Greece Macroeconomic Outlook 2016

Summary of views

Based on recent domestic developments and the progress in implementing the fiscal consolidation and structural reforms agenda agreed with official creditors, this report provides a detailed analysis of Greece's macroeconomic outlook for 2016.

On the economy's short-term performance, our in-house econometric models for nowcasting Greek GDP signal a continuation of the domestic recession in Q4, with the respective range of year-on-year real growth estimates falling between -1.5% and -0.8%. Barring any major revisions in past GDP data, this would translate into a full-year contraction between -0.30% and -0.15% in 2015, with the respective carry over impacts into next year coming in between -1 and -0.5 percentage points.

For next year, a simulation exercise for real GDP growth in Greece is conducted in order to account for latest developments, both on the domestic front and the euro area. In more detail, a quantification of trends in GDP components is conducted, with economic rationale invoked for each, and total growth extracted from there.

The simulation exercise points to a mid-point real GDP forecast of around -1%, as recessionary pressures in domestic demand, consumption in particular, due to the impact of fiscal measures on disposable incomes are only partially counterbalanced by more benign developments in the external sector. This estimate is provisional since the detailed specification of measures is not finalized yet. No extra measures are assumed for the achievement of the 2016 target apart from those agreed already.

Significant uncertainty to the growth outlook remains. Risks to the baseline forecast are assessed, including the final outcome for 2015 GDP growth, which constitutes the basis for the projection, the timeliness and outcome of negotiations on the 1st programme review and the degree of political ownership in implementing the reforms.

Taking into account recent developments, this note also presents revised projections on the general government borrowing needs and sources of funding over the entire time horizon of the new bailout programme and beyond. Moreover, it provides an updated analysis of public debt dynamics and the potential (cash flow and stock) impact of new debt relief, which is expected after the successful completion of the 1st programme review.

In more detail: a) under the present baseline macro scenario, the overall amount of official creditor loans needed to cover Greece's public sector borrowing requirement over the 3-year horizon of the new bailout may prove lower than expected i.e., €70bn or less vs. c. €84bn envisaged initially; b) 2016 is expected to be more manageable than this year in terms of debt service payments; and c) a new relief package including significant maturity extensions and payment deferrals on old and new EU loans in the context of the three bailout programmes could go a long way towards improving the long-term sustainability of fiscal accounts.
As regards the fiscal consolidation and structural reforms conditionality underlying the new bailout programme, Greece has already completed 60 out of a total of c. 220 agreed milestones. These include, among others, a number of key financial sector reforms required for the successful completion of the bank recapitalization as well as several contentious and politically sensitive issues such as the protection of primary residence foreclosures and the framework for the resolution of certain categories of bank non-performing loans. Assuming that the ESM approves the release of the pending €1bn loan installment in the coming sessions, the achieved progress will have paved the way for the release of €21.4bn in ESM funding under the new bailout programme. This consists of the €16bn disbursed in three tranches since mid-August to mainly cover debt service payments and around €5.4bn for the recapitalization of Greece’s four systemic banks.

Nevertheless, a number of challenges lie ahead, primarily pertaining to the 1st programme review and the implementation of several other reforms scheduled for 2016. In this context, the timely completion of the 1st review is of key importance for the initiation of official discussions on debt relief, the re-introduction of a Greek collateral waiver and the IMF’s financial participation in the programme. Among the stickiest issues as regards the conditionality attached to the 1st programme review are the planned overhaul of the social security system, additional labour market reform and certain amendments to the current income tax system. However, difficult the implementation of these reforms may be, it is deemed necessary for stabilizing sentiment, attracting increased flows of investment and eventually boosting the economy’s medium-term growth potential.

| Table 1: Key Macroeconomic Variables – Realizations & Forecasts |
|-----------------|-----------------|-----------------|-----------------|
| 2014, €bn (nominal) | 2015 yoy% Real Growth | Shares in 2015 GDP | 2016 yoy% Real Growth |
| Private Consumption | 125.0 | 0.4 | 69.3 | -2.9 |
| Government Consumption | 35.4 | 0.1 | 21.6 | -0.8 |
| Total Consumption | 118.9 | 0.3 | 91.0 | -2.4 |
| Gross Capital Formation | 21.7 | -16.1 | 10.2 | -1.5 |
| Domestic Demand | 140.6 | -1.6 | 101.1 | -2.3 |
| Imports | 62.6 | -9.0 | 29.6 | -2.1 |
| Exports | 58.0 | -5.2 | 28.4 | 2.4 |
| GDP | 177.6 | -0.3 | 100.0 | -1.0 |
| GDP Deflator (yoy%) | 2014 | 2015 | 2016 |
| -2.2 | -1.0 | 0.2 |
| Unemployment Rate (%) | 26.5 | 25.3 | 25.7 |
| Private Sector Deposits (yoy%) | -1.8 | -22.3 | 6.3 |
| Private Sector Credit (yoy%) | -2.7 | -2.7 | 0.4 |
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1. Nowcasting Greek GDP for Q4 2015

Platon Monokroussos

Based on a number of recent macro data releases up to December 16th, Table 1.1 presents our preliminary estimates for real GDP in Q4, 2015 as well as our respective forecasts for the full year and the implied carry over impacts into 2016 (also see brief methodological note in the paragraph below).

Table 1.1 – Greek real GDP (realizations & forecasts)

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<tr>
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<tbody>
<tr>
<td>Real GDP (EURbn)</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>seasonally &amp; calendar adjust.</td>
<td>46.5</td>
<td>46.6</td>
<td>46.2</td>
<td>45.8 to 46.1</td>
<td>185.0 to 185.3</td>
<td></td>
</tr>
<tr>
<td>Real GDP (%) YoY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seasonally &amp; calendar adjust.</td>
<td>0.4%</td>
<td>0.9%</td>
<td>-1.1%</td>
<td>-1.5% to -0.8%</td>
<td>-0.15% to -0.33%</td>
<td>-0.54 to -1.06ppts</td>
</tr>
<tr>
<td>Real GDP (%) QoQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>seasonally &amp; calendar adjust.</td>
<td>0.0%</td>
<td>0.3%</td>
<td>-0.9%</td>
<td>-0.9% to -0.2%</td>
<td>n.a.</td>
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</table>

Source: EL.STAT., Eurobank Economic Research

1.1. A brief note on MIDAS (Mixed Data Sampling) methodology for nowcasting Greek GDP

MIDAS (Mixed Data Sampling) is a class of linear and non-linear regression models that exploits the use of higher frequency information (herein monthly) in lower frequency settings (herein quarterly). Their use is particularly useful when forecast updating is important as new information arrives from higher frequency variables (e.g. monthly-sampled variables such as retail sales and industrial production) ahead of the release of lower frequency variables (e.g. quarterly-sampled GDP data).

The linear class of MIDAS models also comes under the name Bridge models, in the sense that they connect information from two different frequencies and thus «bridge» the gap between lower frequency data releases with the use of higher frequency variables. After aligning the data¹ and accounting for publication lags, we select how to structure our model in terms of: explanatory monthly variables (usually, contemporaneous and lagged values of these variables pertaining to the particular quarter for which we want to forecast GDP), lags of the dependent quarterly variable (herein GDP) and/or other quarterly variables.

This set of lags and concurrent values makes up the «design» matrix used in our estimation. For model specifications that include many monthly variables and their lags one can resort to non-linear MIDAS models, which constrain the number of parameters to be estimated. In the particular exercise presented herein, this is not necessary as the number of significant variables per model tends not to exceed 2, excluding lags of GDP growth. Finally, our models pass all usual diagnostic tests before they are used to forecast future real GDP growth.

In the particular exercise presented herein our forecasts are based on a number of alternative specifications that include both a dynamic component of past quarterly real GDP as well as concurrent and lagged values of higher frequency (i.e., monthly) variables. The latter include retail sales volume, retail sales turnover, industrial production, consumer sentiment and economic sentiment.

Table 1.2 below summarizes the results of our MIDAS models under two forecasting scenarios. In the first scenario (models A-E), we derive our forecasts by using the dynamic (i.e., lagged) component of real GDP growth as well as the contemporaneous and dynamic (i.e., lagged) effects of the monthly variables (save model A, which only contains GDP’s own history). For each model pertaining to the first scenario, Table 1.2 depicts the monthly variable(s) being used in forecasting year-on-year GDP growth in Q4 2015.

¹ Data alignment is an important step as publication lags imply that when, for example, a quarterly series is updated we cannot align it with monthly variables in the same month or even a month before.
Results are given as ranges across different projections from the same model, coming from different timing applications (number of lags) of the observed values of the monthly variables. In the second scenario (models F-I), we drop the dynamic component of real GDP growth and examine only the impact of the higher frequency (monthly) variables.

As shown in the results table presented below, the full range of forecasts for real YoY GDP growth in Q4, 2015 fall between -3.1% and 0.6%. Yet, both mean and median forecasts across all estimated models indicate a mildly negative outcome. The 95% confidence interval for the mean forecast probably provides the best evaluation for the uncertainty of model forecasts giving us a range of -1.5% to -0.8%; as the interval is clearly skewed to negative territory, and given the most recent declines in monthly variables, we tend to support the case for a negative YoY GDP growth realization in Q4 2015.

Table 1.2 – MIDAS model forecasts for Greece’s year-on-year real GDP growth in Q4, 2015

<table>
<thead>
<tr>
<th>Greek GDP nowcasts for Q4 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>A - Benchmark (set of explanatory variables contain only lag(s) of dependent variable i.e., GDP): -1.1%</td>
</tr>
<tr>
<td>B - Retail sales volume, economic sentiment &amp; lags of GDP: -3.5% to -2.2%</td>
</tr>
<tr>
<td>C - Retail sales volume, consumer sentiment &amp; lags of GDP: -1.7% to -1.6%</td>
</tr>
<tr>
<td>D - Industrial production &amp; lags of GDP: -1.3% to 0%</td>
</tr>
<tr>
<td>E - Retail sales turnover &amp; lags of GDP: -1.5% to -1.4%</td>
</tr>
<tr>
<td>F - B without lags of dependent variable i.e., GDP: -1.7% to -1.5%</td>
</tr>
<tr>
<td>G - C without lags of GDP: -1.1% to 0.5%</td>
</tr>
<tr>
<td>H - D without lags of GDP: -0.5% to -0.2%</td>
</tr>
<tr>
<td>I - E without lags of GDP: -0.5% to 0%</td>
</tr>
</tbody>
</table>

Summary of all forecasts A to I:

| Mean = -1.6% to -0.9%                                                                 |
| Median = -1.5% to -0.5%                                                               |
| Std. Dev. = 0.6% to 0.8%                                                              |
| Full range = -3.1% to 0.6%                                                            |
| 95% confidence interval for mean forecast = -1.5% to -0.8%                           |

Source: Eurobank Economic Research

Tassos Anastasatos

<table>
<thead>
<tr>
<th></th>
<th>2014, bn.</th>
<th>2015 %yoy Real growth (projection)</th>
<th>Shares in 2015 GDP</th>
<th>2016 %yoy Real growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priv. Consumption</td>
<td>125.0</td>
<td>0.4</td>
<td>69.3%</td>
<td>-2.9</td>
</tr>
<tr>
<td>Gov. Consumption</td>
<td>35.4</td>
<td>0.1</td>
<td>21.6%</td>
<td>-0.8</td>
</tr>
<tr>
<td>Total Consumption</td>
<td>160.4</td>
<td>0.3</td>
<td>91.0%</td>
<td>-2.4</td>
</tr>
<tr>
<td>GCF</td>
<td>21.7</td>
<td>-16.1</td>
<td>10.2%</td>
<td>-1.5</td>
</tr>
<tr>
<td>Domestic demand</td>
<td>182.1</td>
<td>-1.6</td>
<td>101.1%</td>
<td>-2.3</td>
</tr>
<tr>
<td>Imports</td>
<td>62.6</td>
<td>-9</td>
<td>29.6%</td>
<td>-2.1</td>
</tr>
<tr>
<td>Exports</td>
<td>58.0</td>
<td>-5.2</td>
<td>28.4%</td>
<td>2.4</td>
</tr>
<tr>
<td>GDP</td>
<td>177.6</td>
<td>-0.3</td>
<td></td>
<td>-1.0</td>
</tr>
</tbody>
</table>

  GDP deflator: -2.2%  -1%  0.2%
  Unemployment Rate(% of l. f.): 26.5%  24.6%  25.7%

Key points

- This note offers a simulation exercise for real GDP growth in Greece in 2016 in order to account for latest developments, both domestic as well as the Eurozone outlook; a quantification of trends in components of GDP is conducted, with economic rationale invoked for each, and total growth is extracted from there.
- Under the main scenario, which takes into account only the expected impact of measures announced so far, real growth is estimated at -1.0% for 2016. The quantification integrates views of Eurobank economists. Risks to the baseline forecast are explained, including outcome of negotiations on the 1st revision of the 3rd Adjustment Programme and the final outcome of 2015 GDP growth.
- This estimate is provisional since the detailed specification of measures (and hence their impact on real disposable incomes) is not finalized yet. No extra measures are assumed for the achievement of the 2016 target apart from the ones agreed already. Significant uncertainty to the growth outlook remains.

