

Proposed Decision

The following decision, which may be adopted by a majority of the votes cast, is proposed for approval by the Executive Board:

1. Greece maintains exchange restrictions subject to Fund approval under Article VIII, Section 2(a) of the Fund's Articles of Agreement, which arise from (i) limits and discretionary 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) the discretionary 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) absolute limits on cash withdrawal of deposits with banks in Greece.
2. In the circumstances of Greece, the Fund grants approval of the retention of these exchange restrictions for a period of twelve months from the date of this decision or until the conclusion of the next Article IV consultation with Greece, whichever is earlier.

Box 1. Recent Reforms and Implementation of Past IMF Recommendations

During the 2013 Article IV consultation, staff urged the authorities to continue fiscal consolidation and reforms to strengthen the tax and public administrations, bank balance sheets, and labor and product markets. Since then, policy implementation has been mixed, with some progress on property taxation in early 2014, followed by a freeze of reform implementation during mid-2014-early 2015 and a number of policy reversals (e.g., pensions, public administration). Since mid-2015, the authorities legislated a package of measures aiming to reinvigorate the reform agenda, including: (i) a fiscal package of 3¾ percent of GDP, including VAT, pension, and income tax reforms; (ii) reforms to improve the NPL legal framework and bank governance, concomitant with recapitalizing the banking sector; and (iii) additional product market and fiscal structural reforms. Nonetheless, fiscal reforms are not growth friendly and the full implementation of all reforms is yet to be achieved, putting fiscal and growth targets at risk.

Fiscal policies:

Greece: Fiscal Measures, 2015-2018 1/

		2015	2016	2017	2018
➤ VAT reform (yield of 0.9 percent of GDP by 2018): The reform has reduced the number of rates and thus broadened the base. However, it also relies on a further hike in the top rate	Total	0.6	2.0	3.5	3.8
	VAT	0.2	0.7	0.9	0.9
➤ Income tax reform (yield of 1 percent of GDP by 2018): The reform has harmonized the rates on wage, business, and farming incomes. However, it has not reduced the generous income tax credit meaningfully, relying instead on hiking already high rates.	VAT reform	0.2	0.6	0.6	0.6
	VAT increase in the top rate	0.0	0.1	0.2	0.2
➤ Pension reform (yield of 1.5 percent of GDP by 2018): The reform has curtailed early retirement rights and introduced a single less generous benefit formula for future pensioners. Current pensions have been rationalized by reducing the EKAS top up and auxiliary pensions above a threshold. Contribution rates have been increased and harmonized, although some concessions have been granted to richer self-employed groups. The system retains a still relatively high guaranteed basic pension, together with low accrual rates, reducing incentives to work and contribute.	Income tax	0.2	0.6	1.0	1.0
	Solidarity surcharge	0.0	0.2	0.4	0.6
➤ Other measures (yield of 0.5 percent of GDP by 2018): Measures to extend the public sector attrition rule, freeze special wages, cut subsidies, and raise excises have been partially offset by spending on humanitarian programs.	Broader base	0.0	0.1	0.4	0.2
	Rate increases (harmonized PIT rates, CIT)	0.0	0.1	0.2	0.2
	Other income tax measures	0.2	0.1	0.0	0.0
	Pensions	0.2	0.2	1.2	1.5
	Phasing out solidarity grant (EKAS)	0.0	0.0	0.3	0.4
	Higher health contributions of retirees	0.1	0.3	0.3	0.3
	Reduced benefits in auxiliary and dividend funds	0.0	0.1	0.2	0.2
	Reform benefits of new retirees (new formula)	0.0	0.0	0.1	0.2
	Curtail early retirement	0.0	0.0	0.1	0.1
	Other pension measures	0.0	0.1	0.2	0.3
	Other Parametric Measures	0.0	0.0	0.4	0.5
	Wage bill reform, non-wage benefits	0.0	0.0	0.0	0.1
	Reduction in subsidies	0.0	0.1	0.1	0.1
	Additional social spending	0.0	0.2	-0.1	-0.1
	Tax rate increases	0.0	0.1	0.3	0.3

Sources: Ministry of Finance and IMF staff estimates.

1/ Staff estimates of the packages of measures adopted by the authorities in 2015-16.

Financial sector policies:

- **NPL legal framework:** The authorities amended the personal and corporate insolvency, revamped the Code of Civil Procedure (CCP), and allowed for the servicing and sales of NPLs. However, these laws are not yet fully effective, as restrictions on primary residences remain, the establishment of the insolvency administrator profession has been delayed, and secondary legislation remains pending.
- **Bank governance:** The HFSF law was amended to tighten the eligibility criteria for bank board members.

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).

