term damage of them all. A recent attempt to incorporate a hysteresis effect in a debt dynamic equation, namely the number of years required for the lost output to be recovered, is to be found in IMF (2015, pp. 62, 3).

<sup>20</sup> As the present paper was virtually completed, two relevant articles came into our attention. Perugini et al. (2016) examine the relationship between income inequality, private indebtedness and financial crises. They provide evidence that higher inequality impacts positively on credit demand which in turn results in a crisis and conclude that "...the distribution of income is not irrelevant to macroeconomic stability, as implicit in mainstream approaches..." (p. 227). As far as government debt is concerned, Azzimontiet al. (2012) assert "...that governments choose higher levels of public debt when financial markets become internationally integrated and inequality increases".

<sup>21</sup> On the same subject, Wolf (2013) admonishes: "The idea that treatment is right irrespective of what happens to the patient falls into the realm of witch-doctoring, not science".

Lastly, could it be that we are not really dealing at all with faulty, ill-conceived “self-defeating” austerity programmes but on the contrary, what we are actually experiencing is a well-targeted overall attempt endowed with power and politics (with the inevitable *faux pas*, belated specious self-incrimination and lukewarm *mea culpa* avowals - without though accepting odium for these decisions - or providing deniability and passing responsibility on to another) to foist deliberately an ideology-ridden masterplan programme which, among various objectives, can be used as an excuse to limit the active remit of the public sector by privatizing state functions, to dismantle the welfare state and generally, to impose a polarizing fiscal policy with redistributive than stabilizing aims and consequences? <sup>22</sup> In this vein, one should also remark that it is only when an austerity template of that sort is constantly implemented, thoroughly evaluated and fully endorsed that a debt restructuring process may be deemed negotiable by the powers that be.

Indeed, the jury should not retire for its final verdict while the evidence at hand is still far from complete. An “all-encompassing” approach is, therefore, urgently called for.

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<sup>22</sup> “For unto every one that hath shall be given, and he shall have abundance but from him that hath not shall be taken even that which he hath.”(Matthew, 25:29). Similar excerpts are to be found in Luke, 8:18, Mark, 4:25 and Matthew, 13:12 artfully encapsulated in Billie Holiday’s “God bless the child”: “Them that’s got shall get/ them that’s not shall lose/So the Bible said and it still is news”.