2.1. Introduction

This note attempts a simulation exercise sketching the framework for the 2016 Greek GDP growth outlook. Hence, it should not be taken to comprise an exact forecast, given the unusually large uncertainties surrounding the macroeconomic landscape. The exercise incorporates the latest developments, both domestic as well as the Eurozone outlook, including the progress of the 1st revision of the 3rd Adjustment Programme of the Greek economy.
2.2. Analysis and Projection for 2015

The second estimate of Q3 2015 GDP data showed that the Greek GDP shrank in Q3 by -1.1%, reversing six consecutive quarters of positive yoy growth. This comprises an unusually large downward revision from the -0.4% decline appearing in the flash estimate. This revision moderated expectations for a milder than previously foreseen recession in 2015 as a whole. However, the Q1 and Q2 2015 readings, although also revised downwards, remained positive at +0.4% and +0.9% respectively. Consequently, it is almost certain that GDP fall in 2015 will be contained below the official EC forecast of a -1.4% recession and closer to the 2016 Budget’s forecast for stagnation in 2015. This assessment is also supported by the Nowcasting model of the previous section.

The overshooting of expectations came as an apparent surprise, given the uncertainty related to the prolonged negotiation of the Greek government with institutions, the imposition of bank holiday and capital controls, and the legislation of contractionary measures as part of the 3rd Adjustment Programme. However, a closer look on the data reveals that GDP resilience was driven, to a large extent, by private consumption. In the first three quarters of 2015 private consumption was growing on average by 0.9% yoy, at the same time when households’ disposable income was decreasing. The seemingly paradox phenomenon of consumption growing while confidence indices were plummeting and capital controls were being imposed is due to two reasons mainly. Firstly, uncertainty regarding the negotiation’s outcome and the country’s Euro participation motivated many households and businesses to withdraw their deposits from banks. Households alone withdrew €33.7bn between end 2014 - August 2015. As a result, ca €50bn of bank notes are currently in circulation in the economy, an amount equal to ca 28% of GDP, compared to a Eurozone norm of ca 10%. Consequently, many individuals chose to use cash for consumption in view of fears for upcoming negative developments.

Secondly, a trend of postponing payment of obligations emerged. Tax revenue in the first two quarters of the year underperformed in comparison to both the target of the previous programme (by almost €2bn), as well as against the respective period in 2014. In fact, undershooting was not limited to income taxes alone. Receipts on taxes on products decreased by -5% yoy in Q3 2015, at the same time when private consumption was increasing by 0.3% yoy and while VAT rate hikes had already started to be implemented. Similar trends were also observed in bank loans servicing, with NPLs increasing in that period, perhaps reinforced by expectations for mass write-offs.

By contrast to the increase in private consumption, Gross Fixed Capital Formation plunged in Q3 2015 by -12.9% yoy, reversing the recovery recorded from the second half of 2014. The decline is enlarged to a dramatic -27% for Gross Capital Formation, which includes inventories, since capital controls forced businesses to serve demand by depleting their inventories.

In addition, exports of goods and services declined in Q3 2015 by -11.4%, despite a good tourist season, thereby interrupting a string of positive readings in the six prior quarters. The net contribution of the external sector remained positive but only because imports decreased by an even faster rate of -19.9%. It has to be noted that the decline of exports is largely due to conjectural reasons, namely, oil prices decline and shipping rates decline. The same is true of imports as the decline comes largely from the sectors of fuels and ships’ purchases. Still, overall the economy slipped towards lesser openness.

Given that the final outcome of 2015 constitutes the basis for the 2016 forecast, a projection has to be made as to realisations of GDP components in the 4th quarter. This is done by extrapolation exploiting the most recent dynamics and in accordance to the findings of the Nowcasting model presented in the previous part. More specifically, for private consumption we use a full year projection of a +0.4% change, against the budget’s projection of +0.5%, on the back of a lagged pass through of contractionary fiscal measures legislated in August on disposable income and thus on consumption. For government consumption we project a +0.1% change, against the budget’s projection of -0.3%, assuming that the delayed implementation of some of the measures results in some slippage. For Gross Fixed Capital Formation, the positive reading of Q1 somehow counterbalances the deteriorating dynamics that developed in later months. GFCF is expected to continue its downward trend in Q4, also given an unfavourable base effect. For arriving at a projection for Gross Capital Formation, we need to take into account the massive destocking that took place in Q2 and Q3. Although the fourth quarter of each year is usually a period of re-stocking, constraints after the imposition of capital controls and adverse short-term disposable income prospects limit scope for an inventories recovery. On the other hand, bureaucratic procedures for approving import of production inputs are gradually normalizing. Overall, we project a -16.1% decrease of GCF.

Latest (October) data on imports show that non-oil imports increase, perhaps in an effort to replenish the shortages created by capital controls. This limits the overall decrease driven by low oil prices. However, the steep decrease of Q3 continues to weigh on the full year reading and Q4 is expected to remain in the red, given an unfavourable base effect; we pencil a -9% decrease for the
year as a whole, lower than the Budget’s projection of a -1.9% decrease. Regarding exports, October data show that the Q3 decline continues unabated, with non-oil exports also turning in the red, as irregularities in the supply chain due to capital controls start to bite. This renders the Budget’s projection of zero change unrealistic; we pencil a -5.2% decrease for the year as a whole.

Aforementioned trends in GDP components result in a projection for a -0.3% yoy decline in the 2015 GDP, slightly lower than the Budget’s projection of stagnation.

Regarding fiscal economics, the Budget projects that 2015 will close with a primary deficit of -0.2% of GDP according to the Programme definition of the fiscal outcome (-0.7% in ESA terms), against a target of a +3% of GDP primary surplus foreseen in the previous programme. The renegotiation of the fiscal target was included in June’s agreement as part of a more gradual path of fiscal consolidation, following fiscal slippage and growth retreat that ensued from the prolonged negotiation and associated erosion of confidence. The target for 2016 is set to a primary surplus of +0.5% of GDP according to the Programme definition. This nominally leaves more fiscal space relative to the target of the previous programme (+4.5%). However, the growth environment in which this target has to be achieved is significantly deteriorated (lower growth and level of GDP and thus a more unfavorable stance of automatic stabilizers). Hence, it is expected that the operation of fiscal multipliers will also be less favorable.

Recent months have seen a deterioration of Economic Sentiment, PMI, Turnover and Retail Sales Indices. Albeit some indices are somehow improved relative to the months immediately after the imposition of capital controls, as a whole high frequency indicators seem to corroborate findings from domestic demand hard data mentioned above. Unemployment exhibited some de-escalation compared to 2014, also helped by seasonal factors, but remains at exceptionally high levels (24.6% of the labour force in September 2015 vs 26.1% in September 2014).

At the time of writing, the government was about to finalize a second set of measures, which are prerequisites for the 1st Review of the 3rd Adjustment Programme to proceed. These prerequisites will unlock disbursement of the remaining €1bn of aid money and will help to improve the perception of the government’s ownership of the Programme. In addition, the signing of the concession agreement for 14 peripheral airports very recently has had a positive impact on investor confidence.

However, the implementation of a number of other reforms delays and the successful completion of the Review is now seen to happen later in 2016. The package includes politically sensitive issues, most importantly the reform of the social security system, taxation of farmers, revamp of the Income Tax Code and progress on key privatizations. Hence, risks related to the backing of reforms from government MPs remain. Implementation of already voted reforms will also be tested with the adequacy and timeliness of secondary legislation.

The successful recapitalization of Greek banks further shielded their capital adequacy and eliminated any fears for a deposits bail-in. However, the large scale of deposit withdrawals in the previous months, combined with lack of access in international capital markets, means a continuing reliance to the Eurosystem for liquidity. This hampers the ability of the banking system to finance the real economy. In this respect, the successful and timely completion of the Review is instrumental in reinstating depositors’ confidence, as well as allowing the ECB to re-introduce the “waiver” (exceptional eligibility of GGBs as collaterals for Eurosystem liquidity operations) and the eventual participation of Greece in ECB’s QE, even if for relatively modest amounts initially. These could substantially improve the tight liquidity conditions now evident throughout the economy.

### 2.3. Derivation of real GDP growth estimate for 2016 (-1.0%)

This exercise provides theoretically consistent economic rationale for anticipating and quantifying impacts of various factors on each GDP component. The GDP growth estimate for 2016, which we consider to be feasible, takes into account only fiscal measures that have been legislated or announced to be undertaken by the time of publishing and their impact on disposable income and the economic climate. The basis for conducting the exercise is provided from the projection of full year 2015 GDP. With a -0.3% projected real recession in 2015 and a 2015 GDP deflator of -1.1%, nominal GDP at the beginning of 2016 should stand at ca €175.1bn. This estimate also implies a particular level of each GDP component and a respective share in 2015 GDP. Thus, it is subject to an additional risk related to basis effects.
2.3.1 Evolution of GDP Components

(a) Private consumption (69.3% of GDP – using chained-linked volumes in 2010 prices): Private consumption predominantly depends on disposable income. In H1 2015, real private consumption was growing by 1.3% yoy on average. By contrast, nominal gross disposable income was declining by -1.9% yoy, taking in mind that HICP was declining by 2% in 2015, real gross disposable income declined in H1 by ca 0.9%. Throughout the crisis, consumers exhibited behavior consistent with a more general intertemporal smoothing of consumption. This was reflected in the dramatic decline of the elasticity of private consumption with respect to disposable income in crisis years compared to the years of rapid growth based on booming consumption, 2001-2008. In 2015 in particular, as it was explained above, this observed decoupling between disposable income and consumption was based on extraordinary circumstances and associated expectations. However, as the driving forces behind the phenomenon are subsiding, the decoupling is expected to be gradually smoothed out. In particular, following the agreement on a 3rd bailout package, it is plausible to assume that expectations of e.g. mass loan write-offs or deposit haircuts are vanishing. Therefore, households and corporations may eventually less plausible to run down on their savings in order to finance their operations. As households gradually realize that disposable income reduction is permanent and not temporary, consumption will begin to align with developments in real incomes. No additional wealth effect on consumption is assumed.

The 2016 Budget projects measures worth ca €5,732bn or ca 3.3ppts of GDP for 2016, from which ca €2.53bn will come from the expenditure side and ca €3.2bn from the revenue side. These extra fiscal and structural measures are expected to further dampen economic activity in the short term. However, commitment to achieving the targets is a precondition, not only for the continuation of official lending, but also for starting the discussion with EU partners on further debt relief.

At the beginning of 2016, net nominal disposable income is estimated to stand at €140.1bn (projecting a 2% nominal decrease in 2015). In order to calculate the impact measures could cumulatively have on net nominal disposable income, we need to account for: i) the fact that not all measures affect disposable incomes, at least not equiproportionately, ii) degree of implementation varies across measures, and iii) the fact that households and corporations partly finance tax payments by drawing from savings, albeit to a lesser extent. This is a notion similar to the impact fiscal multiplier, albeit applied only on net nominal disposable income and not on GDP as a whole. A disaggregated analysis leads us to the estimate that fiscal measures will incur a reduction of net nominal disposable income by €4.4bn or by -3.1% in 2016.

Obviously, net nominal disposable income is not only affected by fiscal measures but also by other factors, most importantly wages in the private sector, unemployment and profits on capital. As far as nominal wages in the private sector are concerned, AMECO projects flat nominal compensation per employee, while nominal ULCs are projected to increase by +0.8%, obviously due to the assumed simultaneous decrease of GDP/employee. On one hand, decreasing trends in demand already evident, as well as a still exceptionally high level of unemployment, may exert further downward pressures on wages. Furthermore, despite introduced flexibility in the labour market, high non-wage costs discourage migration of the grey economy back to the official economy. The beneficial impact of any structural reforms on productivity and thus on wages can only be felt on the more medium term. A possible counterweight could be provided by rapid implementation of privatizations. All in, we consider the EC projection to be rather optimistic and slightly downgrade it to -0.3% in order to capture effects not captured already by the fiscal drag. Considering that about 57% of the labour force is employed in the private sector (after taking account of unemployment), and the fact that labour has a share of ca 60% in the GDP, this constitutes a €0.14bn or -0.1% decrease in net nominal disposable income.

For unemployment, the EC projects an increase to 25.8% of the labour force in 2016, against a 25.5% projection of the budget and a realization of 24.6% in September 2015. While reductions in wages and the more flexible labour market may help in containing the unemployment rate, the incipient second recession works the other way, its effect being reinforced by remaining uncertainty and the liquidity squeeze. We project a year average unemployment rate of 25.7% of the labour force, i.e. ca 57,000 more persons unemployed compared to 2015. Assuming that the per person loss in disposable incomes is approximately equal to the difference between the per capita net income and the unemployment benefit, increase of unemployment will reduce the total net nominal disposable income by ca €0.7bn or 0.5%.

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1 This theory postulates that consumers try to achieve a more balanced level of consumption intertemporally in order to maximise their utility. Hence, when optimism about future incomes is prevalent, consumption increases faster than current income. On the contrary, when consumers experience income cuts which they perceive as temporary, they run down on their savings and cut consumption by less.