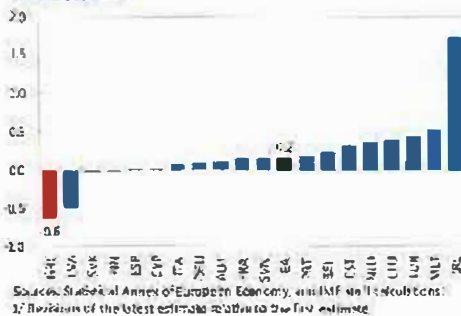
Privatization. Three privatization deals have been signed (regional airports, Port of Piraeus, railway company TrainOSE), totaling €1.5 billion (0.8 percent of GDP). However, the authorities are very far away from their ambitious goal of €50 billion (28 percent of 2016 GDP) in long-run privatization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

Box 2. Revisions to the Greek Statistics

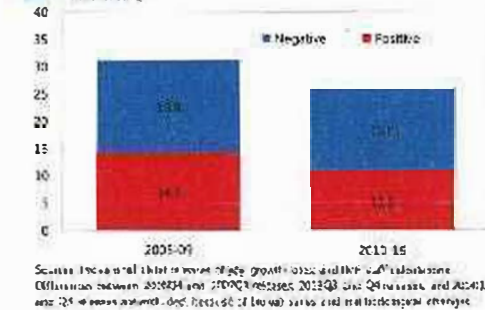
Greek statistical data have been subject to large and frequent revisions that pose significant challenges to macroeconomic projections. While statistical data have improved since 2010, large one-off fiscal adjustments have complicated fiscal projections.

Negative real GDP growth revisions have been more frequent and larger in Greece than elsewhere in the euro-zone. Downward revisions to annual growth outcomes 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 outcome has become more uncertain due to the ongoing crisis.

Average Real GDP Growth Revisions 1/, 2001–14
(Percentage points)

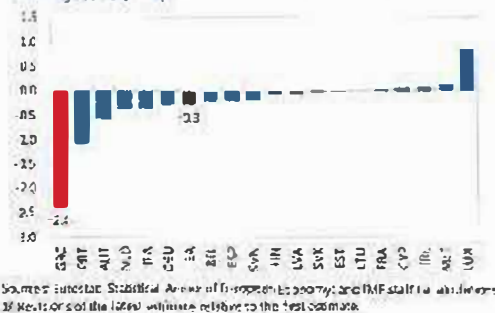


Greece: Frequency of Quarterly Real Growth Revisions 1/, 2005–16 (Percent)

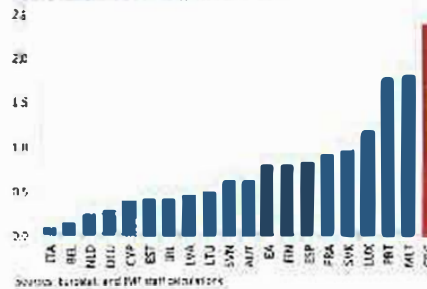


Fiscal revisions have also been large and biased to the downside, and large ESA adjustments further complicate the picture. Over the last fifteen years, Greece's annual fiscal outcomes were revised downward 13 out of 15 times, with only one upward revision (in 2012, likely related to the PSI) and no 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)



ESA Accrual Adjustments, 2012–15
(Percentage points of GDP)



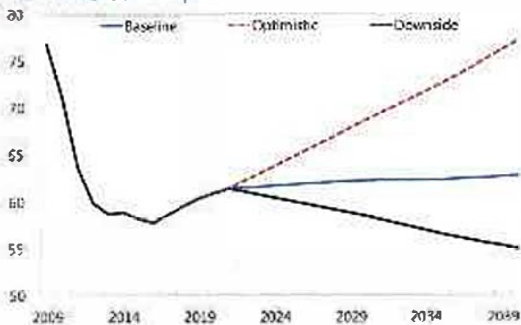
Box 3. An Assessment of Greece's Prospects for Convergence

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 11.1) 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.

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



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

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.

