Greece: 2017 Article IV Consultation-Press Release; Staff Report; and Statement by the Executive Director for Greece

GREECE

February 2017

2016 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE EXECUTIVE DIRECTOR FOR GREECE

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2016 Article IV consultation with Greece, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its February 6, 2017 consideration of the staff report that concluded the Article IV consultation with Greece.
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on February 6, 2017, following discussions that ended on September 22, 2016, with the officials of Greece on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on January 23, 2017.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Executive Director** for Greece.

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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IMF Executive Board Concludes 2016 Article IV Consultation, and Discusses Ex Post Evaluation of Greece's 2012 Extended Fund Facility

On February 6, 2017, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation¹ with Greece. The Executive board also discussed the Ex Post Evaluation of Exceptional Access under the 2012 Extended Arrangement under the Extended Fund Facility with Greece².

Background

Greece has made significant progress in unwinding its macroeconomic imbalances since the onset of the crisis. However, extensive fiscal consolidation and internal devaluation have come at a high cost to society, reflected in declining incomes and exceptionally high unemployment. The large adjustment costs, and the considerable political instability that ensued, contributed to delays in reform implementation since the last Article IV Consultation, and culminated in a confidence crisis in mid-2015.

The economic situation has stabilized since then, as the authorities commenced a new policy adjustment program supported by the European Stability Mechanism. The new program aims to strengthen public finances, restore the banking sector's health, and boost

¹ Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

² The requirement for ex post evaluations (EPEs) was agreed by the IMF Executive Board in September 2002 for members using exceptional access in capital account crisis, and extended to any use of exceptional access in February 2003. The aim of an EPE is to determine whether justifications presented at the outset of the individual program were consistent with IMF policies and to review performance under the program. To do this, EPEs seek to provide a critical and frank consideration of two key questions: (i) were the macroeconomic strategy, program design, and financing appropriate to address the challenges the member faced in line with IMF policy, including exceptional access policy? and (ii) did outcomes under the program meet the program objectives?

(continued...)

potential growth. In this context, the authorities have legislated a number of important fiscal, financial sector, and structural reforms.

Helped by the ongoing reforms and official financing from its European partners, Greece returned to modest growth in 2016. Growth is projected to accelerate in the next few years, conditional on a full and timely implementation of the authorities' adjustment program, including a rapid elimination of the capital controls introduced in mid-2015. On the basis of Greece's current policy adjustment program, long-run growth is expected to reach just under 1 percent, and the primary fiscal surplus is projected to come in at around 1½ percent of GDP. Downside risks to the macroeconomic and fiscal outlook remain significant, related to incomplete or delayed policy implementation. Public debt has reached 179 percent at end-2015, and is unsustainable.

Executive Board Assessment³

Most Executive Directors agreed with the thrust of the staff appraisal while some Directors had different views on the fiscal path and debt sustainability. Directors commended the Greek authorities for the significant economic adjustment and unwinding of imbalances since 2010, supported by important reforms. Directors recognized that this adjustment has taken a heavy toll on society that, together with high poverty and unemployment rates, has contributed to a slowdown in reform implementation. Directors urged the authorities to accelerate reform implementation to ensure a return to higher, inclusive growth and debt sustainability. Given still significant downside risks, Directors stressed that efforts should focus on improving public finances, repairing balance sheets, and removing obstacles to growth.

Most Directors agreed that Greece does not require further fiscal consolidation at this time, given the impressive adjustment to date which is expected to bring the medium-term primary fiscal surplus to around 1½ percent of GDP, while some Directors favored a surplus of 3½ percent of GDP by 2018. However, Directors called for rebalancing fiscal policy by broadening the personal income tax base and rationalizing pension spending to make room for targeted social assistance to vulnerable groups and lower tax rates. While most Directors favored a budget-neutral rebalancing, some Directors considered that the reforms could underpin temporarily higher primary surpluses, provided that they are implemented once the output gap closes so that the impact on the recovery is minimized.

Directors called for renewed efforts to combat tax evasion and address the large level of tax debt. They encouraged the authorities to strengthen tax administration, focus auditing efforts on large taxpayers, and strengthen the implementation of the anti-money laundering framework. Directors called for comprehensive tax debt restructuring for viable taxpayers based on capacity to pay, and welcomed plans to establish an independent revenue agency.

³ At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: <http://www.imf.org/external/np/sec/misc/qualifiers.htm>.

Directors stressed the need for reducing non-performing loans (NPLs) decisively to support the resumption of credit growth. They encouraged the authorities to strengthen the legal framework for debt restructuring, including out-of-court solutions, and to fully utilize the supervisory framework to incentivize banks to set ambitious NPL-reduction targets and strategies. Directors noted that ensuring adequate capital and completing the ongoing governance reform are critical for banks' long-run viability. Directors supported the removal of exchange restrictions as rapidly as practicable on the basis of a milestone-based roadmap while preserving financial stability by ensuring adequate liquidity in the banking system.

Directors encouraged the authorities to accelerate the implementation of structural reforms to enhance competitiveness. While recognizing that the burden of adjustment has fallen disproportionately on wage earners, Directors emphasized the need to preserve and not reverse existing labor market reforms and complement them with additional efforts to bring Greece's collective-dismissal and industrial-action frameworks in line with best practices, open up remaining closed professions, foster competition, and facilitate investment and privatization. Directors underlined the need to maintain and ensure the integrity of statistical information and systems.

Most Directors considered that, despite Greece's enormous sacrifices and European partners' generous support, further relief may well be required to restore debt sustainability. They stressed the need to calibrate such relief on realistic assumptions about Greece's ability to generate sustained surpluses and long term growth. Directors underlined, however, that debt relief needs to be complemented with strong policy implementation to restore growth and sustainability.

It is expected that the next Article IV consultation with Greece will be held on the standard 12-month cycle.

Directors welcomed the ex-post evaluation of the 2012–16 extended arrangement. They broadly agreed that the evaluation provides a useful basis for discussing the lessons from the arrangement. Directors emphasized the importance of developing realistic forecasts and targets, securing adequate financing and debt relief, undertaking fiscal adjustment through high-quality measures at a pace consistent with the country's implementation capacity, and adopting well-sequenced structural reforms based on strong ownership and parsimonious conditionality. Directors looked forward to discussing the operational framework for Fund collaboration with monetary unions.

Greece: Selected Economic Indicators ^{1/}

Population (millions of people)	10.9				Per capita GDP (€'000)	16.2	
IMF quota (millions of SDRs)	1,101.8				Literacy rate (percent)	97.7	
(Percent of total)	0.46				Poverty rate (percent)	35.7	
Main products and exports: tourism services; shipping services; food and beverages; industrial products; petroleum products; chemical products.							
Key export markets: E.U. (Italy, Germany, Bulgaria, Cyprus, U. K.), Turkey, U.S.							
	2011	2012	2013	2014	2015	2016 (proj.)	2017 (proj.)
Output							
Real GDP growth (percent)	-9.1	-7.3	-3.2	0.4	-0.2	0.4	2.7
Employment							
Unemployment rate (percent)	17.9	24.4	27.5	26.5	24.9	23.2	21.3
Prices							
CPI inflation (period avg., percent)	3.1	1.0	-0.9	-1.4	-1.1	0.0	1.2
General government finances (percent of GDP)							
Revenue	44.1	45.9	48.0	46.8	47.8	49.3	47.4
Expenditure	54.4	52.4	51.6	50.8	51.2	51.6	49.7
Fiscal overall balance	-10.3	-6.5	-3.7	-4.0	-3.4	-2.3	-2.3
Fiscal primary balance	-3.0	-1.4	0.4	0.0	0.2	0.9	1.0
Public debt	172.1	159.6	177.9	180.9	179.4	183.9	180.8
Money and credit							
Broad money (percent change)	-14.6	-5.3	2.7	-0.4	-16.9	1.6	...
Credit to private sector (percent change)	-3.1	-4.0	-3.9	-3.9	-3.6	-3.1	0.7
3-month T-bill rate (percent)	9.2	9.2	4.8	2.8	4.5	3.1	...
Balance of payments							
Current account (percent of GDP)	-10.0	-3.8	-2.0	-1.6	0.1	0.0	-0.1
FDI (percent of GDP)	0.2	-0.4	-1.5	0.1	0.5	-1.6	-0.8
Reserves (months of imports)	-1.0	-1.1	-0.8	-1.0	-1.3	-1.3	-1.2
External debt (percent of GDP)	188.2	237.0	237.3	238.5	251.1	245.7	239.2
Exchange rate							
REER (percent change)	0.7	-3.1	-0.8	-2.1	-4.9	0.6	0.0

Sources: Elstat; Ministry of Finance; Bank of Greece; Bloomberg; World Bank, World Development Indicators; IMF, International Finance Statistics; IMF, Direction of Trade Statistics; and IMF staff projections.

1/ Data according to ESA-2010 methodology.

GREECE

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION

January 23, 2016

KEY ISSUES

Context. Despite the policy constraints imposed by its membership in the currency union, Greece has made significant progress in unwinding its macroeconomic imbalances. But extensive fiscal consolidation and internal devaluation have come with substantial costs for society, which contributed to delays in reform implementation and to policy reversals since the last Article IV Consultation, culminating in a renewed crisis of confidence in 2015. Since then, the situation has stabilized, and growth is estimated to have resumed modestly in 2016. Notwithstanding the substantial progress achieved by Greece, it still faces fundamental challenges: (i) a vulnerable structure of the public finances; (ii) significant tax evasion and an ineffective tax administration; (iii) impaired bank and private sector balance sheets; and (iv) pervasive structural obstacles to investment and growth. Moreover, its public debt remains highly unsustainable, despite generous official relief already provided by its European partners. Addressing these remaining challenges and restoring debt sustainability are essential to creating a vibrant and dynamic private sector capable of generating sustainable and equitable growth and employment.

Policies. After major policy reversals in early 2015, the authorities commenced a new adjustment program supported by the European Stability Mechanism in August 2015, which has helped reverse the policy backtracking since then. The program aims to strengthen the public finances, restore the health of the banking sector, and boost potential growth. In this context, the authorities have legislated important fiscal, financial sector, and other growth-enhancing reforms, which constitute important steps forward. However, fiscal policies rely on high tax rates on narrow bases and on a compression of discretionary spending not supported by reforms. These policies are not growth-friendly and may prove difficult to sustain, which could lead to concerns about their credibility.¹ Moreover, structural and financial sector reforms are not sufficiently ambitious to rapidly resolve the large stock of debt to the banks and the tax authorities and to remove bottlenecks to growth and competitiveness.

Recommendations. To achieve sustainable and more equitable growth and ensure that Greece can become competitive within the currency union, while providing adequate protection to vulnerable groups, the authorities must deepen and accelerate reform implementation:

¹ Staff's assessment is that the fiscal surplus will reach around 1½ percent of GDP on the basis of current policies, compared to the authorities' target of 3½ percent supported by the ESM program.

- **Fiscal policy:** Given its cyclical position, Greece does not require further fiscal consolidation at this time beyond what is currently underway. Medium-run fiscal targets should be supported by preferably fiscally-neutral high quality reforms that broaden the personal income tax base and rationalize pension spending to allow the public sector to provide adequate services and social assistance to vulnerable groups, while creating the conditions for investment and more inclusive growth. Fiscal reforms should be complemented by efforts to address tax evasion and the large tax debt owed to the state.
- **Financial sector:** NPLs should be reduced rapidly and substantially to allow for a resumption of credit and growth. This requires additional efforts to strengthen and implement fully the debt restructuring legal framework and enhance supervisory tools. At the same time, bank governance needs to be further strengthened and capital controls eliminated as soon as prudently possible, while preserving financial stability.
- **Structural reforms:** More ambitious labor, product and service market reforms are needed to enhance competition and support growth. A return to the previous less flexible labor market framework should be avoided, as this would put at risk the potential gains for investment and job creation.
- **Debt relief:** Even with these ambitious policies in place, Greece cannot grow out of its debt problem. Greece requires substantial debt relief from its European partners to restore debt sustainability.

Approved By
**Philip Gerson and
 Hugh Bredenkamp**

Discussions for the Article IV consultation were held during September 17-22, 2016. The mission met with Minister of Finance, E. Tsakalotos, Governor of the Bank of Greece, Y. Stournaras; other Cabinet Ministers, and staff of their ministries. Mission members included D. Velculescu (head), I. Petrova, E. Flores, A. Kangur, A. Roitman, S. Saksonovs (all EUR), I. Razafimahefa (FAD), A. Kokenyne Ivanics, O. Wuensch, J. Yoo (MCM), W. Bergthaler, C. El Khoury, J. Garrido (LEG), R. Perrelli, and C. Saborowski (SPR). D. Botman, G. Gatopoulos, N. Kalavrezou, M. Kalimeri (IMF, resident representative office) assisted the mission. S. Chen, E. Rojas and J. Yang (EUR) assisted from headquarters.

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CONTEXT

1. Despite significant progress in unwinding its macroeconomic imbalances, Greece's economy has not yet recovered. Greece entered the crisis with exceptionally large fiscal and external imbalances. Policies supported by its two previous adjustment programs helped to address these imbalances, with both the primary and current account deficits having declined from double digits to around balance in recent years. This is an impressive adjustment, especially for a country belonging to a currency union. Exceptional official financing totaling around €260 billion (147 percent of GDP) helped to buttress the adjustment and keep Greece in the euro-zone. Nonetheless, Greece has not managed to return to sustainable growth, with output having contracted by more than 25 percent since 2008, investment down by more than 60 percent, and unemployment at the highest level in the euro-zone.²

Greece: Current Account Balance and Primary Balance
(Percent of GDP)

Sources: Elstat; and Haver Analytics.

Real Output

(Index, pre-crisis peak = 100 1/)

Sources: Eurostat; Haver Analytics; and IMF staff calculations.

1/ Pre-crisis peaks are 2007 for Greece, 1997 for Asian crisis, 2008 for Eurozone crisis, and 1929 for Great Depression.

2/ Including Indonesia, Republic of Korea, and Thailand.

2. The reform momentum has slowed, however, in part reflecting fatigue associated with the social costs of adjustment. Greece implemented important reforms early in the adjustment program. However, implementation of structural reforms has since slowed, and fiscal reforms have relied increasingly on one-off and ad-hoc adjustments. This reflects the inability of the political system to maintain popular and political support for the reform effort amid an increasingly frayed social and political fabric and a perception that the adjustment costs were unequally borne by some groups (e.g. wage-earners) while others were protected (e.g. the self-employed, current

Political Developments

10-Year General Government Bond Yields, 2010–15
(Percent)

Source: Bloomberg.

² Gourinchas et al ("The Analytics of the Greek Crisis," NBER, 2016) find that the fiscal correction accounts for 50 percent of the output drop, and the increase in funding costs for firms and the sovereign for the bulk of the remainder; the persistence of the recession was attributed to high NPLs and product market rigidities.

pensioners). Over the last six years, Greece had seven governments, including from the center right, and center left, as well as technocratic (including two caretaker governments), but none was able to successfully mobilize the broad political support necessary to complete the two previous Fund-supported programs (only 10 out of 24 planned reviews were completed). The uncertainty associated with frequent political crises paralyzed decision-making or led to unwinding of reforms. Against the background of a somewhat weak external environment, such unwinding of reforms fueled occasional fears of Greece's departure from the euro zone ("Grexit"), leading to confidence shocks and exacerbating the downturn.

3. Greece experienced its latest crisis in 2015 and narrowly avoided Grexit with support from the European Stability Mechanism (ESM). Reflecting reform fatigue and weak ownership, reforms stalled in mid-2014, as signs of macroeconomic stabilization and incipient market access emerged. Following the election of the Syriza government in early 2015 on an anti-program and anti-austerity platform, reforms were unwound across the board. This led to a confidence and liquidity crisis, which culminated in Greece running temporary arrears to the IMF and requiring the imposition of capital controls in June 2015 to stem deposit outflows. Grexit was ultimately avoided with the help of a new ESM-supported program of up to €86 billion (49 percent of GDP) agreed in August 2015, in return for which the government reversed the policy backtracking and reaffirmed its commitment to the basic objectives of the program (Box 1).

4. While the new ESM-supported program has helped stabilize the economic situation, the underlying issues hindering the recovery have not yet been fully addressed:

- **First, public and private balance sheets remain deeply impaired.** Public debt has continued to rise, reaching some 180 percent of GDP by end-2015, about 65 percent higher than its pre-crisis level. This was due to sizeable fiscal deficits and declining growth, notwithstanding the large private sector debt restructuring in 2011-12 and significant flow relief from official creditors. The fiscal problem migrated over time to the private sector balance sheets (Figure 1), with private sector arrears to the banks and the state reaching the second highest level in the euro-zone.

General Government Debt, 2015
(Percent of GDP)

Private Sector Arrears
(Percent of GDP)

- **Second, the economy remains fundamentally uncompetitive.** Despite commitments in its adjustment program to undertake several rounds of structural reforms, Greece has not managed to fully regain competitiveness. In large part, this is due to a weak investment climate, not least

because of insufficient progress in opening up the economy in the face of resistance from vested interests, which hampered the price adjustment needed to restore external competitiveness within the currency union.^{3,4} As a result, exports continue to lag those of peers, and, despite some improvement, Greece still ranks poorly on broadly accepted structural indicators relevant for growth (Figure 2).

5. Greece thus faces four key challenges:

Challenge 1: An unsustainable fiscal policy mix based on unaffordable pensions financed by high tax rates on narrow bases

- Greece implemented an impressive fiscal structural adjustment of around 16 percent of GDP during 2010–15. While more than half of the legislated measures have been on the spending side, only about a quarter of the overall adjustment was directed at reducing public sector wages and pensions, which had grown rapidly before the crisis, with the rest being discretionary spending cuts and increases in tax rates on narrow bases. Although the wage bill declined somewhat as a result, the problem migrated to the pension bill through early retirements, leading to a further rise in pension spending relative to GDP from 2010 to 2015.

- The most recent consolidation package adopted under the ESM program illustrates the political difficulties in tackling key remaining structural weaknesses. The package, expected to yield close to 4 percent of GDP in savings by 2018, is heavily reliant on revenue measures (about 3 percent of GDP), of which the bulk constitutes further increases in already high tax rates on narrow bases.

³ Only about a third of structural benchmarks under the EFF-supported program have been fully completed until now, with the rest either not done or only partially completed.

⁴ The shift of resources from the non-tradable to the tradable sectors has been modest, with only tourism having experienced an increase in employment during 2010–15, while manufacturing saw a sharp decline, also given concentration in low value added segments subject to competition from developing countries (see WP/12/236).

Reductions in pension spending amount to less than 1 percent of GDP (relative to a system deficit of close to 11 percent of GDP). Greece's new automatic contingency mechanism—which provides for ex-post across-the-board cuts in discretionary spending in case of deviations of outturns from fiscal targets—adds to distortions, as it does not address underlying weaknesses through structural reforms, but relies instead on further ad hoc temporary cuts.

- As a result of the sub-optimal policy mix, the pension system remains highly imbalanced (with a deficit four times the euro-area average of 2.5 percent of GDP), discretionary spending is compressed to unsustainable levels, and the tax burden is unevenly distributed due to exceptional exemptions that relieve the middle class from any personal income tax obligation (more than half of wage earners are exempt from paying personal income tax compared to the euro area average of 8 percent).⁵ Thus, the current structure of public finances is fundamentally inefficient, unfair and ultimately socially unsustainable, as it favors current pensioners and middle-class households while denying lower-income and unemployed individuals access to the adequate and well-targeted social benefits and other essential public services they need and that are the norm elsewhere in the euro area. Consequently, during the crisis, relative poverty rates declined substantially for retirees, while they soared for the working-age unemployed.^{6,7}

State Transfers to the Public Pension System
(Percent of GDP)

Sources: 2012 and 2015 Aging Reports; and IMF staff calculations.
Note: State transfers are defined as difference between pension spending and actual contributions, excluding third-party revenues and non-contributory state transfers.

General Government Expenditure on Goods and Services, 2015
(Percent of primary expenditure)

Sources: Eurostat, and IMF staff calculations.

Tax-Free Income Threshold in the Euro Area

Sources: Eurostat; Greece MoF; and IMF staff calculations.
Note: Share of exempted households for Greece is calculated based on 2016 income tax declaration (2015 declared incomes) using thresholds legislated in 2016. For other euro area countries, the share is based on 2014 Household Budget Survey data and 2015 tax-free thresholds.

Change in Poverty Rate, 2010-2015

Source: Eurostat.
Note: Persons at risk of poverty are those living in a household with equalized disposable income below 60 percent of the national median.

⁵ Taxpayers in the highest income decile pay about 60 percent of personal income tax revenue, while 53 percent of wage earners and 85 percent of farmers are exempt.

⁶ Persons at risk of poverty are those living in households with an equalized disposable income below 60 percent of the national median after social transfers.

⁷ The significant reduction in Greece's poverty rate among retirees during the crisis continues a trend that started well before the crisis due to a rapid increase in pension spending during the boom years.

Challenge 2: An ineffective tax administration, weak payment culture, and rising tax debt

- Despite multiple rounds of institutional reforms, tax collection rates have plummeted, while private sector debt to the state has reached 70 percent of GDP, the highest level in the euro-area.⁸ Tax debt was already high prior to the crisis, indicative of a weak payment culture and enforcement capacity. Around half of the population is in arrears to the state, also well above the ratio in other countries. The economic downturn was a key factor in the accumulation of arrears. But the high tax rates and punitive penalties and fines added to the debt. The problem has been exacerbated by an ineffective tax administration frequently subjected to political interference, which has been unable to enforce collections, relying instead on outright amnesties or untargeted installment schemes, which have only served to further weaken incentives to pay and are thus self-defeating.

Greece: Current Tax Collection Rate, 2010–15

Private Sector Debt to the State
(Percent of GDP)

Challenge 3: Weak bank balance sheets and governance

- Despite three rounds of recapitalizations since 2010 and massive liquidity support from the European Central Bank (ECB) and the Bank of Greece (BoG), confidence in the banking sector is yet to return, and capital controls are still in place. The quality of bank capital is weak, with half being comprised of deferred tax assets (DTAs), which could add to contingent liabilities for the state. Moreover, non-performing loans (NPLs) have continued to rise in recent years, reaching

Greece: Total Bank Deposits
(Billions of euros)

Non-Performing Loans
(Percent of total loans)

⁸ The tax collection rate is defined as the ratio of collected to assessed obligations, including taxes, penalties, and fines, the latter of which are largely uncollectible, pointing to a highly ineffective tax administration.

the second highest level in the euro zone (just behind Cyprus).⁹ Finally, governance concerns persist, as early attempts to insulate the Hellenic Financial Stability Fund (HFSF) from political interference have not appeared to yield results, ESM direct recapitalization was not available in 2015, and recent legislation tightening eligibility for bank boards is yet to be fully implemented.

Challenge 4: Pervasive structural rigidities, which prevent inclusive growth

- Greece implemented landmark labor market reforms in 2010-11, aimed at protecting employment by increasing labor market flexibility. The reforms allowed for a significant reduction in labor costs, helping to narrow Greece's wage-competitiveness gap relative to trading partners. However, parallel reforms intended to address rigidities in product markets have not generated the hoped-for increases in productivity and competitiveness, due to slow implementation in the face of strong opposition from vested interests. As a result, while the burden of adjustment has fallen excessively on wages, prices have adjusted less (even after accounting for tax hikes), and a real-exchange-rate overvaluation of some 5-10 percent remains relative to fundamentals (Annex 1).

