

GREECE MACRO MONITOR

October 6, 2016

Draft 2017 budget, fiscal drag & attainability of medium-term fiscal targets

Dr. Platon Monokroussos
Group Chief Economist
Deputy General Manager
Eurobank Ergasias S.A.
pmonokrousos@eurobank.gr

Dr. Theodoros Stamatiou
Senior Economist
tstamatiou@eurobank.gr

Paraskevi Petropoulou
G10 Markets Analyst
ppetropoulou@eurobank.gr

DISCLAIMER

This report has been issued by Eurobank Ergasias S.A. ("Eurobank") and may not be reproduced in any manner or provided to any other person. Each person that receives a copy by acceptance thereof represents and agrees that it will not distribute or provide it to any other person. This report is not an offer to buy or sell or a solicitation of an offer to buy or sell the securities mentioned herein. Eurobank and others associated with it may have positions in, and may effect transactions in securities of companies mentioned herein and may also perform or seek to perform investment banking services for those companies. The investments discussed in this report may be unsuitable for investors, depending on the specific investment objectives and financial position. The information contained herein is for informative purposes only and has been obtained from sources believed to be reliable but it has not been verified by Eurobank. The opinions expressed herein may not necessarily coincide with those of any member of Eurobank. No representation or warranty (express or implied) is made as to the accuracy, completeness, correctness, timeliness or fairness of the information or opinions herein, all of which are subject to change without notice. No responsibility or liability whatsoever or howsoever arising is accepted in relation to the contents hereof by Eurobank or any of its directors, officers or employees. Any articles, studies, comments etc. reflect solely the views of their author. Any unsigned notes are deemed to have been produced by the editorial team. Any articles, studies, comments etc. that are signed by members of the editorial team express the personal views of their author.

Introduction

This report looks at the structure and the underlying assumptions of Greece's draft budget for 2017, which was released earlier this week. Based on an analysis of its main components, it claims that the programme target for a 0.5% of GDP primary surplus this year remains well within reach, while the respective target for 2017 (+1.75% of GDP) is deemed attainable, conditional on a notable improvement in domestic economic activity in the months and quarters ahead. Implementation risks for the new budget (as well as for the attainability of the 2018 fiscal target) are contained by the fact that a great deal of parametric fiscal measures for the period 2016-2018 (worth c. 3ppts-of-GDP in terms of projected net savings) has been legislated already, as a prior action to the 1st review. Furthermore, the new programme features significant buffers and a rigid surveillance mechanism to ensure that significant deviations from the aforementioned targets are avoided. However, the real problem resides with what is officially projected for the period after the termination of the current programme in August 2018 i.e., annual primary surpluses as high as 3.5% for a number of years or even decades. Such projections are deemed to be overly optimistic, to say the least. So, what can be done to secure a sustainable fiscal position that would allow for adequate fiscal space to secure a return to sustainable economic growth? In view of the current economic and political realities in the euro area, the solution can be no other than a substantial relaxation of the medium-term fiscal target (3.5% of GDP) in the context of the medium-term debt relief framework that is supposed to be implemented following the successful completion of the present bailout programme. Our analysis indicates that a relaxation of the medium-term fiscal target to as low as 1.5% of GDP could be accommodated within the general debt relief framework decided at the Eurogroup meetings of May 9 & 24, 2016.

Part I - Draft 2017 Budget: underlying assumptions & attainability of fiscal targets

Greek government unveils draft budget for 2017: Earlier this week, the Greek government unveiled its draft budget for the coming fiscal year (FY-2017), with the final document expected to be submitted for vote to Parliament by November 21, 2016. The main targets, structure and key macroeconomic assumptions of the new budget are highlighted below (see also *Tables 1.1 & 1.2* in the Appendix).

Main macroeconomic assumptions: The new budget is framed on an improved macroeconomic environment, envisaging real GDP growth of 2.7% next year against a slight output contraction of -0.3% in 2016. That is, assuming swift implementation of the fiscal and structural reforms agenda agreed with official creditors in the context of the new (3rd) bailout programme. These projections fall on the optimistic side of market expectation and yet they are slightly below the respective forecasts presented in the IMF's latest World Economic Outlook (real GDP growth of 0.1% and 2.8% in 2016 and 2017, respectively). In more detail, all major expenditure-side GDP components are seen exhibiting positive growth in 2017, with the exception of real public consumption, which is expected to record a slower pace of contraction relative to this year (-0.3% vs. -1.5% in

October 6, 2016

2016). Real private consumption growth is projected to switch into positive territory (+1.8% vs. -0.6%), supported by an expected improvement in disposable incomes amid a further increase in employment and a rebound in consumer confidence. Investment spending is expected to continue providing a positive contribution (expected real growth of 9.1% vs. 3.3% in 2016) mainly on the back of the anticipated increase in bank lending and the continuation of strong rates of absorption of EU structural funds. A positive contribution to 2017 GDP is also expected from net exports, due to a further relaxation of capital controls. Elsewhere, unemployment is projected to remain in a declining path for the fourth year in a row (22.4% vs. 23.5% in 2016), while HICP inflation is expected to turn positive for the first time since 2012 (+0.6% vs. 0.0% in 2016), supported by higher oil prices and the recovery of domestic demand.