2 This is tantamount to a quasi “fiscal multiplier” of ca 0.77, which is close to the size of Year 1 fiscal multipliers estimated for Greece, considering the mixture between expenditure cuts and revenue increases. For example, see ECB’s WP 1760, March 2015.
Profits on capital are projected by AMECO to increase by 0.9%. Albeit low wages should give a boost to profitability, disinvestment has been more aggressive than reduction in production, hence resulting in relatively more intensive use of capital. Productivity-enhancing reforms should also kick-in, albeit only gradually and if not reversed. However, capacity utilization remains low and profitability will be adversely affected by reduced disposable incomes (fiscal drag, unemployment rise). In addition, the NPL management process will involve some business consolidation in the short term. Hence, we downgrade the projection to a 0.6% increase. Considering a 40% share of capital in the GDP, this means a ca €0.4bn or 0.3% increase in nominal disposable income.

In total, net nominal disposable income is projected to decrease by ca €4.8bn or -3.4%. In order to translate this into a decrease in real disposable income, we need an estimate about consumer prices. The Budget assumes a HICP change (period average) of +0.5% against deflation of -1% in 2015; EC projects a +1% change. However, incipient recessionary pressures and waning effects from recent VAT rate hikes, point to subdued inflationary pressures. In addition, oil prices are expected to remain low in 2016 and the stance of ECB’s monetary policy to remain accommodative. Overall, we pencil a HICP change of +0.2%. Hence, real disposable incomes should be reduced by -3.6%.

Finally, we have to deduce to which extent the fall of real disposable income will affect private consumption. According to the aforementioned analysis of reduced intertemporal consumption smoothing and a gradual realization of a lower permanent income, as well as the experience of the relative resilience of consumption in the previous crisis years, we assume an income elasticity of consumption of 0.8. Hence, real private consumption will contract in 2016 by -2.9% (against the budget’s projection of -0.7% and EC’s projection of -1.7%).

(b) Government consumption: (21.6% of GDP): we slightly change the -1% forecast of the budget (EC’s projection also -1%) to -0.8% in order to account for some modest slippage.

Final consumption: (90.9% of GDP): -2.4%

(c) Gross Capital Formation: (10.2% of GDP): GCF is the most sensitive component of GDP in changes of interest rates and the economic climate. Investment has been falling rapidly in crisis years, reaching €20.7bn or 11.6% of GDP in 2014, from €57.4bn or 23.7% of GDP in 2008. Although this constitutes a favorable basis effect, the reduced level of domestic demand results in low capacity utilization, so that enterprises need not invest to serve this demand. The negative readings of H2 2015 reversed the recovery that had been recorded in the prior three quarters. This decline is expected to continue in the first months of 2016 on the back of reduced domestic demand, tight liquidity conditions and uncertainty related to the Programme’s Review. The recapitalization of Greek banks in 2015 boosts confidence but it needs to be accompanied by return of deposits in order to result in positive credit expansion. At the moment, however, liquidity scarcity and a still high risk premium keep interest rates elevated in comparison to historic lows in the rest of Europe, thus eliminating positive NPV for many investment projects.

On the other hand, private investment should benefit from the decline of uncertainty regarding the country’s maintenance in the Eurozone and the avoidance of a disorderly default. A rapid conclusion of the Review and progress with a couple of flagship privatizations could help in spurring a revitalization of investment. In addition, as capital controls are gradually being alleviated, businesses may try to re-stock in order to deal with problems in their supply chain caused by the massive de-stocking of 2015. Planned product market reforms, as well as measures to improve the entrepreneurial environment are hoped to improve investment prospects and produce a supply boost. However, the full impact of those developments will materialize only gradually. Public investment is projected in the Budget to be increased in 2016 at €6.75bn from €6.4bn in 2015. Bureaucratic procedures for absorbing EU Structural and Cohesion Funds have to be improved considerably in order to take advantage of the easing of the requirement for national sources’ co-financing.

Taking into account all aforementioned developments, we assume a non-repetition of regularities observed in previous crisis years (disinvestment much quicker than rate of recession) and pencil a decrease of GCF by ca -1.5% (against the Budget’s projection for -3.7% for GFCF and EC’s projection of -2%).

Domestic demand (101.1% of GDP): -2.3% change.

---

4 This should also provide the motive for conducting investment and kick-start the economy when investment sentiment improves.
(d) Exports of g&s (28.4% of GDP): As long as competitiveness is concerned, the relevant measure is nominal ULC, except for tourism for which CPI is more relevant. However, in 2015, while nominal ULC is projected to have fallen by -0.2%, exports decreased by a projected 5.2%. Even excluding refined oil exports, which were affected by the slump in international oil prices, exports of goods and services in Jan-Sep 2015 decreased by 2.3% yoy. Apparently this was primarily due to the extraordinary circumstances related to uncertainty and the imposition of capital controls, which had adverse repercussions to the supply chain of businesses. This is even more true because of the fact Greek exports have a large import content. External demand factors were rather conducive as Eurozone partners entered recovery and tourism enjoyed a good year, capitalizing on the competitiveness improvements of recent years but also helped by geopolitical tensions in competitive countries. The gradual normalization of risks and prospective lift of capital controls indicate room for a positive evolution this year. In terms of competitiveness, we expect nominal ULC to increase by slightly less than the EC's projection of +0.8% in 2016, a rate approximately at par with the rest of the Eurozone. For HICP we projected a change of +0.2% vs ECB's +1% change for the Eurozone as a whole, while other countries competitive to Greece in tourism are projected to record slightly higher inflation rates. With tourism accounting for 23.2% of total Greek exports of g&s in 2014, the combined improvement in competitiveness should be ca 0.34%. In terms of international demand, roughly 50% of Greek exports go to Eurozone countries and another 25% to SE Europe. Eurozone is expected to recover by a further 1.7% in 2016 and SE Europe is expected to accelerate to +3% (on average, notable differentiations across countries). To be conservative, we assume a unitary elasticity of international demand for Greek exports w.r.t. both trading partners growth rates, as well as to prices (competitiveness gains). Hence, the overall effect should be a 2.4% increase (against the Budget's projection for +1.9% and EC's projection of +1.2%).

(e) Imports of g&s (29.6% of GDP): the collapse of imports in 2015 has to be attributed predominantly on capital controls and negotiation-related uncertainty, rather than on the level of economic activity. Throughout 2009-2012 imports fell more aggressively than general domestic demand but in the recovery of 2014 imports also grew more aggressively (7.7%yoy vs GDP growth of +0.7%). This shows that, to a large extent, imports comprise consumer goods of high income elasticity and investment goods. Hence, incipient recessionary pressures indicate that imports' level and share in the consumer's basket will be pressurized again, as it happened in previous crisis years. We assume an income elasticity of imports of 1.2, which is close to the empirical elasticity observed in previous years. Further, oil prices are also expected to remain subdued throughout 2016, which pushes imports downwards as oil accounts for ca 30% of Greek imports of goods. On the other hand, it is plausible that the gradual replenishment of the massive de-stocking of 2015 by businesses will push imports upwards. All in, we project a 2.1% real reduction of imports (against the Budget's projection for a +0.6% change and EC's projection of no change).

2.4. Risks to the Projection

Risks-Negative

Political waivering and low ownership of reforms could harm confidence and mitigate the growth-enhancing content of reforms. At the extreme, political instability could question the country's ability to abide by its commitments.

Delays on the successful completion of the 1st review of the 3rd Adjustment Programme would adversely affect confidence and the financing of the public sector, possibly leading to the accumulation of arrears and reduced liquidity for the private sector. This is particularly true for a possible delayed implementation of output-boosting reforms and privatizations. At the extreme scenario, it could cast doubt again on the ability of the Greek economy to achieve sustainable growth within the Eurozone.

Insistence in the quest of equivalent measures could, not only delay the review, but also result in an imbalanced mixture of measures, biased towards tax increases rather than expenditure restraint. This could undermine sustainability of fiscal consolidation and, conditional on the exact measures, enhance the fiscal drag.

A delayed lift of capital controls could have adverse implications on the businesses' supply chain, on imports and exports.

A delayed return of deposits to banks could adversely affect banks' ability to reduce exposure to the Eurosystem for liquidity and thus to finance the economy.

Any policy shortcomings delaying recovery could also reduce social tolerance against the Programme and social cohesion. Weaker-than-projected growth in the Eurozone would adversely affect exports.
Failure to deal with the refugee crisis would burden fiscal economics and increase social fatigue. A possible escalation of peripheral confrontations would also harm growth prospects.

Risks-Positive

A rapid successful completion of the 1st review would boost economic confidence and persuade investors of the government's ownership of the Programme. Equally importantly, it would allow for a reinstatement of the "waiver", i.e. GGBs eligibility for ECB operations, reducing the cost for banks' financing and thus boosting liquidity in the economy; it would also allow for participation in ECB's QE, even if for modest amounts initially.

Political ownership in the implementation of reforms could precipitate reaping their benefits.

A full lift of capital controls in H1 2015 would reduce distortions in resource allocation; this pre-requires a reinstatement of depositors' confidence.

Geopolitical risks in neighbouring countries, up to a certain extent, could benefit tourism.

A stronger growth in the Eurozone would benefit exports and tourism.
3. General government borrowing needs and the case for new debt relief

Platon Monokroussos

Excerpt from our December 10, 2015 Greece Macro Monitor: “Lower bank recapitalization needs point to improved public debt dynamics, reduced borrowing requirement relative to earlier projections”.

Based on the most recent domestic macroeconomic developments this note presents new projections on the general government borrowing needs and sources of funding over the entire time horizon of the new bailout programme and beyond. Furthermore, it provides an updated analysis of public debt dynamics and the potential (cash flow and stock) impact of a new relief package, which is expected after the successful completion of the 1st programme review. Some of the main findings of the analysis can be summarized as follows: a) under the present baseline macro scenario, the overall amount of official creditor loans needed to cover Greece’s public sector borrowing requirement over the 3-year horizon of the new bailout may prove lower than expected earlier; b) the aforementioned view is primarily supported by the recent recapitalization of Greece’s four systemic banks, which necessitated significantly lower financing from official sources relative to earlier expectations; c) 2016 expected to be more manageable than this year in terms of debt service payments; d) the present burgeoning level of public debt remains a problem, but recent developments point to less severe dynamics than expected a few months earlier; e) a new relief package including significant maturity extensions and payment deferrals on old and new EU loans given to Greece in the context of the three bailout programmes could go a long way towards soothing sustainability worries; and f) the high interest-rate sensitivity of Greek public debt argues in favor of a further interest rate reduction on EU loans in the context of a new debt relief package.

3.1. Gross borrowing needs over the programme horizon now seen lower than expected earlier

At the time that the 3rd bailout programme was signed (August 2015), Greece’s general government gross borrowing needs over the new programme horizon were projected at c. €91.7bn. The breakdown of the latter amount was as follows: €54.1bn in total debt service payments (interest and amortizations); €7bn for clearing arrears to third parties; €7.6bn for creating an adequate State cash buffer; and up to €25bn for recapitalizing the domestic banking system, including systemic and non-systemic financial institutions.

With regards to the latter item, a relevant document titled “Assessment of Greece’s financial needs” released by the official sector in August 2015 read that "...it is expected that banks will need to raise a substantial amount of capital over a relatively short period of time so as to remain compliant with regulatory requirements and to mitigate the loss of confidence resulting from the imposition of payment restrictions. Given that it is unlikely that banks will be able to secure private investment, capital injections will likely need to come from programme financing. Current calculations estimate financing needs in the banking sector up to a total of EUR 25 bn."

In view of the above, the new programme envisaged total official sector financing up to €85.5bn, which along with expected privatization revenue of €6.2bn would be adequate to fully cover the projected gross borrowing requirement over the corresponding time horizon (August 2015-August 2018). Most of the aforementioned financing was meant to come from the ESM, with any remaining amounts covered by the IMF and, to a lesser extent, by the return to state coffers of the profits accrued to the ANFA holding of the Greek Central Bank (BoG).5

In more detail, total loan disbursements from the ESM (and, potentially, the IMF) were initially projected at c. €84.1bn over the full time horizon of the new programme, with more than half of the latter amount (c. €46.7bn) to be disbursed during the period August-December 2015.

In retrospect, it appears that the overall amount of official creditor loans to cover Greece’s public sector borrowing requirement over the 3-year horizon of the new bailout may prove lower than expected earlier. That is, provided that serious deviations from the agreed targets for the primary fiscal balance and privatization revenues will be avoided. This view is primarily supported by: i) the better-than-expected results of the Greek Comprehensive Assessment 2015, which were publically announced by the ECB/SSM on 31

5 IMF could co-finance the new (3rd) bailout with a total amount up to c. €16bn, which constitutes remaining (i.e., undisbursed) Fund commitments to Greece under the 2nd bailout programme.
October, 2015; and ii) the completion of the capital raising exercise of Greece’s four systemic banks, which limited total financing from official sources (ESM though the Hellenic Financial Stability Fund) to just €5.43bn.\(^6\)

Under the present baseline macro scenario, we expect official sector loans for facilitating full coverage of Greece’s general government gross borrowing requirement over the period August 2015-August 2018 to be less than expected initially. As depicted in Figure 3.1, we expect the relevant amount to be around €65bn, compared to c. €84.1bn seen in August 2015.