Table 1

|                                      |      | Public Debt<br>(% GDP) | GDP Growth<br>rate | Change in<br>Fiscal Balance | RHS of eq.5 | Expenditure<br>Multiplier | Revenue<br>Multiplier | Macro impact | Revenue<br>impact | Expenditure<br>impact |
|--------------------------------------|------|------------------------|--------------------|-----------------------------|-------------|---------------------------|-----------------------|--------------|-------------------|-----------------------|
|                                      |      | b                      | n                  | dbal                        |             | $f'_q$                    | $f'_r$                |              |                   |                       |
| G<br>R<br>E<br>E<br>C<br>E           | 2008 | 109.34                 | 3.99               | 3.46                        | -2.74       | -0.18                     | 0.05                  | -0.66        | 0.01              | -0.67                 |
|                                      | 2009 | 126.72                 | -1.84              | 4.98                        | -12.42      | -0.06                     | -0.07                 | -0.08        | 0.13              | -0.21                 |
|                                      | 2010 | 146.13                 | -4.84              | -3.94                       | -23.35      | 0.52                      | -0.72                 | -2.51        | -1.69             | -0.83                 |
|                                      | 2011 | 171.96                 | -8.41              | -0.97                       | -26.87      | -0.42                     | -3.12                 | -9.28        | -8.54             | -0.74                 |
|                                      | 2012 | 159.41                 | -7.64              | -1.43                       | 11.18       | 0.37                      | -2.81                 | -6.27        | -6.61             | 0.35                  |
|                                      | 2013 | 176.95                 | -5.66              | 3.63                        | -13.97      | -0.40                     | -0.15                 | -2.51        | -0.29             | -2.22                 |
|                                      | 2014 | 178.59                 | -1.57              | -8.87                       | -10.47      | 0.00                      | -0.01                 | -0.03        | 0.02              | -0.05                 |
|                                      | 2015 | 194.80                 | -2.48              | 1.04                        | -15.16      | -0.04                     | -0.07                 | -0.10        | -0.04             | -0.06                 |
|                                      | 2016 | 199.64                 | -0.69              | -1.03                       | -5.83       | 0.06                      | 0.07                  | 0.00         | 0.03              | -0.03                 |
| P<br>O<br>R<br>T<br>U<br>G<br>A<br>L | 2008 | 71.67                  | 1.94               | 0.76                        | -           | 0.29                      | -5.14                 | -0.22        | -0.47             | 0.25                  |
|                                      | 2009 | 83.61                  | -1.91              | 6.04                        | -5.86       | -0.01                     | -0.00                 | -0.06        | 0.01              | -0.07                 |
|                                      | 2010 | 96.20                  | 2.55               | 1.37                        | -11.24      | -0.68                     | -0.36                 | -1.17        | -0.08             | -1.09                 |
|                                      | 2011 | 111.37                 | -2.09              | -3.79                       | -18.99      | 0.04                      | -0.05                 | -0.16        | -0.09             | -0.07                 |
|                                      | 2012 | 126.19                 | -4.41              | -1.72                       | -16.52      | 0.87                      | -0.06                 | -1.31        | -0.01             | -1.29                 |
|                                      | 2013 | 129.00                 | 1.11               | -0.82                       | -3.62       | -0.03                     | -0.05                 | -0.15        | -0.11             | -0.04                 |
|                                      | 2014 | 130.18                 | 1.87               | 2.33                        | 1.13        | -0.05                     | 0.16                  | -0.16        | -0.09             | -0.07                 |
|                                      | 2015 | 128.22                 | 3.10               | -4.20                       | -2.20       | 0.10                      | -0.07                 | -0.42        | -0.03             | -0.38                 |
|                                      | 2016 | 124.76                 | 3.04               | -0.03                       | 3.37        | 0.13                      | -0.26                 | 0.09         | 0.20              | -0.10                 |