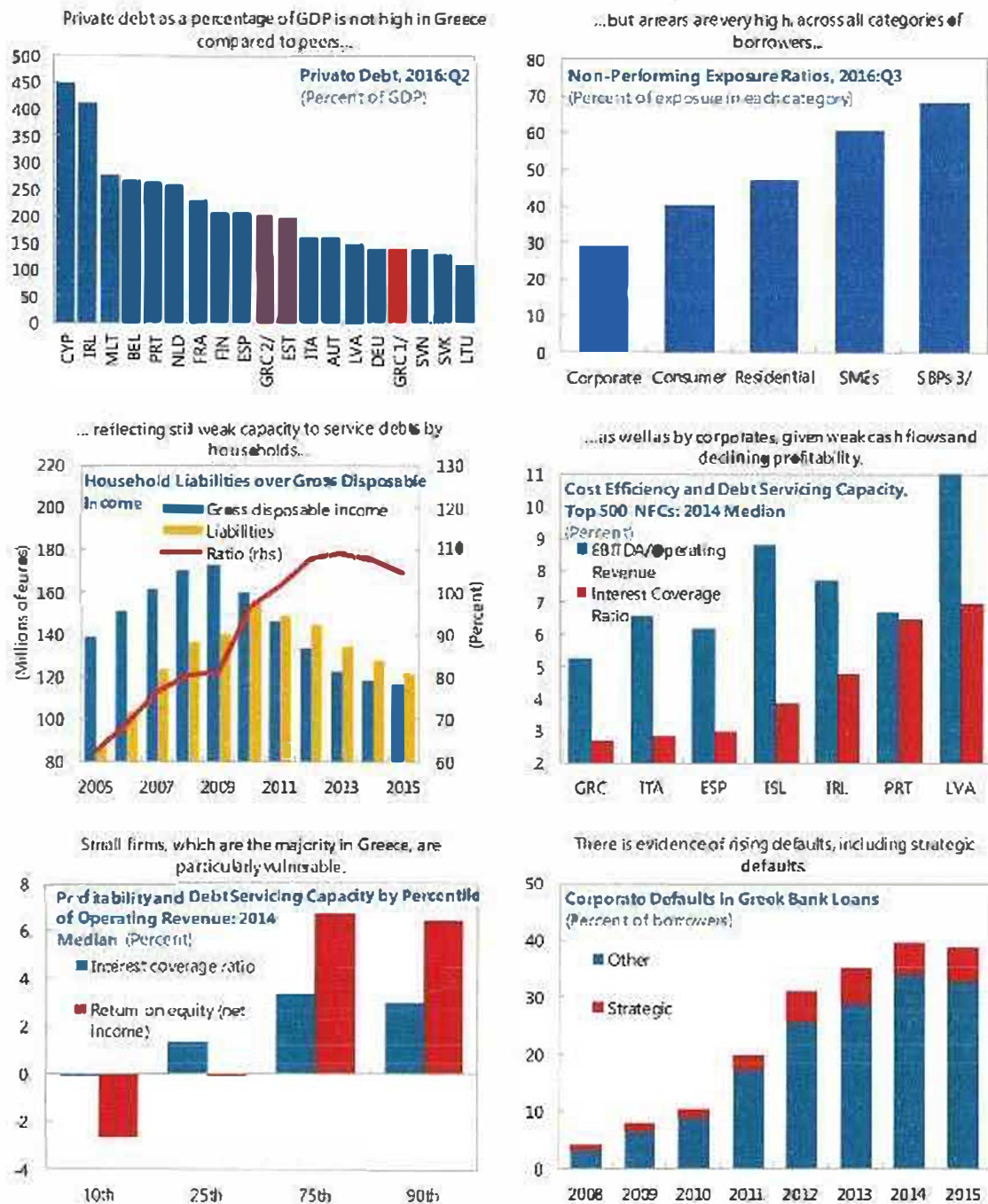
Table: Summary of Assumptions for Long-Term Growth Scenarios (2015 - 2040)

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

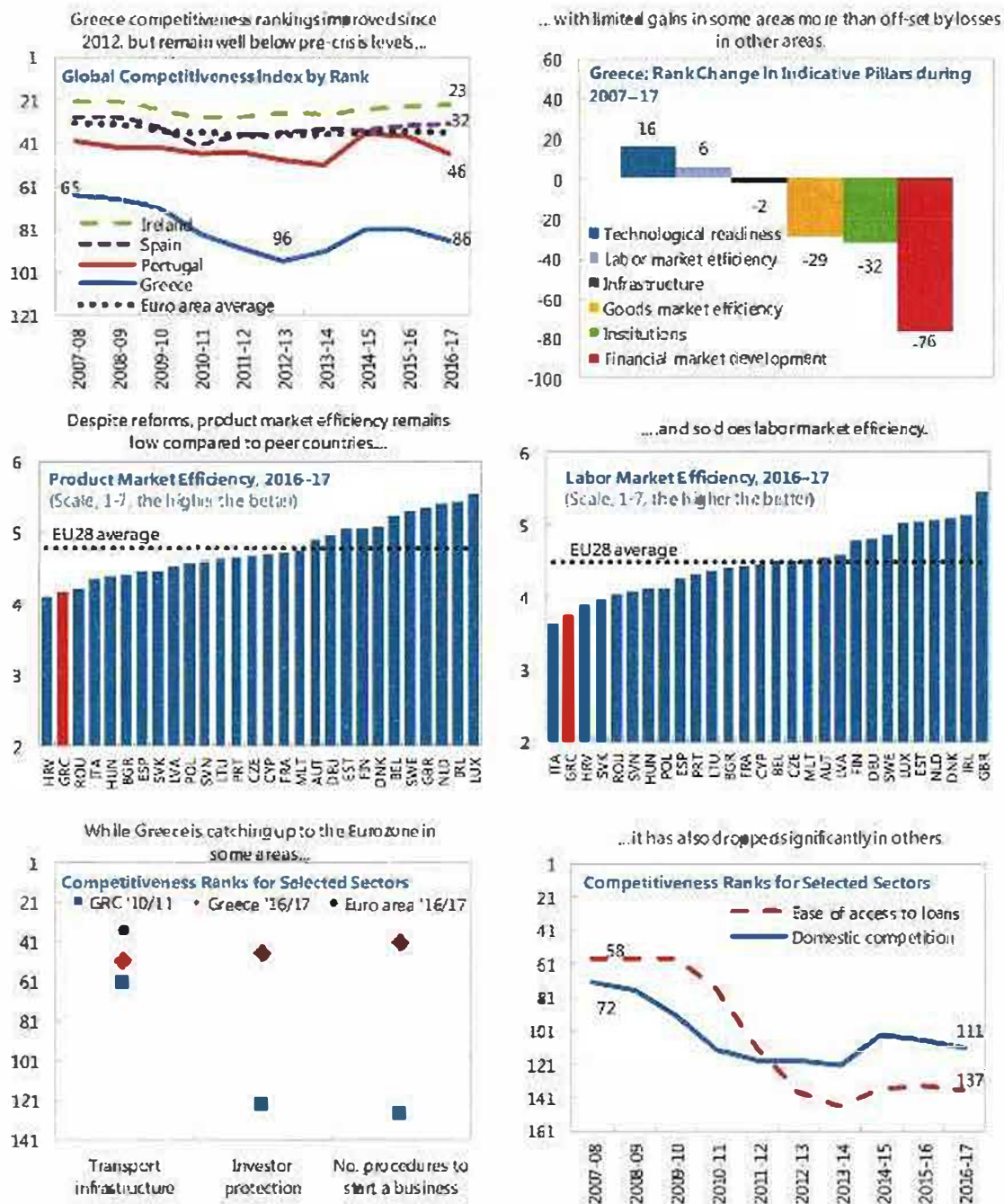
Note: Private debt includes outstanding debt, loans, and other accounts payable for nonfinancial corporations and households.