Key budget forecasts & targets: Greece's general government deficit (in ESA10 terms) is expected to shrink to 1.3%-of-GDP in 2017 from 2.8%-of-GDP this year (Table 2). The new budget's projections for the general government primary balance stand at 0.9% of GDP and 2.2% of GDP in 2016 and 2017, respectively. In programme terms, the draft budget forecasts a primary surplus of 1.8%-of-GDP (c. €3.3bn) next year, broadly in line with the 1.75% of GDP target envisaged in the new bailout programme. In a similar vein, this year's primary surplus is expected to exceed the 0.50%-of-GDP programme target by c. €230mn, coming in at 0.63%-of-GDP. The latter is based on rising optimism -- derived from the latest budget execution data -- that the yield of the fiscal measures implemented in the context of the new stabilization programme will exceed initial expectations.¹ It should be noted that the greatest part of the new fiscal measures to ensure attainability of the agreed budget targets for the period 2016-2018 was legislated (and implemented) last spring, as prior action to the 1st programme review. This alleviates implementation-related concerns as regards the 2017 budget.

Year-to-September state budget execution outperforms targets: According to preliminary data available for the execution of the state budget on a modified cash basis, the overall budget balance for the period January-August 2016 recorded a deficit of €1,035mn, against a targeted shortfall of €3,880mn. Furthermore, the state budget primary balance (which does not include interest payments) recorded a surplus of €3,756mn (c. 2.1% of GDP), against a targeted balance of €980mn (c. 0.6% of GDP). In more detail, state budget net revenues amounted to €31,950mn, underperforming the respective budget target by €584mn. However, this was entirely due to lower than projected public investment program (PIB) receipts, while ordinary budget revenue (consisting, mainly, of indirect and direct tax receipts) exceeded the year-to-August target penciled in the 2016 budget by €464mn or 1.6%. The good performance of budget revenue appears to have continued in September (full data for the state budget execution are not yet out for that particular month). Indeed, according to an official press release yesterday, net ordinary revenue for the first nine months of 2016 period amounted to 37.29bn, higher by c. €1.36bn (or 3.8%) relative to the respective budget target. On the expenditure side, state budget outlays for the period January-August 2016 amounted to €32,985mn, coming in significantly lower than the respective budget target (€36,414mn). This was primarily due to the under-execution of primary expenditure by c. €2bn. Year-to-August PIB outlays were also lower (by €883mn) than the target.

2016 fiscal target well within reach: The overall picture emerging from the analysis above is that of a significant outperformance of the primary surplus target envisaged in the 2016 budget for the period January-September 2016. For the first eight months of the year, this outperformance is estimated at c. 1.9% of GDP, adjusted for the fact that the first instalment of the property tax (ENFIA) was actually received in September this year, instead of August as envisaged in the budget. This comes without any under-execution of tax refunding (relative to what was accounted for in the budget) and supports the view that the targeted primary surplus for 2016 remains well within reach. A great part of the excess primary surplus will likely be spent towards the end of this year (in the form of public investment and other expenditure), but, again, this would be supportive for Q4 GDP growth. Apart from the new fiscal measures legislated in May and June 2016, a range of institutional reforms underway -- including, inter alia, the reorganization of the independent revenue agency (programme milestone) -- appear to have also been conducive in the strengthening of

¹ To facilitate attainability of the agreed fiscal targets, the new budget incorporates part of a package of (permanent) parametric measures for the period 2016-2018 that were legislated earlier this year as a prior action to the 1st programme review. These include: (i) a reform of the personal income tax framework (expected yield savings equivalent to 1ppt-of-GDP over the period 2016-2018); a major pension-system reform (1ppt-of-GDP in 2016-2018); (iii) over 0.2%-of-GDP in 2016-2018 from a further increase in the standard VAT rate to 24%; (iv) up to 0.2%-of-GDP in extra savings from the public sector wage bill; and (v) 0.6%-of-GDP from other parametric measures, mainly in the areas of motor vehicle taxation, excise and consumption taxes (primarily on energy products alcoholic beverages and tobacco).

