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## Why a new package of horizontal austerity measures might well prove counterproductive

### Part II

In our previous *Greece Macro Monitor*, we presented a technical study on Greek public debt, forecasting a significant improvement in its dynamics after 2014 and explaining why the present elevated debt-to-GDP ratio may not by itself be the proper metric for assessing fiscal sustainability<sup>1</sup>. We also explained why a new package of horizontal austerity measures (*i.e.*, over and above those already incorporated in the present adjustment programme) would be *neither necessary nor* appropriate for Greece, especially taking into account the current state of the domestic economy and the present sociopolitical environment. In this report, we provide additional rationale to the latter view, leaning on the results of two recent empirical studies we conducted on the macroeconomic effects of fiscal adjustment policies in Greece.

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#### Size of projected fiscal gaps and related official comments

As per the latest update of the macroeconomic framework underlying Greece's adjustment programme (July 2013), a *cumulative* fiscal gap worth around 2%-of-GDP is expected to arise in 2015-2016. The coverage of this gap is deemed necessary so as to attain the envisaged targets for the general government primary surplus (see *Table 1*). In line with the present programme conditionality, concrete strategies to deal with this issue will need to be identified in the context of the current (still ongoing) troika review, along with the preparation of the final 2014 budget and the medium term fiscal plan update. As noted in a recent European Commission report on Greece, the aforementioned fiscal gap estimates rely on the assumption of significant progress in strengthening the capacity of the tax and social security revenue administrations to increase collection and on stronger compliance incentivized by the recent tax reforms<sup>2</sup>. The said report also noted that in the autumn 2013 new macroeconomic and fiscal data will provide more complete information on the size of any remaining gaps. Along similar lines, the last IMF assessment of the Greek adjustment programme<sup>3</sup> clarified that the current troika review will reassess the effectiveness of a range of measures adopted by the Greek authorities as part of the prior actions to the July 2013 EFSF/IMF loan disbursement. These measures aimed to bridge a number of identified fiscal shortfalls for the period 2013-2014, worth as much as 0.5ppts-of-GDP/annum<sup>4</sup>.

<sup>1</sup> See *Greece Macro Monitor*, "A technical study on Greece's sovereign solvency: How an elevated debt ratio conceals ratio dramatic improvement in the debt rollover profile", Eurobank Research, October 8, 2013.

<sup>2</sup> European Commission, Occasional Papers 159/July 2013, page 24.

<sup>3</sup> IMF, Country Report No 13/241, July 2013)

<sup>4</sup> These measures included, among others, the frontloading of a luxury tax, the imposition of a special solidarity surcharge on income from interest and deposits, an increase in fees for lawsuits and a claw back mechanism in healthcare expenditure on diagnostics and private clinics so as to prevent expenditure deviations from fiscal targets.

**Table 1** – Second Economic Adjustment Programme for Greece: General government primary balance targets & projected fiscal gaps (ppts-of-GDP)

	2012	2013	2014	2015	2016
<b>Primary balance target</b>	-1.3	0.0	1.5	3.0	4.5
<b>Fiscal gap</b>	0.0	0.0	0.0	1.75	2.0

Source: EC (July 2013)

As things stand at this point, it is still unclear what specific strategy will be chosen to deal with the aforementioned fiscal gaps. To complicate things further, a number of recent press reports suggested that the troika now projects a fiscal gap to arise earlier than envisaged in the July 2013 MoU, among other reasons because of a higher shortfall in social security funds and the risk of lower-than-earlier projected revenues from property taxation as a result of the implementation of a new single property tax from 1.1.2014. As per the same reports, the troika staff now projects a fiscal gap of c. €2bn arising in 2014, which would be on top of an earlier projected gap of €4.1bn for 2015-2016. On its part the government expects the said fiscal shortfalls to be much lower in size due to stabilizing GDP dynamics and expected gains from the ongoing reforms in the tax collection mechanism and in the broader public sector.