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



Source: World Economic Forum, The Global Competitiveness Report.

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Figure 3. Greece: Macroeconomic Developments

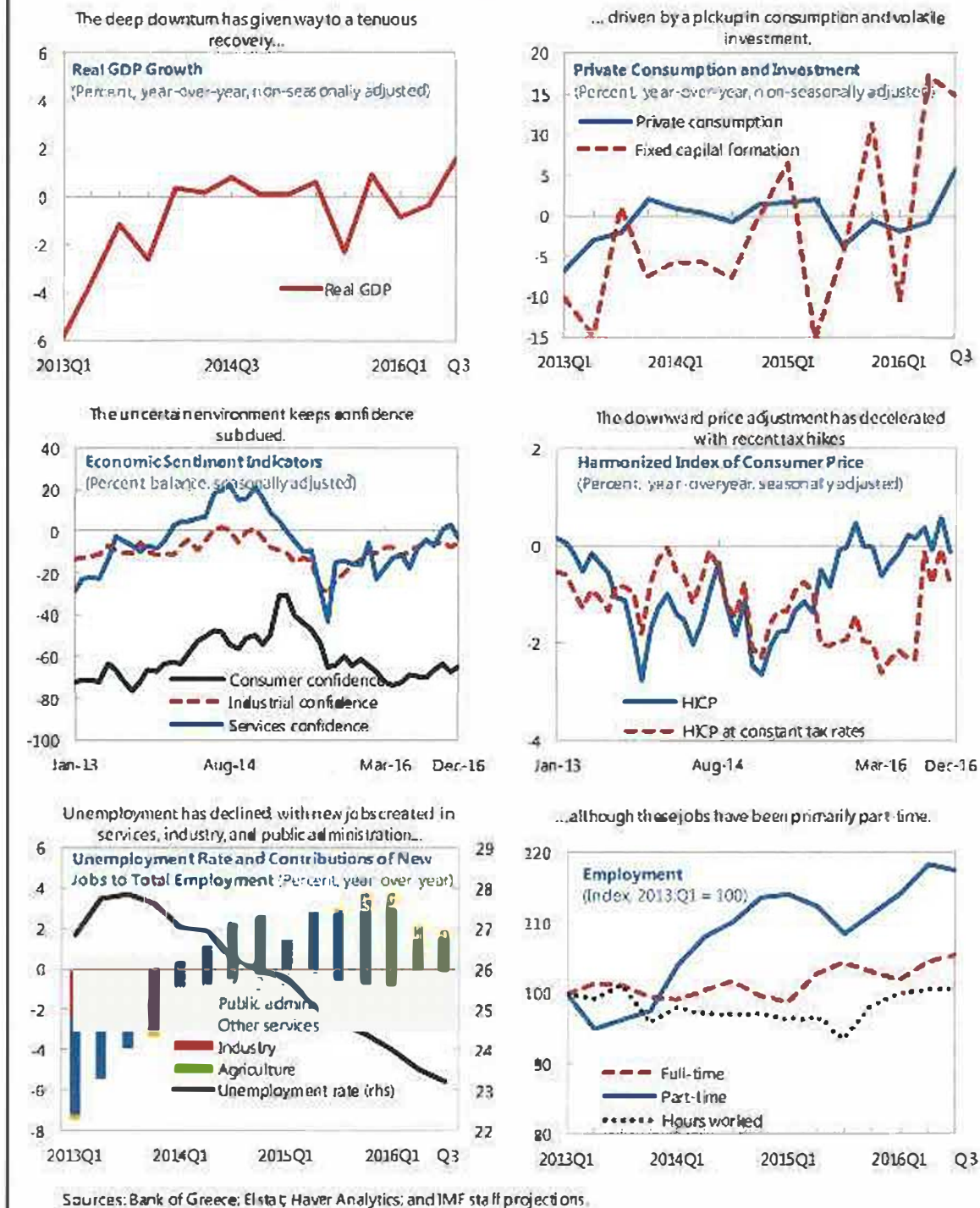
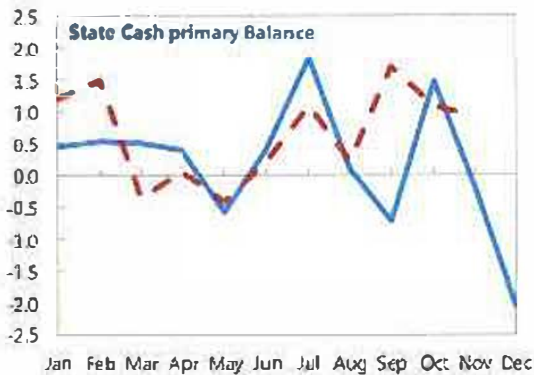