October 6, 2016

VAT and other revenue since July 2016. In addition, the increased use of electronic means of payments due to the introduction of capital controls in June 2015 has led to a significant rise in the reporting of transactions for tax purposes. Finally, expectations for a somewhat milder than expected recession in 2016 provide additional support to our constructive view as regards the attainability of this year's fiscal target. Notably, the IMF has lately revised its forecast for Greek real GDP growth in 2016 to +0.1%, which compares with a forecast of -0.3% penciled in Greece's draft 2017 budget.

2017 growth outlook: drivers & risks: As noted, the new budget is framed on an improved macroeconomic scenario, envisaging real GDP growth of 2.7% next year. This is higher than the current market consensus (between 1.0% and 1.3% according to Bloomberg, Reuters and Consensus Focus Economics), but broadly in line with both the EC Spring forecasts (+2.7%) and the latest IMF projection (+2.8%). Our GDP growth forecast for next year currently stands at 2.3%, but we believe that the evolution of the domestic economy in the months and quarters ahead will crucially depend on a number of factors, the most important of which include: i) the timely conclusion of 2nd programme review (that is, assuming disbursement of the €2.8bn pending ESM loan sub-tranche by late October); and ii) a notable pick-up in domestic sentiment, investment and export activity. In more detail, crucial factors towards this direction include: a) the continuation of product and labor market reforms aiming to create a more business friendly environment, enhance competitiveness and boost extroversion²; b) the implementation of reforms to increase efficiency in the public sector and the judiciary system; c) the inclusion of Greece in the ECB's quantitative easing program (PSPP) -- as we explained in "*Possible QE for Greece: a game changer?*"³, Eurosystem purchases of eligible Greek government and government guaranteed debt could initiate as early as in January 2017; d) the further relaxation / removal of capital controls, with a view to boost depositor confidence and ease lingering investor worries over the safety of their cash-flows; e) the measurable progress in dealing with NPLs, which along with a further relaxation/removal of capital controls could notably improve the outlook for domestic credit⁴; f) the speedy absorption of EU structural funds (>€35bn committed for Greece in the EU budget for 2014-2020) and the utilization of available resources and possibilities provided by the Juncker plan (Greece's absorption of EU structural funds has actually improved considerably in the last few years); g) the continuation of official discussions on debt relief for Greece on the basis of the short and medium term measures agreed in May 2016 (assuming a timely completion of the 2nd programme review, we expect further specification and gradual implementation of the short-term debt relief framework before year end); and h) the absence of a major external shock emanating from e.g. the refugee crisis, the US elections, Brexit negotiations and the upcoming round of elections/referendums in a number of euro area countries in the months and quarters ahead.

Preliminary assessment on the attainability of next year's fiscal target: Ordinary budget net revenue is expected to grow by 0.3%YoY in 2017 against growth of 3.0%YoY forecasted for this year. As regards the main revenue components, direct tax receipts are projected to grow by 1.9%YoY in 2017, while indirect tax receipts are expected to increase by 5.9%YoY mainly on the back of: (i) favorable base effects due to a range of indirect tax hikes implemented in May and June 2016 (e.g., increase in the regular VAT rate to 24% from 23%) as well as certain other parametric fiscal measures to be implemented later this year (e.g., increase on the special consumption tax on heating oil as of October 1, 2016); and (ii) the planned implementation of additional parametric measures as of January 1st, 2017 (e.g., increase on the special consumption tax on tobacco products, imposition of a special levy on cable TV). On the expenditure side, the new budget incorporates a range of measures that are expected to generate net savings of c. €0.91bn in 2017, with the majority of them coming from the latest pension reform (c. €0.74bn).⁵ As regards the new budget projections, net ordinary outlays are expected to decrease by 2.64% YoY in 2017, mainly on the back of lower primary spending (-2.75%

² This would be of crucial importance in view of Greece's low rankings in international surveys on competitiveness and the quality of the business environment. Note that a few days earlier, the World Economic Forum ranked Greece at the 86th position among 138 countries in its annual competitiveness index (from 81st among 140 countries in 2015) as a result of, inter alia: red tape, an unstable political environment, high taxation and an inherently unstable tax system.

³ https://www.eurobank.gr/Uploads/Reports/GREECE_MACRO_Monitor_20160928.pdf

⁴ A more thorough analysis of the significant regulatory reforms legislated in recent months to deal with private-sector insolvency can be found in https://www.eurobank.gr/Uploads/Reports/GREECE_MACRO_Monitor_20160928.pdf

⁵ Total savings to be generated in 2017 by the implementation of the entirety of parametric fiscal measures envisaged in the present stabilization programme are projected to reach c. 3.98bn €bn (or €2.59bn on a net basis, if one subtract the impact of new measures already implemented this year).