|                                 |      | Public Debt<br>(% GDP) | GDP Growth<br>rate | Change in<br>Fiscal | RHS of eq.5 | Expenditure<br>Multiplier | Revenue<br>Multiplier | Macro<br>impact | Revenue<br>impact | Expenditure<br>Impact |
|---------------------------------|------|------------------------|--------------------|---------------------|-------------|---------------------------|-----------------------|-----------------|-------------------|-----------------------|
|                                 |      | b                      | n                  | dbal                |             | $f'_g$                    | $f'_r$                |                 |                   |                       |
| I<br>R<br>E<br>L<br>A<br>N<br>D | 2008 | 42.44                  | -4.82              | 7.26                | -11.28      | -0.10                     | 0.00                  | -0.59           | 0.00              | -0.59                 |
|                                 | 2009 | 61.79                  | -9.66              | 6.85                | -12.50      | -3.86                     | -0.11                 | -               | 0.17              | -20.56                |
|                                 | 2010 | 86.79                  | -1.93              | 18.47               | -6.53       | -0.01                     | 0.00                  | 20.40           | 0.00              | -0.21                 |
|                                 | 2011 | 109.29                 | 4.68               | -19.77              | -42.27      | 0.52                      | 0.02                  | -0.21           | -0.01             | -10.57                |
|                                 | 2012 | 120.22                 | 0.52               | -4.49               | -15.42      | 0.08                      | 0.03                  | -10.58          | 0.03              | -0.28                 |
|                                 | 2013 | 119.98                 | 2.63               | -2.39               | -2.15       | 0.26                      | 0.04                  | -0.25           | 0.01              | -0.55                 |
|                                 | 2014 | 107.49                 | 5.35               | -1.78               | 10.71       | -0.10                     | 0.00                  | -0.55           | 0.00              | 0.14                  |
|                                 | 2015 | 99.77                  | 8.15               | -1.67               | 6.05        | -1.52                     | -0.42                 | 0.14            | 0.17              | 3.12                  |
|                                 | 2016 | 95.44                  | 6.44               | -0.69               | 3.64        | -0.03                     | -1.76                 | 3.29            | 2.06              | 0.06                  |
|                                 |      |                        |                    |                     |             |                           |                       | 2.12            |                   |                       |
| S<br>P<br>A<br>I<br>N           | 2008 | 39.40                  | 3.28               | 6.42                | 2.53        | 0.10                      | -0.33                 | 1.61            | 1.39              | 0.22                  |
|                                 | 2009 | 52.70                  | -3.33              | 6.53                | -6.77       | -1.09                     | -2.21                 | -0.80           | 4.22              | -5.02                 |
|                                 | 2010 | 60.07                  | 0.17               | -1.57               | -8.94       | 0.05                      | -0.19                 | -0.28           | -0.28             | -0.01                 |
|                                 | 2011 | 69.46                  | -0.97              | 0.08                | -9.31       | -0.06                     | -0.03                 | 0.00            | 0.00              | 0.00                  |
|                                 | 2012 | 85.41                  | -2.57              | 0.98                | -14.97      | 0.02                      | -0.33                 | -0.40           | -0.44             | 0.04                  |
|                                 | 2013 | 93.67                  | -1.11              | -3.53               | -11.79      | -0.05                     | -0.19                 | 0.00            | -0.14             | 0.14                  |
|                                 | 2014 | 99.28                  | 0.96               | -1.02               | -6.63       | 0.47                      | 0.18                  | -0.25           | 0.07              | -0.31                 |
|                                 | 2015 | 100.83                 | 3.67               | -1.14               | -2.69       | 0.48                      | -0.16                 | -0.52           | -0.01             | -0.51                 |
|                                 | 2016 | 101.30                 | 3.73               | -1.15               | -1.62       | 0.21                      | 0.01                  | -0.25           | 0.00              | -0.25                 |
| G<br>E<br>R<br>M<br>A<br>N<br>Y | 2008 | 65.04                  | 1.93               | 0.36                | -1.09       | 0.25                      | 0.00                  | 0.19            | 0.00              | 0.19                  |
|                                 | 2009 | 72.50                  | -3.96              | 3.06                | -4.40       | 0.60                      | -2.94                 | -0.39           | -2.78             | 2.39                  |
|                                 | 2010 | 81.01                  | 4.87               | 0.99                | -7.52       | 0.26                      | -0.11                 | 0.06            | 0.15              | -0.08                 |
|                                 | 2011 | 78.37                  | 4.77               | -3.26               | -0.62       | 0.19                      | 0.39                  | -0.22           | 0.28              | -0.50                 |
|                                 | 2012 | 79.71                  | 1.91               | -0.87               | -2.21       | -0.10                     | 0.05                  | 0.06            | 0.03              | 0.03                  |
|                                 | 2013 | 77.35                  | 2.39               | 0.02                | 2.38        | 4.28                      | -0.21                 | 0.26            | -0.01             | 0.27                  |
|                                 | 2014 | 74.92                  | 3.36               | -0.42               | 2.01        | -2.63                     | -0.27                 | 0.59            | -0.05             | 0.64                  |
|                                 | 2015 | 71.42                  | 3.66               | -0.56               | 2.94        | -1.05                     | -0.52                 | 0.86            | 0.09              | 0.77                  |
|                                 | 2016 | 68.48                  | 3.54               | 0.37                | 3.31        | 3.32                      | -1.26                 | 0.95            | 0.16              | 0.79                  |

Source: Ameco, own calculations

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