Figure 4. Greece: Fiscal Developments

(Billions of euros)

— 2015 - - - 2016

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



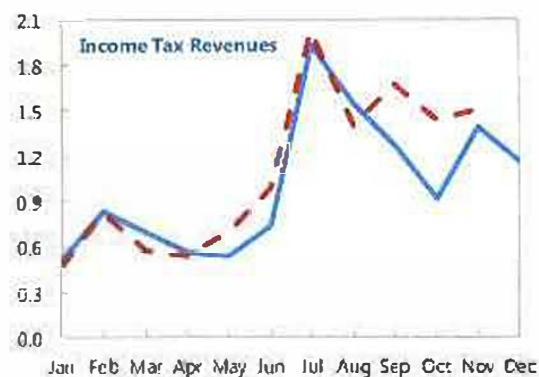
...as spending compression continued in 2016, temporarily eased in the summer.



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



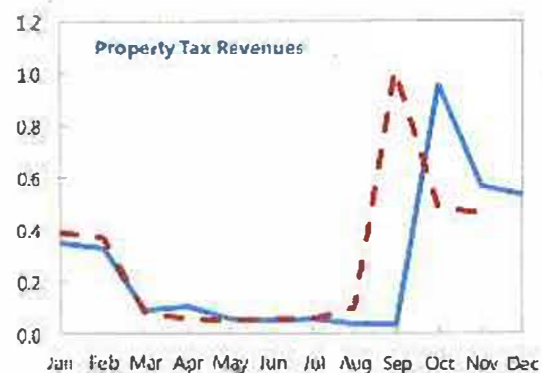
Income tax revenues were bolstered by strong 2015 profits, advanced payments and one-offs...



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



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



Sources: Ministry of Finance; and IMF staff calculations.

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Figure 5. Greece: External Developments

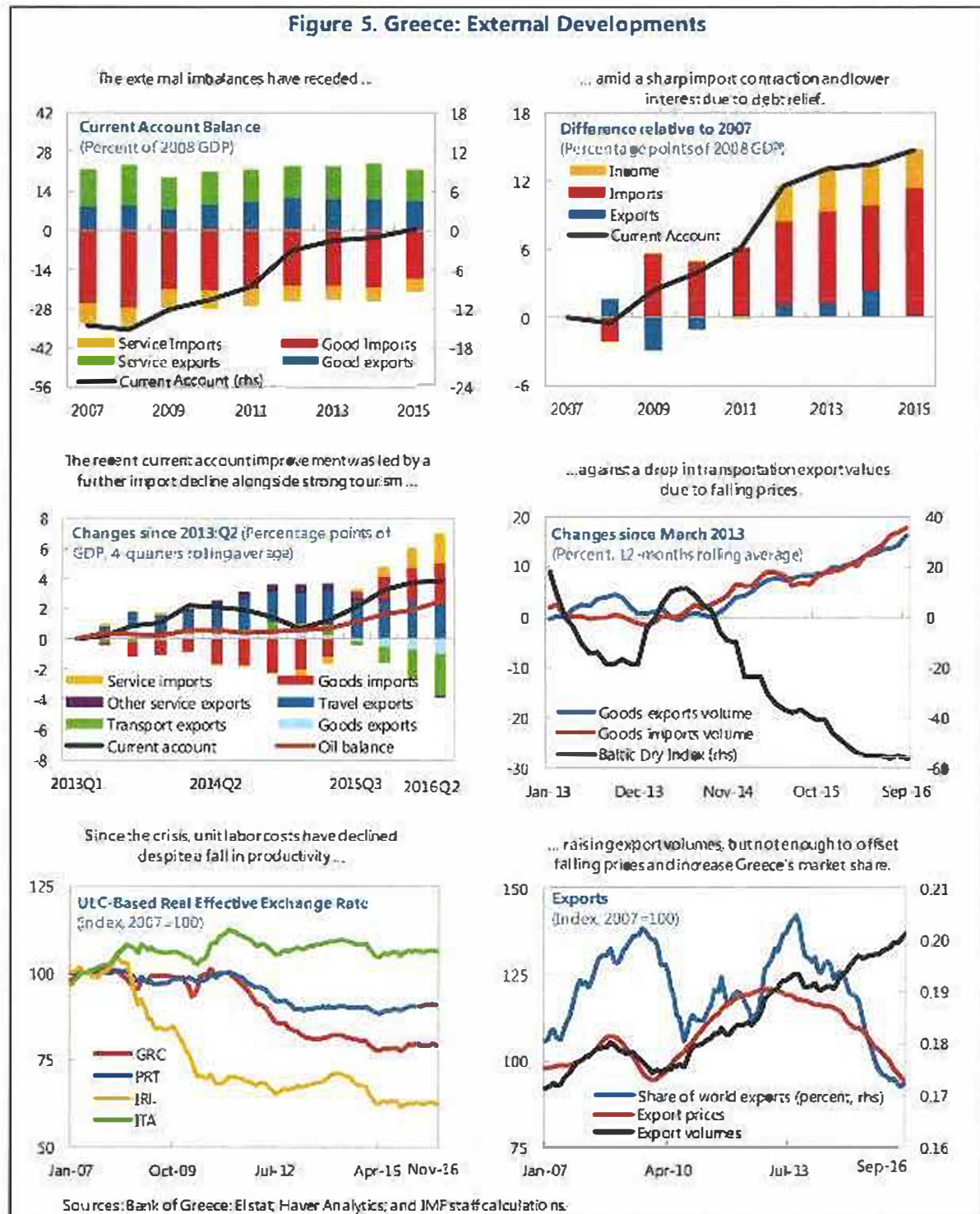


Table 1. Greece: Medium-Term Macro Framework, 2014–21

	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	2.9	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	4.0	-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	0.2	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	45.8	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.