Note that our calculations assume (rather conservatively) that total official sector funding to complete the recapitalization of the domestic banking system (4 systemic banks, Attica bank and co-operative banks) will amount to c. €6.5bn. They also assume fulfilment of the new programme targets for the primary fiscal balance along with (downwardly) revised forecasts for privatization revenue in 2016, in line with Greece’s 2016 Budget. As we explain below, the total amount of official sector loans to Greece over the new programme period may well prove even lower than our (downwardly-revised) estimate of c. €65bn.

Figure 3.1 - Official-sector loan disbursements over the period Aug 2015-Aug 2018 (EURbn)

Source: EC/ECB (August 2015), Eurobank Economic Research

A more detailed overview, of Greek public sector borrowing needs and sources of funding is depicted in Table 3.1 below.

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\(^6\) Note that two of the four systemic banks, Eurobank and Alpha Bank, managed to cover their respective capital shortfalls (under both the base and the adverse scenarios) through internal capital raising means (LME) and private-sector funds injection.
Table 3.1 - General government borrowing needs & funding sources in Aug. 2015-Aug. 2018 (EUR bn)

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<tbody>
<tr>
<td><strong>A. Borrowing need (I.1 + I.2 +…+I.5)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.1 State cash primary balance (“-“ = surplus / “+” = deficit)</td>
<td>22.9</td>
<td>19.2</td>
<td>22.7</td>
<td>7.7</td>
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<tr>
<td>I.2 Debt service (interest &amp; amortization payments)</td>
<td>2</td>
<td>14.3</td>
<td>12.8</td>
<td>18.8</td>
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<tr>
<td>I.3 Banking sector needs</td>
<td>6.5</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>I.4 Arrears clearance</td>
<td>0.0</td>
<td>3.5</td>
<td>3.5</td>
<td>0.0</td>
</tr>
<tr>
<td>I.5 State cash buffer &amp; SDR holdings</td>
<td>0.0</td>
<td>2.7</td>
<td>1.8</td>
<td>2.5</td>
</tr>
<tr>
<td><strong>B. Funding source (II.1+II.2+II.3)</strong></td>
<td>22.8</td>
<td>19.2</td>
<td>22.7</td>
<td>7.7</td>
</tr>
<tr>
<td>II.1 Market access</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>II.2 Privatisation revenue</td>
<td>0.3</td>
<td>2.0</td>
<td>1.7</td>
<td>2.0</td>
</tr>
<tr>
<td>II.3 Programme financing</td>
<td>22.5</td>
<td>17.0</td>
<td>20.9</td>
<td>5.7</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>II.3.1 ANFA &amp; SMP profits</td>
<td>0.0</td>
<td>0.7</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>II.3.2 Official loan disbursements (ESM + IMF?)</td>
<td>22.5</td>
<td>16.3</td>
<td>20.6</td>
<td>5.4</td>
</tr>
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</table>

Source: ECB, EC, Eurobank Research

1/ Assumes relaxation of primary surplus target (% GDP) as follows: 2015: -0.25%; 2016: +0.5%, 2017: +1.75%; 2018-2020: +3.5%
2/ Incorporates partial unwinding of repo operations (by EUR 3.5bn) to c. EUR 6.2bn at the end of the programme period
3/ It is estimated that up to c. EUR 5.2bn of official-sector financing will be needed for the recapitalization of the 4 Greek systemic banks; overall the table assumes (rather conservatively) total official-sector financing up to EUR 6.5bn will be needed for recapitalizing the domestic banking system (including Attica Bank and cooperative banks).
4/ Arrears clearance is estimated at c. EUR 7bn over the programme period
5/ Assumes gradual rebuilding of government cash buffer to c. EUR 8bn at the end of the programme period (EUR 770mn of this will be used to replenish Greece’s SDR holdings account).
6/ 2015 & 2016 privatization revenue in line with the forecasts presented in the 2016 Budget; forecasts for 2017-2018 based on Debt Sustainability Analysis (European Commission, August 2015) and Eurobank Economic Research forecasts. Note that the baseline scenario presented in the EC document of August 2015 assumes that total (non-bank) privatization revenue of €13.9bn will materialize until 2022.
7/ Assumed ANFA & SMP profits only include BoG transfers

3.2. The return of ANFA & SMP profits could further reduce required funding through new official sector loans

Greece’s 2016 Budget incorporates central government (non-ordinary) budget revenue from the return of ANFA and SMP profits of c. €3.88bn and €1.69bn in 2015 and 2016, respectively. As noted above, the “Assessment of Greece’s financial needs” released in August 2015 did not envisage a return to Greece of the profits accrued to the relevant portfolios of the ECB and the foreign NCBs of the Eurosystem. Under Greece’s second bailout programme, a total amount of €9.7bn in ANFA and SMP profits was expected to be returned to the country over the period 2015-2020. The corresponding figure for the programme period (August 2015-August 2018) stood at c. €8.1bn. To the extent that the latter amount (or part of it) will eventually be transferred to Greece, it would constitute part of programme financing and thus, equi-proportionally reduce the need for new ESM or IMF loans.
3.3. Next year expected to be more manageable than 2015 in terms of debt service payments

Next year is expected to be much more manageable than 2015 in terms of total debt service payments, with Q3 representing the most demanding quarter (Figure 3.2). Undoubtedly, this provides some breathing space to the government in the context of the ongoing discussion with official creditors, especially as regards expected negotiations early next year for the completion of the 1st programme review. Yet, in the case of major delays in future negotiations on MoU conditionality, it is hard to see what alternative sources of funding could be used to replace existing programme commitments in covering projected government borrowing needs, at least in the next four quarters. That is, especially in view of the tiny primary surplus target for next year, the new budget’s forecast for 2016 privatization revenue (c. €2.3bn), the recent sharp increase in government arrears (c. €5.1bn at the end of October) and the already elevated level of inter-governmental borrowing (currently close to c. €10bn). All these argue in favor of a swift completion of the upcoming negotiations with official creditors, not only to ensure the undistributed release of programme commitments, but also to facilitate discussion on new debt relief following the completion of the first review.

Figure 3.2 – Remaining gross public debt interest & amortization payments over the new programme period (EUR bn)

![Figure 3.2](image)

Source: EC/ECB Sept 2015, Eurobank Economic Research

3.4. Government borrowing needs beyond the expiration of the new bailout programme

*Figure 3.3 below depicts our current projections on the evolution of Greece’s general government gross borrowing requirement over the period 2016-2020. Projected borrowing needs in the 2-year period following the expiration of the 3rd bailout programme (August 2018) are deemed to be broadly manageable, assuming full (or partial) restoration of market access by that time. Note that in the years leading to the 2008/2009 global financial crisis, the Hellenic Republic used to raise €50bn/annum or more from the international debt markets. Current projections about significant primary surpluses and privatization revenues in outer years provide additional support to the aforementioned view. In any case, annual debt service (interest and amortization) payments are expected to increase considerably post 2020 and thus, considerable debt relief from the official sector is needed to address this problem. As we explain in the following sections, such debt relief is expected after the completion of the first programme review. Appendix I at the end of this document provides a thorough analysis of total outstanding debt principal payments over the period 2016-2059.*
3.5. Peak in public debt ratio now seen at lower level relative to earlier forecasts

Following a temporary improvement during the semester of last year, Greek public debt dynamics have deteriorated anew since early 2015. This was primarily the result of lower forecasts/targets for domestic economic growth, future primary surpluses and privatization revenue as well as increased borrowing needs for recapitalizing domestic banks, rebuilding state cash buffers, clearing arrears & reducing short-term intergovernmental borrowing. As a result of the latter developments, official creditors were projecting back in August 2015 that Greece’s gross public debt ratio would increase much further this year and the next, without returning to levels below 120% of GDP before year 2031 at the earliest. Despite this deterioration, some recent developments point to a less severe profile of future debt dynamic relative to earlier expectations (Table 3.2, Figure 3.4 & Appendix II). These developments include primarily: i) improved expectations about the severity of the domestic recession in H2 2015 and in 2016; and, more importantly ii) a much lower amount of official sector funding required to recapitalize domestic banks.

Table 3.2 - Greece: Evolution of gross public debt to GDP (% GDP)

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<tbody>
<tr>
<td>Eurobank Research (Dec 2015)</td>
<td>178.6</td>
<td>181.0</td>
<td>187.7</td>
<td>185.8</td>
<td>178.4</td>
<td>170.5</td>
<td>163.1</td>
<td>133.7</td>
<td>111.4</td>
<td>103.2</td>
</tr>
<tr>
<td>EC/ECB (Aug 2015)</td>
<td>177.1</td>
<td>196.3</td>
<td>200.9</td>
<td>198.6</td>
<td>190.7</td>
<td>182.3</td>
<td>174.5</td>
<td>144.4</td>
<td>122.2</td>
<td>114.0</td>
</tr>
<tr>
<td>IMF (Jun 2015)</td>
<td>177.1</td>
<td>176.7</td>
<td>176.2</td>
<td>169.7</td>
<td>162.3</td>
<td>155.8</td>
<td>149.9</td>
<td>130.5</td>
<td>114.3</td>
<td>108.6</td>
</tr>
<tr>
<td>IMF (Jun 2014)</td>
<td>174.2</td>
<td>171.0</td>
<td>160.5</td>
<td>152.0</td>
<td>144.6</td>
<td>135.3</td>
<td>127.7</td>
<td>103.4</td>
<td>84.8</td>
<td>78.0</td>
</tr>
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</table>

Source: IMF, EC, ECB, Eurobank Economic Research

**Notes to Table 3.2**

- **IMF (Jun 2014):** broadly in line with the baseline macro assumptions of the IMF Country report No. 14/151.
- **IMF (June 2015):** broadly in line with the baseline macro assumptions of the IMF Country report No. 15/165.
- **EC/ECB (Aug 2015):** broadly in line with the “Debt sustainability analysis” document published in August 2015.
- **Eurobank Research (Dec 2015):** broadly in line with the medium term baseline macro assumptions of the “Debt sustainability analysis” published in August 2015. Respective projections adjusted to take into account: i) a milder than earlier expected economic recession in 2015-2016 (see Greece’s 2016 Budget); and ii) a lower than expected external borrowing need for bank recapitalization.

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7The said improvement primarily reflected: i) the return of the €10.9bn HFSF bank recapitalization buffer to the EFSF (Feb. 2015); ii) lower projected interest rates (Euribor, EFSF funding) relative to the mid-2014 EC/ECB/IMF reviews; and iii) the replacement of c. €11bn of external borrowing with intergovernmental borrowing (from local governments, social security funds & other entities). These factors more than offset the effect of weaker GDP performance (and downward statistical revisions to historical GDP) relative to the mid-2014 EC/ECB/IMF reviews, leading to a cumulative improvement (decrease) of 135ppts in the projected debt ratio in 2015-2022.
purposes. In more detail, while the 3rd bailout programme provides for a backstop facility up to €25bn for completing the new bank recapitalization exercise, our scenario assumes that official funding to recapitalize domestic banks will not exceed €6.5bn.

Figure 3.4 - Greece: snowball effect on gross public debt (ppts of GDP)
(Automatic increase/decrease in the debt ratio due to the difference between nominal GDP growth and the nominal effective interest rate on debt)

3.6. Potential modalities of new debt relief

As a result of the sharp deterioration in public debt dynamics since early 2015 official creditors have explicitly signaled their commitment to consider new debt relief (OSI) for Greece once the first review of the new bailout programme is successfully completed. As per a number of press reports and official comments, a new relief package would aim to meet a new condition for debt sustainability (based on projected annual gross borrowing needs no higher than 15%-of-GDP in the medium-term) and potentially involve further maturity extensions and service payment deferrals on EU loans given to Greece in the context of the three bailout programmes. A thorough analysis of the rationale for new debt relief can be found in Greece Macro Monitor, “Greece State financing gaps, funding sources & the case for debt restructuring”, Eurobank Research, September 2015. Therefore, we do not repeat the relevant arguments here. Instead, we present below an updated analysis of the potential (cash flow & stock) impact of three hypothetical debt relief packages (Tables 3.3 & 3.4). These involve, respectively: scenario 1: 20-year maturity extension & 10 year deferral of interest & amortization payments on all EU loans (GLF, EFSF & ESM) that have been released already or are expected to be released under the new (3rd) bailout programme; scenario 2: 20-year maturity extension, 10 year deferral of interest & amortization payments & fixed interest rate of 0.50% on all EU loans; and scenario 3: 20-year maturity extension, 10 year deferral of interest & amortization payments & fixed interest rate of 0.25% on all EU loans (GLF, EFSF & ESM).

As demonstrated in tables 3.3 & 3.4 below, the main beneficial impact of such debt relief packages would mainly be in the form of reduced public borrowing needs over the period 2016-2050. In addition, a significant benefit would also be realized in the form of a measurable reduction in the net present value of gross public debt.