October 6, 2016

YoY). The achievement of the latter target is, to a certain extent, unrelated to GDP growth realization for next year, as a great deal of related measures have already been legislated (and implemented) in previous months as prior actions to the 1st programme review. Yet, the performance of other important budgetary aggregates in the period ahead (e.g. tax revenue, social security contribution receipts and unemployment benefits) will crucially depend on the ability of the economy to stage a notable strong bounce next year, as envisaged in the 2017 draft budget.

Part II - Recessionary impact of the new fiscal measures and potential offsets

Structure of the agreed fiscal consolidation package for 2016-2018: In the context of the new ESM programme agreed in August 2015, Greece committed to a revised fiscal path, envisaging primary outcomes for the general government budget (in ppts of GDP terms and under the programme definition) equivalent to -0.25% in 2015, 0.5% in 2016, 1.75% in 2017 and 3.5% from 2018 onwards. These targets were revised downwards from what was envisaged under the previous (2nd) stabilization programme i.e., a primary surplus of 4.5% from 2016 onwards. As a demonstration of commitment to the new fiscal consolidation programme, domestic authorities legislated in July and August 2015 fiscal measures of permanent nature, equivalent to c. 1.7% of GDP, comprising mainly reforms in the VAT system (hikes in the respective tax rates along with a gradual abolishment of special VAT discounts for certain Greek islands), increases in pensioners' health contribution rates and stronger disincentives for early retirement. As a result of the milder than expected decline of domestic economic activity in H2 2015 and also due to certain one-off factors, the 2015 primary surplus target of -0.25% was actually outperformed by c. 1ppt of GDP. Further to the fiscal measures legislated ahead of the signing of the new ESM programme, domestic authorities also implemented additional fiscal parametric measures as a prior action to the 1st programme review that was (mostly) completed in June 2016.⁶ These were in line with the MoU agreed in summer 2015 and were adopted to fully cover the projected fiscal gap to reach the new programme targets for the general government primary balance (see *Table 2* of the Appendix).

Estimating the fiscal drag from the new austerity measures: The quantification of the recessionary impact of the new fiscal measures is an inherently difficult exercise, which requires the empirical estimation of a range of fiscal multipliers pertaining to different revenue and expenditure categories. Such an empirical exercise was presented in a couple of our earlier empirical studies⁷, which documented, among others, the regime-dependence of fiscal multipliers in Greece i.e., higher multipliers in recessionary phases than in expansionary output regimes. However, the presentation of a comprehensive analysis on the fiscal drag stemming from the new austerity measures is well beyond the scope of this paper. Thus, we next present a quite simplistic way to estimate that impact, so as to get a rough idea about the potential macroeconomic effects of the new fiscal package. For simplicity purposes, let us assume a uniform fiscal multiplier of unity (1.0) for all parametric revenue and expenditure categories that are affected by the new fiscal consolidation program (including measures legislated in July-August 2015). As *Table 2* in the Appendix demonstrates, net *incremental* savings accruing to the primary balance as a result of the implementation of these measures are estimated at c. 0.7 in 2016, 1.6 (=2.3-0.7) in 2017 and 0.7 (=3.0-2.3) in 2018, all in percent-of-GDP terms. This would then be equivalent to an estimated (nominal) recessionary impact of €1.75bn this year, €1.81bn next year and €1.89bn in 2018. This is not an immaterial drag, considering the current weak state of the domestic economy. It should, however, be noted that a partial offset could be provided by the ongoing clearance of state arrears to tax payers and third parties (e.g. construction companies and suppliers). Out of the €10.3bn ESM loan instalment attached to the 1st programme review (€7.5bn disbursed to Greece in July plus €2.8bn expected by end-October), €3.5bn have been committed for the clearance of arrears. Up to this point, it is estimated that over €1.3bn has been used to settle outstanding state debts (c. €6.9bn in August 2016). Looking further ahead, additional funds will be released for this purpose, with a view to settle

⁶ Authorities are in the process of completing the 15 *pending* prior actions linked to the 1st programme review - 12 milestones legislated already, with the remaining 3 expected to be finalized ahead of the October 10th Eurogroup, which is expected to give the green light for the release of the €2.8bn ESM loan sub-tranche.