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	2.5	1.5	1.4	1.2	1.2	1.7	2.3	2.7
Debit	1.1	0.5	0.8	0.2	0.7	1.0	1.7	2.2
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	14.2	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	1.0	8.3	6.6	4.4	-0.4	0.3	-0.1	-0.8
Other investment (excl. program financing)	-1.1	17.6	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	0.1	-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
PIF	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	0.5	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. Sanctioned 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. EPSF 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.	Pret.	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

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	546.1	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	159.7	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	95.1	94.5	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	296.2	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	25.6	26.4	27.1
Private sector	212.6	203.9	197.5	198.9	203.1	210.6	213.1	215.0
Corporate	35.2	69.1	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	67.0	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
Eurosystem liquidity support	56.0	107.6	72.8	57.7	54.8	52.8	50.0	47.7
						(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	157.7	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	105.4	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	35.2	46.3	44.8	44.8	44.8	44.8	44.8	44.8
Eurosystem 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
Eurosystem 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 1 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	27.5	27.6
Memorandum items:						
Assets (billions of euros)						
Banks	412.7	389.7	385.0	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	161.0	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)

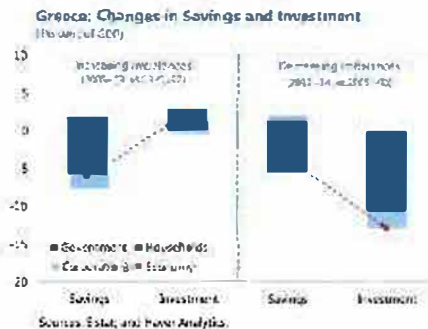
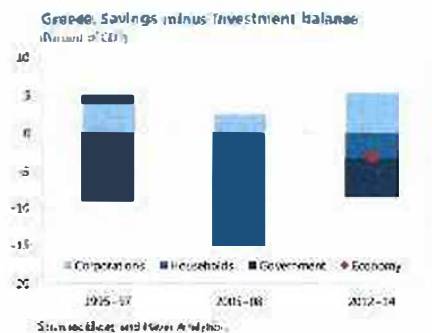
Source of risk	Relative Likelihood and Transmission	Expected Impact of Realized	Recommended Policy Response
Reform fatigue	High Unemployment remains high, while economic recovery fails to materialize. Reforms stall and political pressure mounts to reverse key fiscal and structural reforms.	High Rejection 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.

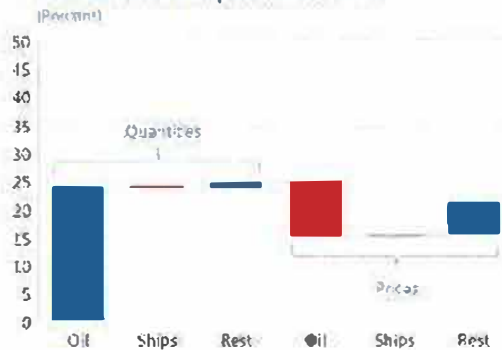
1. Imbalances have declined sharply, but largely through lower investment. The buildup of large external imbalances followed the adoption of the Euro. Lower euro area interest rates encouraged household borrowing and public investment financed by external savings. Domestic savings saw a large decline. 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



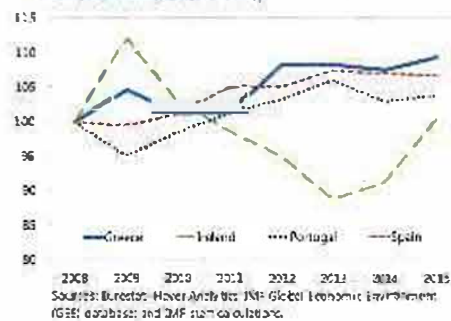
Sources: Eurostat; Haver Analytics; and IMF staff calculations.

Greece: Good Exports, 2010–15



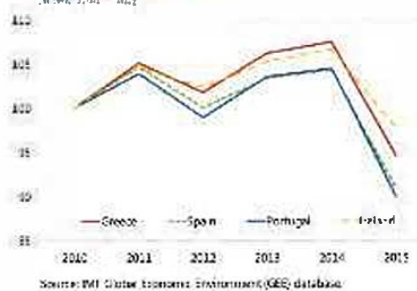
3. While goods volumes have increased robustly, export values have lagged peers. In terms of exports volume, Greece outpaced its peers, even after taking into account that its trading partners' demand has increased slightly faster. Nonetheless, the value of exports of goods and services declined in nominal 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 Indexed as a Share of Trading Partners' Demand Index, 2008–15 (Index: 2008 = 100)

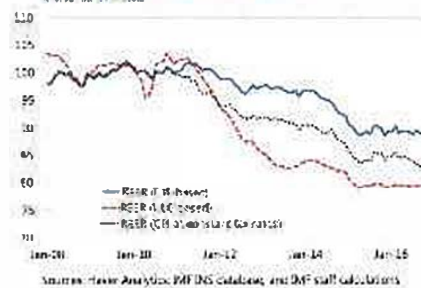


Sources: Eurostat; Haver Analytics; IMF Global Economic Environment (GEE) database; and IMF staff calculations.