Harmonized Index of Consumer Prices
(Index, January 2010 = 100; seasonally adjusted)

Labor Cost, Wage Index
(Index, 2010:Q1 = 100)

- While labor market reforms appear to have helped halt the rise in the unemployment and poverty rates (which have been closely interlinked) after 2012 by allowing firms to adjust

People Below 60 Percent of Median Income
(Percent)

Evolution of Inequality, 2008-15

⁹ Non-performing loans are defined as loans that are 90 days or more past due, unlikely to be repaid in full without realizing collateral, and impaired according to accounting rules, as well loans that have been restructured for less than a year.

their payrolls rather than close down, Greece's poverty level remains unacceptably high, especially compared to that in the rest of the euro area. At the same time, inequality is relatively high in cross-country comparison and has further increased during the crisis (although to a lesser extent than in other countries, such as Cyprus, Ireland, or Spain), suggesting that while better-off interest groups have been relatively protected, the brunt of the adjustment has been borne by wage earners and the unemployed.

RECENT ECONOMIC DEVELOPMENTS

6. Macroeconomic outcomes remain weak, reflecting the lingering uncertainty about the prospects for success of the authorities' current policy package:

- Growth** (Figure 3): After a temporary spell of small but positive growth in 2014, output contracted by 0.2 percent in 2015, with private consumption and investment falling following the introduction of capital controls in June 2015. Output has started to recover since mid-2016, supported by net exports and the authorities' efforts to clear the state's spending and tax refund arrears with the private sector. The current account remained close to balance in 2016, with both imports and exports declining further by end-September (Figure 4). Harmonized consumer prices fell by 1.1 percent in 2015 and were stable in 2016, notwithstanding recent VAT hikes. The labor market is recovering gradually, with the unemployment rate having declined to 23 percent (seasonally adjusted) at end-October 2016 from a peak of close to 28 percent in 2013Q3, while wages per employee increased by 2.6 percent (y-o-y) through end-September 2016.
- Fiscal outcomes** (Figure 5): After Greece managed to achieve a small primary surplus in 2013, spending pressures built up in 2014 and the first half of 2015. The ensuing easing was arrested with the introduction of new consolidation measures, which helped achieve a small primary surplus of 0.2 percent of GDP in 2015 (ESA2010 basis, excluding bank recapitalization costs). In 2016, the cumulative general government's primary surplus (cash basis) through end-November was higher by 0.8 percentage points than a year ago. This outcome reflects higher tax revenues due to the new measures coming into effect in 2016 and the

Greece: Contributions to Real GDP Growth
(Percent, quarter-over-quarter, seasonally adjusted)

Consolidated General Government Accounts

(Cash Basis)

	2015 Jan-Nov	2016 Jan-Nov	Difference (2016-2015)
	(Percent of GDP)		
Revenue	37.6	39.5	1.9
Direct Taxes	8.7	9.3	0.6
Indirect Taxes	13.2	14.7	1.5
Social Contributions	9.9	10.2	0.3
Other Revenue	5.8	5.4	-0.4
Primary Spending	34.7	35.9	1.2
Social Benefits	19.9	20.1	0.2
Compensation of Employees	8.1	8.1	0.0
Other Current Expenditure	4.5	5.6	1.1
Investment	2.2	2.1	-0.1
Cash Primary Balance	2.8	3.6	0.8

Source: Greece, Ministry of Finance.

relatively better macroeconomic performance, partly offset by higher cash spending related to the government's clearance of its arrears to the private sector.

- Banking sector:** Banks lost 27 percent of deposits in the first half of 2015 and had to resort to capital controls and emergency liquidity assistance (ELA). Since then, deposits have stabilized and banks have reduced central bank exposure. The banking sector required a fresh round of recapitalization in 2015 (€15 billion, or 8½ percent of GDP) to help bring capital ratios from 8 percent Common Equity Tier 1 (CET1) in mid-2015 to around 18 percent at end-September 2016. NPLs have reached 45 percent of total loans in 2016Q3, almost four times as high as in 2010. Provisioning stands at 50 percent of total NPLs. Credit continued to contract in 2016, bringing the total credit decline to 20 percent since 2010.

Greece: Private Sector Credit Growth

(Percent, y-o-y)

- 7. Political support for the authorities' policies remains weak.** The Syriza government initially achieved broad support for their new program. However, the government has found it increasingly difficult to maintain the support of opposition parties for the adjustment program now underway. Lingering political uncertainty and specter of new elections have kept yields elevated. The ECB, while having restored Greek banks' eligibility for monetary policy operations, has not yet added Greece to its QE program.

10-Year General Government Bond Yields, 2015–Latest

(Percent)

OUTLOOK AND RISKS

- 8. After modest growth in 2016, output is projected to rebound over the medium term.** Growth is expected to have reached around 0.4 percent in 2016, and to accelerate to 2.7 percent this year. Projections are predicated on full and timely implementation of the authorities' adjustment program, which is expected to be accompanied by rising confidence following agreement on debt relief, access to the ECB's QE program, and rapid elimination of capital controls. Projections also presume continued clearance of the government's

Cumulative Real GDP Growth

(Percent)

spending and tax refund arrears to the private sector, which would help offset the drag from the ongoing fiscal consolidation.¹⁰ GDP is expected to grow above potential during 2018-20, closing the output gap. The projected recovery is slightly smaller than that projected for Spain and Cyprus, and Greece's 2020 real output and investment are expected to remain below pre-crisis levels by 15 and 45 percent, respectively. Inflation is expected to stay below the ECB target, reflecting slower productivity growth, and unemployment will fall to just below 19 percent by 2020, given high structural unemployment.

Key Economic Indicators

	2015	2016	2017	2018	2019	2020
<i>(percent change unless otherwise indicated)</i>						
Real GDP	-0.2	0.4	2.7	2.6	2.4	2.0
Total Domestic Demand	-0.2	-0.4	2.2	2.2	2.3	1.9
Private Consumption	-0.2	0.8	1.5	1.4	1.2	1.0
Public Consumption	0.0	0.7	0.5	0.5	2.0	1.7
Gross Fixed Capital Formation	-0.2	3.0	9.5	9.0	8.0	6.2
Foreign Balance (contribution)	0.9	-0.1	0.5	0.4	0.0	0.1
Exports	3.4	1.0	6.5	6.0	4.8	4.2
Imports	0.3	1.2	4.6	4.6	4.7	3.7
Unemployment Rate (percent)	24.9	23.2	21.3	19.8	19.0	18.4
HICP (period average)	-1.1	0.0	1.2	1.4	1.6	1.7
GDP Deflator	-1.0	0.1	1.4	1.5	1.5	1.6

Sources: Bank of Greece; and IMF staff estimates.

9. Long-term growth is expected to reach around 1 percent. Adverse demographics are projected to render the contribution of labor to long-run potential growth slightly negative, even as labor force participation is assumed to improve and the unemployment rate to decline gradually to single digits by 2040. Investment growth is expected to remain modest, as financial sector and structural reforms take time to fully materialize. Capital accumulation is thus expected to have a positive but small contribution to growth. Export growth is predicated on a shift of resources from the non-tradable to the tradable sector that occurs only gradually, helping to offset the negative growth impact of higher imports. Ultimately, long-term potential growth will depend on TFP growth, which, given the slow pace of implementation of structural reforms, is projected to reach 0.9 percent, higher than Greece's long-term average, but below the euro-area average.

10. The primary fiscal balance is projected to reach close to 1 percent of GDP in 2016 and rise to 1½ percent by 2018. This is predicated on full implementation of the package of measures legislated in 2015-16 (estimated to yield 3¾ percent of GDP), entering into effect gradually

¹⁰ The authorities plan to clear 3.8 percent of GDP in expenditure and tax refund arrears to the private sector during 2016-17 (of which about 1 percent has been already cleared), while 3 percent in new measures enter into effect. As noted below, fiscal projections are based on staff's estimate of the primary balance given the authorities' current fiscal policy package.

during 2015-18. However, given that some of these measures replace expiring measures or other one offs, their net effect represents an improvement of only around 1½ percent of GDP in the primary balance by 2018.¹¹ Specifically, in 2016, the balance is projected to increase by 0.7 percent of GDP relative to 2015 on account of ongoing consolidation measures, which are partly offset by a recently legislated one-off bonus to retirees and by the expiration of one-off revenues related to bank liquidity support. The primary surplus is projected to increase to 1 and 1½ percent of GDP in 2017 and 2018, respectively, also on account of new measures, which are partly offset by expiring measures, and a further decline in non-tax revenues, and assuming that the authorities fully finance the rollout of the GMI in a budget neutral way, in line with their ESM program commitments.¹²

General Government Operations, 2015-18 (ESA 2010)
(Percent of GDP)

	2015	2016	2017	2018
Total Primary Revenue	47.8	49.3	47.5	46.3
Indirect taxes	16.1	16.9	16.7	16.5
Direct taxes	9.4	9.9	9.0	8.7
Social contributions	13.9	13.8	14.0	13.8
Other revenue	8.4	8.6	7.7	7.3
Total Primary Expenditure	47.6	48.4	46.5	44.8
Social benefits	22.2	22.2	21.4	20.2
Compensation of employees	12.3	12.3	12.1	11.7
Other expenditure	13.1	13.9	13.0	12.9
Primary Balance	0.2	0.9	1.0	1.5

Sources: Ministry of Finance, and IMF staff estimates.

11. Significant downside risks weigh on the outlook (Annex 1). The key risks remain domestic, related to an insufficient or slow pace of implementation of the authorities' reform agenda. A stylized scenario based on current policies with no further reform implementation (e.g. incomplete financial and structural reforms, persistence of capital controls, lack of access to QE and absence of a solution to debt), would imply much lower investment and TFP, resulting in growth of only about 1 percent in the medium term and 0.3 percent in the long term.¹³ Such a scenario, if prolonged, could lead to renewed liquidity squeezes, which, in the absence of further official support, could rekindle Grexit concerns. But even if the authorities' policy program stays on track, high risks to the baseline remain, given the four challenges noted above. Frequent and large downward data revisions and uncertainty associated with the size of the output gap complicate the analysis and add to downside risks to the outlook (Box 2). External risks have also increased following the UK referendum, which could affect Greece's exports, FDI, and growth. Finally, a further intensification of refugee flows could add to fiscal costs and increase political risks.¹⁴

Downside Scenario

	2017	2018	2019	2020	2021
Real GDP Growth (percent)	1.1	1.2	1.2	0.8	0.6
<i>Contributions (percentage points)</i>					
Final Consumption	0.5	0.7	0.5	0.2	0.1
Gross Fixed Capital Formation	0.3	0.6	0.6	0.5	0.5
Foreign Balance	0.3	0.1	0.1	0.1	0.1
Primary Balance (percent GDP)	0.5	0.6	0.4	0.4	0.4

Source: IMF staff estimates.

¹¹ This is in line with experience during 2010-14, when legislated measures of close to 28 percent of GDP resulted in an improvement in the primary balance of 10 percent, also on account of temporary measures and one off effects, among other factors.

¹² Projections also take into account the recently-legislated budget for 2017.

¹³ The contribution of investment to GDP growth is assumed at ½ percent, in line with the 2001-2009 and 1961-2015 averages. This is around half of the level assumed under the active policy baseline scenario.

¹⁴ Costs related to the refugee crisis are difficult to estimate, with preliminary estimates suggesting 2016 costs at around 0.2 percent of GDP. European partners have indicated an intention to help cover such costs.

12. The authorities agreed with staff's short-term growth projections, but had a more sanguine view of longer-term growth prospects and of the fiscal outlook and risks. They concurred that growth is likely to rebound strongly this year, supported by a return of confidence following an expected solution to debt and the inclusion of Greece in the QE program. The authorities had more optimistic medium-term growth projections than staff (averaging close to 3 percent during 2017-19), also on account of confidence effects, notwithstanding significantly higher projected fiscal primary surpluses, which they expected at 0.7, 2.0, and 3.5 percent of GDP for 2016-18. In the long run, they expected potential growth to be higher than staff's projection, at around 1½ to 2 percent, given expected growth dividends from ongoing structural reforms. The authorities saw risks more balanced, and considered that downside risks are linked to delays in an agreement on debt relief and in Greece's inclusion in the ECB's QE program.

POLICY DISCUSSIONS

13. Discussions focused on addressing the four challenges noted above to repair public and private sector balance sheets and restore competitiveness. There was broad agreement that progress has been made in reinvigorating the reform agenda since August 2015. However, it was recognized that impediments to growth and fiscal sustainability remain, posing risks to the outlook. Discussions focused on four main themes: (i) the appropriateness of medium-and long-term fiscal targets and the policy mix; (ii) fiscal structural reforms to address tax evasion; (iii) financial sector reforms to repair bank and private sector balance sheets; and (iv) growth-enhancing structural reforms. It was agreed that even with implementation of ambitious reforms, Greece will not be able to restore sustainability without significant debt relief from its European partners.

A. Toward More Credible and Sustainable Fiscal Policies

14. Greece's current fiscal strategy remains anchored in an ambitious medium-term primary surplus target of 3½ percent of GDP, but the policies underlying it appear unduly optimistic, especially given pent-up demands for spending. In particular, the authorities' assumptions about the yield of recently legislated measures and about revenue buoyancy seem excessive, and the assumed further sharp compression of discretionary spending of 2 percent of GDP is not underpinned by structural reforms. Reaching and sustaining such a high surplus for an extended period will be challenging, in view of pent-up spending pressures, some of which are already materializing (e.g. the recent bonus to pensioners, budget overruns in healthcare spending, etc.), and given that double-digit unemployment rates are expected to persist for several decades. Cross-country evidence suggests that few countries having managed to maintain such high surpluses for extended periods of time, and even fewer (one in Europe) have done so while also experiencing double digit unemployment rates.¹⁵

¹⁵ Since 1945, only five euro-area countries have ever been able to maintain an average primary balance higher than 1.5 percent of GDP for a period longer than 10 years, and only one (Italy) in the context of double digit unemployment rates.

15. The authorities should avoid further pro-cyclical consolidation at this time and ensure that their medium-run fiscal targets are supported by credible reforms. As noted above, the current package of fiscal reforms is expected to result in a primary surplus of around 1½ percent of GDP by 2018. This is appropriate in view of Greece's own track record and the current cyclical position.¹⁶ Aiming for a higher target would necessitate further net fiscal consolidation, which is not advisable at this time, as it would be detrimental to the nascent recovery. Relying on one-off factors or the contingency mechanism to temporarily achieve higher targets is equally undesirable, as it would not only pose a drag on growth, but would also obscure the underlying fiscal position and add to risks down the road. Should the authorities choose to maintain a medium-term primary surplus of 3½ percent of GDP, then they will need to implement additional credible and high quality reforms. These reforms should be implemented only once the output gap closes, to mitigate the impact on the recovery. Still, such a policy will undoubtedly have an adverse impact on growth, as it will constrain demand.

16. Regardless of fiscal targets, the authorities should aim to rebalance the policy mix toward more growth-friendly and equitable policies. A rebalancing of the policy mix away from spending on entitlements and excessive taxation on narrow bases and toward better-targeted social transfers and spending on other essential public services and investment can help to strengthen the sustainability of the public finances and mitigate downward risks to growth by promoting jobs and more inclusive growth. While the rebalancing is necessary in any case, the sequencing of its various elements would depend on the fiscal target chosen. Specifically, with a target of around 1.5 percent of GDP, such a rebalancing should be implemented as soon as possible, and in a fiscally neutral manner, to maximize the growth and re-distributional benefits and reduce policy uncertainty. If the medium-term target is higher than 1.5 percent of GDP, measures that boost revenues or reduce expenditures would need to be implemented first (but only once the output gap closes) to support the higher targets, while growth-enhancing rebalancing measures would need to be postponed, to be implemented only as fiscal space allows. Cross-country experience shows that fiscal adjustments based on tax-base broadening and expenditure rationalization have lower growth costs and are more durable.¹⁷ This is because when the tax burden is already high, further tax increases create disproportionately higher efficiency losses by reducing labor supply and investment.

17. Specifically, tax rates need to be reduced, while tax bases are broadened. As a result of repeated waves of tax hikes, rates for all major taxes are higher than the euro-area average. However, Greece's revenue yields lag behind peers', as high marginal tax rates applied on narrow bases encourage tax evasion, discourage labor participation in the formal economy, and provide incentives for firms to relocate to low-tax neighboring countries. At the same time, as noted earlier, more than half of wage earners are exempt from paying personal income tax (PIT). To

¹⁶ Staff assess that this remains broadly in line with the European fiscal framework, under a sufficiently ambitious debt restructuring.

¹⁷ IMF 2015, "Fiscal Policy and Long-Term Growth", and IMF, 2013, "Reassessing the Role and Modalities of Fiscal Policies in Advanced Economies", and IMF, 2013, "Fiscal Monitor: Taxing Times".

address these distortions, the authorities should lower marginal tax rates, while at the same time reducing the generous tax credit and remaining exemptions. For example, aligning Greece's personal income tax credit relative to the average wage to the euro-area average could create space to lower the marginal CIT rate by up to 10 percentage points and the PIT rates to as low as 15-20 percent, and, to the extent feasible, also the top VAT rate by up to 1 percentage point, helping to support investment, growth, and job creation in the formal economy. As benefits of the tax credit accrue mostly to the wealthier taxpayers, lowering the tax credit while reducing PIT rates for lower incomes would help ensure that the increased tax burden is borne by the relatively better off groups.

Tax Rates, 2015

Source: OECD Tax Database.

1/ Simple averages of the top marginal PIT rate, combined central and subcentral government CIT rate, and the standard VAT rate for euro area countries.

Tax Revenues, 2015

Source: Eurostat.

1/ Simple average of PIT, CIT, and VAT revenues for euro area countries.

Greece: Distribution of Personal Tax Credit Benefit by Taxpayer Wage Deciles

(Shares in percent, 2015 declarations)

Sources: Ministry and Finance; and IMF staff calculations.

Greece: Distribution of Losses from a Reduction in Personal Tax Credit by Taxpayer Wage Deciles

(Billions of euros, 2015 declarations)

Sources: Ministry of Finance; IMF staff calculations.

Note: Simulated reduction in the tax credit to align the tax-free threshold to average wage ratio to the euro area average.

18. Spending should be rebalanced away from pensions toward protection of vulnerable groups and other essential public services and investment. While recent pension reforms have helped address expected long-run pressures from population aging, pensions for current retirees remain un-affordably high.¹⁸ This is in part because in Greece, pensions not only serve to protect incomes in old age, but also act as an informal social safety net in the absence of an adequate and well targeted welfare system. However, this arrangement has not been effective in addressing the rise in poverty: as noted above, poverty in old age has been declining even as

¹⁸ Also see Selected Issues Paper "Pension Reform in Greece and Remaining Policy Challenges."

that for the working-age population, especially the unemployed, has been rising.¹⁹ In this context, the authorities should consider rationalizing current pension spending further by applying the benefit formula introduced by the recent pension reform to current pensioners. This would result in lower benefits for those with higher pensions and shorter working histories and higher benefits for some retirees with lower pensions and longer contribution periods. The savings could be used to finance a well-designed social safety net, as well as health and transportation services (where shortages of critical inputs have been reported) and growth-enhancing public investment. Rationalizing pension benefits of current retirees would also ensure a fairer intergenerational burden-sharing of the reform costs.

Gross Replacement Rates, 2013

Distribution of Losses from Applying the New Benefit Formula to Current Retirees (percent change in monthly median pension benefit)

19. Social spending on welfare should be reformed as a matter of priority to ensure that the most vulnerable groups can be adequately protected. Given the protracted recession, and with unemployment expected to remain in the double digits for the foreseeable future, there is an urgent need to address the high level of poverty. As noted above, neither the current system of social assistance nor the pension system has been able to cope with the problem, given that they are not well targeted. As a result, social protection covers only

Coverage of Social Protection Benefits in the Poorest Quintile

Ratio of the GMI Benefit to Poverty Threshold, 2015–16
(single person family, in percent)

¹⁹ Indeed, a recent World Bank report points to the inadequacy of the pension system to stand in lieu of a well targeted social safety net. For example, while the working-age population with children is identified as a group with a high risk of being in poverty, only 12 percent of such households include a pensioner.

73 percent of the poorest 20 percent of the population, the lowest level in the euro area (the average is 87 percent). Moreover, Greece is one of two countries in the euro-area that has not provided a last resort poverty support to the working-age poor. The authorities should thus ensure that the new Guaranteed Minimum Income (GMI) scheme—expected to provide income equivalent to about 50 percent of the poverty threshold to vulnerable groups (in line with the euro area average)—being rolled out is fully implemented. For the new scheme to be effective and adequately financed, existing overlapping and poorly targeted social schemes should be eliminated; the pension savings noted above could also be used to finance part of the cost of the GMI.

20. The authorities saw scope for lowering long-term fiscal targets below 3½ percent of GDP, but did not see a need to reduce pension spending or the income tax credit. While they considered medium-term fiscal targets achievable, the authorities indicated that a long-term primary surplus target of 2-2½ percent of GDP would be more realistic, in light of political and social considerations. As to the fiscal policy mix, they sought to preserve the current revenue-oriented consolidation, which they considered more equitable in that high marginal income tax rates on the top deciles allowed for protecting a large share of the middle classes. Thus, the authorities did not see a need to lower the income tax credit. Nonetheless, the authorities concurred with the importance of lowering the high corporate tax rate to support investment and jobs, but saw scope to focus on improving tax compliance as a way of broadening tax base. The authorities also agreed that reforming the welfare system is a priority, but were not willing to consider further reductions of current pensions or a major overhaul of existing benefits to finance it, seeing instead scope to achieve further savings through revenue over-performance, limited rationalization of existing social benefits, and a future spending review.

B. Combating Tax Evasion and Addressing Tax Debt

21. The ongoing fiscal consolidation should be complemented with stronger efforts to fight tax evasion. As noted above, tax evasion—especially among the self-employed and related to VAT—was a problem even before the crisis, putting pressure on the budget and

Tax Evasion among Self-Employed

Source: Artavanis et al. (2012).

VAT Gap, 2014
(Percent)

Sources: EC, Study and Reports on the VAT Gap in the EU-28 Member States: 2016 Final Report; and Eurostat.

leading to an unequal distribution of the tax burden.²⁰ The authorities should thus redouble their efforts to strengthen institutions and practices in this area to send a strong signal that Greece can no longer tolerate evasion. Amnesty schemes should be avoided, as they encourage moral hazard. Instead, the authorities should fully operationalize an independent revenue agency that employs modern risk-based taxpayer compliance principles and is insulated from political interference. Tax administration practices also need to be brought in line with best practices by adopting a risk-based framework that prioritizes cases of new debt, large taxpayers, and high net-wealth individuals, and by strengthening the use of enforcement tools against strategic defaulters, including AML tools that can facilitate collection and sharing of information with domestic and foreign tax authorities.