### Table 3.3 - Greek public debt re-profiling scenarios: impact on the general government borrowing requirement in EURbn

"–" denotes improvement (decrease) / "+" denotes deterioration (increase)

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<tbody>
<tr>
<td>GLF (1st program)</td>
<td>20 year loan maturity extension &amp; 10 year grace on all interest &amp; principal payments / no change in interest rates</td>
<td>-8.2</td>
<td>-14.0</td>
<td>-3.7</td>
<td>21.2</td>
<td>18.4</td>
<td>1.7</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>EFSF loans (2nd program)</td>
<td></td>
<td>-0.5</td>
<td>-12.6</td>
<td>-23.9</td>
<td>-32.5</td>
<td>29.6</td>
<td>65.5</td>
<td>20.6</td>
<td>20.6</td>
</tr>
<tr>
<td>ESM loans (3rd program)</td>
<td></td>
<td>-0.8</td>
<td>-1.4</td>
<td>-5.4</td>
<td>-6.7</td>
<td>-5.8</td>
<td>18.5</td>
<td>14.4</td>
<td>14.4</td>
</tr>
<tr>
<td>Total impact</td>
<td></td>
<td>-9.6</td>
<td>-28.0</td>
<td>-33.1</td>
<td>-18.0</td>
<td>42.2</td>
<td>85.7</td>
<td>35.0</td>
<td>74.1</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Scenario 2</th>
<th>Description</th>
<th>2016-2022</th>
<th>2023-2030</th>
<th>2031-2040</th>
<th>2041-2050</th>
<th>2051-2060</th>
<th>2061-2070</th>
<th>2071-2080</th>
<th>2016-2080</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLF (1st program)</td>
<td>20 year loan maturity extension &amp; 10 year grace on all interest &amp; principal payments / fixed interest rate 0.50%</td>
<td>-8.2</td>
<td>-17.3</td>
<td>-11.2</td>
<td>16.1</td>
<td>15.9</td>
<td>1.6</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>EFSF loans (2nd program)</td>
<td></td>
<td>-0.5</td>
<td>-20.1</td>
<td>-40.3</td>
<td>-49.0</td>
<td>16.0</td>
<td>56.8</td>
<td>19.5</td>
<td>19.5</td>
</tr>
<tr>
<td>ESM loans (3rd program)</td>
<td></td>
<td>-0.8</td>
<td>-4.1</td>
<td>-12.7</td>
<td>-33.3</td>
<td>-10.6</td>
<td>15.7</td>
<td>13.5</td>
<td>13.5</td>
</tr>
<tr>
<td>Total impact</td>
<td></td>
<td>-9.6</td>
<td>-41.8</td>
<td>-64.2</td>
<td>-46.2</td>
<td>21.4</td>
<td>74.1</td>
<td>33.0</td>
<td>-32.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GLF (1st program)</td>
<td>20 year loan maturity extension &amp; 10 year grace on all interest &amp; principal payments / fixed interest rate 0.25%</td>
<td>-8.2</td>
<td>-22.4</td>
<td>-43.9</td>
<td>-52.2</td>
<td>13.2</td>
<td>53.6</td>
<td>18.8</td>
<td>18.8</td>
</tr>
<tr>
<td>EFSF loans (2nd program)</td>
<td></td>
<td>-0.8</td>
<td>-4.9</td>
<td>-14.5</td>
<td>-14.9</td>
<td>-11.8</td>
<td>14.9</td>
<td>13.1</td>
<td>13.1</td>
</tr>
<tr>
<td>ESM loans (3rd program)</td>
<td></td>
<td>-0.8</td>
<td>-4.9</td>
<td>-14.5</td>
<td>-14.9</td>
<td>-11.8</td>
<td>14.9</td>
<td>13.1</td>
<td>13.1</td>
</tr>
<tr>
<td>Total impact</td>
<td></td>
<td>-9.6</td>
<td>-45.2</td>
<td>-71.0</td>
<td>-52.0</td>
<td>16.7</td>
<td>70.0</td>
<td>31.9</td>
<td>-59.1</td>
</tr>
</tbody>
</table>

Source: EC, ESFS, ESM, Bloomberg, Eurobank Economic Research

**Note**
The Euribor rates utilized in our calculations are derived from the 3m & 6m Euribor futures curves. The EFSF & ESM funding rates utilized in our calculations are based on a polynomial of 5th degree fit on the present EFSF & ESM cost curves.

Our exercise assumes full disbursement of ESM loans (3rd programme) as envisaged in the new loan agreement signed in August 2015.

### Table 3.4 - Greek public debt re-profiling scenarios: Evolution of public debt ratio (% GDP)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Description</th>
<th>2015</th>
<th>2020</th>
<th>2022</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline scenario</td>
<td></td>
<td>181</td>
<td>163</td>
<td>134</td>
<td>111</td>
</tr>
</tbody>
</table>

**20 year** maturity extension & **10 year** grace on principal and interest payments | 181 | 163 | 134 | 112 |

**20 year** maturity extension, **10 year** grace on principal and interest payments & **0.50%** fixed interest rate on all EU loans | 181 | 164 | 134 | 107 |

**20 year** maturity extension, **10 year** grace on principal and interest payments & **0.25%** fixed interest rate on all EU loans | 181 | 162 | 132 | 103 |

Source: EC, ESFS, ESM, Bloomberg, Eurobank Economic Research

**Note**
Baseline scenario compared to three hypothetical restructuring scenarios assuming:
20-year maturity extension and 10 year deferral of interest & amortization payments on all EU loans (GLF, EFSF & ESM);
20-year maturity extension, 10 year deferral of interest & amortization payments & fixed interest rate 0.50% on all EU loans (GLF, EFSF & ESM); and
20-year maturity extension, 10 year deferral of interest & amortization payments & fixed interest rate 0.25% on all EU loans (GLF, EFSF & ESM).

3.7. The case for lower interest rates on EU loans

The comparison of the three scenarios presented in Table 3.3 argues strongly in favor of reduced interest rates on some or all EU loans provided to Greece in the context of the three bailout programmes. The same point can be made by looking at Table 3.5 below, which shows the sensitivity or the public borrowing requirement to a 25bps increase in funding rates post 2020 relative to current projections.

Table 3.5 – Greece: interest rate sensitivity of gross borrowing requirement (EUR bn)

Projected change (increase) in the general government gross borrowing requirement per 0.25ppts upward shift in the 3m & 6m Euribor rates as well as in the EFSF & ESM funding curves post 2020

<table>
<thead>
<tr>
<th></th>
<th>2016-2022</th>
<th>2023-2030</th>
<th>2031-2040</th>
<th>2041-2050</th>
<th>2051-2060</th>
<th>2016-2060</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLF (1st program)</td>
<td>0.3</td>
<td>0.8</td>
<td>0.6</td>
<td>0.0</td>
<td>0.0</td>
<td>1.6</td>
</tr>
<tr>
<td>EFSF loans (2nd program)</td>
<td>0.2</td>
<td>2.6</td>
<td>2.8</td>
<td>1.6</td>
<td>0.3</td>
<td>7.4</td>
</tr>
<tr>
<td>ESM loans (3rd program)</td>
<td>1.3</td>
<td>1.7</td>
<td>2.0</td>
<td>1.3</td>
<td>0.4</td>
<td>6.6</td>
</tr>
<tr>
<td>Total change</td>
<td>1.7</td>
<td>5.0</td>
<td>5.3</td>
<td>2.9</td>
<td>0.7</td>
<td>15.7</td>
</tr>
</tbody>
</table>

Source: ESFS, ESM, Bloomberg, Eurobank Economic Research

Note
Our calculations assume full disbursement of ESM loans (3rd programme) as envisaged in the new loan agreement signed in August 2015.
4. Progress on structural reform implementation & 2016 milestones

Paraskevi Petropoulou
Theodoros Stamatiou

This section provides a brief summary of recent developments related to the implementation of programme conditionality and analyses the challenges lying ahead in conjunction with the milestones attached to the 1st programme review and beyond.

4.1. ESM expected to approve €1bn loan disbursement to Greece

The ESM Board of Governors is reportedly expected to approve in the coming sessions the release of the pending €1bn loan installment to Greece. In an effort to fulfill the attached prior actions (Table 1 in Appendix III), the Greek government has issued a number of relevant ministerial decrees and the Hellenic Parliament approved a multi-bill which drew support from all 153 SYRIZA-ANEL coalition MPs.9 The aforementioned installment constitutes the third (and last) part of the €16bn loan tranche approved by official creditors in mid-August. The first part of the latter amounting to €12bn was released in the same month, while the second one worth €2bn was unlocked in mid-November.10 This followed the endorsement of 48 prior actions that included, among others, a number of key financial sector reforms required for the successful completion of bank recapitalization (Table 2 in Appendix III).11,12 Overall, out of c. 220 milestones outlined in the new Memorandum of Understanding (MoU), Greece has so far completed 60 (or c. 28% of total).

4.2. Formal negotiations on the 1st programme review expected to incept by mid-January

As per the new MoU conditionality, Greece needs to complete around 65 additional milestones next year, including 5 items that will be reportedly attached to the 1st programme review (Tables 3 & 4 in Appendix). Speaking at a recent investment forum, European Commission’s mission head to Greece was quoted saying that official discussions on the 1st review are expected to begin around mid-January. In this context, negotiations between the Greek government and the Institutions may prove difficult and more protracted than expected earlier. Reportedly, they may extend to mid-February or beyond. This is so especially as significant deviations between the two sides still exist on certain key reforms, including the planned overhaul of the social security system.

4.3. Completion of 1st review is key prerequisite for initiation of debt relief talks, reintroduction of Greek collateral waiver

According to the MoU conditionality, a staff level agreement on the 1st programme review is a key precondition for: (i) the initiation of official discussions on additional debt relief measures for Greece; (ii) the reintroduction of a Greek collateral waiver i.e. the reacceptance of bonds issued or guaranteed by the Hellenic Republic as eligible collateral in the ECB’s regular liquidity provision operations; (iii) potential IMF financial participation in Greece’s new bailout; and (iv) the release of additional official funding under

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9 ANEL MP Nikos Nikolopoulos & SYRIZA MP Stathis Panagoulis were expelled from their respective parliamentary groups after they broke ranks in the key parliamentary vote on November 19th for the endorsement of the prior actions to the release of the €2bn ESM loan installment. Both lawmakers decided to retain their parliamentary seats as independent MPs. As a result, the parliamentary majority of the coalition government was reduced by two seats to 153: 144 controlled by SYRIZA and 9 by ANEL.

10 The €13bn sub-tranche primarily covered the repayment of the €7.2bn EFSM bridge loan granted to Greece in mid-July and €3.4bn for ECB debt payment.

11 In the context of the new (3rd) bailout programme, a backstop facility up to €25bn has been committed for bank recapitalization and resolution. However, the total amount to be finally used for that purpose is likely to be significantly lower. This is due mainly to better-than-expected results of the ECB’s Comprehensive Assessment on the four Greek systemic banks which were publicly announced by the ECB/SSM in late October 2015 as well as the successful completion of the share capital increase of Greece’s four systemic banks, which necessitated total financing from official sources (ESM through the Hellenic Financial Stability Fund) of just €5,43bn.

12 According to a recent European Commission report on Greece’s compliance with the 49 milestones that were attached to the €2bn ESM loan installment released last November, 44 have been fully completed, while one was marked as pending and will be addressed as part of the conditionality attached to the completion of the 1st programme review. For the effective implementation of the remaining four milestones, either some further issues should be addressed or some corrections are needed.
the 3\textsuperscript{rd} bailout programme.\textsuperscript{53} The IMF mission head to Greece was recently quoted saying that the Fund will decide on whether to financially participate in the new bailout upon completion of the 1\textsuperscript{st} programme review. Furthermore, in line with comments by other high level IMF officials, she made clear that a relevant decision will be based on two preconditions: (i) more progress by the Greek side in implementing the agreed structural reforms, especially on the pension system; and (ii) the provision by EU creditors of further debt relief so as to strengthen sustainability of Greek public debt.\textsuperscript{54} On his part, the European Commission’s mission head to Greece was recently quoted saying that official discussions on new debt relief are expected to commence in February, after the completion of the 1\textsuperscript{st} programme review.\textsuperscript{55} With regard to a potential reintroduction of a Greek collateral waiver, ECB Vice President Vítor Constâncio said during the Q&A session of the December 3\textsuperscript{rd} policy meeting that the aforementioned issue may be considered even before the completion of the 1\textsuperscript{st} review. According to press reports, the ECB may revisit the issue by next February, on the condition that official discussions on the 1\textsuperscript{st} review will evolve positively. As regards the prospect of the ECB starting to purchase Greek sovereign bonds under its expanded asset purchase programme (APP), Mr. Constâncio said that this issue “is more complex and it does not depend only on the successful completion of the review.”