Without attempting to make a prognosis on the outcome of the current negotiations between the government and the troika on how to bridge the aforementioned fiscal gaps, we highlight below a number of recent official comments ruling out a new package of horizontal austerity measures for Greece. Among others, IMF Managing Director Christine Lagarde was quoted last week as saying that “If there was a shortfall, if there was a gap as a result of efforts undertaken, then we would sit down with the Greek authorities and we would look at what needs to be done and over what period of time,” adding that “we are ruling out across-the-board cuts in wages and pensions”<sup>5</sup>. Separately, in a recent joint press conference with European Commission President Jose Manuel Barroso, Greece’s Prime Minister Antonis Samaras expressed his strong opposition to new austerity measures as a means of addressing any projected fiscal gaps, adding that any additional savings would come from structural measures. On his part, Deputy Prime Minister Evangelos Venizelos said earlier this month that “when the Greek government says it will not take any new measures, it absolutely means it”. Last but not least, Greek finance minister Yiannis Stournaras told reports after the conclusion of the October 14 Eurogroup that the Greek government will not opt for any new horizontal fiscal measures affecting pensions and wages, clarifying that any new measures would be of a purely structural nature. As a final note to this section, we quote what the January 2013 IMF report on Greece said on potential strategies to bridge the fiscal shortfall projected in 2015-2016. The report read that “To close the estimated gap of up to €4 billion, the authorities intend to focus on retaining expiring measures, base broadening, and gaining efficiency savings from long-term structural reforms. The largest gains would come from extending expiring revenue measures (*i.e.*, the solidarity surcharge on PIT). Staff also sees potential in continuing the reforms of the social benefits system, which remains complicated and inefficient”.

### Why a new package of horizontal austerity measures might well prove counterproductive

In our last *Greece Macro Monitor*, we explained why a new package of horizontal austerity measures (*i.e.*, over and above those already incorporated in the present adjustment programme) would be neither necessary nor appropriate, especially taking into account recent macroeconomic and fiscal developments as well as the current state of affairs in the domestic sociopolitical sphere<sup>6</sup>. In what follows we repeat some of the arguments provided in support of the latter view:

<sup>5</sup>The comments were made during a news conference held in the context of the IMF 2013 Annual Meeting (October 11-13).

<sup>6</sup> See Greece Macro Monitor, “A technical study on Greece’s sovereign solvency: How an elevated debt ratio conceals dramatic improvement in the debt rollover profile”, Eurobank Research, October 8, 2013

- Greece's *cyclically-adjusted* primary balance has improved by more than 15ppts-of-GDP cumulatively in 2009-2012 and the country remains en route to reaching a cyclically-adjusted primary surplus of over 6%-of-GDP this year, by far the highest in the EU-27<sup>7</sup>. In line with our expectations for a switch to positive GDP growth from 2014 onwards (and in the absence of a future policy shift towards undue fiscal relaxation), the above argument supports the attainability of sizeable primary surpluses, once the domestic economy resumes positive and sustained growth rates.
- Implementation risks to the expenditure-side package of agreed measures for the period 2013-2016 have declined considerably after a range of steep cuts in public sector wages, social security transfers and operating expenditure introduced in early 2013. Note that the overall package of new fiscal measures for the aforementioned period is worth c. 7.2ppts-of-GDP, with c. 5.2ppts-of-GDP of that corresponding to expenditure reductions<sup>8</sup>.
- A new package of debt-relief measures by official lenders (expected by spring 2014) would not only reduce the overall stock of public debt, but it would also lighten up the government borrowing requirement on a multi-year basis and thus, lessen the need for new austerity measures down the road.
- Besides alienating further the social fabric and creating additional frictions in the domestic political scene, a new significant package of horizontal austerity measures would also risk derailing the still fragile recovery reflected in Greece's Q2 2013 GDP data and a range of forward-looking indicators of domestic economic activity.
- Particularly relevant to the latter argument are the findings of our recent empirical work on fiscal multipliers, which demonstrate that the fiscal drag of austerity policies in Greece tends to be much higher in periods of economic hardship. In the following section, we elaborate further on that issue, while **Table 2.1** in the Annex section of the present document provides a comprehensive summary of the fiscal package for 2013-2016 agreed with official lenders in the context of the December 2012 revision of the present economic adjustment programme.

### **Main results of our recent empirical studies on Greece's fiscal multipliers and their relevance for the present program review and the domestic macro trajectory**

In two empirical studies we conducted recently on the macroeconomic effects of fiscal policy changes, we applied as many as three different methodologies for estimating the *size* and the *sign* of fiscal multipliers in Greece, using quarterly data spanning the period Q1 1999 to Q4 2012. In the first of these studies<sup>9</sup>, we followed the Structural Vector Autoregression (SVAR) approach initially developed in Blanchard and Perotti (2002) as well as a regime-switching model, in the spirit of Auerbach and Gorodnichenko (2010 & 2011). In the second one<sup>10</sup>, we utilized a Multivariate Threshold Autoregressive Model (TVAR), with the aim to: (i) check the robustness of the empirical results documented in our initial study; and (ii) take a closer look at certain important government expenditure categories that could potentially have a pronounced effect on domestic GDP. In what follows, we summarize the main results of these studies and provide a brief assessment of their policy implications:

<sup>7</sup> According to the European Commission spring 2013 Forecasts, Greece's cyclically-adjusted primary surplus will come in at 6.3%-of-GDP in 2013.