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: 2008 = 100)

Source: IMF Global Economic Environment (GEE) database.

Greece: Real Effective Exchange Rates
(Index: 2010 = 100)

Source: Haver Analytics; IMF GEE database; and IMF staff calculations.

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

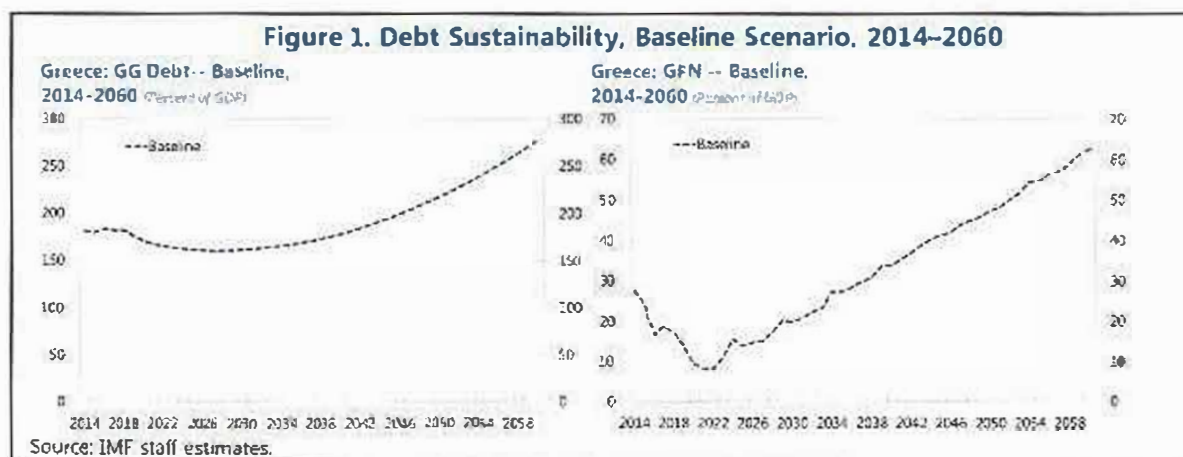
This appendix considers the sustainability of Greece's public and external debt. The analysis suggests that Greece's public debt is highly unsustainable. Even with full implementation of policies agreed under the ESM program, public debt and financing needs will become explosive in the long run, as Greece 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.



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.

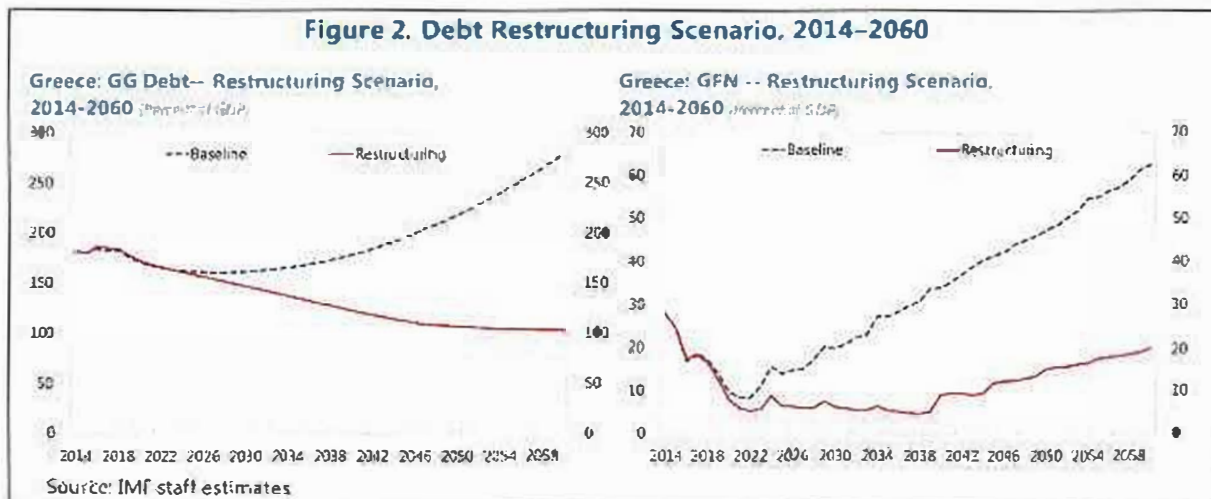
4. The Eurogroup committed to additional debt relief for Greece, although some measures are not specific enough to enable a full assessment of their impact on debt sustainability. At the May 2016 Eurogroup, European partners agreed on the GFN framework and a broad package of debt relief measures to be 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.