4.4. Significant delays in the conclusion of the 1\textsuperscript{st} review might endanger the 2016 outlook

According to press reports, the 1\textsuperscript{st} programme review is expected to begin mid-January and to be concluded by mid-February. Although relevant negotiations are likely to prove challenging, major delays in completing the review should be avoided so as to: (i) allow for the timely initiation of the debt relief talks; and (ii) facilitate the reintroduction of the Greek collateral waiver, as explained in the paragraph above. All in all, a swift completion of the review should pave the way for:

✓ The achievement of the upwardly-revised growth projection for 2016. Greece’s 2016 Budget forecasts a real GDP growth contraction of -0.7\% next year, which compares with the -1.3\% reading expected by the European Commission (Autumn 2015 Forecasts). The budget’s more optimistic projection implies a switch into positive QoQ GDP growth from Q3 2016 onwards. A timely completion of the 1\textsuperscript{st} programme review could go a long way towards facilitating a major improvement in the domestic economic climate, a key prerequisite for improving growth dynamics going forward.

✓ The restoration of confidence and the creation of the necessary environment for the return of private sector deposits. Since the Greek sovereign debt crisis erupted in late 2009/early 2010, domestic banks lost c. 50\% over their total deposits base. Furthermore, deposit withdrawals over the period September 2014-June 2015 exceeded €40bn, with most of these remaining “under the mattress” within the country. Provided that deposit interest rates in Greece remain at much higher levels than in the rest of the euro area, a restoration of domestic confidence could see a) a swift removal of capital controls; and b) a significant amount of departed deposits returning into the domestic banking system. The Economic Sentiment Index (ESI), a comprehensive metric of confidence in the domestic economy (and closely correlated to the growth rate of private sector deposits), reached a 75-month high in June 2015 at 104.2 index points and then followed a downward path that accelerated after the imposition of capital controls in late June 2015. Between June and July 2015, it recorded its highest monthly negative change since 1997, and reached a multi-year low of 75.2 in August 2015. However, after the 3\textsuperscript{rd} Adjustment programme was signed in mid-August 2015, the ESI has partly recovered, reaching 86.5 points in November. A further improvement in confidence via, among others, the implementation of the structural reforms and the timely conclusion of the 1\textsuperscript{st} review is needed in the period ahead so as to facilitate a speedier improvement in domestic credit dynamics.

✓ Further progress in structural reforms implementation so as to boost the economy’s medium-term growth potential. The new (3\textsuperscript{rd}) bailout programme is more heavily oriented (and front loaded) towards structural reforms than the prior two ones.

\footnotesize \textsuperscript{53} Assuming that the ESM approves the release of the €1bn loan installment, out of c. €86bn financing committed under the new ESM loan facility, Greece will have received by the end of this year €21.43bn (€16bn + €5.430bn through the Hellenic Financial Stability Fund, as part of the €1bn sub-tranche earmarked for bank recapitalization and resolution purposes), required for the completion of the share capital increase of Greece’s four systemic banks. As recently suggested by ESM Managing Director Klaus Regling, the total amount utilized out of the ESM loan facility for Greece may prove smaller than initially envisaged in mid-August following the better-than-expected results of the ECB’s Comprehensive Assessment on the four Greek systemic banks.

\footnotesize \textsuperscript{54} Stressing the importance of IMF involvement in Greece’s new bailout programme, Euro Working Group (EWG) President Thomas Wieser was quoted saying in a recent interview to a local newspaper that, in line with the August 14\textsuperscript{th} Eurogroup statement and the July 12\textsuperscript{th} EU Summit communiqué, programme engagement of the Fund is a key prerequisite for the completion of the 1\textsuperscript{st} review. In addition, he pointed out that a number of EU Parliaments will not approve the finalization of the review “unless they are completely certain that the IMF will join the programme.”

\footnotesize \textsuperscript{55} According to the July 12\textsuperscript{th} EU Summit statement “the Eurogroup stands ready to consider, if necessary, possible additional (debt relief) measures... after the first positive completion of a review.”
Progress of implementation has already encountered significant delays relative to the timeline envisaged in the new MoU for the completion; acceleration would certainly be beneficial. Although significant progress has been made in reforming the domestic economy since the first bailout programme, it can be argued that structural reforms have not yet reached the critical mass necessary to boost the economy’s productive capacity on a sustainable basis. Reforms implementation decelerated in the second half of 2014 and completely stalled during the first 7 months of 2015. As a result, Greece was downgraded, for the first time in 5 years, in 2015 on the Doing Business ranking by two positions (to 60th in 2015). In view of the above, the timely implementation of the agreed reform agenda in the months ahead is a necessary condition for the creation of a stable and investment-friendly environment and the return of the Greek economy to a sustainable growth path.

**Increase in domestic investment, a prerequisite for the return to a sustainable growth path.** Gross fixed capital formation was at ca. 24.6% of GDP in 2007 and fell to ca. 11.5% of GDP at the end of 2014. The downturn continued in 2015 and is expected to remain in place next year albeit at a slower pace. The resolution of uncertainty as well as a stable macroeconomic and fiscal environment will pave the way for new investment projects. To this end, the privatization programme will be the major source for foreign direct investments in the medium term.

**A swift removal of capital controls.** According to press reports, the government now expects a removal of capital controls in H1 2016. Significant delays in the conclusion of the 1st review (or the ones that will follow) might jeopardize the achievement of this target.

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16 If we use the World Bank’s Doing Business Indicator as a proxy for the improvement of the economy due to structural reforms, Greece climbed from 100th in 2010 to 58th rank in 2014, an improvement of 42 positions that is second to none in the history of the index.
Appendix I

Greece: taking stock of future debt amortization payments

Table A1 – Greece: amortization payments on gross public debt excl. T-bills (EUR bn)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total amortization payments</td>
<td>24.0</td>
<td>8.7</td>
<td>11.1</td>
<td>5.1</td>
<td>13.7</td>
<td>5.1</td>
</tr>
<tr>
<td>ECB (SMP)</td>
<td>5.2</td>
<td>1.5</td>
<td>3.7</td>
<td>1.3</td>
<td>4.8</td>
<td>1.1</td>
</tr>
<tr>
<td>NCBs (ANFA)</td>
<td>1.5</td>
<td>0.9</td>
<td>1.6</td>
<td>0.6</td>
<td>1.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Bonds</td>
<td>0.1</td>
<td>0.5</td>
<td>2.7</td>
<td>0.0</td>
<td>4.8</td>
<td>0.0</td>
</tr>
<tr>
<td>Special purpose &amp; bilateral international loans (EIB)</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Other international loans</td>
<td>0.1</td>
<td>0.6</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>BoG loan</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
<td>0.47</td>
</tr>
<tr>
<td>Short-term (net) /1</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Unwinding of repo operations /2</td>
<td>0.0</td>
<td>1.5</td>
<td>1.5</td>
<td>0.5</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>EFSF bridge loan</td>
<td>7.2</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Official creditors</td>
<td>9.2</td>
<td>3.0</td>
<td>0.7</td>
<td>1.8</td>
<td>2.1</td>
<td>2.8</td>
</tr>
<tr>
<td>of which:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IMF</td>
<td>9.2</td>
<td>3.0</td>
<td>0.7</td>
<td>1.8</td>
<td>2.1</td>
<td>2.1</td>
</tr>
<tr>
<td>EU (GLF loans)</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Source: PDMA, Eurobank Economic Research

1/ Total outstanding amount of T-bills assumed to remain at current levels (c. EUR 15bn) over the entire projection horizon
2/ Assumes partial unwinding of repo operations (by EUR 3.5bn) to c. EUR 6.2bn at the end of the programme period

Figure A1 - Central government debt amortization payments (excl. T-bills)
As of end-2015 (EUR bn)

Source: PDMA, Eurobank Economic Research

(*) Figure assumes partial unwinding (by €3.5bn) of repo operations to c. €6.2bn at the end of the 3rd programme period (Aug 2018).
Appendix II

Greece: projected evolution of gross public debt (% GDP) & underlying macro assumptions

Figure B

Source: IMF, EC, ECB, Eurobank Economic Research

(**) It is estimated that up to c. EUR 5.4bn of official-sector financing will be needed for the recapitalization of the 4 Greek systemic banks; overall the table assumes (rather conservatively) total official-sector financing up to €6.5bn will be need for recapitalizing the domestic banking system (including Attica Bank and cooperative banks).
<table>
<thead>
<tr>
<th>Year</th>
<th>NCBs (ANFA)</th>
<th>ECB (SMP)</th>
<th>Bonds</th>
<th>BoG loans</th>
<th>Special purpose &amp; bilateral international loans (EIB)</th>
<th>Other international loans</th>
<th>EFSF loans</th>
<th>GLF loans (sft bailout)</th>
<th>IMF loans</th>
<th>Repos</th>
<th>ESM loans (3rd programme)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0.9</td>
<td>1.5</td>
<td>0.5</td>
<td>0.3</td>
<td>0.6</td>
<td>3.0</td>
<td>1.5</td>
<td>8.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2017</td>
<td>1.6</td>
<td>3.7</td>
<td>2.7</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
<td>0.7</td>
<td>11.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>0.6</td>
<td>1.3</td>
<td>0.0</td>
<td>0.3</td>
<td>0.2</td>
<td>1.8</td>
<td>0.5</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>1.0</td>
<td>4.8</td>
<td>4.8</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
<td>2.0</td>
<td>13.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>0.2</td>
<td>1.2</td>
<td>0.5</td>
<td>0.5</td>
<td>0.3</td>
<td>0.2</td>
<td>2.0</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
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| 2025 | 0.1         | 1.7       | 0.4   | 0.2       | 2.4                                             | 2.6                       | 7.4        | ** Source: PDMA, Eurobank Economic Research **

(**) Table assumes partial unwinding (by €3.5bn) of repo operations to c. €6.2bn at the end of the 3rd programme period (Aug 2018).

(***) It is estimated that up to c. EUR 5.4bn of official-sector financing will be needed for the recapitalization of the 4 Greek systemic banks; overall the table assumes (rather conservatively) total official-sector financing up to €6.5bn will be need for recapitalizing the domestic banking system (including Attica Bank and cooperative banks).
### Appendix III

#### Table 1 - Prior actions to the €2bn ESM loan disbursement (released on 23 November 2015)

1. Finalisation of a comprehensive strategy for the financial system (*completed*).
2. Issuance by the BoG of all necessary provisions for the Code of Conduct implementation (*completed*).
3. Finalisation of a medium-term technical assistance plan with the European Commission (*completed*).
4. Introduction of a new Criminal Law on Tax Evasion and Fraud; abolishment of all Code of Books and Records fines including those levied under law 2523/1997 (*completed*).
5. Issuance of Circular & legislation on fines for breaching accounting code & non-issuance or incorrect issuance of retail receipts (*completed; some further implementation issues should be addressed in consultation with technical assistance*).
6. Issuance of ministerial decree extending indirect bank account register to provide 10 years of transaction history (*completed*).
7. Issuance of a ministerial decree specifying details of transfer of all tax- and customs-related capacities and duties and all tax- and customs-related staff in SDOE and other entities to the General Secretary of Public Revenue (*completed*).
8. Development of a cost plan for the promotion and facilitation of the use of electronic payments (*completed*).
9. Secondary legislation for making the Fiscal Council fully operational (*completed*).
10. Legislation for upgrading the Organic Budget Law (*key deliverable - completed; further amendments and secondary legislation are needed for the implementation of the reform*).
11. Presentation of a plan for the clearance of State arrears (*completed; some details still need to be fine-tuned to ensure effective implementation of the plan*).
12. Agreement with the European Commission on detailed action plan to enhance efficiency and transparency of the public procurement system, prevent misconduct and ensure more accountability and control (*key deliverable - completed*).
13. Extension of the claw-back ceilings for diagnostics, private clinics and pharmaceuticals to the next three years (*key deliverable - completed*).
14. Setting out detailed preparations for a gradual nationwide roll-out of a Guaranteed Minimum Income (GMI) including plans for the setup of a benefits registry and a strategy to ensure the inclusion of vulnerable groups and to avoid fraud (*completed*).
15. Adoption of a roadmap for the investment licensing reform (*completed*).
16. Establishment of three mobile enforcement teams on anti-smuggling (*completed*).
17. Reconvention of the inter-ministerial spatial planning committee, with participation of independent experts (*completed*).
18. Issuance of a Joint Ministerial Decree determining notaries’ fees (*completed*).
19. Launch of an ex-post impact assessment of selected reforms on competition, investment licenses and administrative burden (*key deliverable - completed*).
20. **Energy package**: Implement gas market reform according to the agreed timeline, prioritizing distribution tariffs; implement a scheme for the temporary and permanent capacity payment system; modify electricity market rules to avoid that any plan
forced to operate below their variable cost; regulate according to the final decision of the Council of State on the netting of the arrears between PPC and the market operator; implement interruptible contracts as approved by the European Commission; revise PPC tariffs based on costs, including replacement of the 20% discount for energy-intensive users; discuss with the European Commission the design of the NOME system of auctions (key deliverable - completed).

21. Legislation of the restructuring plan for ‘OASA - Transport for Athens’ agreed with the institutions (key deliverable - completed with clear implementation risks; there is lack of clarity around the selection process of the new Board and in particular against the commitment to follow international best practices).

22. Production of a roadmap for the implementation of the revised Code of Civil Procedure (completed).

23. Issuance of a presidential decree specifying the terms for the establishment of the appropriate infrastructure of the auction announcement webpage, the required conditions and other details for the respective publications (completed).