<sup>8</sup> Implementation risks to the 2013-2016 austerity programme are higher on the revenue-side, especially as there is virtually no room for further increases in tax rates and significant uncertainty continues to surround the near-term success of a number of recently enacted structural reforms to broaden the tax base and fight tax and social security contributions evasion.

<sup>9</sup> See Monokroussos and Thomakos, "Fiscal multipliers in deep economic recessions and the case for a 2-year extension in Greece's austerity programme", Eurobank Research, Oct. 2012.

[http://www.euro2day.gr/dm\\_documents/%CE%9F%CE%B9%CE%BA%CE%BF%CE%BD%CE%BF%CE%BC%CE%AF%CE%B1\\_%CE%BA%CE%B1%CE%B9\\_%CE%B1%CE%B3%CE%BF%CF%81%CE%AD%CF%82\\_5ZJSJ.pdf](http://www.euro2day.gr/dm_documents/%CE%9F%CE%B9%CE%BA%CE%BF%CE%BD%CE%BF%CE%BC%CE%AF%CE%B1_%CE%BA%CE%B1%CE%B9_%CE%B1%CE%B3%CE%BF%CF%81%CE%AD%CF%82_5ZJSJ.pdf)

<sup>10</sup> See Monokroussos and Thomakos, "Greek fiscal multipliers revisited: Government spending cuts vs. tax hikes and the role of public investment expenditure", Eurobank Research, March 2013.

<http://www.eurobank.gr/Uploads/Reports/Economy%20and%20Markets%20march%2020123.pdf>

**Eurobank October 2012 study “Fiscal multipliers in deep economic recessions and the case for a 2-year extension in Greece’s austerity programme”**Key findings

- (i) in line with the methodology developed in Blanchard and Perotti (2002), our Structural Vector Autoregression (SVAR) model estimated *government spending* multipliers for Greece falling broadly within the range of estimates provided by a number of earlier empirical studies *i.e.*, multiplier values in the vicinity of 0.4-0.5;
- (ii) our *regime-switching* Smooth Transition Vector Autoregression (STVAR) model estimated positive (and strongly significant) government spending multipliers in recessionary phases along with broadly insignificant multipliers in periods of economic expansion; and
- (iii) the latter result was found to be particularly pronounced for government *wage* expenditure, with the corresponding multiplier estimates being as high as 2.35 (and strongly significant) in recessionary regimes and largely insignificant in economic expansions.

**Eurobank April 2013 study “Greek fiscal multipliers revisited: Government spending cuts vs. tax hikes and the role of public investment expenditure”**Key findings

In this particular study, we estimated *regime-dependent* fiscal multipliers for Greece, examining a range of key government revenue and expenditure categories. Our estimates broadly confirmed the empirical results of our earlier study as regards the respective *size* and the *sign* of fiscal multipliers across the different facets of the business cycle. In more detail:

- (i) the response of real output to a discretionary shock in government current spending or government tax revenue depends on the *regime* in which the shock occurs (*i.e.*, economic expansion or contraction) as well as on the *size* and the *direction* of the fiscal shock;
- (ii) expansionary or contractionary fiscal shocks taking place in lower output regimes (*i.e.*, economic downturns) have much larger effects on output - both on impact and on a cumulative basis - relative to shocks of similar sign and size occurring in higher regimes (economic expansions);
- (iii) in lower regimes, the contractionary effects on output from a *negative* fiscal shock (*i.e.*, spending cut or tax hike) rise with the size of the shock; in the same vein, the expansionary effects on output from a positive fiscal shock (*i.e.*, spending rise or tax cut) increase with the size of the shock; and
- (iv) similar effects apply for fiscal shocks taking place in higher output regimes, though to a much lesser extent.

As regards the *optimal* mix (*i.e.*, expenditure cuts vs. tax hikes) of fiscal consolidation strategies, the empirical findings of our latter analysis document the following:

- a) it is more preferable to implement fiscal adjustment in Greece through higher tax revenue than lower government spending as the former is found to have much milder effects on output than the latter, *both* on impact and on a cumulative basis;
- b) taking into account the overall size of fiscal adjustment for the period 2013-2016 incorporated in Greece’s present stabilization programme, our multiplier estimates suggest that Greek GDP may decline by up to €1.89 cumulatively over a three-year period per €1 discretionary cut in real government spending on goods and services;

- c) the corresponding impact on domestic GDP would be much more benign if the aforementioned adjustment were to exclusively come through higher government revenue *i.e.*, cumulative decline in real GDP of up to €0.5 over a three-year period per €1 increase in government net tax revenue;
- d) regarding points *b)* and *c)* above, it is important to emphasize that they don't necessarily constitute an outright call for a further increase in indirect or direct tax rates in Greece, which remain amongst the highest in the euro area. Instead, they highlight the urgency to move in a more resolute way to reform public administration and repair the country's revenue collection mechanism; and
- e) our empirical findings argue in favor of higher public investment spending in the current recessionary trajectory as a means of boosting short- and medium-term economic growth. Among others, our results imply that for a given positive discretionary shock in the public investment program, real output rises by between €2.91 and €3.99 cumulatively over a 12 quarter period per €1 increase in real investment expenditure.