22. The authorities must also tackle decisively the large stock of tax debt to help clean up the private sector's balance sheet.²¹ The high and growing private sector debt to the state—of which a large part has become uncollectible—suggests that the problem has reached endemic proportions and is hampering economic activity. Rather than resorting to punitive fines and installment schemes not linked to capacity to pay, the authorities should re-examine the system of fines to ensure that they can act as an effective deterrent to tax evasion, but without bringing the tax debt burden to unsustainable levels. Moreover, the revenue administration should focus on tax debtors' economic situation and undertake an assessment of their viability. On this basis, the authorities should develop restructuring modalities in line with individual taxpayers' ability to pay and integrated within a holistic framework that includes bank debt (in the context of the out-of-court debt restructuring framework, see paragraph 24). For viable borrowers, such modalities could encompass selective write-downs of public claims, provided they are adequately tailored and limit moral hazard. Write-downs may also be needed for uncollectible claims of unviable debtors after full use of liquidation and enforcement tools.

23. While concurring with the need to strengthen efforts to combat tax evasion, the authorities believed that installment and other schemes could help boost revenues. They considered that efforts underway to implement the recently legislated revenue agency and to boost enforcement were already producing promising results. Moreover, the authorities were open to considering modalities of restructuring select public claims along with bank debt, while stressing the importance of minimizing moral hazard concerns. However, the authorities continued to believe that new types of installment schemes and voluntary disclosure initiatives, as well as other measures to freeze current debts or allow some bank accounts to be exempted from enforcement, could help improve short-term revenue collections without harming the payment culture. Indeed, a voluntary disclosure initiative and incentives for electronic payments have already been recently legislated.

²⁰ Artavanis et al. in their 2015 paper "Measuring Tax Evasion using Bank Credit: Evidence from Greece" estimate that close to half of self-employed income goes unreported and untaxed. For 2009, this implies €28 billion (near 12 percent of GDP) of unreported income, with significant implications for foregone revenue.

²¹ See Selected Issues Paper "Addressing the Burden of Large Tax Debt and Social Security Debt."

C. Enhancing the Viability of the Banking Sector

24. Decisive action is needed to repair bank and private sector balance sheets to facilitate a return of sustainable credit growth. Without reducing NPLs rapidly, banks will not be able to provide new lending to vibrant firms, putting the recovery in jeopardy.²² Similarly, the non-financial private sector needs to strengthen its balance sheet to be able to borrow and invest again. Banks and companies cannot simply grow out of their NPL problems. In this context, the authorities need to intensify their efforts to tackle NPLs and incentivize debt restructuring along three key dimensions:

- Debt restructuring legal framework:**²³ An effective enforcement process represents a powerful incentive for the negotiation of restructuring solutions and the restoration of a payment culture that has been severely eroded. To this end, the authorities should ensure that the recently legislated insolvency and debt-enforcement framework is made fully operational, including by establishing the insolvency administrator profession and facilitating auctions. Given weaknesses in the judicial system, the formal insolvency system alone is likely insufficient to deal with the massive over-indebtedness problem facing Greece. The authorities should thus revamp the out-of-court debt restructuring framework to allow for the restructuring of both private and public claims and provide for the possibility of debt write-downs to preserve viability, where possible, in line with individual debtors' capacities to pay. Across-the-board solutions should be avoided, as they encourage moral hazard and do not provide effective and durable solutions that restore borrower's viability.

- NPL supervisory framework:** Even if the above mentioned legal tools are fully available, banks still need incentives to make full use of them. The Bank of Greece, together with the Single Supervisory Mechanism (SSM) should fully operationalize a framework to set NPL targets and monitor banks' strategies and performance against these targets, similarly to what has been done in Ireland and Cyprus.²⁴ The banks' current strategies imply a reduction in the aggregate NPL ratio to 48, 42, and 34 percent by 2017, 2018, and 2019, respectively. These back-loaded NPL reductions do not appear consistent with the authorities' ambitious investment and growth assumptions—which would seem to require a more ambitious clean-up of bank balance sheets—and are subject to significant downside risks. Thus, the BoG, together with the SSM, needs to

²² Reducing NPLs has been associated with higher corporate credit growth, thus supporting economic growth (*Annex 1.3 of the GFSR, April 2014; Box 1.1 of the WEO, April 2014*).

²³ See also Selected Issues Paper "Insolvency and Debt Enforcement in Greece."

²⁴ An alternative to bank led NPL restructuring would be the set-up of an AMC, as in Ireland or Spain. However, this could be difficult in Greece, as there is little demand to establish a private AMC. As to public AMC options, they carry risks, given stringent State Aid and other European rules that could trigger bail in if additional capital is needed in the short run. Moreover, governance concerns for a public AMC remain significant.

review banks' strategies and targets and ensure that they are credible and sufficiently ambitious. Such strategies should focus on sustainable restructuring measures rather than the short-term loan ever-greening that has been the norm so far and on strengthening banks' operational capacity to address NPLs decisively.

- **Capitalization:** The sheer scale of the NPL problem, coupled with uncertainty regarding the effectiveness of the legal framework, suggests that upfront measures to reduce NPLs will likely be costly in terms of capital. The recent liberalization of NPL sales will provide a first market test in this regard (so far, there have not been any successful sales, indicative of depressed market prices). The authorities should thus ensure that capital remains adequate over the medium term to facilitate a rapid reduction in NPLs.

25. Over the medium run, policies should focus on enabling the provision of credit to the economy. Looking beyond the immediate need to address legacy NPLs, the authorities should develop policies to allow savings to be channeled to the most productive uses. In this regard, they will need to strengthen the existing frameworks (e.g. credit register, real estate transactions register) and incentivize banks to move to modern practices to assess credit risk (e.g. credit scoring, etc.). Private solutions should be given precedence over public ones, as they can be most easily aligned with the needs of creditors and debtors. However, adequate safeguards for consumers need to be retained.

26. Bank governance must also be strengthened. Ensuring that lending and restructuring decisions are taken on commercial principles and without undue political interference is key to the long-run viability of the banking sector and the success of the economic recovery. The authorities should thus implement their plans to fully reconstitute bank boards on the basis of revised eligibility criteria in line with prudent internal practices that go beyond supervisory fit-and-proper criteria as defined by the SSM, so as to uproot the linkages between the Greek banks, politicians, and powerful vested interests. Over the medium term, the authorities will also need to divest public ownership in banks to reputable international financial institutions to take advantage of international banking expertise and minimize the contingent liabilities of the state.

27. Capital controls should be eliminated as soon as is prudent, while preserving financial stability. Exchange restrictions and capital controls introduced in June 2015 continue to hamper economic activity, in particular with respect to export and import activities, and impede rebuilding confidence in the banking system. Although the authorities have taken some recent steps to relax the controls, they remain pervasive and are giving rise to three exchange restrictions under the Article VIII, Section 2(a) (see also Annex 4).²⁵ Their removal as soon as

²⁵ Greece has introduced measures that give rise to following exchange restrictions subject to Fund approval under Article VIII, Section 2(a): (i) An exchange restriction arising from absolute limits and discretionary Bank Transactions Approval Committee (BTAC) approval on the availability of foreign exchange for certain payments and transfers for (a) current international transactions related to normal business activities and (b) invisible transactions and remittances (such as travel, except for tuition fee and medical expenses). (ii) An exchange restriction arising from the discretionary BTAC approval of transfers abroad of moderate amounts for the amortization of loans and of income from investments including dividends and interest payments of non-financial entities to non-residents. (iii) An exchange restriction arising from absolute limits on withdrawal of

feasible is thus essential to support the economic recovery. The authorities should aim to fully eliminate them on the basis of a milestone-based roadmap taking into account confidence trends and key steps in the implementation of their financial sector strategy, such as the continuing return of deposits and normalization of funding conditions, and progress toward resolving NPLs. Key liberalization steps will need to focus on abolishing restrictions on domestic wire transfers and cash withdrawals, as well as on the gradual facilitation of cross-border transfers. To preserve financial stability, the Bank of Greece, with support from the ECB, should ensure sufficient bank liquidity to cope with the possibility of increased outflows, including by allowing for slower ELA repayment.

28. The authorities broadly agreed with the priorities noted above, although they raised concerns that the bank governance reform is going too far. While they concurred with the need to tackle NPLs, the authorities saw the European financial architecture (e.g. State Aid rules and the BRRD framework) as constraining and considered that a more gradual pace of NPL reduction would be more feasible and appropriate. They remained committed to further improving their debt restructuring legal framework and strengthening the supervisory NPL framework. However, the authorities considered that automatic solutions (rather than tailored ones) may be better suited to deal with the large number of small debtors, given capacity constraints. As to governance, they considered the current framework for selection of bank board members as overly restrictive, in that it does not allow for boards with sufficiently broad expertise. The authorities agreed that a milestone-based roadmap could be helpful in guiding the liberalization of capital controls, and on this basis have requested the approval of the retention of temporary exchange restrictions, which they intend to remove as soon as conditions allow.

D. Regaining Competitiveness within the Currency Union

29. Greece requires a notable increase in productivity to become competitive within the euro-zone. Without a substantial acceleration in the pace of structural reforms, Greece will be unable to narrow the gap in its real per capita income relative to the euro area, raising concerns about the ability of the economy to prosper and remain competitive inside the euro-zone (Box 3). Greece will thus need to make rapid progress to close remaining gaps with best practice both in labor and product market reforms.

Euro Area and Greece: Real GDP per Capita

cash from bank accounts in Greece in the absence of an unrestricted channel for payments due to discretionary BTAC approval and absolute limits.

30. The authorities should preserve the important labor market gains achieved so far and complement them with additional reforms. With no exchange rate flexibility and a long way to go to reduce unemployment, there is little doubt that further labor market flexibility is needed to attract both domestic and foreign investment and facilitate the restructuring of indebted Greek firms. Reducing unemployment is also essential to lower the high poverty rate. However, calls for unwinding previous labor market reforms have increased, given that the adjustment so far has fallen disproportionately on wage earners. However, heeding such calls would be drawing the wrong conclusion, as this would risk unwinding the competitiveness gains achieved so far, hurting job creation.²⁶ Instead, existing reforms should be complemented with additional measures to bring Greece's collective dismissals and industrial relations frameworks in line with international best practice:

- **Collective dismissals:** While Greece ranks around average among OECD members on employment protection regarding collective dismissals, this indicator does not take into account a much lower threshold relative to the levels indicated in the EU Directive and a restrictive pre-approval requirement for such dismissals, which does not exist in most other advanced economies.²⁷ As a result, only two approvals for collective dismissals have been granted since the early 1980s. A recent ruling by the European Court of Justice found the procedure to be an obstacle to the freedom of establishment and conducting business.²⁸ This makes downsizing operations in Greece very costly, with many firms forced to relocate, enter bankruptcy, or implement costly voluntary exit schemes. In this context, the authorities should consider repealing the requirement for administrative approvals and bringing the threshold for collective dismissals in line with the recommendation in the EU Directive and the European Court of Justice, while making use of EU funds to support retraining programs to reintegrate those unemployed into the labor force.
- **Industrial action:** Greece's rules governing the establishment of trade unions and their decision-making processes, as well as legislation governing strikes, have not been reformed since the 1980s. This could explain the large number of strikes in Greece, which even prior to the crisis far exceeded levels seen elsewhere. While the right to strike should be fully preserved, the

²⁶ The authorities wish to reinstate sectoral agreements with extensions and the after effect of collective bargaining. A body of recent micro evidence suggests that collective bargaining systems including extensions of sectoral agreements to those not represented in the negotiations have adverse employment effects (Diez-Catalan and Villanueva, 2015; Hijzen and Martins, 2016; Martins, 2014, Magruder, 2012), and that "after-effects" are detrimental to credit-constrained firms in need of adjustment (Hijzen and Martins 2016).

²⁷ The threshold for defining collective dismissals is roughly half that recommended in the EU directive for most firms except very large ones. As to the pre-approval requirement for dismissals, only the Netherlands has a similar requirement in Europe (Spain, which had a similar requirement, abolished it a few year ago). A recent ruling by the European Court of Justice also found the procedure to be an obstacle to the freedom of establishment and conducting business.

²⁸ This compares to an average—adjusted for population size—of 160 to 250 per year during the 1990s crisis in Norway, 920 in the UK during the early 2000s boom, and more than 10,500 workers per year in Spain.

authorities will need to align their industrial action framework with best international practice by setting appropriate quorum requirements for trade unions calling a strike and by allowing for defensive lockouts by employers. These actions can help support investment by limiting costs associated with prospective strikes that may result in the stoppage of production.²⁹

Strikes: 2002-2007
(Average per 1000 employees)

Source: Vandaele (2014).

31. At the same time, the implementation of product and service market reforms and privatizations should be significantly accelerated. Despite several laws having been passed over the last six years to open up closed professions, remove obstacles to competition, and facilitate investment licensing, reform implementation has been slow and uneven, reflecting strong opposition from vested interests. As noted earlier, this has exacerbated inequality and resulted in increased social resistance to reforms. Privatization efforts have also lagged, constraining economic efficiency, limiting benefits to consumers, and restricting the potential for FDI flows into the economy. The authorities should thus redouble efforts in all these areas to ensure full and rapid carry through of reforms from the legislative to the implementation stage. They should also take further decisive steps to privatize state assets—including in the area of energy, where costs remain high due to extensive state interference—while avoiding fire sales. Such efforts are essential not only to send a strong signal to investors that “Greece is open for business,” but also to cement support for the remaining labor market reforms noted above and to achieve benefits from reform synergies.

Inward FDI Flows
(Percent of GDP)

Sources: OECD; and IMF staff calculations.

State Control, 2013

(Higher values correspond to less competition-friendly policies)

Source: OECD.

²⁹ In Greece, only 33 to 25 percent (at the second ballot) of first level union members need to be represented in the decision to call a strike. Among European countries a prohibition on lockouts is relatively unusual, existing only in France, Lithuania, Portugal and Slovenia.

32. Institutional reforms remain a key priority. There are three key areas where reforms could have a large impact on growth. First, the authorities should strive to improve the efficiency of the judicial system, including by addressing the large backlogs that inhibit enforcement and distort incentives (e.g. with regard to insolvency and competition). Second, they will need to intensify efforts to tackle corruption, where Greece continues to lag behind peers and where, despite efforts (including a new legal and institutional framework), recent World Bank indicators point to a deterioration since 2013. Third, the authorities should develop ways to promote innovation, in particular on spending R&D, patents, and university-industry collaboration, as fiscal space allows.

Greece: Top 10 indicators: Impact on growth

Source: Chapter 8, *Jobs and Growth: Supporting the European Recovery*.
Note: The x-axis represents the percent increase in growth if Greece moves to best practice—relative to EU27—for the corresponding indicator.

33. The authorities sought to unwind the previous labor market reforms and considered that the current pace of product market reform implementation is adequate. They argued that the 2011 collective bargaining reforms were not helpful and should be unwound to bring Greece more in line with the European social model. At the same time, the authorities did not see the need to fundamentally reform collective dismissals and the industrial action framework, quoting a recent labor market review and an understanding from social partners that the current regime is broadly adequate. In what concerns product market reforms, the authorities pointed to ongoing efforts to implement the OECD's recommendations to remove barriers to competition, investment licensing, and entry into professions, noting that several years would be needed to implement reforms in all these areas, given capacity and other constraints.

DEBT SUSTAINABILITY

34. Even with full implementation of the above-mentioned policies, Greece's debt is highly unsustainable (Annex 3). Staff's DSA is based on the gross financing needs (GFN) framework, covering a period up to 2060. This framework captures better Greece's true debt burden compared to a stock-of-debt framework, given that the bulk of Greece's debt comprises official loans provided on highly concessional terms and with long maturities. Under staff's baseline scenario, which assumes full implementation of reforms under Greece's adjustment program, debt and GFN are projected to reach around 160 and 20 percent of GDP by 2030, respectively, but become explosive thereafter. The adverse dynamics are due to the need to replace gradually a large amount of concessional debt with market financing at much higher rates, which eventually render debt and GFN unsustainable. In other words, Greece cannot be expected to grow out of its debt problem, even with full implementation of reforms.

Greece: GG Debt and GFN-- Baseline, 2014-2060 (Percent of GDP)

Source: IMF staff estimates.

35. Greece thus requires significant debt relief from its European partners to ensure debt sustainability. While debt relief need not be approved upfront, all policy-contingent relief will need to be delivered once Greece's official financing program ends, if Greece is to exit successfully from official financing. In this regard, the Eurogroup committed to provide further debt relief—in addition to the generous flow relief provided thus far—upon the successful implementation of Greece's adjustment program in order to maintain GFN below 15 and 20 percent over the medium and long run. However, to provide more credibility to the debt strategy for Greece, further specificity will be needed regarding the type and scope of debt relief to be expected. In this regard, in addition to those measures that are sufficiently well specified by the Eurogroup, ambitious extensions of grace and maturity periods, a full deferral of interest on European loans, as well as a locking in of the interest rate on a significant amount of European loans will be needed to reduce GFN sufficiently to put debt on a sustained downward path. If Greece's medium term objective (MTO) is also to be met over the long run, debt relief would need to be even more extensive (see Annex 3).

Greece: GG Debt-- Restructuring Scenario, 2014-2060
(Percent of GDP)

Greece: GFN -- Restructuring Scenario, 2014-2060
(Percent of GDP)

STATISTICAL ISSUES

36. The quality of official statistics has continued to improve, and the gains must be preserved in the face of ongoing political pressures. Significant progress was achieved in improving the quality of Greek statistics since the establishment of the independent Hellenic Statistical Authority, ELSTAT, in 2010. In particular, data compilation processes have been improved, including coverage, timeliness, and consistency with international statistical standards, and data provision is broadly adequate for surveillance. Technical assistance from the IMF, Eurostat, and other member states has been important in this regard. Nonetheless, as noted above, revisions of national accounts and fiscal data are frequent, significant, and consistently biased to the downside, and continuing discrepancies in fiscal reporting remain.³⁰ The authorities should protect the gains achieved so far by defending the statistical agency against any efforts to undermine its credibility, guaranteeing its professional independence, and addressing remaining shortcomings in reporting, while firmly respecting the “Commitment on Confidence in Statistics” that was endorsed by the government in 2012.

³⁰ While Eurostat has validated most of the Greek fiscal data without reservation since 2010, it did not validate Greece's general government financial accounts, recently withdrawing existing data from publication.

STAFF APPRAISAL

37. **Greece has made significant progress in unwinding its macroeconomic imbalances.**

The fiscal primary and external current account deficits have fallen from double digits to around zero over the last six years. This is an impressive adjustment, all the more so for a country belonging to a currency union, where policy levers are limited. However, in view of the extraordinary challenges that Greece had to face, the adjustment has tested the social and political fabric and has taken a large toll on society, with unemployment and poverty levels without precedent in the euro zone. This illustrates the difficulty of relying on fiscal consolidation and internal devaluation to address imbalances while remaining inside the currency union.

38. As a result, sustainable growth has been elusive and risks remain elevated. While the adjustment was initially based on important reforms, the costs associated with adjustment have frayed the political and social fabric, eroding consensus, slowing reform momentum, and making the fiscal adjustment increasingly reliant on one-off and ad hoc adjustments. Recurrent political crises and confidence shocks associated with the inability to sustain the reform effort exacerbated the downturn. While growth is expected to resume modestly this year, future growth prospects are highly dependent on a substantial reacceleration of Greece's reform implementation. Even with ambitious reforms, unemployment is expected to stay in the double digits until the middle of the century, and risks to the outlook remain tilted firmly to the downside.

39. To create a private sector capable of generating sustainable growth and employment and to increase the economy's resilience to shocks, Greece must deepen and accelerate reform implementation. Despite successive reforms, not least the latest round legislated since last year, a number of key structural problems remain: (i) a vulnerable structure of the public finances that results from unaffordable pension spending financed by high tax rates on narrow bases and a deteriorating payment culture; (ii) impaired bank and private sector balance sheets; (iii) pervasive structural obstacles to investment and growth, which continue to hamper competitiveness; and (iv) an unsustainable public debt burden despite large debt relief already received. These problems must be addressed decisively to pave the way for a sustained recovery based on a vibrant private sector, to provide the resources necessary to address basic needs of the most vulnerable, and to exit from dependence on official financing.

40. Greece does not require further fiscal consolidation at this time beyond what is currently underway. Thanks to the impressive fiscal consolidation to date, including the most recent fiscal package legislated in 2015-16, Greece achieved primary balance last year (excluding costs for bank recapitalization) and is expected to attain a primary surplus of around 1½ percent of GDP in the medium and long term on the basis of the fiscal package legislated in 2015-16. A surplus of this level is appropriate in view of cross-country experience and Greece's own track record, and also given the expectation that unemployment will remain high for decades. Should Greece choose to target a higher medium-term surplus, this will need to be underpinned by credible reforms, which should be implemented once the output gap closes, to minimize the negative effects on the recovery.

41. The fiscal policy mix needs to be rebalanced to bolster the medium-term sustainability of the public finances and support growth and equity. As currently implemented, fiscal policy is unsustainable, unfair, and unfriendly to growth. Spending remains excessively focused on unaffordable pensions, while the personal income tax system absolves middle class households from contributing their fair share. As a result, lower-income households are denied access to adequate and well-targeted social benefits, as well as to other essential public services, such as healthcare and transportation. A budget-neutral rebalancing of policies is thus essential for the public sector to be able to provide adequate services and social assistance to vulnerable groups, while creating the conditions for investment and more inclusive growth. This can be achieved by lowering the generous income tax credit and eliminating remaining exemptions that benefit the rich and applying to current pensioners the new pension benefit formula introduced with the recent pension reform, with savings going to finance a more modern and comprehensive social safety net and to encourage the private sector to invest to create employment.

42. The authorities should complement their fiscal rebalancing with renewed efforts to combat tax evasion. Pervasive evasion and an ineffective and politicized tax administration have exacerbated the unfair distribution of the tax burden, and contributed to a rising tax and social security debt and to falling tax-collection rates. The authorities should refrain from adopting untargeted installment or amnesty schemes and instead strengthen the use of enforcement tools against those who can pay but choose not to do so, concentrate audits on large taxpayers and high-wealth individuals, and mobilize the AML framework. For taxpayers who no longer can afford to pay fully their tax obligations, restructuring solutions based on capacity to pay need to be found to preserve viability where possible. Establishing an independent revenue agency that is fully insulated from political interference will be critical in this effort.

43. As to the financial sector, non-performing loans (NPLs) must be reduced decisively. With NPLs close to 50 percent of total loans, putting in place policies that support a rapid and deep clean-up of bank balance sheets is essential to achieving a successful recovery. Assuming that banks can simply grow out of the NPL problem is not credible, as growth ultimately depends on the ability of banks to lend to viable firms. The authorities should thus further strengthen the legal framework for debt restructuring, including by providing for out-of-court debt workouts of public and private claims. The supervisory authorities should enhance incentives for banks to set ambitious NPL-reduction targets and implement strategies prioritizing sustainable restructuring measures and NPL sales. Ensuring adequate bank capital is key to allow a rapid reduction in NPLs, even if costly.