⁷ Monokroussos, Platon and Thomakos, Dimitris, 2012, "Fiscal Multipliers in deep economic recessions and the case for a 2-year extension in Greece's austerity programme", *Economy & Markets, Global Markets Research, Eurobank Ergasias S.A.*, and Monokroussos, Platon and Thomakos, Dimitris, 2013, "Greek fiscal multipliers revisited: Government spending cuts vs. tax hikes and the role of public investment expenditure", *Economy & Markets, Global Markets Research, Eurobank Ergasias S.A.*

October 6, 2016

the full stock of accumulative arrears (net basis) by June 2017. Note that the current bailout programme incorporates funding up to €7bn committed for the clearance of outstanding state debts overdue for more than 90 days.

Part III - Attainability of medium-term fiscal targets

Taking into consideration the new parametric fiscal measures that were legislated last spring to reach the primary surplus targets envisaged in Greece's current stabilization programme, one could forecast fulfillment of these targets in both 2017 and 2018. That is, assuming that the domestic macro situation evolves broadly in line with the present baseline scenario, which expects a switch into positive GDP growth in the coming two years (2.7% in 2017 and 3.1% in 2018). Besides the recent implementation of the aforementioned parametric fiscal measures, a tighter fiscal surveillance framework for Greece and the programme's built-in fiscal buffers provide additional assurances regarding the fulfilment of the agreed targets. Having said that, the programme assumption that Greece can sustain annual primary surpluses as high as 3.5% of GDP for a number of years or even decades following the termination of the present programme (i.e., after 2018) is overly optimistic, to say the least. In what follows we provide additional analysis on the aforementioned points.

Contingent mechanism & built-in fiscal buffers: As a reminder, domestic authorities have legislated last spring a contingent fiscal mechanism that ensures that additional measures are automatically implemented to address any divergence from the agreed targets for the primary balance.⁸ Furthermore, in addition to the parametric fiscal measures highlighted above, domestic authorities have committed to a range of administrative reforms aiming to: a) boost budgetary revenue on a lasting basis by e.g. addressing shortfalls in tax collection and enforcement as well as creating better incentives for tax and social security contributions compliance; and b) gain better control over expenditure by e.g. implementing extensive expenditure audits, including on defense spending and state owned enterprises. According to the European Commission's estimates (and based on the commitments made by the Greek side), such reforms would generate additional savings of 0.1 and 0.4 ppts of GDP in 2017 and 2018, cumulatively. These would be over and above what is currently projected in the agreed package of parametric fiscal measures. The baseline of all these is that despite the serious challenges for the domestic economy from the new fiscal consolidation framework (e.g. emphasis on higher taxation than on additional spending cuts, further increases of already high direct and indirect tax rates on relatively narrow basis and significantly higher corporate tax rates relative to competitor economies in the broader region), the new framework includes a number of important features to: *firstly*, automatically correct deviations from the annual fiscal targets and *secondly*, provide a strong incentive to the government to meet these targets so as to prevent undue delays in programme loan disbursements and, most importantly, avoid the implementation of new austerity measures via the activation of the contingent fiscal mechanism. Last but not least, the current framework's built-in buffers (in the form of the administrative fiscal reforms highlighted above) offer some additional comfort as regards the attainability of the fiscal targets for the period 2016-2018, provided that no significant deviations from the present baseline macroeconomic scenario materialize in the quarters and years ahead.

Why a 3.5% of GDP primary surplus is deemed to be unsustainable in the medium-term: Although there is a relatively recent historical precedent in Greece of significant primary surpluses for a number of years (i.e., average annual primary surplus of 2.1% of GDP in 1996-2000), it is arguably optimistic to think that the domestic economy can sustain annual surpluses as high as 3.5%-of-GDP for a number of years or even decades post-2018, as it is currently assumed in the country's stabilization programme. This point has been emphasized in the latest IMF Country Report for Greece⁹, which provides targets of the primary balance that could be sustained in the long-run. More specifically, a long-run primary surplus of 1½ % of GDP would be "a more realistic assessment of Greece's ability to deliver on fiscal policy commitments, in light of reform fatigue after several years of consolidation". The said report -- which was actually released before additional parametric measures worth c. 3% for the period 2016-2018 were legislated by the Greek parliament as a prior action to the completion of the 1st programme review in June 2016 -- urged for additional fiscal

⁸ The said mechanism envisages the implementation of corrective structural measures (including revenue measures) up to the size of 2% of GDP on an annual basis, in the case of negative deviations between budgetary outcomes and the agreed fiscal targets.