### **Policy implications**

As we noted in the *Empirical Results & Interpretation* section of our first empirical study on fiscal multipliers (October 2012)<sup>11</sup> our empirical findings provided strong support in favor of a 2-year extension in Greece's adjustment programme. Such an extension was indeed granted to the county in late 2012, upon fulfillment of a number of key prior actions and programme milestones.

Regarding the ongoing negotiations between the government and the troika in the context of the present troika review, we note the following:

- (i) a new package of horizontal cuts in wages, pensions or the public investment budget would risk a disproportionately large impact on domestic GDP, given the current state of the economy and the large multipliers of these major expenditure items in periods of economic hardship;
- (ii) our empirical results on the optimal mix of fiscal consolidation strategies in Greece make a strong case in favor of higher tax revenue rather than lower government spending, given that the former is found to have much milder effects on output than the latter;
- (iii) the point above does not necessarily argue in favor of higher (direct or indirect) tax rates, which, in any case, remain among the highest in the euro area. Instead, it highlights the need of reducing tax and social security contributions evasion, by accelerating the current reform effort in the tax collection mechanism and the broader public sector; and
- (iv) in relation to the latter point, we refer our readers to a June 2013 IMF report (Greece: Selected Issues, IMF Country Report No. 13/155), which, among other, provides a comprehensive overview of the problem of tax avoidance in Greece and the challenges facing the present public sector & revenue administration reform.

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<sup>11</sup>See Monokroussos and Thomakos, "Fiscal multipliers in deep economic recessions and the case for a 2-year extension in Greece's austerity programme", Eurobank Research, Oct. 2012.

**A note of caution regarding our empirical results**

As we emphasized in our recent studies on Greece's fiscal multipliers, our relevant empirical results should be treated with caution, among other reasons because:

- 1) a considerable diversion of views continues to exist as regards the macroeconomic effects of discretionary fiscal policy changes, both on theoretical and empirical grounds;
- 2) multiplier estimates tend to be not only regime- and shock-specific, but also estimation method-specific;
- 3) a problem related to our empirical studies on fiscal multipliers is the lack of availability of a long-enough history of fiscal data i.e., one spanning an adequate number of economic expansions and downturn phases in Greece;
- 4) an important finding in some recent empirical studies on the macroeconomic effects of fiscal policy is that multipliers tend to decline with the intensity of market doubts over the sustainability of a country's fiscal position; in the case of Greece, this appears to provide an important argument in favor of a heavily front-loaded fiscal adjustment strategy;
- 5) there may be a wide range of other factors that may affect the shape and the magnitude of output responses to discretionary fiscal policy changes;
- 6) one such factor is the degree of liquidity constraints facing households, with a number of recent studies documenting higher multipliers for economies in which a large share of domestic economic agents are liquidity constrained (as is currently the case in Greece); and
- 7) the results of our recent empirical studies on fiscal multipliers were derived on a ceteris paribus basis and refer to the net impact of fiscal austerity on output (fiscal drag); and
- 8) taking into account the aforementioned point, it becomes clear that our results do not necessarily represent forecasts of the response variable (i.e., GDP) as, besides fiscal policy shocks, other factors may affect the latter's future evolution. Indeed, domestic output growth may be affected by, among others, shifts in investor sentiment towards Greece, domestic monetary conditions, FDI inflows, the external macroeconomic environment as well as a multitude of other factors.

## Annex

Table 2.1 – Package of new austerity measures 2013-2016

	(Percent of GDP)	
New Fiscal Measures	2013-14	2015-16
Expenditure Measures	5.10	0.04
Compensation of employees	0.79	0.01
Social Security transfers	3.23	0.04
Subsidies	0.09	0.01
Intermediate consumption	0.75	-0.01
Gross fixed capital formation	0.24	0.00
Revenue Measures	2.06	0.02
Direct taxes	0.90	0.01
Indirect taxes and sales	0.61	0.00
Social security contributions	0.38	0.00
Total	7.15	0.06
Memorandum item:		
Tax administration gains	0.34	1.30

Source: IMF staff estimates

1/ Fiscal measures introduced at the first review

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