44. At the same time, payment conditions should be normalized and bank governance strengthened significantly. Payment restrictions and capital controls persist, hindering confidence and the return of much needed liquidity to the economy. The authorities should relax the controls rapidly and predictably—on the basis of a milestone-based roadmap—while preserving financial stability by ensuring adequate bank liquidity, with support from the ECB. Moreover, lingering governance concerns, related to a legacy of close relations between banks, the state, and powerful vested interests, should be addressed decisively by completing the board overhauls in line with the new legislation both in systemic and non-systemic banks. Staff supports the authorities' request for

Executive Board approval for the retention of three exchange restrictions since they are imposed temporarily, for balance of payments reasons, and non-discriminatorily.

45. Greece needs more, not fewer, structural reforms to become competitive inside the currency union. Despite successive attempts to address its weak institutions, Greece has not fully regained competitiveness. The 2011 labor market reforms were major steps forward, as evidenced by the subsequent improvement in labor costs. However, in the absence of implementation of product-market reforms, the burden of the adjustment has fallen disproportionately on wage earners. Reversing existing reforms is tantamount to drawing the wrong conclusions, as this would put at risk the potential gains for investment and job creation. Instead, they should redouble their efforts to fully open up remaining closed professions, foster competition, facilitate investment and privatizations, and bring Greece's collective-dismissals and industrial-action frameworks in line with international best practice.

46. Even with full implementation of the above-mentioned policies, Greece cannot restore debt sustainability through its efforts alone and needs significant debt relief from its European partners. Greece has made enormous sacrifices to get to where it is now. But the significant achievements in balancing the budget, closing the current account deficit, and improving the flexibility of the labor market have taken a heavy toll on the society and tested its endurance. Recognizing that European partners have made considerable efforts to support Greece, including through official financing and generous flow relief provided thus far, further debt relief will be needed to restore Greece's debt sustainability. Such relief should be calibrated on realistic assumptions about Greece's ability to generate sustained surpluses and long-term growth. But ultimately no amount of debt relief can make Greece competitive in the euro-zone without strong policies. Greece, for its part, must also seize the opportunity to make steady but resolute progress toward addressing its remaining challenges.

47. The next Article IV consultation with Greece is expected to take place on a 12-month cycle.

Box 1. Recent Reforms and Implementation of Past IMF Recommendations (concluded)**Structural reforms:**

- **Fiscal institutional reforms:** A new law establishing an independent revenue agency was adopted, although implementation will take time and is subject to risks. The authorities also reformed the public sector wage grid, although this provides only a marginal improvement over the previous system. The new welfare system is yet to be rolled out by end-year, pending adequate fiscally-neutral financing.
- **Labor market reform:** While the authorities initiated an independent review of the labor market framework, further reforms expected by end-2015 were postponed to late 2016.
- **Product and service markets:** The authorities have addressed OECD competition assessment recommendations in some sectors (Toolkit I and a narrow set of Toolkit II), but maintained restrictions in some key areas (pharmacy ownership, Sunday trading, and the legal and engineering professions) and postponed action in a number of other sectors (e-commerce, wholesale trade, media).

Privatization. Three privatization deals have been signed (regional airports, Port of Piraeus, railway company Trainose), totaling €1.5 billion (0.8 percent of GDP). However, the authorities are very far away from their ambitious goal of €50 billion (28 percent of 2016 GDP) in long-run privatization receipts.

Box 2. Revisions to the Greek Statistics

Greek statistical data have been subject to large and frequent revisions that pose significant challenges to macroeconomic projections. While statistical data have improved since 2010, large one-off fiscal adjustments have complicated fiscal projections.

Negative real GDP growth revisions have been more frequent and larger in Greece than elsewhere in the euro-zone. Downward revisions to annual growth outturns have been made in more than one third of data releases, compared to less than a quarter in the rest of the euro zone during 2001-14. The revisions have been larger than in all other euro-area countries and consistently biased on the downside (-0.6 percent on average versus 0.2 for the euro-area). An examination of quarterly data since 2005 reveals that, since ELSTAT was established as an independent entity in 2010, the frequency of quarterly GDP growth revisions has subsided, even as the growth outturn has become more uncertain due to the ongoing crisis.

Average Real GDP Growth Revisions 1/, 2001–14

(Percentage points)

Sources: Statistical Annex of European Economy; and IMF staff calculations.
1/ Revisions of the latest estimate relative to the first estimate.

Greece: Frequency of Quarterly Real Growth Revisions 1/, 2005–16 (Percent)

Sources: Provisional Elstat releases of yoy growth rates; and IMF staff calculations.
Differences between 2006Q4 and 2007Q3 releases, 2013Q3 and Q4 releases, and 2014Q2 and Q3 releases are excluded, because of broken series and methodological changes.

Fiscal revisions have also been large and biased to the downside, and large ESA adjustments further complicate the picture. Over the last fifteen years, Greece's annual fiscal outturns were revised downward 13 out of 15 times, with only one upward revision (in 2012, likely related to the PSI) and no revision to 2014 data. In cross country comparison, Greece is a clear outlier: the average revision in Greece has been very large and negative (-2.4 percent of GDP) compared to close to -0.3 for the euro-area as a whole. The quality of Greek fiscal data has improved since 2010, with less frequent and volatile revisions, albeit still negative ones. An additional complication is posed by ESA accrual adjustments, which, in absolute terms, have averaged 2.4 percent of GDP in Greece, almost three times as large as the euro area average, which has increased the uncertainty of fiscal projections.

Average Primary Balance Revisions, 2001–15 1/

(Percentage points of GDP)

Sources: Eurostat; Statistical Annex of European Economy; and IMF staff calculations.
1/ Revisions of the latest estimate relative to the first estimate.

ESA Accrual Adjustments, 2012–15

(Average absolute adjustments, percent of GDP)

Sources: Eurostat; and IMF staff calculations.

Box 3. An Assessment of Greece's Prospects for Convergence

Since 2009, the gap between Greece's real GDP per capita and the euro area average has increased by one quarter in relative terms. This reflects, in part, the correction of pre-crisis unsustainable policies, which had masked the economy's profound lack of competitiveness. Greece's long-term outlook for becoming competitive inside the euro-zone is dependent on its ability to implement a critical mass of structural reforms to increase productivity and growth.

Under staff's baseline assumptions, the gap between Greece's real GDP per capita and the euro area average will not close in the long-run. Staff's baseline long-term growth projection of 1 percent is lower than the euro-area's growth, which is expected to average around 1.3 percent during 2022-40 (according to the 2015 EC Ageing Report). But Greece's population is expected to shrink faster than in the euro area. This implies that the gap in Greece's real GDP per capita relative to the euro-area will stay broadly flat. As a result, Greece's standard of living will be only around 63 percent of the euro-area average by 2040 (still below the relative level in 2006 and similar to Malta's now).

Modest downside deviations of policy outcomes from projections could have dramatic consequences for convergence. Projections are highly sensitive to assumptions. For example, in staff's downside scenario (see ¶11) there would be a rapid widening of the relative gap between Greece's real per capita GDP and the euro area's. In this case, by 2040, Greece's real GDP per capita would be 55 percent of the euro area level, slightly below where Portugal stands now, and the gap would continue to widen thereafter, signaling a potentially unsustainable situation.

Even in the most optimistic scenario, convergence will take substantial time. If Greece's GDP growth were higher on account of higher TFP growth, Greece could embark on a path toward convergence to the rest of the euro area. But even in the most optimistic scenario, where Greece would move from among the lowest TFP growth rates in the euro zone to the highest, the annual rate of convergence would be 0.8 percentage points on average, implying that it would take Greece close to half a century to match the average real GDP per capita of the euro area.

Difference in Euro Area and Greece Real GDP per Capita
(Percent of euro area level)

Table: Summary of Assumptions for Long-Term Growth Scenarios (2015 - 2040)

	Depreciation Rate		Labor Force Participation				NAWRU				Average Contribution to Growth					
	EA	Greece	EA		Greece		EA		Greece		Labor		Capital		TFP	
			2015	2040	2015	2040	2015	2040	2015	2040	EA	Greece	EA	Greece	EA	Greece
Baseline	0.06	0.04	72.4	78.2	68.8	75.5	9.7	6.6	20.0	9.6	-0.1	0.0	0.6	0.1	0.8	0.9
Optimistic	0.06	0.04	72.4	78.2	68.8	75.5	9.7	6.6	20.0	9.6	-0.1	0.0	0.6	0.1	0.8	2.0
Downside	0.06	0.04	72.4	78.2	68.8	71.9	9.7	6.6	20.0	9.6	-0.1	-0.3	0.6	-0.1	0.8	0.7

Sources: Eurostat, EC Ageing Report, and IMF staff estimates

Note: EA labor share (average of four largest economies) is assumed to be 0.6 and for Greece labor share is 0.5 based on Penn World Tables.

Figure 1. Greece: Private Sector Balance Sheets

Sources: Asimakopoulou et al, 2016; Bank of Greece; Eurostat; Haver Analytics; Orbis database; and IMF staff calculations.

Note: Private debt includes outstanding debt, loans, and other accounts payable for nonfinancial corporations and households.

1/ As reported by Bank of Greece.

2/ Adjusted for tax debt and SSC debt.

3/ SBPs: small businesses and professionals.

Figure 2. Greece: Competitiveness Indicators

Figure 3. Greece: Macroeconomic Developments

Sources: Bank of Greece; Elstat; Haver Analytics; and IMF staff projections.

Figure 4. Greece: Fiscal Developments

(Billions of euros)

— 2015 - - - 2016

The state cash primary balance started the year strongly and has further improved since August...

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

...while tax revenues outperformed in 2016 due to new tax reforms and one-off receipts.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

...VAT revenues increased in line with yields from recent reforms and a stronger tax base,...

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

...as spending compression continued in 2016, temporarily eased in the summer,

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Income tax revenues were bolstered by strong 2015 profits, advanced payments, and one-offs...

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

...while earlier billing of property taxes propped up outcomes since September.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Sources: Ministry of Finance; and IMF staff calculations.

Figure 5. Greece: External Developments

Table 1. Greece: Medium-Term Macro Framework, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
		Prel.				Proj.		
(Percentage change, unless otherwise indicated)								
Domestic economy								
Real GDP	0.4	-0.2	0.4	2.7	2.6	2.4	2.0	1.5
Output gap (percent of pot. output)	-6.4	-5.3	-4.8	-2.8	-1.5	-0.5	0.0	0.0
Total domestic demand	-0.5	-0.2	-0.4	2.2	2.2	2.3	1.9	1.4
Private consumption	0.4	-0.2	0.8	1.5	1.4	1.2	1.0	1.0
Public consumption	-1.4	0.0	0.7	0.5	0.5	2.0	1.7	1.3
Gross fixed capital formation	-4.6	-0.2	3.0	9.5	9.0	8.0	6.2	3.0
Exports of goods and services	7.8	3.4	1.0	6.5	6.0	4.8	4.2	4.0
Imports of goods and services	7.6	0.3	1.2	4.6	4.6	4.7	3.7	3.6
Final Consumption (contribution)	0.0	-0.1	0.7	1.1	1.1	1.2	1.0	0.9
Gross fixed capital formation (contribution)	-0.6	0.0	0.3	1.1	1.1	1.1	0.9	0.4
Change in stocks (contribution)	1.0	-1.0	-0.5	0.0	0.0	0.0	0.0	0.0
Foreign balance (contribution)	-0.1	0.9	-0.1	0.5	0.4	0.0	0.1	0.1
Unemployment rate (percent) 1/	26.5	24.9	23.2	21.3	19.8	19.0	18.4	16.7
Employment	0.7	2.1	2.0	2.2	3.4	2.2	1.8	1.8
Unit labor costs	-2.3	-3.1	3.9	1.4	1.4	1.5	1.6	1.6
Consumer prices (HICP), period average	-1.4	-1.1	0.0	1.2	1.4	1.6	1.7	1.7
GDP deflator	-1.8	-1.0	0.1	1.4	1.5	1.5	1.6	1.6
Monetary survey								
Private credit growth 2/	-3.9	-3.6	-3.1	0.7	2.1	3.7	1.2	0.9
Domestic private sector deposit growth	-2.0	-22.9	2.1	12.6	...	...	...	...
Liabilities to the Bank of Greece (billions of euros)	56.0	107.6	71.8	57.7	...	...	...	...
(Percent of GDP, unless otherwise indicated)								
Balance of payments								
Current account	-1.6	0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.1
Trade balance	-2.2	-0.2	-0.7	-0.1	0.3	0.4	0.5	0.6
Export of goods and services	32.5	30.0	27.8	29.1	30.0	30.6	31.2	31.7
Export of goods	15.1	14.1	13.5	13.5	13.4	13.5	13.7	13.9
Exports of services	17.5	15.9	14.3	15.6	16.6	17.2	17.5	17.8
Imports of goods and services	34.7	30.2	28.5	29.2	29.7	30.3	30.7	31.1
Imports of goods	27.6	23.9	22.6	22.8	23.3	23.6	23.9	24.1
Imports of services	7.2	6.3	5.9	6.4	6.4	6.7	6.8	7.0
Primary income	0.8	0.6	0.9	0.5	0.3	0.3	0.3	0.2
Secondary income	-0.2	-0.3	-0.2	-0.5	-0.5	-0.7	-0.8	-0.8
Net international investment position	-132.5	-134.6	-132.8	-126.4	-120.2	-114.5	-109.5	-105.3
Gross external debt	238.5	251.1	245.7	239.2	231.3	224.3	218.1	213.6
Private sector capital flows (net)	6.1	-42.0	12.8	3.2	-9.9	2.7	0.5	1.6
Public finances (general government)								
Total revenues	46.8	47.8	49.3	47.4	46.3	45.5	45.1	44.8
Total expenditures	50.8	51.2	51.6	49.7	47.7	46.9	46.7	46.8
Primary expenditures	46.8	47.6	48.4	46.4	44.8	44.0	43.6	43.3
Overall balance	-4.0	-3.4	-2.3	-2.3	-1.4	-1.4	-1.6	-2.0
Primary balance	0.0	0.2	0.9	1.0	1.5	1.5	1.5	1.5
Privatization receipts	0.3	0.1	0.3	0.5	0.7	0.2	0.2	0.1
Gross debt	180.9	179.4	183.9	180.8	180.8	174.9	169.9	166.5
Sources: Elstat; Ministry of Finance; Bank of Greece; and IMF staff projections.								
1/ Based on Labor Force Survey.								
2/ Projections do not take into account write-offs, valuation changes, or reclassifications.								
3/ Based on program assumptions, including unidentified fiscal measures.								

Table 2. Greece: Summary of Balance of Payments, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
		Prel.				Proj.		
(Billions of euro)								
Current account balance	-2.9	0.2	0.0	-0.1	0.1	-0.1	-0.1	-0.1
Balance of goods and services	-4.0	-0.3	-1.3	-0.1	0.6	0.7	1.0	1.2
Goods balance	-22.3	-17.2	-16.0	-17.1	-18.9	-20.2	-21.0	-21.8
Exports	26.8	24.8	23.9	24.8	25.6	26.8	28.3	29.6
Imports	49.0	42.0	39.9	41.9	44.5	47.0	49.3	51.3
Services balance	18.3	16.9	14.7	17.0	19.5	20.9	22.0	22.9
Credit	31.1	27.9	25.2	28.8	31.8	34.2	36.1	37.8
Debit	12.8	11.0	10.5	11.7	12.3	13.3	14.1	14.9
Primary income balance	1.4	1.0	1.6	1.0	0.5	0.6	0.5	0.5
Credit	8.5	7.5	7.4	7.1	7.2	7.7	8.3	8.7
Debit	7.1	6.5	5.8	6.2	6.7	7.0	7.7	8.2
Secondary income balance	-0.3	-0.5	-0.3	-1.0	-1.0	-1.5	-1.6	-1.7
Capital and financial account balance	9.1	24.2	21.9	18.0	6.1	3.7	2.9	1.5
Capital account balance	2.5	2.0	2.0	2.1	2.3	2.3	2.1	2.1
Financial account	6.6	22.2	20.0	15.9	3.8	1.4	0.7	-0.6
Direct investment	0.3	0.9	-2.8	-1.4	-1.4	-2.5	-3.2	-3.4
Portfolio investment	7.0	8.3	6.6	4.4	-0.4	0.3	-0.1	-0.8
Other investment (excl. program financing)	-1.1	12.6	16.2	12.9	5.6	3.6	4.0	3.6
Reserve assets (increase = -)	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	1.9	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Program financing, net	5.1	18.8	18.0	13.9	1.5	-0.7	-1.3	-2.6
Unidentified financing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(Percent of GDP)								
Current account balance	-1.6	0.1	0.0	-0.1	0.0	-0.1	-0.1	-0.1
Balance on goods and services	-2.2	-0.2	-0.7	-0.1	0.3	0.4	0.5	0.6
Goods balance	-12.5	-9.8	-9.1	-9.3	-9.9	-10.1	-10.2	-10.2
Services balance	10.3	9.6	8.3	9.2	10.2	10.5	10.7	10.8
Primary income balance	0.8	0.6	0.9	0.5	0.3	0.3	0.3	0.2
Secondary income balance	-0.2	-0.3	-0.2	-0.5	-0.5	-0.7	-0.8	-0.8
Capital and financial account balance	5.1	13.8	12.4	9.8	3.2	1.9	1.4	0.7
Capital account balance	1.4	1.1	1.1	1.2	1.2	1.1	1.0	1.0
Financial account	3.7	12.6	11.3	8.6	2.0	0.7	0.4	-0.3
Direct investment	0.1	0.5	-1.6	-0.8	-0.7	-1.2	-1.5	-1.6
Portfolio investment	3.9	4.8	3.7	2.4	-0.2	0.2	0.0	-0.4
Other investment	-0.6	7.2	9.2	7.0	2.9	1.8	1.9	1.7
Reserve assets (increase = -)	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	1.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0
Program financing	2.9	10.7	10.2	7.5	0.8	-0.4	-0.6	-1.2
Unidentified official financing / market access	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gross external debt	238.5	251.1	245.7	239.2	231.3	224.3	218.1	213.6
Public sector 1/	182.6	215.8	204.1	194.7	199.1	191.3	186.6	182.1
Private sector	55.9	35.3	41.5	44.4	32.2	33.0	31.5	31.6
Memorandum item:								
Current account balance in cash terms	-0.9	0.8	0.6	0.7	0.7	0.7	0.7	0.8

Sources: Bank of Greece; and IMF staff estimates.

1/ Includes debt of the monetary authority.

Table 3. Greece: General Government Operations, 2014–21 ^{1/}

	2014	2015	2016	2017	2018	2019	2020	2021
		Prel.				Proj.		
(Billions of euros)								
Revenue	83.2	84.1	87.1	87.3	88.7	90.5	93.1	95.4
Indirect taxes	27.6	28.3	29.9	30.7	31.7	32.4	33.3	34.2
Direct taxes	17.5	16.5	17.5	16.6	16.6	17.0	17.8	18.4
Social contributions	24.1	24.4	24.4	25.8	26.4	27.1	27.8	28.6
Other current revenue	4.4	4.4	4.9	4.5	4.6	4.6	4.6	4.4
Sales	5.0	5.0	5.0	5.2	5.1	5.0	5.0	5.1
Capital revenue	4.6	5.4	5.4	4.5	4.4	4.4	4.6	4.8
Primary expenditure	83.3	83.6	85.4	85.5	85.8	87.5	90.1	92.3
Social benefits	38.4	39.0	39.1	39.4	38.7	39.6	41.2	42.4
Subsidies	1.6	1.7	2.1	1.7	1.8	1.8	1.8	1.8
Other current expenditure	3.5	2.8	3.1	3.0	3.2	3.4	3.3	3.4
Compensation of employees	21.9	21.6	21.7	22.2	22.4	22.6	22.8	23.3
Intermediate consumption	8.7	8.4	9.2	9.6	10.5	10.8	11.5	11.6
Investment	9.0	10.1	10.1	9.5	9.3	9.5	9.3	9.6
Primary balance	0.0	0.4	1.6	1.8	2.9	3.0	3.0	3.2
Interest	7.1	6.3	5.8	6.0	5.6	5.8	6.4	7.4
Overall balance	-7.1	-5.9	-4.1	-4.2	-2.7	-2.8	-3.4	-4.2
Gross debt (Maastricht)	322.0	315.1	324.8	332.8	346.3	348.2	350.8	354.4
(Percent of GDP)								
Total primary revenue	46.8	47.8	49.3	47.4	46.3	45.5	45.1	44.8
Indirect taxes	15.5	16.1	16.9	16.7	16.5	16.3	16.1	16.0
Direct taxes	9.9	9.4	9.9	9.0	8.7	8.6	8.6	8.6
Social contributions	13.5	13.9	13.8	14.0	13.8	13.6	13.5	13.4
Other current revenue	2.5	2.5	2.8	2.4	2.4	2.3	2.2	2.1
Sales	2.8	2.9	2.8	2.8	2.6	2.5	2.4	2.4
Capital revenue	2.6	3.1	3.1	2.4	2.3	2.2	2.2	2.2
Total primary expenditure	46.8	47.6	48.4	46.4	44.8	44.0	43.6	43.3
Social benefits	21.6	22.2	22.2	21.4	20.2	19.9	20.0	19.9
Subsidies	0.9	0.9	1.2	0.9	0.9	0.9	0.9	0.9
Other current expenditure	2.0	1.6	1.8	1.6	1.6	1.7	1.6	1.6
Compensation of employees	12.3	12.3	12.3	12.1	11.7	11.4	11.1	10.9
Intermediate consumption	4.9	4.8	5.2	5.2	5.5	5.4	5.6	5.5
Investment	5.1	5.8	5.7	5.2	4.8	4.8	4.5	4.5
Primary balance	0.0	0.2	0.9	1.0	1.5	1.5	1.5	1.5
Interest	4.0	3.6	3.3	3.3	2.9	2.9	3.1	3.5
Overall balance	-4.0	-3.4	-2.3	-2.3	-1.4	-1.4	-1.6	-2.0
Gross debt (Maastricht)	180.9	179.4	183.9	180.8	180.8	174.9	169.9	166.5
Nominal GDP (billions of euros)	177.9	175.7	176.6	184.0	191.6	199.1	206.4	212.8

Sources: Ministry of Finance; and IMF staff projections.

^{1/} Calculations based on program definitions as outlined in the TMU.