24. Ensuring that ELSTAT has access to administrative data sources (in line with Art. 17 of Law 4174/2013 amended by 4254/2014 and 4258/2014), and the Memorandum of Understanding signed between ELSTAT, the Ministry of Finance (GSIS), the Secretary General for Public Revenues and the Social Insurance Institute (IKA) on 17/04/2014 (completed).

25. Integration into ETEA of all supplementary pension funds and verification that they will be financed only by own contributions as of 1 January 2015 (pending; to be completed as part of the pension reform that constitutes one of the prior actions attached to the release of the €1bn loan installment).

26. Technical amendment for ensuring abolishment of the refund of excise tax on diesel oil for farmers from October 2016 (completed).

27. Rectification of technical mistake in the omnibus act concerning the 2014–15 tax and SSC debt instalment schemes (completed).


30. Issuance of all Ministerial Decrees for the implementation of all pension provisions. These decisions should include an explanation that minimum pensions should also be subject to early retirement penalties, e.g. when provided at the age of 62 with 15 years of contributions (completed).

31. Other amendments on the August 2015 omnibus act and other laws related on pensions:
   (I) the following additions need to be made to both the public sector and main laws: (a) for those who can retire on a full pension before the age of 67 with less than 40 years of contributions; and (b) the contributory period will be progressively adopted to 40 years by 2022. (II) Review and repeal as appropriate exceptions to those subject to certain provisions of the article 56 of Presidential Decree of 169/2007 and article 4 of Law 3660/2008; and (III) Amend paragraph 4 of public sector law, specifying 67% or higher disability grade (completed).

32. Finalization of a credible strategy for addressing the issue of NPLs (completed).

33. Adoption of certain amendments on the household insolvency law: legislation of primary and issuance of secondary legislation to tighten the eligibility criteria for protection of primary residence while protecting the vulnerable debtor in line with the proposal made by the institutions (completed).

34. Publication of a PM decision for the activation of the Government Council of Private Debt (completed).

35. Adoption of the OECD recommendation on pharmacy ownership to open it to non-pharmacists (completed).
36. Implementation of at least an additional 35 OECD Toolkit II recommendations regarding beverages and petroleum products (completed).

37. Adoption of a cabinet act for the establishment of an inter-ministerial committee for the investment licensing reform (completed).

38. Taking irreversible steps for the sale of the regional airports at the current terms with the selected bidder (completed).

39. Ensuring implementation of all Government Pending Actions identified by HRDAF (completed).

40. Establishment of claw backs for 2015 for diagnostics and private clinics and delink the 2014 claw back for private clinics from 2013 including, respectively, publication of a relevant ministerial decree and the government gazette number (FEK) provided (key deliverable-completed).

41. Amendment of the legislation on the grandfathering clause in light of highlighted issues on the period of price protection for generics and off-patent drugs (data vs. patent), and on the pricing mechanism. Introduction of a clause repealing conflicting provisions. All the following must be present in the final legislation: grandfathering must not apply; pricing mechanism must be satisfactory; protection period must be the shortest between data and patent; conflicting legislation must be repealed (completed).

42. On international non-proprietary name (INN) prescriptions: relevant circular must be published on “Diavgeia” and must be sent to E-governance in Social Insurance (IDIKA) (completed).

43. Issuance of ministerial decree freezing the 2015 level of claw back up to 2018 for private clinics (completed).

44. Issuance of ministerial decree freezing the 2015 level of claw back up to 2018 for diagnostics (or reducing it, in view of forthcoming price cuts) (completed).

45. Repeal of ministerial decree (FEK 1117/2015), in order to re-enforce sanctions and penalties as a follow-up to the assessment and reporting of misconduct and conflict of interest in prescription behaviour and non-compliance with the EOF prescription guidelines (completed).

46. Amendment of the gas market reform law approved in August as part of the Omnibus bill to: i) restore full eligibility for all customers outside the EPA Areas (article 182) and ii) state the Regulatory Authority for Energy’s competences on transmission tariffs (article 88) according to the agreed timeline, whilst prioritizing distribution tariffs; implement interruptible contracts as approved by the European Commission (completed).

47. Repeal of recent amendments to the Income Tax Code introduced in Law 4328/2010 article 2(3) concerning the legal assignment of unpaid rents to the Revenue service and replacement as required (completed).

48. Offsetting measures for substituting VAT on private education, if the government changes the relevant provisions (completed).

49. Review and repeal as appropriate the amendments to the pension system introduced in Laws 4325/2015 and 4331/2015 (articles 21, 24, 28, 31, 37, 38, 39, 75, 76) in agreement with the institutions (completed).

Source: MoU (August 2015), EU Commission, Eurobank Economic Research
Steps to irreversibly privatize the electricity transmission company, ADMIE\(^\text{17}\) unless an alternative scheme is provided with equivalent results (in terms of competition and prospects for investment), in line with the best European practices and following an agreement with the institutions aiming to engineer full ownership unbundling from the Public Power Corporation PPC (key deliverable).

Comment: Official creditors approved a scheme, reportedly presented by the Greek government, as an alternative but equivalent to a privatization plan of ADMIE, envisioning unbundling of the company from the PPC (currently ADMIE is a 100% subsidiary of PPC). According to the said agreement, 100% of ADMIE will be reportedly transferred to the State which will hold 51% and, out of the remaining 49%, 20% will be sold to a private investor (i.e., international transmission operator) and, at a later stage, 29% will be listed on the Athens Stock Exchange (ASE). The agreement provides for the majority of the seats on the Governing Board to be held by the State while the Chief Executive of the new entity and the business plan will be jointly approved by both the State and the new strategic investor. According to the Ministry of Environment & Energy, the PPC will be fully compensated for the purchase of the 51% stake through expected proceeds from the sale of the 49% stake and up to 10% of the transmission company’s annual core profit.

Steps to accelerate NPLs resolution.\(^\text{18}\) These include the approval of legislation dictating the legal framework for the licensing of non-banking institutions that will be authorized to offer NPL management services and repurchase of certain portfolios.

Comment: According to press reports, the agreed regulatory framework, effective January 1\(^\text{st}\) 2016, concerns solely the management and potential repurchase of NPLs of large corporations (with a turnover in excess of €50mn/annum and more than 250 employees) and mortgages that do not pertain to first residence. The aforementioned non-banking institutions will be subject to the BoG’s code of conduct while the BoG will also be the supervisory authority. As per the same sources, an overdue loan could be sold only after the relevant bank has proposed some form of restructuring in order to make the loan performing, at least 12 months before the sale. The agreed NPLs settlement excludes mortgages pertaining to first residence, consumer loans, SMEs’ loans and State-guaranteed loans, the regulatory framework for which must be prepared by February 15, 2016.

Appointment of an independent Task Force to identify options and prepare recommendations on the operational goals, structure and governance of a new independent Privatization Fund (key deliverable). In addition, completion of pending privatization actions, initially planned for Q4 2015 (e.g., the sale of the regional airports & the announcement of binding bid dates for Piraeus Port, Thessaloniki Port, TRAINOSE and ROSCO).\(^\text{19}\)

Comment 1: In line with the MoU conditionality entailing that the new Privatization Fund should be managed by Greek authorities under the supervision of the relevant European institutions, the two sides reportedly agreed that three out of the five members of the Governing Board will represent the Greek government and the other two, including the Governor, will represent official creditors. Yet, as per the same sources, both sides will have veto rights on the appointment of the Governing Board members. The new Fund will reportedly incorporate, inter alia, the Hellenic Financial Stability Fund (HFSF), the Hellenic Republic Asset Development Fund (HRADF), real estate assets and state holdings in public entities. Once the Fund is fully operational, the proceeds target over the life of the new ESM loan, may be reassessed from €50bn initially planned, as total recapitalization needs of the four Greek systemic banks stood at €5.430bn, well below the €25bn initially earmarked for bank recapitalization and resolution needs. Yet, irrespective of any revised target, up to 50% of the projected revenue will be used for the repayment of the recapitalisation of banks and other assets, 25% for retiring government debt and another 25% for investments, in line with the July 13\(^\text{rd}\) EU Summit agreement.\(^\text{20}\)

As part of the previous bailout agreement, Greece had agreed to sell a 66% stake in ADMIE.

Non-performing exposures (including non-performing loans for > 90 days as well as those in arrears for less than 90 days but at risk of becoming non-performing without the liquidation of related collaterals) reportedly stand currently at around 42% of total loans (to a level around €108bn). As per local press reports, out of total NPLs, c. 26% (or €28bn) is attributable to the housing sector out of which c. 43% or €12bn pertain to first residence, 19% (or €20bn) to SMEs, 37% (or €42bn to big corporates, 9% (or €10bn) to the consumer sector.

The implementation of the privatization program aims to generate annual proceeds of €1.4bn in 2015, €3.7bn in 2016 and €1.3bn in 2017. Privatization proceeds from non-bank assets are expected to lower State financing needs by €6.2bn over the programme period.

Under the MoU conditionality, valuable Greek assets should be transferred to the new Privatisation Fund that will replace the existing Hellenic Republic Asset Development Fund (HRADF), with a view to monetize assets through privatization worth up to €50bn, out of which €25bn to be used for the repayment of the recapitalisation of banks and other assets, €12.5bn for retiring government debt and another €12.5bn to be used for investments.
Comment 2: The Hellenic Republic Asset Development Fund (HRADF) signed earlier this month the 40-year lease agreement for the 14 regional airports with the selected preferred bidder Fraport AG - Copelouzos consortium. The deal involves an upfront payment of €1.23bn in the autumn of 2016 upon undertaking by the consortium of the management and operation of the airports, an annual fee of €22.9mn during the life of the concession while the German–Greek consortium will have to carry out €330mn worth of investments for the upgrade of existing infrastructure by 2020. With respect to the remaining pending actions, the Chairman of the Hellenic Republic Asset Development Fund (HRADF), Stergios Pitsiorlas, revealed recently the following: (i) the deadline for the submission of binding offers for a 51% stake in Greece’s largest port, Piraeus Port Authority (OLP) would be extended to 21 December (from December 3 previously). The tender for OLP is now scheduled to take place in H1 2016, along with the tender for Thessaloniki Port Authority (OLTH); and (ii) the date for the submission of binding offers for railway operator TRAINOSE and rolling stock maintenance company ROSCO - initially planned for December 2015 and then for mid-January- will be extended to mid-February.

4. **Reform of the unified wage grid**, effective January 1, 2016. In line with the MoU conditionality, the unified wage grid will be applied across the public sector in a fiscally neutral manner with a view to decompress the wage distribution in connection with the skill, performance, responsibility and position of staff (key deliverable).

5. **Issuance of a ministerial decree for the initiation of the claw-back mechanism on hospitals.** Among others, the said reform will entail a downward revision in prices of diagnostic tests, so as to bring structural spending in line with the claw-back targets (key deliverable).

6. **Implementation of 10 pending recommendations from OECD competition toolkit II.** These will include, among others, certain intervention in the market of beverages and petroleum products.

7. **Plan for the establishment of a new independent Secretariat of Public Revenues.** Relevant legislation is expected to be adopted during the 1st programme review.

8. **Legislative measures for combatting fuel smuggling and VAT carousel fraud.**

9. **Proposal for a time-bound roadmap for potential improvements in the spatial planning law (4269/2014); adoption of a Presidential Decree on forestry definitions.** Upon agreement with official creditors.

10. **Operation of a HFSF section panel for the appointment of Banks’ BoD members and chairman,** including: (i) agreement on binding Terms and Reference for the selection process; (ii) submission by the HFSF to the EWG of a proposal on the remuneration of Selection Panel Members which has been agreed with the European institutions, and (iii) agreement on a timetable for the next steps with the aim of completing appointments by end-December 2015.

11. **Secondary legislation on the financial assistance scheme for vulnerable households** to facilitate the required payments under the household insolvency law; issuance by the Bank of Greece of a decision on the procedure and criteria to be used for determining the maximum of the borrower’s repayment capacity, the amount that creditors would have received in case of emergency enforcement and the potential prejudice to the creditors; provision of a detailed implementation plan for the establishment of a Credit and Wealth Bureau by end-June 2016 as an independent authority that will identify borrowers’ payment capabilities for the facilitation of banking institutions.

12. **Issuance of ministerial decree for the re-establishment of the inter-ministerial committee for restricted professions.**

13. **Interventions on projects co-financed by EU structural funds.** In particular, for motorways, metro and waste management projects, an inter-ministerial committee should be established to supervise the implementation of the time-bound roadmap of relevant works and safeguard the timely decision making for their promotion.