⁹ IMF Country Report No. 16/130, "Preliminary Debt Sustainability Analysis – Updated Estimates and Further Considerations", May 2016.

adjustment to prevent falling back into a primary deficit (of around 1 percent of GDP) over the medium-term. According to the IMF staff, this would be due to a number of factors, which are detailed in *Table 3* of the Appendix. In a nutshell, some of these factors include: a) an expected re-emergence of spending pressures in the years ahead due to the fact that government spending on goods, services and health have already been cut to levels that inhibit the proper function of the state and despite the fact that Greece faces one of the highest old-age dependency ratios; b) even after the recent pension system reform, related spending remains by far the highest in the euro area and unsustainable in the long-run due to adverse demographics and still generous pensions to existing retirees; c) the income tax system in Greece offers a large implicit tax-free threshold which exempts more than half of wage and pension earners (compared to c. 9% in the euro area) and; d) cross-country evidence shows that a 3½ percent of GDP primary surplus is difficult to achieve and sustain in the long-run, especially after long recessions and when faced with high structural unemployment. To these factors we would add the need to create the required fiscal space in the years to come so as to allow a gradual reduction of overly high statutory tax rates on domestic corporations and individuals falling in the higher income tax brackets as well as for accommodating higher spending in public investment, which has been nearly halved during the crisis years.

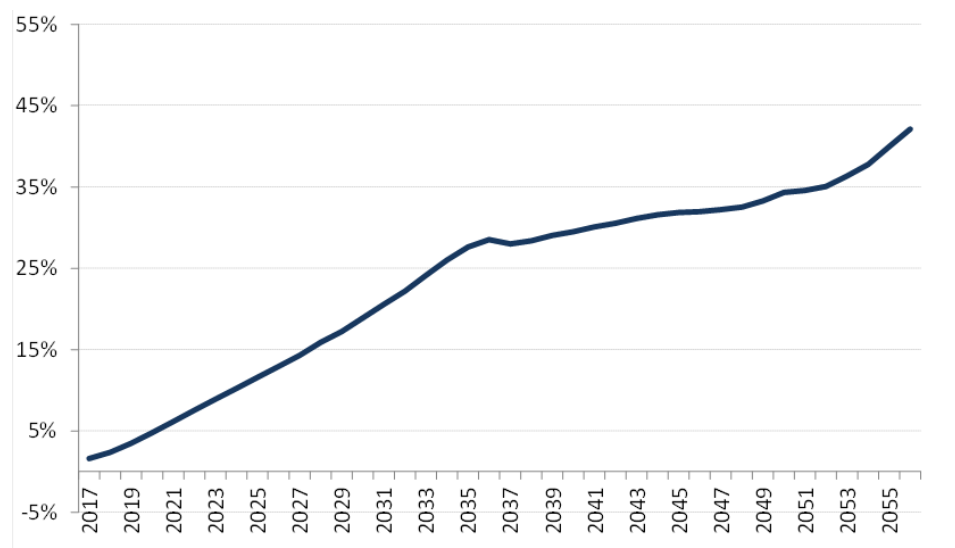
Part IV - Scope for reducing the primary surplus target post-2018?

As noted already, the maintenance of a general government primary surplus as high as 3.5% of GDP for a number of years or even decades in the post-2018 period would be extremely difficult for an economy like the Greek one to sustain. Thus, it comes as no surprise that many analysts have already doubted the attainability of such a target and a number of high-level domestic officials have recently argued in favor of reducing the medium-term (post-2018) primary surplus target to as low as 2.0% of GDP in order to facilitate a faster return of the domestic economy to positive and sustainable growth rates. Then, the question is whether, when and under what conditions such a development could materialize, given prevailing political and economic realities in Greece and the euro area. A potential answer to these questions was presented in "*Public debt restructuring strategies & evaluation of the agreed framework for debt relief*", *Eurobank Economic & Markets Research*, 21 June 2016.¹⁰ In a nutshell, we believe that a significant relaxation of the medium-term fiscal target could be accommodated in the context of the medium-term debt relief framework for Greece that was agreed at the Eurogroup meetings of May 9 and 24, 2016. As per the latter decisions, the said framework is expected to be considered after the successful completion of the present ESM programme for Greece in August 2018. For demonstration purposes, *Figure 1* below depicts the cash flow savings that could be generated by the implementation of a hypothetical medium-term debt relief structure that would accommodate a relaxation of the medium-term target (post-2018) to 1.5% of GDP per annum.

¹⁰ https://www.eurobank.gr/Uploads/Reports/GR_DSA_June2016.pdf

October 6, 2016

Figure 1 - Cash flow savings from medium-term debt relief (time evolution of NPV savings as % of GDP from $T_0 = 2017$ to $T = 2060$)



Source: IMF, May 2016; Eurobank Research

Key assumptions of indicative debt relief scenario

Macroeconomic assumptions broadly in line with the IMF's May 2016 DSA:

- Long term real GDP growth: 1.2%
- Long term GDP deflator inflation: 1.9%
- General government primary balance (2018 onwards): 1.5% of GDP
- Privatization revenue in line with the IMF's DSA

Market rate for refinancing Greek debt assumed at c. 6.0% in 2019 and increasing/decreasing afterwards by 4bps per 1ppt increase/decline in debt ratio.