Table 4. Greece: Modified General Government Cash Balance, 2014–16 ^{1/}

(Billions of euros)

	2014	2015	2016
	Act.	Prel.	Proj.
I. State budget			
Revenue	50.5	51.3	52.7
Ordinary budget (A + B + C - D)	45.8	46.4	48.3
A. Recurrent revenue	48.0	47.8	51.0
1. Direct taxes	20.7	19.9	21.2
Income taxes	12.3	12.1	13.1
PIT	7.9	7.9	8.1
CIT	2.7	2.9	3.9
Other	1.7	1.4	1.2
Property taxes	3.5	3.2	3.4
Tax arrears collection	1.9	1.7	1.7
Other direct taxes	3.0	2.9	2.9
2. Indirect taxes	23.8	23.8	25.3
Transaction taxes	14.2	14.3	15.4
VAT	13.6	13.6	14.9
Other	0.6	0.6	0.5
Consumption taxes	8.7	8.8	8.8
Tax arrears collections	0.5	0.5	0.7
Other indirect taxes	0.4	0.3	0.3
3. Tax Installment Scheme	0.0	0.0	0.0
4. Transfers EU	0.2	0.4	0.4
5. Nontax revenue	3.4	3.6	4.2
B. One-off revenue	1.2	1.5	0.4
C. Revenue from concession and rights	0.1	0.2	0.1
D. Tax refunds	3.6	3.1	3.3
Investment budget	4.7	4.8	4.4
A. EU flows	4.6	3.9	4.2
B. Own revenues	0.1	0.9	0.2
Expenditure	56.2	55.2	57.5
Ordinary spending	49.7	48.8	50.7
Ordinary primary spending (includes guarantees to entities inside the general government)	44.1	43.7	46.1
A. Remuneration and pensions	18.5	18.4	18.1
B. Insurance and healthcare	14.5	14.7	15.7
C. Operating and other expenditure	5.7	5.4	5.7
D. Earmarked revenue	3.3	2.8	3.3
E. Reserve	0.0	0.0	0.4
F. Guarantees to entities inside the general government	0.4	1.6	2.1
G. Guarantees to entities outside the general government	0.1	0.0	0.2
H. EFSF commitment fee	0.1	0.2	0.1
I. Spending on military procurement	0.3	0.6	0.6
J. Arrears clearance	1.2	0.0	0.0
Interest	5.6	5.1	4.7
Investment	6.6	6.4	6.8
A. Co-Financed	5.9	5.7	6.0
B. Own revenues	0.7	0.7	0.8
State overall balance	-5.7	-3.9	-4.8
State primary balance	-0.2	1.2	-0.1

Table 4. Greece: Modified General Government Cash Balance, 2014–16^{1/} (concluded)

(Billions of euros)

	2014	2015	2016
	Act.	Prel.	Proj.
II. Balance local governments	0.2	0.6	0.4
III. Balance social security funds	-0.5	0.4	-0.5
IV. Balance of extra-budgetary funds	1.4	0.9	1.3
V. Balance of state-owned enterprises (incl. guarantees)	1.0	1.4	2.0
General government primary cash balance (after measures)	0.6	4.4	3.2
General government primary cash balance (excl. PIB related to EU funds, program definition)	3.2	6.2	...
State primary spending (includes guarantees to entities inside the general government), program definition	44.8	44.4	46.8

Sources: Ministry of Finance; and IMF staff projections.

1/ Calculations based on program definitions as outlined in the TMU.

Table 5. Greece: Monetary Survey, 2011–16

	2011	2012	2013	2014	2015	2016			
						Mar.	June	Sep.	Dec.
									Proj.
(Billions of Euros)									
Aggregated balance sheet of Monetary Financial Institutions (MFIs)									
Total assets	646.1	602.5	517.6	501.2	545.7	536.3	510.0	492.9	487.0
Cash (held by credit institutions)	2.4	2.5	2.0	1.8	1.8	1.8	1.8	1.8	1.8
Claims on Bank of Greece	5.1	3.1	4.0	3.2	2.9	2.8	2.8	2.9	2.9
Claims on other MFIs	198.8	170.7	107.3	86.2	134.1	127.6	112.0	96.7	92.5
Claims (Loans) on non MFIs	275.9	250.1	238.9	234.2	225.6	222.3	221.7	218.3	218.5
Domestic	269.5	244.8	233.8	229.7	221.0	218.0	217.3	213.9	214.1
General government	22.3	17.4	15.9	17.7	16.7	15.5	15.6	15.4	16.2
Other sectors	247.2	227.5	217.9	212.0	204.3	202.5	201.7	198.6	197.9
Other countries	6.4	5.2	5.2	4.5	4.6	4.3	4.5	4.4	4.4
Securities 1/	93.0	100.4	94.3	102.0	107.7	107.6	101.1	102.9	101.5
Other assets	65.9	70.6	66.0	69.1	68.9	69.5	65.8	65.6	65.2
Fixed assets	5.0	5.0	5.1	4.7	4.7	4.7	4.6	4.7	4.7
Total Liabilities	646.1	602.5	517.6	501.2	545.7	536.3	510.0	492.9	487.0
Liabilities to Bank of Greece	128.9	121.2	73.0	56.0	107.6	101.5	87.1	75.3	71.8
Liabilities to other MFIs	154.4	133.2	93.0	92.6	102.7	102.0	91.4	81.5	78.2
Deposits and repos of non MFIs	237.5	225.2	218.9	191.0	143.6	141.0	142.6	145.1	147.4
Domestic	187.7	179.1	182.6	177.2	136.8	134.7	135.5	137.2	139.4
Other countries	49.8	46.1	36.3	13.8	6.8	6.3	7.1	7.8	8.1
Capital and reserves	44.7	45.6	67.0	75.0	90.7	90.4	88.8	88.5	88.2
Banknotes and coins in circulation	23.7	24.3	25.4	27.9	28.6	28.5	28.5	28.6	28.7
Other liabilities	56.8	53.0	40.3	58.7	72.6	72.9	71.6	73.9	72.7
Money and credit									
Broad money	199.2	188.4	193.2	192.4	159.8	157.9	159.2	160.3	162.4
Credit to the private sector 2/ 3/	248.1	227.3	217.5	211.6	203.9	202.1	201.3	198.2	197.5
Credit to government 2/	59.1	28.2	21.8	23.6	23.7	22.0	22.1	21.7	22.8
(Annual percentage change)									
Broad money	-14.6	-5.3	2.7	-0.4	-16.9	-7.4	3.2	3.9	1.6
Domestic private sector deposits	-17.0	-7.3	1.4	-2.0	-22.9	-12.1	1.0	1.9	2.1
Credit to the private sector 2/ 3/	-3.1	-4.0	-3.9	-3.9	-3.6	-5.1	-3.3	-3.2	-3.1
Credit to government 2/	2.0	-7.9	-18.1	8.0	0.7	-4.5	-1.4	-6.5	-3.9
(Percent of GDP)									
Broad money	96.1	98.5	107.0	108.2	91.2	90.3	91.0	91.4	92.4
Domestic deposits	90.6	93.6	101.1	99.7	78.0	77.0	77.5	78.2	79.3
Credit to the private sector 3/	119.8	118.8	120.5	119.0	116.3	115.6	115.1	112.9	112.4
Credit to government	28.5	14.8	12.1	13.3	13.5	12.6	12.6	12.4	13.0
Memorandum items:									
(Percent)									
Capital to assets	4.8	3.3	6.9	7.7	9.2	8.9	8.8	9.0	8.9
Loans to customer deposits	117.0	111.6	110.6	109.3	138.3	139.3	139.3	133.0	131.3
Velocity	1.0	1.0	0.9	0.9	1.1	1.1	1.1	1.1	1.1

Sources: Bank of Greece; and IMF staff estimates and projections.

1/ Holdings of securities other than shares and derivatives.

2/ Projected growth rates are calculated from differences in outstanding amounts and do not take into account write-offs, valuation

3/ Credit to domestic non-MFI residents by domestic MFIs excluding the Bank of Greece, including securitized loans and corporate bonds.

Table 6. Greece: Monetary Financial Institutions (excl. BoG)—Uses and Sources of Funds, 2014–21

	2014	2015	2016	2017	2018	2019	2020	2021
	Proj.							
	(Billions of euros)							
Assets	397.8	386.0	363.8	369.7	379.7	392.7	399.9	405.6
Cash	1.8	1.8	1.8	1.9	1.9	2.0	2.1	2.1
Claims on other MFIs	28.0	24.5	18.7	18.7	18.8	18.8	18.7	18.6
Claims on non-MFIs	298.2	291.7	277.8	281.3	288.3	298.4	303.2	307.0
General government	23.6	23.7	22.8	23.6	24.6	25.5	26.4	27.1
Private sector	211.6	203.9	197.5	198.9	203.1	210.6	213.1	215.0
Corporate	95.2	89.1	90.6	93.4	97.4	103.2	106.7	109.8
Households	116.4	114.8	106.9	105.5	105.6	107.3	106.4	105.2
Other countries	63.0	64.1	57.5	58.8	60.6	62.3	63.8	64.9
Other assets	69.8	68.0	65.5	67.9	70.7	73.4	75.9	78.0
Liabilities	397.8	386.0	363.8	369.7	379.7	392.7	399.9	405.6
Liabilities to other MFIs	39.8	11.4	22.6	23.5	24.4	25.3	26.1	26.8
Deposits of non-MFIs	186.6	140.2	143.7	161.0	169.6	180.4	186.8	192.4
Central government	7.1	5.7	5.3	5.5	5.8	6.0	6.2	6.4
Private sector	166.1	128.1	130.7	147.2	155.1	165.1	170.8	175.7
Other countries	13.4	6.4	7.7	8.2	8.8	9.3	9.8	10.3
Other liabilities	45.7	45.6	46.9	46.2	46.1	46.1	45.9	45.7
Capital and reserves	69.7	81.1	78.7	81.4	84.8	88.1	91.0	93.5
Eurosysteem liquidity support	56.0	107.6	71.8	57.7	54.8	52.8	50.0	47.2
	(Percent of GDP)							
Assets	223.8	220.2	207.1	203.3	200.4	199.6	196.7	194.1
Cash	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Claims on other MFIs	15.8	14.0	10.6	10.3	9.9	9.5	9.2	8.9
Claims on non-MFIs	167.7	166.4	158.1	154.7	152.2	151.7	149.1	146.9
General government	13.3	13.5	13.0	13.0	13.0	13.0	13.0	13.0
Private sector	119.0	116.3	112.4	109.4	107.2	107.0	104.8	102.9
Corporate	53.5	50.8	51.6	51.3	51.4	52.5	52.5	52.6
Households	65.5	65.5	60.8	58.0	55.8	54.6	52.3	50.4
Other countries	35.4	36.5	32.7	32.4	32.0	31.7	31.4	31.0
Other assets	39.2	38.8	37.3	37.3	37.3	37.3	37.3	37.3
Liabilities	223.8	220.2	207.1	203.3	200.4	199.6	196.7	194.1
Liabilities to other MFIs	22.4	6.5	12.9	12.9	12.9	12.9	12.9	12.8
Deposits of non-MFIs	105.0	80.0	81.8	88.5	89.5	91.7	91.9	92.1
Central government	4.0	3.3	3.0	3.0	3.0	3.0	3.0	3.0
Private sector	93.4	73.1	74.4	81.0	81.8	83.9	84.0	84.1
Other countries	7.5	3.7	4.4	4.5	4.6	4.7	4.8	4.9
Other liabilities	25.7	26.0	26.7	25.4	24.3	23.4	22.6	21.9
Capital and reserves	39.2	46.3	44.8	44.8	44.8	44.8	44.8	44.8
Eurosysteem liquidity support	31.5	61.4	40.9	31.7	28.9	26.8	24.6	22.6
Memorandum items:								
Domestic private sector deposit growth (percent)	-2.0	-22.9	2.1	12.6	5.3	6.5	3.4	2.9
Private credit growth (percent change) 1/	-3.9	-3.6	-3.1	0.7	2.1	3.7	1.2	0.9
Eurosysteem liquidity support (percent of total assets)	14.1	27.9	19.7	15.6	14.4	13.4	12.5	11.6

Sources: Bank of Greece; and IMF staff estimates and projections.

1/ Projections do not take into account write-offs, valuation changes, or reclassifications.

Table 7. Greece: Core Set of Financial Soundness Indicators for Deposit Taking Institutions, 2011–16

(Percent, unless otherwise indicated)

	2011	2012	2013	2014	2015	2016
						Jun.
Core set						
Regulatory capital to risk-weighted assets 1/	7.0	10.0	13.6	14.1	16.5	18.1
Regulatory tier I capital to risk-weighted assets 1/	5.8	9.3	13.2	13.9	16.4	18.0
Nonperforming loans net of provisions to capital 2/	...	152.0	138.5	120.3	79.5	81.9
Nonperforming loans to total gross loans 2/	16.0	24.5	31.9	33.8	36.8	37.0
Bank provisions to nonperforming loans	62.9	49.1	49.3	55.8	67.6	67.8
Return on assets (after taxes)	...	...	...	-1.3	-2.6	0.1
Return on equity (after taxes)	...	...	...	-14.1	-26.7	0.5
Interest margin to gross income	93.7	103.1	76.7	88.0	84.5	82.8
Non-interest expenses to gross income	66.1	93.9	76.3	64.8	56.7	49.1
Liquid assets to total assets 3/	32.3	32.1	29.9	28.9	29.7	28.5
Liquid assets to short-term liabilities 3/	43.1	41.9	40.0	40.1	40.4	38.2
Net open position in foreign exchange to capital 1/	...	15.7	5.3	5.4	5.6	1.9
Encouraged set						
Spread between reference lending and deposit rates (end-of-period, basis points) 4/	7.5	7.1	7.0	6.2	5.9	5.7
Customer deposits to total (noninterbank) loans 3/	85.5	89.6	90.4	90.3	71.8	71.4
Foreign currency-denominated liabilities to total liabilities 3/	7.7	6.5	5.9	5.5	3.1	3.1
Market liquidity						
Average bid-ask spread in the securities market (basis points)	87.2	193.0	185.0	157.0	173.0	157.0
Households						
Household debt to GDP	61.3	63.7	64.5	63.0	62.3	61.1
Real estate markets						
Residential real estate loans to total loans 3/	22.8	25.5	26.4	26.8	27.6	27.6
Memorandum items:						
Assets (billions of euros)						
Banks	412.7	389.7	383.0	375.0	367.8	352.8
Branches of foreign banks	52.0	39.1	10.8	9.1	5.8	5.2
General insurance companies 5/	14.9	15.6	16.2	16.3	16.6	16.7
Other credit institutions	11.5	12.6	12.9	13.0	12.0	11.8
Deposits (billions of euros)						
Banks	172.4	164.0	177.2	174.3	128.7	127.4
Branches of foreign banks	20.9	18.1	3.5	2.5	2.8	2.9

Source: Bank of Greece.

1/ Data on a consolidated basis. For end-2011 and 2012Q1, C.A.R. ratios are affected by the PSI and include only the first tranche of €18 billion HFSF recapitalization. In addition, C.A.R. ratios are affected by the negative supervisory own funds of two banks (ATEbank and TT Hellenic Post Bank).

2/ Loans are classified as nonperforming when (1) payments of principal and interest are past due by three months (90 days) or more, or (2) interest payments equal to three months (90 days) interest or more have been capitalized (reinvested into the principal amount), refinanced, or rolled over. NPLs also include those loans with payments less than 90 days past due that are recognized as nonperforming under national supervisory guidance. This definition does not take into account restructured NPLs.

3/ On an aggregate resident-based approach (i.e. commercial banks, cooperative banks, and foreign branches).

4/ Spread between rate on credit lines and savings deposit rate.

5/ There are no specialised life insurance companies in Greece. General insurance companies offer general insurance and life insurance products.

Annex I. Risk Assessment Matrix ^{1/}

(Scale—High, Medium, or Low)

Source of risk	Relative Likelihood and Transmission	Expected Impact of Realized	Recommended Policy Response
Reform fatigue	High Unemployment remains high, while economic recovery fails to materialize. Reforms stall and political pressure mounts to reverse key fiscal and structural reforms.	High Rejection of program policies could result in renewed liquidity pressures on the banking system and trigger debt default and/or exit from the euro area.	Keep on track with implementation of reforms agreed under the ESM-supported program.
Weak recovery of domestic demand	High Debt overhang and the recent revenue-based fiscal consolidation package create a larger than expected drag on the economy.	High Lower growth could undermine fiscal performance, complicate debt relief, and perpetuate debt overhang.	Pursue a more growth friendly consolidation by tackling structural challenges on the expenditure side, lowering tax rates and broadening tax bases.
Economic fallout from political fragmentation	Medium/High Brexit. Negotiations could be more complex, contentious and protracted. Dislocation in the Middle East, Africa, and Europe, leading to an increase in migrant flows.	Medium Lower exports—including tourism—and renewed capital flight. Further fiscal pressures and stress on social cohesion.	Diversify export destinations, and accelerate reforms to improve competitiveness.
Tighter or more volatile global financial conditions	Medium Investors withdraw from riskier assets as they reassess underlying risks in Europe, or respond to an unanticipated FED tightening, lowering growth in the Euro area.	Medium Weaker confidence and renewed capital flight, as well as lower exports.	Accelerate efforts to tackle the high level of NPLs and fully eliminate capital controls, but with caution in order to preserve financial stability.
Structurally weak growth in the Euro Area	High Weak demand and low productivity growth from a failure to address crisis legacies and undertake structural reforms leading to lower potential growth.	Medium Adverse impact from lower exports to Europe and weaker confidence.	Diversify exports destinations, and accelerate reforms to improve competitiveness. Rebalance spending towards vulnerable groups, health and investment—also making use of EU funds.

^{1/} The risk assessment matrix shows events that could materially alter the baseline path discussed in this report (which is the most likely to materialize in the view of staff). The relative likelihood is the staff subjective assessment of the risk surrounding the baseline (“low” is meant to indicate a probability below 10 percent, “medium” a probability between 10 and 30 percent, and “high” a probability between 30 and 50 percent). The RAM reflects staff’ views on the source of risk and overall level of concern as of the time of discussion with the authorities.

Annex II. External Sector Assessment

After reaching deficits of up to 15 percent of GDP in 2007-08, Greece's current account achieved balance in 2015. The external position is somewhat weaker than the level consistent with medium-term fundamentals and desirable policy settings, suggesting the need for further exchange rate adjustment of about 5-10 percent. Moreover, the decline in external imbalances is due chiefly to lower investment, while savings remain on a downward trajectory. The trade balance has improved as a result of a sharp import contraction, an increase in the exports of fuel derivatives, and a more recent recovery in non-oil exports, with debt relief also contributing to the adjustment in the income balance. Labor and product market reforms are needed to improve competitiveness. Shifting the fiscal consolidation strategy from raising tax rates to lowering spending and broadening the tax base would also support growth and savings.

1. Imbalances have declined sharply, but largely through lower investment. The buildup of large external imbalances followed the adoption of the Euro. Lower euro area interest rates encouraged household borrowing and public investment financed by external savings. Domestic savings saw a large decline. Since the crisis, the economy adjusted to lower levels of external financing, managing to significantly reduce the size of the imbalances, with the current account achieving balance in 2015. However, household savings have declined further, and the adjustment has materialized mainly through an investment collapse, hurting growth and employment.

2. The contraction in imports was the main driver behind the closing of the current account deficit, with goods exports and tourism contributing to a lesser degree. Greece's trade deficit was 0.2 percent of GDP in 2015—the lowest since it joined the Eurozone. The reduction in disposable income resulted in a sharp decline in imports, especially of capital goods (basic metals, machinery, and equipment). Since the crisis, most of the improvement in goods exports is associated with higher volume of oil exports—partially in response to a decline in domestic demand for fuels. Meanwhile, the services balance has benefitted from very strong tourism receipts, but the improvement was offset by a sharp decline in transportation receipts reflecting lower freight prices.

Greece: Good Exports, 2008–15

Sources: Eurostat; Haver Analytics; and IMF staff calculations.

Greece: Good Exports, 2010–15

3. While goods volumes have increased robustly, export values have lagged peers. In terms of exports volume, Greece outpaced its peers, even after taking into account that its trading partners' demand has increased slightly faster. Nonetheless, the value of exports of goods and services declined in nominal terms since the crisis, while it has been growing strongly in peer countries. However, for goods exports, this reflects lower prices (particularly oil) rather than volumes. In all, this implies that Greece has been losing market share relative to peers.

Export Volumes Index as a Share of Trading Partners' Demand Index, 2008–15 (Index, 2008 = 100)

4. The exchange rate has also declined. Greece's unit labor costs declined by some 5 percent since 2010, less than in Spain and Portugal. This improvement was achieved through a compression of wages (by close to 30 percent), rather than through higher productivity. The ULC-based REER has depreciated by some 18 percent since 2010. With prices falling less than wages, the CPI-based REER has declined by slightly less than 10 percent. However, there were large increases in consumption taxes in Greece during the program—including a 4 percentage point increase in the statutory VAT rate—which are not included in the above-mentioned figure. Adjusting for tax changes, the CPI-based REER shows a decline close to 15 percent.

Unit Labor Costs, 2008–15
(Index, 2010 = 100) Greece: Real Effective Exchange Rates
(Index, 2010 = 100)

5. Methodological approaches underlying the Fund's EBA methodology suggest that Greece's REER remains modestly over-valued:

- **The current account approach** provides estimates of the current account adjusted for cyclical (terms of trade and output gap) developments as well as the current account norm. In the case of Greece, the cyclically adjusted current account amounts to -2.7 percent of GDP, given the large estimated output gap, while the current account consistent with fundamentals and desirable policies is estimated to be a small deficit (1.2 percent of GDP). Closing this gap would require a real exchange rate adjustment of about 6 percent. However, the model fit is relatively poor in the case of Greece (with an unexplained regression residual of -3.8 percent of GDP), highlighting the significant uncertainty surrounding the estimates.
- **The real exchange rate index approach** compares the average 2015 REER index to an estimated norm. The approach suggests a REER overvaluation of some 6 percent, subject to a regression residual of broadly the same magnitude.
- **The real exchange rate level approach** compares the price level of a representative basket of goods among trading partners, thus allowing the regression to exploit not only within country variation in the REER but also cross-country information. The regression suggests overvaluation of some 11 percent and a residual of about the same magnitude.
- **The external sustainability approach** compares the projected medium-term current account to a norm that would stabilize the net foreign assets ratio to GDP at an appropriate benchmark (set at some -63 percent of GDP in the case of Greece). Greece's net international investment position has broadly stabilized at around 135 percent of GDP in 2015, with liabilities of 274 percent of GDP mostly reflecting public external debt. The external sustainability approach suggests that a current account close to balance would gradually improve the international investment position to sustainable levels.

2016 Current Account and REER Gaps

	EBA Methodologies /1			
	Current account	REER index approach	REER level approach	External Sustainability
<i>In percent of GDP</i>				
Actual Current Account	0			
Cyclically Adjusted Current Account	-2.7			
Current Account Norm	-1.2			
Current Account Gap	-1.5			
<i>In percent</i>				
Exchange Rate Gap (+ is overvaluation)	6.0	5.9	10.6	-1.7

/1 Based on preliminary October 2016 EBA results.

6. Staff's assessment is that a competitiveness gap remains, requiring some 5-10 percent in further real exchange rate adjustment. The results of three of the four methodological approaches covered in the Fund's EBA analysis consistently point to some modest remaining over-valuation; albeit they might overstate it given the increases in consumption taxes, and to the extent that the output gap is smaller than envisaged. While the results are subject to significant uncertainty, staff's judgment is broadly in line with the finding that some modest overvaluation of about 5-10 percent remains.

Annex III. Debt Sustainability Analysis

This appendix considers the sustainability of Greece's public and external debt. The analysis suggests that Greece's public debt is highly unsustainable. Even with full implementation of policies agreed under the ESM program, public debt and financing needs will become explosive in the long run, as Greece will be unable to replace highly subsidized official sector financing with market financing at rates consistent with sustainability. In a scenario in which sufficient debt relief is provided to achieve sustainability, public debt remains highly sensitive to shocks. External debt is high and expected to decline only gradually over the medium term; macroeconomic shocks and policy slippages could result in adverse dynamics.