Source: MoU (August 2015), EU Commission, Eurobank Economic

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*Of the 14 regional airports, 3 are on mainland (at the cities of Aktio, Kavala & Thessaloniki) while the other 11 are on islands (Corfu, Kefalonia, Kos, Rhodes, Chania, Kos, Zakynthos, Santorini, Mytilini, Samos & Mykonos).*
Table 3: Milestones to be fulfilled by the end of 2016

<table>
<thead>
<tr>
<th>January 2016</th>
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<tr>
<td>Completion of a thorough audit for the clearance of the outstanding stock of State arrears.</td>
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<td>Completion of an external audit of EOPYY’s accounts payable (key deliverable).</td>
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<tr>
<td>Completion of a consolidated, comprehensive and simplified legislative framework (primary and secondary legislation) on public procurement and concessions (key deliverable).</td>
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<td>Legislation of reforms to welfare benefits; decision on the benefit rates of the initial Guaranteed Minimum Income (GMI) rollout.</td>
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<th>February 2016</th>
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<td>Completion of a comprehensive review on the remaining tax legislation that is in conflict with the income tax code (ITC) and tax procedure code (TPC).</td>
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<td>Agreement between the BoG and domestic banks on operational targets for NPL resolution, e.g. loan restriction and creation of joint ventures (key deliverable).</td>
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<tr>
<td>Introduction by the Hellenic Financial Stability Fund (HFSF) of a scheme for the review of the Banks’ BoD members (solely in banks where the Relationship Framework Agreements apply) (key deliverable).</td>
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<td>Adoption of the legal framework for nationwide cadastral offices (key deliverable).</td>
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<th>March 2016</th>
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<tr>
<td>Issuance of secondary legislation for the implementation of the income tax code (ITC) and tax procedure code (TPC).</td>
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<tr>
<td>Codification and simplification of the VAT legislation through its alignment with the tax procedure code; elimination of outstanding loopholes; reduction of VAT payment period (key deliverable).</td>
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<tr>
<td>Simplification of the income tax regime, ensuring consistency of the income tax base and social security contributions of small businesses below the VAT registration threshold (key deliverable).</td>
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<tr>
<td>Modernization of the corporate law in the income tax code (ITC) so as to cover mergers and acquisitions and corporate reserve accounts; implementation of ITC provisions concerning cross-border transactions and transfer pricing (key deliverable).</td>
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<tr>
<td>Adoption of a further series of guaranteed employment support schemes covering 150,000 persons, including the long term unemployment (29+), young people (16-29), and disadvantaged groups (including inter alia Guaranteed Minimum Income beneficiaries) with individualized active labour market measures for participants, using local partnerships, involving the private and social economy sectors and ensuring efficient use of the resources available.</td>
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<tr>
<td>BoG to revise the Code of Conduct for debt restructuring guidelines to deal with groups of borrowers (e.g., SMEs) on the basis of clear criteria to segment retail portfolios and introduce fast-track mechanisms including standardized assessment templates, restructuring contracts and workout solutions.</td>
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<tr>
<td>Ensuring that each of the three international ports is equipped with at least one scanner.</td>
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<td>Making institutional changes for post-clearance audits and restructuring the risk analysis department in line with the World Customs organization (WCO) recommendations (key deliverable).</td>
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<td>Adoption of legislation to ensure the full functionality of the Port regulator.</td>
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<td>Implementation of the Task Force’s recommendations on the operational goals, structure and governance of the Privatization Fund (key deliverable).</td>
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<td>Proposing a long term plan for the codification of the main legislations.</td>
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<td>Update of the OECD’s 2011 assessment on the Greek education system.</td>
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<td>Establishment of a new central purchasing scheme (key deliverable).</td>
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<td>Action proposals for the implementation of an updated Education Action Plan.</td>
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<tr>
<td>Completion of the relevant process for the selection of Directors.</td>
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June 2016
- Rationalization of the payment process in the social security and health system (key deliverable).
- Delivering a plan for conducting annual independent financial audits on hospital accounts.
- Assessment of public health care capacity, both public and private, by region and by specialty; review of the need for commissioning private providers.
- Assessment of the effectiveness of the insolvency legal and institutional framework, introduction of necessary amendments.
- Based on the outcome of a relevant HFSF review, Banks’ BoG members may be replaced in a manner that ensures Banks’ boards include at least three independent international experts with adequate knowledge and long-term experience in related banking and with no affiliation over the previous ten years with Greek financial institutions (key deliverable).
- Full adoption of the pending OECD toolkit 1 recommendation on building materials.
- Adoption of the relevant legislation for addressing all issues identified in a new OECD competition assessment on wholesale trade, construction, e-commerce, media and rest of manufacturing (key deliverable).
- Adoption of secondary legislation for the prioritization of the investment licensing reform (key deliverable).
- Identification of any remaining issues needed to be addressed for the full implementation of certain reforms on competition, investment licensing and administrative burden (key deliverable).
- Full installment of the inflow-outflow system in the tax and customs warehouses ranks.
- Adoption of secondary legislation for selected improvements in the spatial planning law.
- Enhancing and strengthening further the independency of the water regulator (key deliverable).
- Adoption of a general transport and logistics master plan for Greece covering all transport modes (road, railways, maritime, air and multi-modal) and a time-bound action plan for the logistics strategy (key deliverable).
- Rationalisation of the public sector’s specialized wage grids.

July 2016
- Full implementation of the forestry law.

August 2016
- Adoption of further actions for supporting generics penetration through improvement on pharmacists’ incentive structure (e.g., profit structure).
- Development of a new system of electronic referrals to secondary care based on e-prescription and the electronic record, allowing the monitoring of waiting time.

September 2016
- Alignment of all property assessment values with market prices with effect from January 2017; cross-checking of all ownership interests against the information on all individual properties in the cadaster (key deliverable).
- Design of a new government Budget Classification structure and Chart of Accounts in time for the 2018 Budget.
- Comprehensive assessment of the effectiveness of the existing judicial remedies system (key deliverable).
- Establishment of an institutional benefits framework managing, monitoring and controlling the Guaranteed Minimum Income (GMI) and other benefits.
- Completion of the customs reorganisation (key deliverable).

October 2016
- Implementation of the second (and final) step for the abolishment of the refund of excise tax on diesel oil for farmers.

December 2016
- Implementation of a central registry of social security contributions in coordination with the pension funds consolidation.
- Completion of a review on the operation of the Fiscal Council.
- Clearance of outstanding stock of spending arrears (€7.5bn) and the backlog of unprocessed tax refund and pension claims.
- Putting into force the reform of the system of non-judicial/administrative remedies (key deliverable).
- Adoption of concrete steps for increasing further the proportion of centralized procurement (from 60% to 80%), the share of outpatient generic medicines by volume (from 40% to 60%), inpatient generic medicines (from 50% to 60%) as well as the share of procurement by hospitals on pharmaceutical products by active substance (from 2/3 to 3/4) of the total.
- Full national rollout of the Guaranteed Minimum Income (GMI) scheme (key deliverable).
- Completion of the clean-up process of NPL resolution (key deliverable).
– Streamlining and rationalizing existing labour laws through the codification into a Labour law Code (key deliverable).
– Equipping fully the scanners of the three main international ports (key deliverable).
– Completing the relevant process for the selection of new managers.

Source: MoU (August 2015), Eurobank Economic Research
The basic reform principles of the new system structure will reportedly include, inter alia: (i) integration into ETEA of all supplementary pension funds and replacement of the zero deficit clause with a so-called viability rule ensuring that they are financed only by own contributions (pending item from the list of prior actions attached to the €2bn loan installment); (ii) integration of main pension funds with uniform rules for all pensions; (iii) adoption of a closer link between contribution and benefit rules; (iv) adoption of a new scheme for the calculation of new pension payments (basic state guaranteed pension of €384/month granted to pensioners provided they have at least 15 years of work + supplementary pension based on new revised replacement rates); and (vi) the establishment of a special social security reserve fund for the recapitalization of social security funds. The said fund will reportedly raise funds through, inter alia, the exploitation of the funds’ assets, the imposition of a special levy on concession contracts for public works, oilfields and certain financial fines (e.g., traffic violations). The Greek government reportedly opposes official creditors’ request for the introduction of income criteria for the provision of the basic state guaranteed pension. In addition, as a means to avert any further cuts in main pensions as well as horizontal cuts in supplementary pensions, it has reportedly counterposed an increase in contributions. As per the same sources, it has suggested a 1.5% and 0.5% increase in employer and employee contributions respectively, until the domestic economy returns to positive growth. On their part, official creditors reportedly argue that the Greek government will not succeed in fulfilling its commitment for annual savings of c. 1%-of-GDP unless pensions are further reduced. In more detail, the IMF is pushing for a horizontal reduction of 6% in all pensions. Alternative IMF proposals include either a 15%-20% cut in pensions > €800 per month or a 35.-40% reduction in pensions > €1000 per month. The government is reportedly planning to submit to Parliament by January 15th the relevant social security reform bill with an intention to bring it for vote by January 20th.

2. Certain amendments to the income tax system.

Comment: The planned overhaul will reportedly include, among others: (i) abolishment of the preferential tax treatment for agricultural income (i.e., increase in farmer income to 20% in 2016 from 13% currently and to 26% in 2017); (ii) integration of the solidarity surcharge into the income tax code; (iii) increase in the income tax rate for rents to 15% -from 11%- for annual incomes below €12,000 and to 35% -from 33%- for annual incomes above €12,000; (iv) new income tax brackets; and (vi) collection of receipts through banking transactions or/and the use of credit and debit cards so as taxpayers to be eligible for the tax-free threshold and certain tax discounts (with the exception of taxpayers more than 75 years old and those who live in remote areas).

3. Additional labor market reform.

Comment: Under the MoU conditionality, the Greek government has pledged to launch a consultation process, headed by a group of independent experts to review with the collaboration of the International Labour Organisation (ILO) a number of existing labour market frameworks, taking into account best practices in Europe and internationally. Against this background, key items in the agenda of the upcoming discussions will reportedly include, inter alia: (i) collective dismissals and the purportedly veto power of the Labor & Social Security’s Minister; (ii) industrial action (e.g., lockout); (iii) collective bargaining; and (iv) reassessment of the existing regulatory frameworks dictating labor unions’ operation, including the procedure applied for engaging in a strike. To this end, Greece’s Minister of Labour, Social Insurance and Social Solidarity Georgios Katrougalos reportedly intends to form a special committee consisting of, inter alia, representatives of the International Labor Organization (ILO) and the EU Commission for Social Affairs that will have the mandate to hold discussions with official creditors in the context of the 1st programme review so as to reach a consensus on what constitutes best practices. However, as per the same sources, the institutions are against the participation of the ILO and have proposed instead the involvement of the World Bank and the Organization for Economic Co-operation and Development (OECD).

4. Finalisation of any outstanding issue with regards to the NPL resolution framework (e.g., NPLs related to primary residence, SMEs, consumer loans and State-guaranteed loans).

Table 4 - Key deliverables for the completion of the 1st programme review

1. Overhaul of social security and pension system to improve long-term sustainability of the overall system.22

Comment: The planned overhaul will reportedly include, among others: (i) abolishment of the preferential tax treatment for agricultural income (i.e., increase in farmer income to 20% in 2016 from 13% currently and to 26% in 2017); (ii) integration of the solidarity surcharge into the income tax code; (iii) increase in the income tax rate for rents to 15% -from 11%- for annual incomes below €12,000 and to 35% -from 33%- for annual incomes above €12,000; (iv) new income tax brackets; and (vi) collection of receipts through banking transactions or/and the use of credit and debit cards so as taxpayers to be eligible for the tax-free threshold and certain tax discounts (with the exception of taxpayers more than 75 years old and those who live in remote areas).

2. Certain amendments to the income tax system.

Comment: The planned overhaul will reportedly include, among others: (i) abolishment of the preferential tax treatment for agricultural income (i.e., increase in farmer income to 20% in 2016 from 13% currently and to 26% in 2017); (ii) integration of the solidarity surcharge into the income tax code; (iii) increase in the income tax rate for rents to 15% -from 11%- for annual incomes below €12,000 and to 35% -from 33%- for annual incomes above €12,000; (iv) new income tax brackets; and (vi) collection of receipts through banking transactions or/and the use of credit and debit cards so as taxpayers to be eligible for the tax-free threshold and certain tax discounts (with the exception of taxpayers more than 75 years old and those who live in remote areas).

3. Additional labor market reform.

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4. Finalisation of any outstanding issue with regards to the NPL resolution framework (e.g., NPLs related to primary residence, SMEs, consumer loans and State-guaranteed loans).

22 According to OECD report “Pensions at a Glance 2015” published earlier this month, public pension spending in Greece amounted 14.5%-of-GDP in 2014 compared to an average 7.9%-of-GDP across OECD countries (for more details see: http://www.oecd-ilibrary.org/docserver/download/b1152016.pdf?expires=1450443711&id=id&accname=guest&checksum=925C1EAv1B3C2OE6462EB2660CF186C

23 A first phase of pension reform was approved by the Hellenic Parliament in mid-August as part of the conditionality incorporated in the relevant law enacting the ESM bailout programme. These reforms included, inter alia, disincentives to early retirement and gradual adjustment in statutory retirement age.
5. **Legislation of additional structural measures** yielding at least 0.75% of GDP and 0.25% of GDP for FY-2017 and FY-2018 respectively, to support the achievement of the medium term primary balance target of 3.5%-of-GDP.

*Source: MoU (August 2015), Local Press, Eurobank Economic Research*
Eurobank Economic Analysis and Financial Markets Research

Dr. Platon Monokroussos: Group Chief Economist
pmonokroussos@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

Stylianos 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 Stamatiou: Senior Economist
tstamatiou@eurobank.gr, +30 210 33 71 228

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

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