Debt restructuring after completion of current programme (mid 2018)

For simplicity purposes, market refinancing is assumed to take place through the issuance of 5 years fixed coupon bonds.

Discount rate for NPV calculation assumed at 3%.

October 6, 2016

Appendix

Table 1.1- Greece's draft budget 2017: main macroeconomic aggregates (realization & forecasts, % YoY)

	2015	2016 (f)	2017 (f)
Real GDP	-0.2	-0.3	2.7
Private consumption	0.3	-0.6	1.8
Public consumption	0.0	-1.5	-0.3
Investment	0.7	3.3	9.1
Exports of goods & services	-3.8	-6.3	5.3
Imports of goods & services	-6.9	-2.6	3.3
GDP deflator	-0.6	0.4	0.8
Harmonized CPI	-1.1	0.0	0.6
Employment*	1.9	2.0	2.0
Unemployment* (f)	22.9	21.5	20.4
Unemployment** (f)	24.9	23.5	22.4

*national accounts basis

** domestic basis

Source: FinMin, Eurobank Economic Research







Table 1.2 - General Government draft Budget 2017: main fiscal aggregates (ESA2010, millions in euros)

	2015	2016		2017 targets/forecasts
		Budget projection	Forecast	
I. Central government revenue (a+b)	51,592	53,653	52,536	52,444
a. Ordinary budget net revenue	46,760	49,233	48,160	48,289
b. Public Investment Budget (PIB) revenue	4,832	4,420	4,376	4,155
II. Central government expenditure (c+d)	55,919	57,180	57,224	55,892
c. Ordinary budget expenditure	49,513	50,430	50,474	49,142
d. Public Investment Budget (PIB) outlays	6,406	6,750	6,750	6,750
III. State Budget Balance- ESA 2010	-8,537	-6,373	-7,370	-4,564
% GDP	-4.8	-3.7	-4.2	-2.5
State Budget Primary Balance-ESA 2010	-1,725	557	-1,000	1,686
% GDP	-1.0	0.3	-0.6	0.9
IV. General Government Balance- ESA 2010	-12,756	-3,695	-4,856	-2,363
% GDP	-7.2	-2.1	-2.8	-1.3
General Government Primary Balance-ESA 2010	6,055	3,126	1,610	4,003
% GDP	3.4	1.8	0.9	2.2
V. General Government Primary Balance-Programme Terms	1,278	919	1,111	3,330
% GDP	0.73	0.53	0.63	1.83
% GDP (programme target)	-0.25	0.50	0.50	1.75
VI. Public Debt	311,452		315,170	318,670
% GDP	176.9		178.9	174.8
GDP	176,023	174,438	176,197	182,332

Source: FinMin, Eurobank Economic Research

October 6, 2016

Table 2 - Overview of the parametric fiscal measures to reach the ESM primary surplus targets in 2016 - 2018 (net savings)

	% of GDP			bn EUR		
	2016	2017	2018	2016	2017	2018
Primary balance target 1 /	0.5	1.75 	3.5	0.9	3.2	6.6
Primary balance under baseline scenario 2/	-2.0	-5.0	0.5	-0.4	-1.0	1.0
Fiscal gap under baseline scenario	0.7	2.3	3.0	1.3	4.1	5.7
I. Pension reform	0.4	0.8	1.1	0.7	1.4	2.0
II. Income tax reform	0.1	0.8	1.0	0.2	1.4	1.9
III. Other parametric measures	0.2	0.8	0.9	0.4	1.5	1.7
VAT reform	0.1	0.2	0.2	0.3	0.4	0.4
Wage bill reform	0.0	0.1	0.2	0.0	0.1	0.3
Other tax measures	0.1 	0.5 	0.5 	0.1 	0.9 	1.0
Total parametric policy package (I+II+III)	0.7	2.4	3.0	1.3	4.3	5.6
Fiscal gap after total permanent parametric policy package 3/	0.0	-0.1	0.0	0.0	-0.1	0.0
Memo items GDP - bn EUR				175.1	181.3	189.3

1/ Primary balance as defined under the Economic Adjustment Programme 2/ Includes measures legislated in July - August 2015

3/ (-) signals over - performance vis-a- vis target; (+) signals fiscal gap vis-à-vis target

Source: European Commission, "Compliance Report The Third Economic Adjustment Programme for Greece - First Review", June 2016

October 6, 2016

Table 3 – Why a 3.5% of GDP primary surplus for Greece is deemed to be unsustainable in the long-run & the case for further adjustment