I. PUBLIC SECTOR DSA

1. The public sector DSA, which is based on the Gross Financing Needs (GFN) framework, updates the May 2016 published DSA. As noted in the published DSA, the GFN framework better captures Greece's true debt burden compared to a stock-of-debt framework, given that the bulk of Greece's debt comprises official loans provided on highly concessional terms. The time horizon covered by the analysis extends to 2060, coinciding with the maturity of Greece's official loans. Under the GFN framework, achieving debt sustainability requires maintaining low GFN for an extended period to allow debt to decline before Greece can return to markets on a larger scale. Thus, any debt restructuring solution would need to achieve two key objectives. First, it should maintain gross financing needs well within the 15-20 percent of GDP thresholds defined in the MAC DSA for emerging-advanced economies throughout the projection period. Second, it should ensure that debt is on a sustained downward path. In other words, solutions that provide only temporary flow relief but do not deliver a declining debt path over the projection horizon would not be consistent with sustainability.

2. Greek debt is highly unsustainable in staff's baseline scenario (Figure 1). Staff's baseline assumptions reflect staff's current macroeconomic scenario (Box 1). Under these assumptions, debt is projected to reach 170 percent of GDP by 2020, and 164 percent by 2022, but will rise thereafter, reaching around 275 percent of GDP by 2060, as the cost of debt, which rises over time as market financing replaces highly subsidized official sector financing, more than offsets the debt-reducing effects of growth and the primary balance surplus.¹ Gross financing needs cross the 15 percent-of-GDP threshold already by 2024 and the 20 percent threshold by 2031, reaching around 33 percent by 2040 and around 62 percent of GDP by 2060.

¹ The debt-stabilizing primary balance can be approximated by $(r - g)$ times the debt/GDP ratio, where r and g are the nominal interest rate and GDP growth rates, respectively. For example, for $(r - g)$ around 2 and debt of around 100 percent of GDP, a primary balance of 2 percent would be needed to stabilize the debt (and a higher one to bring debt down). For higher debt-to-GDP ratios, the primary surpluses need to be higher to stabilize debt and even higher to bring debt down to safer levels.

Figure 1. Debt Sustainability, Baseline Scenario, 2014–2060

Source: IMF staff estimates.

3. The European institutions' significantly more optimistic assumptions lead to notably more benign debt dynamics. Under the baseline assumptions in their June 2016 published DSA, debt is projected to decline to under 120 percent of GDP by 2030 and slightly over 100 percent by 2040, with gross financing needs remaining under 10 percent of GDP until 2023 and under 20 percent until 2040, rising to 24 percent by 2060 (Box 2). This projection is based on significantly more optimistic assumptions than staff's, in particular with respect to growth and the primary balance, the latter of which is expected to be maintained at 3.5 percent of GDP for a decade, declining gradually to 3.2 percent by 2030, and to 1.5 only by 2040.

4. The Eurogroup committed to additional debt relief for Greece, although some measures are not specific enough to enable a full assessment of their impact on debt sustainability. At the May 2016 Eurogroup, European partners agreed on the GFN framework and a broad package of debt relief measures to be provided by the end of the ESM program, subject to continued implementation. For the short-term (before the end of the ESM program), the package includes: (i) smoothening the EFSF repayment profile under the current maximum weighted average maturity; (ii) using a more diversified EFSF/ESM funding strategy to reduce interest rate risk; (iii) waiving the step-up interest rate margin on the debt buy-back tranche of the 2nd Greek program for 2017. Following the successful implementation of the program, further measures could be implemented over the medium and long run, including: (i) abolishing the step-up margin for 2018 onwards; (ii) restoring the transfer of ANFA and SMP profits; (iii) partially repaying existing official loans to Greece by using unused ESM resources; and (iv) implementing a targeted EFSF re-profiling.

5. A substantial restructuring of the terms of European loans to Greece is required to restore debt sustainability under staff's baseline scenario. A possible restructuring modality that could satisfy the objectives noted above could be based on a combination of the following measures, which go well beyond the scope of measures currently proposed by the Eurogroup (Figure 2):

- **Grace extensions until 2040:** This would require an extension of grace periods on existing debt ranging from 6 years on ESM loans to 17 and 20 years for EFSF and GLF loans, respectively. While possible extensions of grace periods have been mentioned by the Eurogroup, the scope has not been well defined, and the measures do not encompass GLF and ESM loans.

- **Maturity extensions until 2070:** This would require maturity extensions of 30 years for GLF loans, up to 14 years for EFSF loans, and 10 years for ESM loans. As with the above mentioned measures, while possible maturity extensions have been mentioned by the Eurogroup, the scope has not been well defined, and the measures do not encompass GLF and ESM loans.
- **Interest deferrals until 2040:** This would require a further deferral of interest payments on all GLF, EFSF and ESM loans until 2040, amortized in equal instalments until 2070 (including interest on interest). The scope of these measures has also not been well defined by the Eurogroup.
- **Interest margin and SMP/ANFA profits:** Abolishing the step-up interest margin on the EFSF buyback tranche from 2017 onwards and returning SMP/ANFA profits during the years following the ESM program have been proposed by the Eurogroup and could be used to further lower GFN and debt.
- **Locking in the interest rate on all EFSF and ESM loans:** To ensure that debt can remain on a downward path, interest rates on all EFSF and ESM loans (amounting to around €200 billion, 113 percent of 2016 GDP) would need to be fixed at low levels for 30 years, not exceeding 1½ percent. While the Eurogroup has agreed to lock in the interest rate on some European loans, the scope of the measures contemplated is likely much less than what is required to ensure sustainability under staff's baseline scenario.

Achieving SGP compliance (in particular with respect to the MTO) through the projection horizon would require additional debt relief aiming at lowering Greece's interest burden. One option to achieve this would be to defer EFSF interest payments to 2060 rather than 2040.

6. Debt dynamics remain highly sensitive to shocks under the restructuring scenario. Two shock scenarios are considered to assess the robustness of staff's proposed restructuring scenario (Figure 3):

- **Upside scenario:** Stronger-than-expected policies, resulting in somewhat higher nominal growth (3.2 percent) and no additional bank recapitalization needs, combined with debt restructuring as proposed by staff, would lead to lower GFNs, and a faster reduction in debt, which generates a virtuous cycle of lower market interest rates and lower debt levels over the long run. This scenario illustrates the importance of advancing structural and financial sector reforms that can enhance productivity growth and ensure that the banking sector can support the economy over the long term.
- **Downside scenario:** If policies were weaker than expected, resulting in a lower primary balance (stabilizing at 1 percent of GDP), debt sustainability would no longer be ensured even under staff's restructuring proposal. In this case, both the debt and GFN dynamics would become unstable and would rise over time, as the measures would no longer be sufficient to ensure that Greece can access markets at rates consistent with sustainability. To ensure sustainability under this scenario according to staff's criteria, the interest on both EFSF and ESM loans would need to be reduced to 0.25 for 30 years. Considering that staff's assumption of a primary surplus of 1.5 percent for many decades is optimistic by most metrics, this scenario illustrates the magnitude of the downside risks that remain in staff's DSA.

Box 1. Key Assumptions in the DSA

The following elements underpin staff's baseline DSA projections:

Macroeconomic assumptions: Staff has revised up its primary balance projections for 2016/17 compared to the May published DSA but continues to assume a primary surplus of 1.5 percent of GDP starting in 2018 and throughout the long-term. While 2016 GDP projections have been revised up to reflect recent developments, medium- and long-term growth has been revised down on account of a slower pace of structural reform implementation than previously envisaged. Consequently, starting in 2022, staff now expects nominal growth of some 2.8 percent, on account of both lower real growth and lower inflation, reflecting lower productivity growth than in the rest of the euro-zone.

Bank recapitalization needs: Staff has maintained its assumption from May that a buffer of around €10 billion (5½ percent of 2016 GDP) should be set aside to cover potential additional bank support needs given the remaining risks to asset quality and still bleak prospect for banks' profitability. This is because despite successive recapitalizations (which added around €43 billion, or close to 25 percent of GDP to public debt since 2010), banks' balance sheets remain vulnerable with high level of NPLs, and half of bank capital comprised of deferred tax assets that represent contingent liabilities of the state.

Privatization proceeds: Despite Greece's commitment to set up a €50 billion (28 percent of 2016 GDP) privatization fund as part of its ESM-supported program, staff has not revised privatization projections, which amount to €3 billion (1½ percent of GDP) by 2018, rising to €5 billion (2½ percent of 2018 GDP) thereafter. These projections are seen as realistic, given Greece's poor record in meeting privatization targets under its previous programs. Moreover, as noted above, despite the large capital injections since 2010, the state has not been able to recover its investment in the banks; on the contrary, following the most recent recapitalization, the state's share in the banking sector has been reduced to around 20 percent (from around 60 percent). As a result, staff does not expect any material proceeds from bank privatization.

Additional financing needs: As in the May 2016 DSA, staff projects that arrears will be cleared and deposit buffers rebuilt to reach medium-term coverage of eight-months of forward-looking financing needs (€8 billion, 4½ percent of 2016 GDP). In addition, repo operations are assumed to reach €10 billion (5½ percent of GDP) at end-2016 and €6.5 billion (3¼-3½ percent of GDP) going forward.

Official interest rates: Greece is benefitting from very low nominal official interest rates (weighted average of around 1 percent), supported by the exceptional relaxation in monetary conditions in the euro zone. Staff has revised rates down somewhat since May to reflect recent developments. But since the rates are variable, they are expected to revert to their historical averages over the long run as financing conditions normalize. The long-run risk-free rate continues to be assumed at 3.8 percent and is based on the end-point medium-term forecast for euro area growth (1.5 percent) and achievement of the ECB's price stability objective (1.9 percent), and a modest wedge over the sum of the two, consistent with what has been observed historically.

Box 1. Key Assumptions in the DSA (concluded)

Market interest rates: Greece is assumed to access markets by end-program at an initial rate of 6 percent, reflecting a prolonged absence from markets, a weak track record on delivering fiscal surpluses, and a substantial debt overhang. The rate is in line with the rates obtained by the country in 2014 when it was able to temporarily issue on the markets. It is consistent with a risk-free rate of 1-1½ percent in 2018 and a risk premium of 450-500 basis points (broadly consistent with an increase in the premium of four basis points for each 1 percent of GDP in debt above the Maastricht limit). Regression analysis suggests that staff's assumption is at the low (optimistic) end of estimates, which range between 6 and 13 percent. As to its evolution over time, the rate is expected to fall/rise by four basis points for every one percentage point decline/increase in debt-to-GDP ratio, in line with the literature (Laubach, 2009, Ardagna, Casseli, Lane, 2004, Engen and Hubbard, 2004), fluctuating between a cap of 6 percent (to avoid non-linearities and reflect the likelihood of loss of market access at high levels of debt/interest rate) and a floor of 4½ percent (consistent with a small long-run risk free premium of 75 basis point).

Box 2. Comparison with European DSA Assumptions

The European institutions have a significantly more optimistic baseline scenario in their June 2016 published DSA compared to staff. This is primarily due to more sanguine assumptions on the path of primary balance, nominal growth and, to a lesser extent, privatization and bank recapitalization needs. As a result, debt relief needs are significantly more limited under the European institutions' scenario. The corollary is that debt restructuring proposals of European institutions fall short of what is required to ensure debt sustainability under staff's baseline.

The European institutions' June 2016 DSA implies a declining debt path throughout the projection horizon, with gross financing needs below 20 percent of GDP until 2040. Debt is projected to fall to under 120 percent of GDP by 2030, and to stabilize marginally above 100 percent of GDP during 2040-60. Gross financing needs remain well below 15 percent of GDP until 2030, rising to 20 percent by 2040, and marginally exceeding this threshold in 2050-60. The difference with staff's projections for debt and GFN ratios by 2060 amounts to more than 170 and 40 percent of GDP respectively.

- **Primary balance:** The primary surplus target of 3½ percent of GDP is assumed to be reached by 2018 and maintained for a decade. It gradually declines to 3.2 percent of GDP by 2030, and converges to the IMF assumption of 1½ percent of GDP only by 2040. This assumption is the key factor driving the differences between the European and staff's baseline DSAs. Introducing this assumption in staff's baseline (and allowing staff's endogenous market interest rate to respond to the new dynamics in line with staff's assumed elasticity) would result in lower debt and GFN ratios by around 140 and 30 percent of GDP by 2060.
- **Growth:** Nominal GDP growth rates are projected to reach some 3.3 percent by 2030 and stay at this level going forward. As such, they are some 0.5 percentage points higher than staff's. Adding this assumption to staff's baseline on top of the primary balance assumption leads to a declining debt path throughout the projection horizon (stabilizing below 100 percent of GDP), and to a GFN level at around 21 percent of GDP by 2060. Optimistic growth and primary balance assumptions together thus stand in lieu of debt relief.
- **Privatization and bank recapitalization needs:** Privatization revenues are assumed by European institutions to amount to close to €15 billion (8½ percent of 2016 GDP) euro over the projection horizon, of which close to €3 billion (1¾ percent of 2016 GDP) are from the sale of state's stake in banks. Importantly, the European institutions do not project any additional costs from future needs for bank recapitalization under their baseline. Introducing these assumptions in staff's DSA on top of the previous two assumptions leads to a further reduction in the 2060 debt and GFN ratios compared to the scenario above by some 12 and 3 percent of GDP respectively.
- **Interest rates:** The European institutions assume that the market interest rate immediately after the program is around 5 percent, implying a lower risk premium than staff's by some 100 basis points. The rate fluctuates within a narrow band around 5 percent until 2060, despite debt declining by around 60 percent of GDP. European partners also assume lower long-run official rates of around 3-3.3 percent from 2030 onwards (their short-run official projections in June were, however, somewhat higher than staff's today and are expected to be revised down to

Box 2. Comparison with European DSA Assumptions (concluded)

reflect recent developments). The cumulative effect of introducing in staff's baseline the ESM's June market and official interest rate assumptions worsens the debt and GFN ratios by some 11 and 3 percent of GDP, respectively, in part reflecting staff's more sanguine assumption on the elasticity of market rates.

¹Staff's analysis was conducted in two stages: first, staff estimated the impact of each individual ESM assumption while keeping all else the same (i.e. introducing one assumption at a time). This was first stage was used to order the assumptions from most to least important, namely: primary balance, growth, market rates, privatization and bank recap needs, official rates. Based on this ordering, in a second stage, staff re-introduced the ESM assumptions sequentially in staff's baseline and computed their cumulative effect. This better captures the interaction effect between the various assumptions.

II. EXTERNAL SECTOR DSA

7. External debt increased prior to the crisis but has since stabilized in nominal terms.

Greece's stock of external debt all but doubled from 97 percent of GDP in 2004 to 185 percent of GDP in 2010, as the country used external savings to finance rapidly growing domestic demand at the cost of large current account deficits. Although the public sector accounted for the bulk of external debt throughout the period, banks similarly expanded their borrowing from abroad. Since the onset of the program in 2010, debt has remained broadly constant in nominal terms although it remained on an increasing path in GDP terms as activity contracted. In 2015, the composition of liabilities has shifted somewhat away from banks and towards the central bank amid deposit outflows and emergency liquidity assistance to Greek banks. As of 2015, about 60 percent of total debt is accounted for by the general government and 26 percent by the monetary authorities.

Greece: External Debt, 2004–15

(Billions of euros)

NIIP and External Debt, 2015

(Percent of GDP)

8. At some 250 percent of GDP, external debt remains relatively large, while the international investment position is the second weakest in Europe. Greece's external debt is higher than in most European economies, with the exception of Belgium, Cyprus, Ireland and the Netherlands. At -135 percent of GDP, Greece's net international investment position is the second weakest in Europe after Ireland. The weak international investment position will continue to represent a drag on the recovery as the availability of external savings remains limited and domestic savings have to be mobilized to make room for investment.

9. External debt is projected to decline gradually to about 211 percent of GDP in 2022.

This improvement would come mostly on account of the projected recovery in growth and inflation and would be supported by a positive non-interest current account (the overall current account is projected to remain near balance over the medium term). Higher FDI inflows, currently low compared to peers, would be an important source of non-debt-creating financing.

10. Macroeconomic shocks and policy slippages could result in adverse dynamics.

- *Interest rate shock.* The effects of higher Greek sovereign spreads are dampened by the almost exclusive reliance of Greece on official financing. Changes in the risk free rate would nevertheless impact Greece through the cost of official financing. A 100 bps interest rate shock would worsen the income account and result in a 2021 debt ratio 11 percentage points above the baseline.
- *Growth shock.* A decline in average growth by 2.3 percentage points would continue to see debt decline, but the ratio would end 2021 some 27 percent higher.
- *Larger current account deficits.* Slow competitiveness improvements resulting from delayed structural reforms or a terms-of-trade shock could affect exports negatively and worsen the baseline current account projections. The debt ratio would remain on a downward path, but would be 15 percentage points higher than in the baseline by 2021.
- Debt dynamics would also be worse under a combined shock involving higher interest rates, lower growth and a smaller current account, with the debt ratio reaching 241 percent of GDP in 2021, 27 percent of GDP higher than in the baseline.

Greece Public DSA Risk Assessment (Restructuring Scenario with Deferrals and Fixed Rates)

Heat Map

Debt level 1/

Gross financing needs 2/

Debt profile 3/

Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability shock
Real GDP Growth Shock	Primary Balance Shock	Real Interest Rate Shock	Exchange Rate Shock	Contingent Liability Shock
Market Perception	External Financing Requirements	Change in the Share of Short-Term Debt	Public Debt Held by Non-Residents	Foreign Currency Debt

Evolution of Predictive Densities of Gross Nominal Public Debt

(Percent of GDP)

Debt Profile Vulnerabilities

(Indicators vis-à-vis risk assessment benchmarks)

Source: IMF staff.

1/ The cell is highlighted in green if debt burden benchmark of 85% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

2/ The cell is highlighted in green if gross financing needs benchmark of 20% is not exceeded under the specific shock or baseline, yellow if exceeded under specific shock but not baseline, red if benchmark is exceeded under baseline, white if stress test is not relevant.

3/ The cell is highlighted in green if country value is less than the lower risk-assessment benchmark, red if country value exceeds the upper risk-assessment benchmark, yellow if country value is between the lower and upper risk-assessment benchmarks. If data are unavailable or indicator is not relevant, cell is white.

Lower and upper risk-assessment benchmarks are:

400 and 600 basis points for bond spreads; 17 and 25 percent of GDP for external financing requirement; 1 and 1.5 percent for change in the share of short-term debt; 30 and 45 percent for the public debt held by non-residents.

4/ An average over the last 3 months, 03-Sep-16 through 02-Dec-16.

5/ Includes liabilities to the Eurosystem related to TARGET.

Greece Public DSA - Realism of Assumptions (Restructuring Scenario with Deferrals and Fixed Rates)

Forecast Track Record, versus program countries

Assessing the Realism of Projected Fiscal Adjustment

3-Year Adjustment in Cyclically-Adjusted Primary Balance (CAPB) (Percent of GDP)

3-Year Average Level of Cyclically-Adjusted Primary Balance (CAPB) (Percent of GDP)

Source : IMF Staff.

1/ Plotted distribution includes program countries, percentile rank refers to all countries.

2/ Projections made in the spring WEO vintage of the preceding year.

3/ Data cover annual observations from 1990 to 2011 for advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Greece: Public Sector Debt Sustainability Analysis (DSA) - Restructuring Scenario with Deferrals and Fixed Rates

(Percent of GDP, unless otherwise indicated)

Debt, Economic and Market Indicators 1/

	Projections																			As of December 02, 2016	
	Actual																			Sovereign Spreads	
	2005–2013 2/	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030			
Nominal gross public debt	134.0	180.1	179.3	186.3	183.1	183.1	176.6	171.1	167.4	164.7	162.1	159.9	157.7	155.5	153.3	151.0	148.8	146.5	Spread (bp) 3/	940	
Public gross financing needs	12.4	26.4	24.2	17.3	18.1	16.2	12.2	7.7	5.8	5.1	5.5	8.6	6.2	6.1	5.7	5.7	7.3	6.0	CDS (bp)	1025	
Real GDP growth (percent)	-2.3	0.4	-0.2	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Ratings	Foreign Local	
Inflation (GDP deflator, percent)	1.6	-1.8	-1.0	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	Moody's	Caa3 Caa3	
Nominal GDP growth (percent)	-0.6	-1.5	-1.3	0.5	4.2	4.1	3.9	3.7	3.1	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	S&P's	B- B-	
Effective interest rate (percent) 4/	4.1	2.2	2.0	1.5	1.5	1.4	1.4	1.6	1.7	1.8	1.9	2.0	1.9	1.9	1.9	1.8	1.8	1.7	Fitch	CCC CCC	

Contribution to Changes in Public Debt

	Actual			Projections																Debt-stabilizing primary balance 9/
	2005–2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Cumulative	
Change in gross public sector debt	8.3	3.0	-1.6	7.0	-3.3	0.0	-6.5	-5.4	-3.8	-2.7	-2.6	-2.2	-2.2	-2.2	-2.2	-2.2	-2.3	-2.3	-32.9	-1.5
Identified debt-creating flows	16.6	8.7	4.1	3.3	-4.1	-0.4	-7.0	-5.8	-4.2	-3.1	-3.1	-2.7	-2.7	-2.8	-2.8	-2.9	-2.9	-3.0	-44.3	
Primary deficit	3.3	0.0	-0.2	-0.9	-1.0	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-1.5	-21.5	
Primary (noninterest) revenue and grants	42.0	46.8	47.8	49.3	47.4	46.3	45.5	45.1	44.8	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	681.1	
Primary (noninterest) expenditure	45.3	46.8	47.6	48.4	46.4	44.8	44.0	43.6	43.3	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	659.6	
Automatic debt dynamics 5/	7.6	8.4	7.7	1.8	-4.8	-4.7	-4.5	-3.6	-2.3	-1.3	-1.3	-1.1	-1.2	-1.2	-1.2	-1.3	-1.3	-1.4	-29.4	
Interest rate/growth differential 6/	7.6	6.7	5.9	1.7	-4.8	-4.7	-4.4	-3.6	-2.3	-1.3	-1.3	-1.1	-1.2	-1.2	-1.2	-1.3	-1.3	-1.4	-29.5	
Of which: real interest rate	3.5	7.3	5.5	2.4	0.1	-0.1	-0.3	-0.1	0.1	0.3	0.3	0.5	0.4	0.3	0.3	0.2	0.1	0.1	4.5	
Of which: real GDP growth	4.1	-0.6	0.4	-0.8	-4.9	-4.6	-4.1	-3.5	-2.4	-1.6	-1.6	-1.6	-1.6	-1.5	-1.5	-1.5	-1.5	-1.4	-34.1	
Exchange rate depreciation 7/	-0.1	1.7	1.8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Other identified debt-creating flows	5.7	0.3	-3.4	2.4	1.7	5.8	-1.1	-0.8	-0.4	-0.3	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	6.6	
Net privatization proceeds	-0.1	-0.3	-0.1	-0.3	-0.5	-0.7	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-2.5	
Contingent liabilities	1.0	0.6	-6.3	2.7	2.3	1.2	-0.9	-0.6	-0.3	-0.2	-0.2	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	3.8	
Other liabilities (bank recap. and PSI sweetner)	4.8	0.0	3.1	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2	
Residual, including asset changes 8/	-8.3	-5.7	-5.7	3.9	0.8	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.7	11.5

Source: IMF staff projections.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Bond Spread over German Bonds.

4/ Defined as interest payments divided by debt stock at the end of previous year.

5/ Derived as $[(r - p(1+g) - g + ae(1+r)] / (1+g+p+gp)$ times previous period debt ratio, with r = interest rate; p = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the denominator in footnote 4 as $r - \pi(1+g)$ and the real growth contribution as $-g$.

7/ The exchange rate contribution is derived from the numerator in footnote 2/ as $ae(1+r)$.

8/ For projections, this line includes exchange rate changes during the projection period. Also includes ESM capital contribution, arrears clearance, SMP and ANFA income, and the effect of deferred interest.

9/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

Greece Public DSA - Composition of Public Debt and Alternative Scenarios (Restructuring Scenario with Deferrals and Fixed Rates)

Composition of Public Debt

Alternative Scenarios

Underlying Assumptions

(Percent)

Restructuring scenario	2016	2017	2018	2019	2020	2021	2022	2025	2030	Historical scenario	2016	2017	2018	2019	2020	2021	2022	2025	2030
Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0	Real GDP growth	0.4	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1	-2.1
Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7
Primary balance	0.9	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	Primary balance	0.9	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8	-2.8
Effective interest rate	1.5	1.5	1.4	1.4	1.6	1.7	1.8	1.9	1.7	Effective interest rate	1.5	1.5	1.7	1.9	2.4	2.6	2.9	3.0	2.9
Constant primary balance scenario																			
Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0										
Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7										
Primary balance	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9										
Effective interest rate	1.5	1.5	1.4	1.4	1.6	1.7	1.9	1.9	1.7										

Source: IMF staff.

Greece Public DSA - Stress Tests (Restructuring Scenario with Deferrals and Fixed Rates)

Macro-Fiscal Stress Tests

Additional Stress Tests

Underlying Assumptions

	2016	2017	2018	2019	2020	2021	2022	2025	2030		2016	2017	2018	2019	2020	2021	2022	2025	2030
Primary Balance Shock										Real GDP Growth Shock									
Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0	Real GDP growth	0.4	-1.9	-2.1	2.4	2.0	1.5	1.0	1.0	1.0
Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	Inflation	0.1	0.3	0.3	1.5	1.6	1.6	1.7	1.7	1.7
Primary balance	0.9	-0.6	-0.1	1.5	1.5	1.5	1.5	1.5	1.5	Primary balance	0.9	-1.8	-4.0	1.5	1.5	1.5	1.5	1.5	1.5
Effective interest rate	1.5	1.5	1.5	1.5	1.6	1.8	1.9	2.0	1.8	Effective interest rate	1.5	1.5	1.5	1.7	1.7	1.9	2.0	2.0	1.8
Real Interest Rate Shock										Real Exchange Rate Shock									
Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0	Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.0	1.0	1.0
Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7	Inflation	0.1	1.8	1.5	1.5	1.6	1.6	1.7	1.7	1.7
Primary balance	0.9	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5	Primary balance	0.9	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Effective interest rate	1.5	1.5	1.9	2.1	2.7	3.0	3.2	3.4	3.3	Effective interest rate	1.5	1.5	1.4	1.4	1.6	1.7	1.8	1.9	1.7
Combined Shock										Contingent Liability Shock									
Real GDP growth	0.4	-1.9	-2.1	2.4	2.0	1.5	1.0	1.0	1.0	Real GDP growth	0.4	-1.9	-2.1	2.4	2.0	1.5	1.0	1.0	1.0
Inflation	0.1	0.3	0.3	1.5	1.6	1.6	1.7	1.7	1.7	Inflation	0.1	0.3	0.3	1.5	1.6	1.6	1.7	1.7	1.7
Primary balance	0.9	-1.8	-4.0	1.5	1.5	1.5	1.5	1.5	1.5	Primary balance	0.9	-13.1	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Effective interest rate	1.5	1.5	1.9	2.4	3.0	3.2	3.4	3.6	3.5	Effective interest rate	1.5	1.5	2.0	1.6	1.8	2.0	2.1	2.1	1.9
Lower Growth Scenario																			
Real GDP growth	0.4	1.7	1.6	1.4	1.0	0.5	0.0	0.0	0.0										
Inflation	0.1	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.7										
Primary balance	0.9	1.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5										
Effective interest rate	1.5	1.5	1.4	1.4	1.6	1.8	1.9	2.0	1.8										

Source: IMF staff.

Greece: External Debt Sustainability Framework (In percent of GDP, unless otherwise indicated)													
	Actual					Projections						Debt-stabilizing non-interest current account 6/ -5.2	
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021		
Baseline: External debt	188.2	237.0	237.3	238.5	251.1	245.7	239.2	231.3	224.3	218.1	213.7		
Change in external debt	2.7	48.8	0.3	1.2	12.6	-5.4	-6.5	-7.9	-7.0	-6.2	-4.5		
Identified external debt-creating flows (4+8+9)	27.8	18.6	13.2	0.7	-0.6	-2.7	-7.3	-6.8	-6.4	-5.9	-4.6		
Current account deficit, excluding interest payments	1.5	-1.7	-3.1	-2.6	-2.8	-2.3	-3.0	-2.7	-2.6	-2.7	-2.8		
Deficit in balance of goods and services	6.1	3.8	2.8	2.2	0.2	0.7	0.1	-0.3	-0.4	-0.5	-0.6		
Exports	25.3	28.6	30.4	32.5	30.0	27.8	29.1	30.0	30.6	31.2	31.7		
Imports	31.5	32.4	33.2	34.7	30.2	28.5	29.2	29.7	30.3	30.7	31.1		
Net non-debt creating capital inflows (negative)	0.3	-0.4	-2.8	-4.5	-3.1	-1.6	-0.8	-0.7	-1.2	-1.5	-1.6		
Automatic debt dynamics 1/	25.9	20.7	19.1	7.9	5.3	1.2	-3.5	-3.3	-2.6	-1.6	-0.2		
Contribution from nominal interest rate	8.5	5.5	5.1	4.3	2.7	2.3	3.1	2.7	2.6	2.8	2.8		
Contribution from real GDP growth	17.6	16.1	7.9	-0.9	0.6	-1.1	-6.6	-6.0	-5.2	-4.4	-3.1		
Contribution from price and exchange rate changes 2/	-0.2	-0.9	6.1	4.5	2.0	-0.2	-3.4	-3.4	-3.5	-3.6	-3.5		
Residual, incl. change in gross foreign assets (2-3) 3/	-25.0	30.2	-12.9	0.4	13.2	-2.5	4.1	2.3	3.0	3.2	3.6		
External debt-to-exports ratio (in percent)	742.3	828.3	780.4	733.7	837.1	884.5	821.9	771.6	732.8	699.2	674.3		
Gross external financing need (in billions of US dollars) 4/	327.8	294.3	256.4	214.0	180.8	177.1	148.7	135.1	159.7	157.5	163.0		
in percent of GDP	113.8	119.7	106.9	90.5	92.8	10-Year	10-Year	90.5	75.1	65.7	74.5	70.6	71.0
Scenario with key variables at their historical averages 5/						245.7	255.8	271.7	290.3	310.8	331.6	13.8	
Key Macroeconomic Assumptions Underlying Baseline						Historical Average	Standard Deviation						
Real GDP growth (in percent)	-9.1	-7.3	-3.2	0.4	-0.2	-2.1	4.7	0.4	2.7	2.6	2.4	2.0	1.5
GDP deflator in US dollars (change in percent)	5.7	-7.9	0.9	-1.8	-17.4	0.2	9.2	0.0	-1.5	1.3	1.8	2.0	1.5
Nominal external interest rate (in percent)	4.4	2.5	2.1	1.8	0.9	2.7	2.1	0.9	1.3	1.2	1.2	1.3	1.3
Growth of exports (US dollar terms, in percent)	11.0	-3.7	3.8	5.3	-23.9	2.2	15.6	-7.0	6.0	7.0	6.4	6.0	4.6
Growth of imports (US dollar terms, in percent)	0.7	-12.2	0.1	3.1	-28.4	-0.4	18.3	-5.1	3.4	5.7	6.2	5.6	4.4
Current account balance, excluding interest payments	-1.5	1.7	3.1	2.6	2.8	-3.3	6.4	2.3	3.0	2.7	2.6	2.7	2.8
Net non-debt creating capital inflows	-0.3	0.4	2.8	4.5	3.1	1.5	2.0	1.6	0.8	0.7	1.2	1.5	1.6
1/ Derived as $[r - g - r(1+g) + ea(1+r)] / (1+g+r+gr)$ times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, g = real GDP growth rate, e = nominal appreciation (increase in dollar value of domestic currency), and a = share of domestic-currency denominated debt in total external debt. 2/ The contribution from price and exchange rate changes is defined as $[-r(1+g) + ea(1+r)] / (1+g+r+gr)$ times previous period debt stock. r increases with an appreciating domestic currency ($e > 0$) and rising inflation (based on GDP deflator). 3/ For projection, line includes the impact of price and exchange rate changes. 4/ Defined as current account deficit, plus amortization on medium- and long-term debt, plus short-term debt at end of previous period. 5/ The key variables include real GDP growth; nominal interest rate; dollar deflator growth; and both non-interest current account and non-debt inflows in percent of GDP. 6/ Long-run, constant balance that stabilizes the debt ratio assuming that key variables (real GDP growth, nominal interest rate, dollar deflator growth, and non-debt inflows in percent of GDP) remain at their levels of the last projection year.													

Greece: External Debt Sustainability: Bound Tests 1/ 2/ (External debt in percent of GDP)

Baseline and historical scenarios

Interest rate shock (in percent)

Growth shock

(in percent per year)

Non-interest current account shock

(in percent of GDP)

Combined shock 3/

Sources: International Monetary Fund, Country desk data, and staff estimates.

1/ Shaded areas represent actual data. Individual shocks are permanent one-half standard deviation shocks.

Figures in the boxes represent average projections for the respective variables in the baseline and scenario being presented. Ten-year historical average for the variable is also shown.

2/ For historical scenarios, the historical averages are calculated over the ten-year period, and the information is used to project debt dynamics five years ahead.

3/ Permanent 1/4 standard deviation shocks applied to real interest rate, growth rate, and current account balance.

Annex IV. The Greek Capital Controls Framework as Applied to Current International Transactions

The framework imposing limitations on cash withdrawals and external transfers is composed of Law 4350/2015 as well as Legislative Acts No. 65 and 84, as amended, a number of ministerial decrees, and decisions by the Bank Transactions Approval Committee (BTAC). These comprehensive measures were introduced on July 18, 2015 and the authorities have subsequently relaxed them periodically, most recently in August 2016. The framework establishes a three-tier approval system consisting of the BTAC, subcommittees at bank level, and bank branches. The banks (unlike the BTAC) do not have discretionary powers but merely verify whether transactions in which the banks participate are consistent with the legal framework and routinely approve all requests subject to the limits set by the BTAC. The BTAC does not automatically approve all bona fide transfer requests but occasionally uses its discretion not to approve requests taking into account the absolute limits and priorities set such as the “public good.” Specifically:

- Current payments related to normal business activities are subject to weekly limits on the aggregate amount of banks’ transfers (currently EUR 112 million for the systemic banks and EUR 480 million for the entire banking system) on behalf of their customers. Payments up to EUR 10,000 may be approved by banks’ branches. Payments between EUR 10,000 and 350,000 per day per customer are subject to approval by the banks’ subcommittees. Payments above EUR 350,000 and interbank transactions irrespective of the amount must be approved by the BTAC. Import payments above EUR 30,000 may not exceed 140 percent of the importer’s highest monthly amount of import payments in the 2 previous years.
- Transfers abroad of moderate amounts for the amortization of loans and of income from investments including dividends and interest payments of non-financial entities to non-residents is subject to discretionary BTAC approval.
- Tuition and the cost of medical treatment are freely transferrable to the service provider. Individuals may transfer EUR 5,000 (EUR 8,000 if the payment is directly to the landlord or campus dorm) per quarter for students’ living expenses abroad. For expenses related to medical treatment abroad, individuals may withdraw EUR 2,000 a month. Travelers can take EUR 2,000 in cash with them abroad per trip. Individuals and corporates may remit EUR 1,000 per month without documentary proof up to a monthly limit of EUR 80 97million allocated by the BTAC for each bank and payment institution. While credit and debit cards can be used for payments abroad up to a weekly limit of EUR 50 million for all banks (on top of limits on cash withdrawals), there is also a weekly limit for each bank and certain merchandise and services may not be purchased through the internet.
- There is a limit on withdrawal of cash from bank accounts in Greece (EUR 840 every two weeks per depositor per bank). Cash deposits are exempt from the withdrawal limit. Transfers from abroad may be re-exported in their totality or can be withdrawn up to a limit of 30% per month.

The capital controls framework has an impact on the cost of current international transactions. Due to the approval and the related documentation requirement depositors must use more expensive payment methods instead of inexpensive electronic bank transfers resulting in a significant

increase in the direct cost of the international transfers. These fees are commercially determined by the banks and not set by the authorities. Producing and processing the documents also increases the expenses related such transaction both for the banks and their clients.

INTERNATIONAL MONETARY FUND

STAFF REPORT FOR THE 2016 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

January 23, 2017

Prepared By

European Department
(In Consultation with Other Departments)

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FUND RELATIONS

(as of December 31, 2016)

Membership Status: Joined December 27, 1945.

Exchange Rate Arrangements: Greece's currency is the euro, which floats freely and independently against other currencies. Greece has accepted the obligations of Article VIII, Sections 2, 3, and 4, but maintains exchange restrictions subject to Fund approval under Article VIII, Section 2(a) of the Fund's Articles of Agreement. Specifically: (i) An exchange restriction arising from absolute limits and discretionary Bank Transactions Approval Committee (BTAC) approval on the availability of foreign exchange for certain payments and transfers for (a) current international transactions related to normal business activities and (b) invisible transactions and remittances (such as travel, except for tuition fee and medical expenses). (ii) An exchange restriction arising from the discretionary BTAC approval of transfers abroad of moderate amounts for the amortization of loans and of income from investments including dividends and interest payments of non-financial entities to non-residents. (iii) An exchange restriction arising from absolute limits on withdrawal of cash from bank accounts in Greece in the absence of an unrestricted channel for payments due to discretionary BTAC approval and absolute limits.

General Resources Account:

	SDR Million	Percent Quota
Quota	2428.90	100.00
IMF's Holdings of Currency	11,964.01	492.57
Reserve Tranche Position	572.81	23.58

SDR Department:

	SDR Million	Percent Allocation
Net Cumulative Allocation	782.36	100.00
Holdings	5.67	0.72

Outstanding Purchases and Loans:

	SDR Million	Percent Quota
Stand-by Arrangements	240.30	9.89
Extended Arrangements	10,107.91	416.15

Latest Financial Arrangements:

Type	Date of Arrangement	Expiration Date	Amount Approved (SDR million)	Amount Drawn (SDR million)
EFF	May 15, 2012	Jan 15, 2016	23,785.30	10,224.50
Stand-by	May 09, 2010	Mar 14, 2012	26,432.90	17,541.80

Projected Payments to the Fund:

(SDR Million, based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2017	2018	2019	2020	2021
Principal	591.93	1,452.95	1,704.08	1,704.08	1,704.08
Charges/Interest	288.01	247.74	182.60	110.31	54.09
Total	879.95	1,700.69	1,886.69	1,814.39	1,758.17

Article IV Consultations:

Article IV Consultations with Greece were expected to take place on a 24-month consultation cycle in 2010-2015. The previous consultation discussions took place during April 8-15, 2013, and the staff report (Country Report No. 13/54) was discussed on May 31, 2013. Article IV Consultations with Greece are currently expected to take place on a 12-month consultation cycle.

Resident Representative:

Mr. Dennis Botman (Senior Resident Representative) assumed his position in September 2016.

Technical Assistance:

Department	Purpose	Date
FAD	Implementing tax administration reform program	June 2013
FAD	Expediting Arrears Clearance	June 2013
FAD	Reviewing government investment incentives	July 2013
FAD	Streamlining government payment processes	July 2013
FAD	Tax administration progress and preparing for tax reforms	August 2013
FAD	Strengthening the social budget report	September 2013
FAD	Tax administration promotion arrangements	October 2013
FAD	Revenue administration grading reform	October 2013
MCM	Bank Asset Quality	October 2013
FAD/LEG	Joint Tax Administration and Tax Procedure Code	October 2013
LEG	AML and Anti-Tax Evasion: Strengthening the BoG's Supervisory Process	October 2013
FAD	Revenue administration: regional offices, staffing plan, and organization issues	November 2013
FAD	Revenue administration reforms	November 2013
LEG	Judicial Reform	November 2013
FAD	Fiscal responsibility and budget management law	December 2013
FAD	Strengthening The Social Budget Report	December 2013
LEG	AML and Anti-Tax Evasion: Strengthening the BoG's Supervisory Process	December 2013
FAD	Implementation of the unified property tax	January 2014
FAD	Stabilizing social security contribution collections	February 2014

Department	Purpose	Date
FAD	Review of the center for recovery of social security debts	March 2014
FAD	Streamlining Payment Processes and Cash Management Operations	March 2014
FAD	Progress Update on the tax administration Staffing Plan	March 2014
FAD	Implementing the New Policy and Legislative Tax Administration Directorate	March 2014
FAD	Implementation of New Grading System in the tax administration	March 2014
MCM	Strengthening the Supervision of State Banks	March 2014
LEG	Judicial Reform	March 2014
MCM	Strengthening the Supervision of State Banks	March 2014
MCM	Asset Recovery	March 2014
MCM	The Eurofi High-level Seminar	March 2014
FAD	Implementation of New Tax Laws and Progress of Tax Administration Reform	May 2014
FAD	Review of the Center for Recovery of Social Security Debts	May 2014
FAD	Implementing Promotion System Reform in the tax administration	May 2014
FAD	Implementing the New Organization Structure of the tax administration	June 2014
MCM	Asset Recovery Follow-up	June 2014
LEG	AML and Anti-Tax Evasion: Strengthening the BoG's Supervisory Process	June 2014
MCM/LEG	Workshop on Corporate and Household Insolvency Reform	July 2014
FAD	Managing the Public Investment Budget	August 2014
FAD	Budget Analysis, Cash Management and Legal Framework Review	August 2014
FAD	Reforming the Collection of Social Security Contributions	September 2014
FAD	Strengthening the Social Budget Report	September 2014
FAD	Autonomy in Revenue Administration	October 2014
FAD	Legislative Framework and IFMIS	October 2014
STA	Government Finance Statistics	October 2014
FAD	Enhancing High Wealth Personal Income Tax Compliance	July 2014
FAD	Progress of Autonomy and Tax Operations Reform	November 2014
FAD	Reviewing the Organic Budget Law and Ongoing Public Financial Management Reforms	January 2015
FAD	Progress in Reforms to Social Security Contribution Collections	February 2015
FAD	Government Cash Management Reforms	May 2015
STA	Developing the Chart of Accounts	May 2015
FAD	Designing a New Chart of Accounts and Enhancing Fiscal Reporting	June 2015
FAD	Revenue Administration Gap Analysis Program- The Value-Added Tax Gap	June 2015
MCM/LEG	Workshop on Corporate and Household Insolvency Reform	June 2015
FAD/LEG	Tax Policy	September 2015
FAD	Pension Reform	October 2015
FAD	Tax Policy	October 2015

Department	Purpose	Date
MCM	Capital Controls	October 2015
FAD	Implementing a Government Cash Management Framework	January 2016
FAD	Reframing PFM Reform Priorities	April 2016
FAD	Stocktaking of the Tax Administration Reform Program and Preparations for a New Revenue Agency	May 2016
FAD	Social Security Contribution Collection	July 2016
FAD	Transforming Financial Management	July 2016
FAD	Improving Social Security Contribution Administration	September 2016
FAD	Implementing a Modern Staff Assessment System in the Tax Administration	October 2016
FAD	Chart of Accounts, Payment Process and Fiscal Reporting Reforms	October 2016
STA	Chart of Accounts, Financial Management Reforms and Fiscal Reporting	October 2016

STATISTICAL ISSUES

As of December 21, 2016

I. Assessment of Data Adequacy for Surveillance	
<p>General. Data provision has some shortcomings but is broadly adequate for surveillance. The quality of Greek statistics has improved since the establishment of the independent Hellenic Statistical Authority, ELSTAT, in 2010.</p>	
<p>Real sector. Quarterly and annual national accounts are compiled in accordance with the <i>ESA 2010</i> standard. The CPI is chained annually, and weights from the 2015 household expenditure survey will be introduced at the start of 2017.</p>	
<p>Fiscal sector. General government accounts are compiled in accordance with <i>ESA 2010</i>. Eurostat has not validated and published Greece's general government financial accounts reported by Bank of Greece (BoG). The financial accounts data reported by the BoG do not follow Eurostat standards (Reg. 479/2009 and Reg. 549/2013 interpreting <i>ESA 2010</i>) in a number of areas. In addition, compilation issues result in flows that appear implausible and have also not been validated by Eurostat. As a consequence, reported data are not comparable to non-financial accounts data and data reported in the context of EDP. Shortcomings in source data, such as the absence of accounting records on operations not passing through the state budget (e.g. Single Treasury Account), also present risks to fiscal data quality.</p>	
<p>Trade and balance of payments. Since January 2015, data are provided according to the IMF's sixth edition of the <i>Balance of Payments Manual</i>. Historical data based on the new methodology are available from January 2002. Since July 2015, the Bank of Greece has been using ELSTAT's trade statistics instead of the settlements data used until June 2015 inclusive. Therefore, the goods trade balance statistics reflect customs-based or other administrative data, as collected or estimated by ELSTAT. Historical data based on the methodology is available from January 2013.</p>	
<p>Monetary sector. Data on the central bank balance sheet and on the aggregated balance sheet of other monetary financial institutions are available from the Bank of Greece's website. The data is also reported to the IMF using standardized report forms: 1SR for the central bank (1SR) and 2SR for other depository corporations (ODCs). Data on other financial corporations (OFCs) is not compiled.</p>	
<p>Financial Soundness Indicators (FSIs): Data on FSIs are compiled and reported to IMF on a quarterly basis and covers deposit takers, other financial corporations, nonfinancial corporations and households.</p>	
II. Data Standards and Quality	
Greece has been a subscriber to the Fund's Special Data Dissemination Standard (SDDS) since November 8, 2002.	A data module of the Report on the Observance of Standards and Codes (ROSC) was published in 2003, and it was updated in 2004 and 2005 in the context of the Article IV staff report.