- a. A gradual decline in revenue relative to GDP, as: (i) the recovery is expected to rely on investment and exports, which are not tax rich; (ii) almost half of social contributions (e.g. self-employed) are not linked to income, (iii) property taxes are not linked to market prices; and (iv) one-off revenues from bank liquidity support will taper off.
- b. A gradual re-emergence of spending pressures due to the fact that past expenditure cuts have not been supported by reforms. Furthermore, spending on goods and services has already fallen to 16% of primary spending (lower than its pre-crisis level of 19% and a euro-area average of 22%), while health-related expenditure has been compressed to 4½ % of GDP (i.e., well below the euro area average of 7% of GDP), despite the fact that Greece faces one of the highest old-age dependency ratios.
- c. The pension system is deemed unsustainable, with related spending remaining unsustainable and by far the highest in the euro-area (17½ % of GDP, out of which 10% represents budgetary transfers to the system compared to c. 2½ % in the euro-area). According to the IMF, this reflects very generous pensions to existing retirees, whereas the recent reform aims to address this problem over the long-run by reducing benefits of future retirees.
- d. The income tax system in Greece offers a large implicit tax-free threshold, which exempts more than half of wage and pension earners (compared to c. 9% in the euro area). This leads to a highly skewed income tax distribution, with the top decile contributing 60% of the tax revenue. As a result, collection rates have been declining steadily despite efforts to strengthen tax administration, and tax debt has reached 50 % of GDP, the largest in the euro-area.
- e. Finally, cross-country evidence shows that a 3½ percent of GDP primary surplus is difficult to achieve and sustain in the long-run especially after long recessions and when faced with high structural unemployment. On this point, the IMF analysis notes that in a sample of 55 countries in the last 200 years, there have been only 15 episodes of recessions longer than 5 years, and none of these countries sustained a primary surplus in excess of 2% of GDP after such a long period of negative growth. (Greece is already in its 7th consecutive year of negative or stagnant at best GDP growth, since its debt crisis erupted in late 2009/early 2010). Furthermore, among the countries that experienced double-digit unemployment rates since 1980, only four (out of 22) managed to maintain a primary balance higher than 3 percent of GDP for 10 years, and only two if commodity exporters are excluded. As a matter of comparison, Greece's unemployment rate has been double digit in the last several years, currently standing at c. 23.5% vs. a record high of 27.5% reached in late 2013. Finally, a look at the more recent history reveals that only very few countries have managed to sustain high primary balances.

Source: IMF Country Report No. 16/130, May 2016

Eurobank Economic Analysis and Financial Markets Research

Dr. Platon Monokroussos: *Group Chief Economist*
pmonokrousos@eurobank.gr, +30 210 37 18 903

Dr. Tassos Anastasatos: *Deputy Chief Economist*
tanastasatos@eurobank.gr, +30 210 33 71 178

Research Team

Anna Dimitriadou: *Economic Analyst*
andimitriadou@eurobank.gr, +30 210 3718 793

Ioannis Gkionis: *Research Economist*
igkionis@eurobank.gr +30 210 33 71 225

Stylios Gogos: *Economic Analyst*
sgogos@eurobank.gr +30 210 33 71 226

Olga Kosma: *Economic Analyst*
okosma@eurobank.gr +30 210 33 71 227

Arkadia Konstantopoulou: *Research Assistant*
arkonstantopoulou@eurobank.gr +30 210 33 71 224

Paraskevi Petropoulou: *G10 Markets Analyst*
ppetropoulou@eurobank.gr, +30 210 37 18 991

Galatia Phoka: *Research Economist*
gphoka@eurobank.gr, +30 210 37 18 922

Theodoros Stamatou: *Senior Economist*
tstamatou@eurobank.gr, +30 210 3371228

Eurobank Ergasias S.A, 8 Othonos Str, 105 57 Athens, tel: +30 210 33 37 000, fax: +30 210 33 37 190, email: EurobankGlobalMarketsResearch@eurobank.gr

Eurobank Economic Analysis and Financial Markets Research

More research editions available at <http://www.eurobank.gr/research>

- **Daily Overview of Global markets & the SEE Region:** Daily overview of key macro & market developments in Greece, regional economies & global markets
- **Greece Macro Monitor:** Periodic publication on the latest economic & market developments in Greece
- **Regional Economics & Market Strategy Monthly:** Monthly edition on economic & market developments in the region
- **Global Economy & Markets Monthly:** Monthly review of the international economy and financial markets

Subscribe electronically at <http://www.eurobank.gr/research>

Follow us on twitter: <http://twitter.com/Eurobank>