Greece: Table of Common Indicators Required for Surveillance
(As of January 23, 2016)

	Date of Latest Observation	Date Received	Frequency of Data ⁷	Frequency of Reporting ⁷	Frequency of Publication ⁷	Memo Items:	
						Data Quality – Methodological soundness ⁸	Data Quality – Accuracy and Reliability ⁹
Exchange Rates	1/23/17	1/23/17	D	D	D		
International Reserve Assets and Reserve Liabilities of the Monetary Authorities ¹	12/16	1/5/17	M	M	M		
Reserve/Base Money	12/16	1/5/17	M	M	M	O, O, O, O	LO, O, O, O, O
Broad Money	11/16	1/4/2017	M	M	M		
Central Bank Balance Sheet	12/16	1/20/17	M	M	M		
Consolidated Balance Sheet of the Banking System	11/16	12/29/16	M	M	M		
Interest Rates ²	12/16	1/4/2017	M	M	M		
Consumer Price Index	12/16	1/11/2017	M	M	M	O, O, O, O	O, LO, O, O, O
Revenue, Expenditure, Balance and Composition of Financing ³ – General Government ⁴	2015	1/3/17	A	A	A	LO, LO, LO, O	LO, O, O, O, NA
Revenue, Expenditure, Balance and Composition of Financing ³ – Central Government	12/16	1/17/17	M	M	M		

Greece: Table of Common Indicators Required for Surveillance (concluded)
(As of January 23, 2016)

Stocks of Central Government and Central Government-Guaranteed Debt ⁵	2016:Q3	11/18/16	Q	Q	Q		
External Current Account Balance	11/16	1/20/17	M	M	M	O, LO, LO, O	O, O, O, O, O
Exports and Imports of Goods and Services	11/16	1/20/17	M	M	M		
GDP/GNP	2016:Q3	11/29/16	Q	Q	Q	O, O, O, O	LO, LO, O, O, LO
Gross External Debt	2016:Q3	12/29/16	Q	Q	Q		
International Investment Position ⁶	2016:Q3	12/29/16	Q	Q	Q		

¹Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivatives to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.

²Both market-based and officially determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.

³Foreign, domestic bank, and domestic nonbank financing.

⁴The general government consists of the central government (budgetary funds, extra budgetary funds, and social security funds) and state and local governments.

⁵Including currency and maturity composition.

⁶Includes external gross financial asset and liability positions vis-à-vis nonresidents.

⁷Daily (D), weekly (W), monthly (M), quarterly (Q), annually (A), irregular (I); and not available (NA).

⁸Reflects the assessment provided in the data ROSC (published in October 2003, and based on the findings of the mission that took place during November 2002) for the dataset corresponding to the variable in each row. The assessment indicates whether international standards concerning concepts and definitions, scope, classification/sectorization, and basis for recording are fully observed (O); largely observed (LO); largely not observed (LNO); not observed (NO); and not available (NA).

⁹Same as footnote 8, except referring to international standards concerning (respectively) source data, assessment of source data, statistical techniques, assessment and validation of intermediate data and statistical outputs, and revision studies.

**Statement by Mr. Psalidopoulos, Alternate Executive Director on Greece
February 6, 2017**

The Greek authorities thank the mission teams for their hard work on the Article IV and EPE reports as well as the accompanying documents. They appreciate the candid dialogue with staff on a wide range of issues. Acknowledgments are also extended to the technical missions that are constantly in close touch in all relevant ministries in Greece, providing support and assistance on the spot.

The previous Article IV board meeting on Greece took place in May 2013. Due to the time that passed between that meeting and the one on February 6, 2017, the Greek authorities deemed necessary to address the Executive Board directly. Their notes are attached to this statement.

The following statement provides an overall assessment and background.

The Greek authorities agree in general with some of staff's findings. They have, however, a different view on how the Greek economy is developing. They particularly don't agree with staff's hypotheses and conclusions regarding the DSA (please see Minister Tsakalotos' statement below).

The Greek authorities remain committed to pursue policies in line with those agreed in the MoU signed with the Institutions in August 2015, in a way that will safeguard macroeconomic stability and growth and will assist the country to get back on a sustained and sustainable growth trajectory.

I. On the Article IV Report

Macroeconomic outlook

According to the most recent data, the Greek economy turned a corner in 2016: Q2 and has now shown two consecutive quarters of positive GDP growth. This fragile recovery was supported by the successful conclusion of the first review of the ESM program in May 2016 that strengthened confidence and was accompanied by the disbursement of €3.5 bn for arrears clearance that has injected liquidity into the real economy.

Real GDP, after falling in Q1 2016, rose by 0.4 percent q-o-q in Q2 and 0.8 percent q-o-q in Q3. For the first nine months of the year, growth was 0.2 percent and is estimated to reach 0.8 percent in 2016. Economic activity is being driven by private consumption and gross fixed capital formation

During the first nine months of 2016, **real exports of goods** increased by 7.6 percent, while real receipts from tourism decreased by 5.2 percent and receipts from shipping continued to decline.

Industrial Production increased in the January-November 2016 period (2.3 percent y-o-y), due mainly to the performance of manufacturing production (4.6 percent y-o-y).

Employment in the private sector registered a positive cumulative net balance of 136,260 new jobs in 2016, exceeding net inflows in 2015 by 36,560 new jobs. As a result of the increased net inflows, **dependent employment stock in the private sector** registered a 5.1 percent y-o-y increase in 2016. Job creation in 2016 continued to rely on **flexible forms of employment**, which accounted for 54.7 percent of new hirings.

Over recent years, **Greece has benefited significantly from improved competitiveness**. In part, this development reflects the effect of structural reforms in the labor market, allowing more flexibility in the process of wage bargaining. As a result, the cumulative loss in labor cost competitiveness recorded between 2000 and 2009 has been recovered.

Economic sentiment increased to a year high in December due to improved consumer confidence and more optimistic expectations in manufacturing and construction sectors.

Financial indicators – sovereign bond yields, yields on bonds issued by non-financial corporations and share prices – were volatile during 2016, reflecting investor concerns about the review process of the Greek program as well as about the prospects for economic activity. The decrease in volatility in international financial markets, during the July-October 2016 period, led to a significant decline in the volatility of the prices of Greek bonds and equities. Investor sentiment towards Greece significantly affected the market value of sovereign bonds and equities; sovereign yields fell after the conclusion of the first review. Currently, investor attention is focusing on the prospects for concluding the second review.

Openness has improved substantially and Greek exporters have managed to maintain, if not increase, their shares in world exports, despite adverse liquidity and financing conditions.

Qualitative indices reflecting the **business environment** suggest that Greece is still ranked relatively low. However, it is the country with some of the largest improvements in recent years. Policy is now focused on improving non-price competitiveness.

Deflationary pressures are still present but in the last months they have been overshadowed by indirect taxation increases. The recent increase in the special consumption tax on heating oil in October 2016 has already added further upward pressure on HICP inflation.

Looking forward, Greek authorities expect positive growth rates in 2017 and 2018 of the

order of 2.5–3.0 percent supported by the expected amelioration of credit conditions and economic sentiment.

Risks to the projections: Downside risks exist and are related to delays in the conclusion of the second review of the program, the impact of increased taxation on economic activity and reform implementation. Some downside risks related to the international environment also exist, such as renewed pressures from the refugee crisis, increased uncertainty associated with forthcoming elections in several EU countries, the rise of protectionism worldwide and a slowdown in global trade. Upside risks are related to the inclusion of Greek sovereign debt in the ECB's quantitative easing program (QE).

Taking a **longer-term perspective**, the rebalancing of the Greek economy is on-going since a number of years. **Flow imbalances** have been eliminated with both the current account and fiscal balances being in equilibrium.

The reduction of these imbalances has come, however, at a **high cost**. Real GDP is now more than a quarter lower than its pre-crisis levels.

Additionally, large stock imbalances still remain. Unemployment, though falling, is high. The general government debt to GDP ratio has risen substantially – in 2009, it stood at 126.7 percent; it reached 177.4 percent at end-2015. Indebtedness of the private sector has generated significant NPLs which are hampering banks' ability to support recovery through the granting of new credit. Measures to deal with this problem have been legislated. Finally, a rebalancing between private consumption (which stands at 70 percent of GDP) and investment (11 percent of GDP) is required, if future growth is to prove more sustainable.

The Memorandum of Understanding (MoU)

The MoU signed between the Institutions and Greece on 19 August 2015 envisages ESM financing of up to €86 bn over the three years 2015-18.

The MoU places emphasis on four pillars: (i) the restoration of fiscal sustainability; (ii) the safeguarding of financial stability; (iii) the implementation of structural policies to enhance competitiveness and growth; and (iv) the modernization of the state and public administration.

In line with these pillars, most structural reforms agreed have already been legislated.

Following the legislation on 8 and 22 May 2016 on pension and income tax reform, indirect taxation, the NPL strategy, privatizations and an automatic contingent fiscal correction mechanism, agreed by the European Institutions and the IMF, the Eurogroup on 24 May 2016 agreed to a package of short-term debt measures to be phased in progressively and subject to the pre-defined conditionality of the ESM program, in order for making Greece's public debt and gross financing needs sustainable.

The agreement allowed the Board of Directors of the ESM to authorize the second tranche of €10.3 bn of ESM financial assistance. On 23 January 2017, **the ESM and EFSF Boards of Directors adopted the rules implementing a set of short-term debt relief measures for Greece**. The measures are designed to reduce interest rate risk for Greece, by, inter alia, exchanging some debt to fixed from floating rates, and to ease the country's repayment profile. The ESM estimated that the full implementation of short-term debt relief measures should lead to a cumulative reduction of Greece's debt-to-GDP ratio of around 20 percentage points (pps) until 2060, while the country's net financing needs are expected to decrease by 5 pps in that time.

The Eurogroup of 26 January 2017 welcomed the faster than expected recovery of the Greek economy as well as the strong dynamics on the fiscal side, with better than expected revenues. The Greek authorities and the Institutions were encouraged to conclude the second review which will support the positive trend in the economy.

Fiscal policy and management

The 2015 primary fiscal outcome (program definition) recorded a surplus of 0.25 percent of GDP, significantly outperforming the program target of -0.25 percent of GDP. The improvement compared to the previous year reflected mainly spending containment and, to a lesser extent, revenue over performance. Available data for 2016 indicate that **the outcome will outperform the program's target** for a primary balance of 0.5 percent of GDP by a large margin (the balance will be probably around 2 percent)

Banking sector

An effective management of the high stock of non-performing loans is already underway and will bear fruit in 2017. Success in this regard would impact favorably on economic activity via two channels: a) by increasing bank loan supply; and b) by restructuring production. The decrease in non-performing loans would contribute to a reduction in banks' financial risk and lower their funding costs, while also boosting their capital adequacy. This, in turn, would lead to a gradual increase in loan supply and a decline in borrowing rates for businesses and households.

Structural reforms

The reforms implemented since 2015 are expected over the long term to boost the Greek economy's growth potential through faster productivity and employment growth.

According to the OECD, the reforms implemented in the period 2010-2016, in combination with the ones to be implemented as part of the current program, are expected, *ceteris paribus*, to increase real GDP by 13 percent over the next ten years. Similar analyses by the Bank of Greece indicate that structural reforms in the labor market leading to a permanent reduction of 10 percent in employers' wage costs are expected, over a 10-year horizon, to result in increases of 4.5 percent in real GDP, 3 percent in employment and 4.5 percent in private investment.

Conclusion

Based on the above-mentioned encouraging indications and estimates, it is safe to assume that the Greek economy has the potential to move onto a new and sounder growth path. The Greek authorities are determined and committed to implement the current program and avoid past mistakes and backsliding.

They call on the IMF to take stock of what has been achieved thus far, of the restrictions and limitations stemming from a 7-year ongoing Greek crisis and to stay engaged so that these achievements are not jeopardized.

Furthermore, at the current juncture, the Greek authorities are ready to proceed to the closing of the second review with the Institutions in order to sustain growth, participate in ECBs QE, lift capital controls and move toward sustainable growth.

II. On the Ex Post Evaluation of 2012-16 Program

The Greek authorities believe that despite its merits, the EPE study is short on accomplishments and long on missed opportunities. The Greek authorities hold the view that an approach that could distinguish between two distinct periods, 2012-mid 2014, mid 2014-August 2015 would have more lessons to teach for the success of future programs.

Despite the obstacles, the high cost of adjustment and the frequent setbacks, the economic adjustment programs implemented from 2010 onward, and the one from 2012 to 2016 in particular, which is the object of the particular report, succeeded to a large extent in reversing many of the prevailing adverse trends up to 2010 and in improving the economy's growth potential. More specifically, the following have been achieved:

- Unprecedented fiscal consolidation. Over the period 2013-16, the primary deficit was eliminated and, for the first time since 2001, general government primary surpluses were recorded. Moreover, the improvement in the “structural” primary budget balance by more than 17 percentage points of potential GDP between 2009 and 2016 was more than double the one achieved in other cases under similar programs.
- A recouping of the sizeable cumulative loss in labor cost competitiveness vis-à-vis Greece's trading partners between 2000 and 2009.
- An elimination of the external deficit, which exceeded 15 percent of GDP in 2008.
- An increase in the share of exports from 19 percent of GDP in 2009 to 32 percent today.
- A recapitalization and a restructuring of the banking system, enabling it to withstand the crisis and the flight of deposits, and ensuring that it now has adequate capital, provisions and collateral, i.e. that the necessary conditions are in place for the banking system to address the major problem of non-performing loans.

- A halting of the increase (and even a slight decrease) in the volume of non-performing loans in the second and third quarters of 2016, for the first time since 2014.
- Structural reforms, notably in the labor market, but also in the product markets and in public administration.
- A rebound of the economy in the second and third quarters of 2016, making it reasonable to anticipate a positive growth rate for the year as a whole, for the first time since 2014.

These stabilization policies inevitably came at an economic and social cost: a deepening of the recession, job and income losses. To some extent, these effects were to be expected, as with nearly every stabilization program implemented elsewhere in the world. In Greece though, the cost was, according to all estimates, higher. The causes have been discussed at length: no participant in these efforts stands uncorrected.

Factors that didn't allow the program to bring full results include shortcomings in the design of the programs, a misjudgment of the consequences, frequent course changes due to the absence of a unifying consensus and more. This consensus was finally materialized when in August 2015, 222 out of 300 members of parliament in Greece, belonging to five different political parties, voted Yes for the implementation of the MoU 2015-18.

Statement by the Minister of Finance Mr Euclid Tsakalotos

The Greek economy is currently moving from a state of prolonged economic crisis to a state of solid economic recovery. Following years of protracted recession, the first signs of robust growth, declining unemployment rate and increasing confidence in the economy have begun to appear and clear signs of changing winds are within reach. With the ESM economic adjustment programme in mid-way, the Greek Government has made significant progress to implement an ambitious and comprehensive reform programme, which will form the basis for a competitive economy in years to come. On top of this, recently agreed short-term debt relief measures will contribute significantly in reducing gross-financing needs and in making debt sustainable. It is, thus, certain, given the recent growth projections and fiscal over-performance being significantly better than expected, that economic stability and enhanced reform efforts are paying off. Against this background, the Staff Report for the 2016 Article IV consultation is welcomed; however, despite evidence and the analysis presented, we observe that the report fails to do justice in several areas, while many of the conclusions made are not consistent with recent and well-documented empirical evidence.

Firstly, the report presents an overall picture of reform effort not representative of the actual effort exerted by the Greek Government during the ESM programme. The implementation of structural reforms has accelerated significantly, particularly those of deep reforms such as the consolidation of social security funds into a single fund, the comprehensive pension reform, the establishment of an independent tax authority, several product market reforms (including significant progress in the introduction of OECD recommendations) and a wide-ranging

privatisation programme. In contrast, the report cites a slowed reform momentum, which is not evident from what has already been done in fiscal policy, in the financial sector and in many areas of structural reforms.

A corollary to the misleading representation of reform-effort is the effect of structural reforms to economic growth not being duly accounted for in the Debt Sustainability Analysis (DSA). The renewed effort should, in principle, lead to increased potential growth in the future. Yet, the steady state of economic growth has been reduced in the DSA from 1.25 percent to 1 percent of GDP since the May 2016 DSA; this is a second consecutive reduction of growth projections. Given numerous legislated reforms since August 2015 and the successful conclusion of the first review of the ESM programme in June 2016 accompanied by the significant acceleration of reform effort which that entailed, reducing future economic growth as a response to more reforms is, by itself, an oxymoron.

Secondly, the fiscal outturn of 2015 and fiscal outcome of 2016 are significantly better than initially expected. IMF staff have projected a primary fiscal deficit of -0.5 percent of GDP in 2016 raising to 1.5 percent in 2018 with the current legislated measures. Preliminary indications show that the primary surplus for 2016 will be in the territory of 2 percent of GDP, instead, with the difference in estimated versus actual arising from the overly-pessimistic assumptions in the yield of the legislated measures. Despite the significant fiscal over-performance, the analysis does not proceed to a substantial revision of primary surpluses at 2018 and beyond, remaining at the projected level of 1.5 percent, despite overwhelming evidence for the opposite.

In addition to the need for fiscal revisions, the significant fiscal surplus in 2016 puts into question three important arguments made in the report. Most importantly, the argument that Greece cannot sustain high fiscal surpluses that surpass 1.5 percent of GDP is in contradiction to recent developments. Equally important, the gap in fiscal surplus estimates between the IMF and other institutions should be reduced, in light of the latest evidence on fiscal over-performance. Lastly, the results of the debt sustainability analysis are doubtful, since they rely neither on the most recent evidence of fiscal performance nor on the most up-to-date evidence on the ability of the Greek economy to produce fiscal surpluses.

Thirdly, the report argues for a growth-friendly policy-mix, but insufficient or misleading evidence is presented on the impact of the current policy mix and the effects of the proposed re-balancing. While we agree that the tax base should be widened, this should occur through the increase of tax compliance and not through a reduction in the tax credit. In making the argument for lower tax credit the report wrongly compares actual tax declarations in Greece with household budget survey data from other countries. The different unit comparison used without appropriate adjustment, produces misleading results. While, the household data used are compiled for individuals “leaving under the same roof”, in the Greek Income Tax Code only couples, couples with dependent minors, file taxes together, all other individuals file taxes separately, including minors with property or any type of income. Indicatively, the number of tax returns in 2016 has been above 6 million, corresponding to a population of 10.8 million, significantly less than the average household number. Similarly, the proposed

re-balancing does not account for taxation in income from other sources or for effects on the tax wedge which will have a negative effect on competitiveness.

Several other gaps can be observed in the analysis in the policy-mix. For instance, in pensions, the report's analysis does not include the effects of the recent pension reform and consolidation of pension funds. Moreover, the data concerning state-transfers to the pension system for Greece include also the "official-statutory" contributions of the state (as part of the three-parties' contribution scheme), as well as the contribution of the state as employer of public servants plus the expenditure of certain welfare benefits. On the other hand, for other Member-States the state-transfers have been defined as the difference between the total amount of expenditures and contributions, resulting in completely incomparable figures. In addition, the adjustment due to the large GDP reduction and the unprecedented unemployment, which results in reduced contributions, are not taken into account in the analysis. Thus, a more thorough analysis of the economic, social and distributional impact is warranted to make such important re-balancing proposals credible.

Lastly, the DSA results rely on overly-pessimistic assumptions. Among many factors, the reduction in long-term growth from 1.25 percent to 1 percent of GDP despite numerous reforms, the decrease of steady state inflation to 1.9 percent instead of the 2 percent at ECB target, the increase of interest rates for external financing, the fiscal surpluses at 1.5 percent in the medium and long-term and the partial incorporation of short-term debt relief measures, all contribute to extremely negative results for debt sustainability. All in all, both recommendations in the report and assumptions in the DSA analysis are not in line with the most recent, evidence-based and pragmatic analysis of the Greek economy.

Statement by the Governor of the Bank of Greece Mr Yannis Stournaras¹

On the Staff Report for the 2016 Article IV Consultation for Greece

This report is a useful account of economic developments in Greece since 2010. We agree with the thrust of the argument that Greece has achieved an impressive fiscal and current account adjustment. However, we disagree with certain of its findings regarding the adjustment of various components of aggregate demand such as exports, as well as supply, such as the shift of resources from non-tradable to tradeable sectors.

In addition, the report downplays the progress on the financial sector and is unduly pessimistic on its macroeconomic and fiscal projections, as well as on future financial developments, including banks' further needs for recapitalization. As the general government primary surplus of 2016 is likely to reach 2 percent of GDP compared to a target of 0.5 percent of GDP, the Fund's fiscal projections raise many questions. Likewise, despite the better than expected 2016 GDP outcome, which is acknowledged in the report, there is an

¹ Mr Stournaras is the Governor of the Bank of Greece, since June 2014. He was Finance Minister from July 2012 until June 2014

unexplained 0.25 percent reduction in the long term growth projection compared to the previous Article IV Report. In general, it is not clear why long term TFP growth in Greece lags behind the rest of the euro area, despite the fact that there is still a lot of upside stemming from further structural reforms and catching up opportunities. As far as banks are concerned, the Fund assumes that they will need a further €10 billion capital buffer without explaining why this is the case. It should be reminded that according to the supervisors' assessment (ECB, SSM, Bank of Greece) the current CET1 ratio is 18 percent. Additionally, according to Bank of Greece estimates, the achievement of NPLs medium term targets will further increase the CET1 ratio substantially.

All of the above lead to the conclusion that the Fund's long term projections seem to have incorporated only substantial downside risks rather than being a baseline scenario.

On the Ex-Post Evaluation of Exceptional Access under the 2012 Extended Arrangement

This report contains very useful information for the period it examines regarding economic, fiscal and financial developments. It also contains useful conclusions and lessons for the future such as the need for less severe financing constraints, upfront debt relief measures, stronger ownership of the programme by the authorities, better cooperation and coordination among the institutions, a smaller number of milestones when reviewing the programme's implementation etc.

However, at its present form, it misses the opportunity to be fair to history since it criticizes everybody else except the IMF. As far as this point is concerned, being Finance Minister between July 2012 and June 2014, I can confirm that during this period

- (a) the IMF pressed for more and more parametric fiscal policy (austerity) measures ignoring even its own research regarding the size of fiscal multipliers and tax buoyancy, thus consistently underestimating progress in the reduction of the primary general government deficit,
- (b) the IMF is partly responsible for delays in closing the 2013 review since it was unjustifiably (given the final outcome) asking for additional parametric fiscal policy measures even when it was more than clear that 2013 fiscal developments were pointing to a primary surplus large over-performance,
- (c) the IMF insisted on additional recapitalization of banks disregarding the views of the authorities, the Bank of Greece and the ECB, and it turned out that it grossly overestimated capital needs and underestimated the impact to the economy of excess bank capital,
- (d) the IMF consistently played down the progress on structural reforms, ignoring, among others, OECD's assessments (see, for instance, "Going for Growth" OECD Reports).

In addition, the repeated references that the authorities preferred an upfront-loaded fiscal programme are not correct (they are actually misleading). The IMF repeatedly ignored the cyclically adjusted primary surplus (or deficit) as a relevant fiscal target, by not taking into account its own Fiscal Monitoring Report, and insisted that financing constraints cannot accommodate for this. Hence, instead of referring misleadingly to the authorities' preferences, it would have been much more accurate to say that financing constraints (and the lack of upfront debt relief) determined fiscal targets.