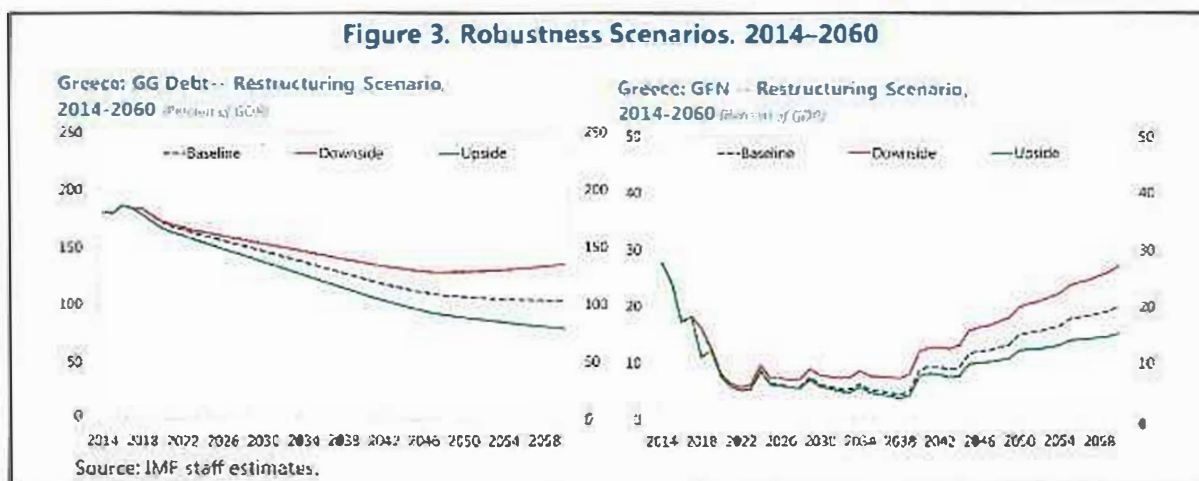
- **Maturity extensions until 2070:** This would require maturity extensions of 30 years for GLF loans, up to 14 years for EFSF loans, and 10 years for ESM loans. As with the above mentioned measures, while possible maturity extensions have been mentioned by the Eurogroup, the scope has not been well 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)

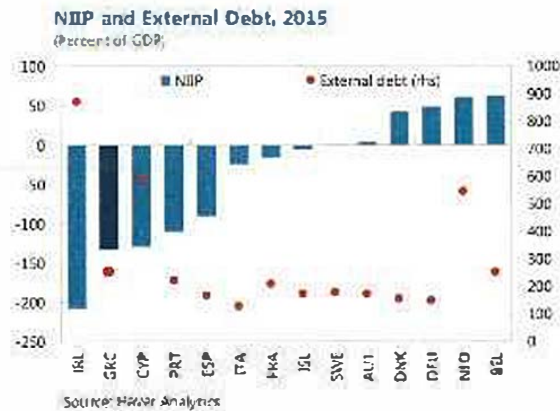
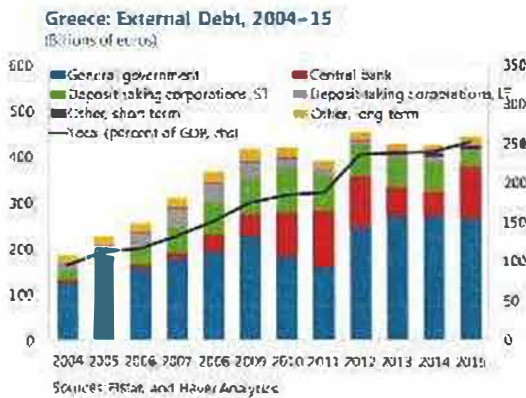
reflect recent developments). The cumulative effect of introducing in staff's baseline the ESM's June market and official interest rate assumptions worsens the debt and GFN ratios by some 11 and 3 percent of GDP, respectively, in part reflecting staff's more sanguine assumption on the elasticity of market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



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/

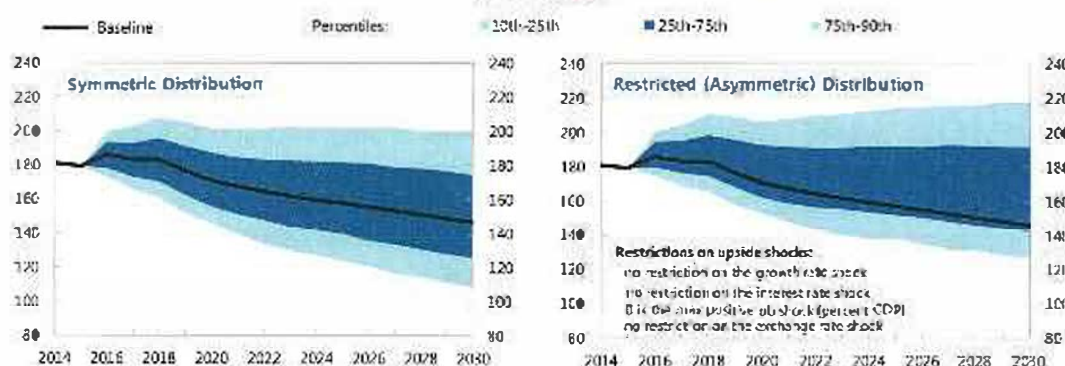
Gross financing needs 2/

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 Reception	External Financing Requirement	Change in the share of short-term debt	Public Debt Held by Non-Residents	Foreign Currency Debt

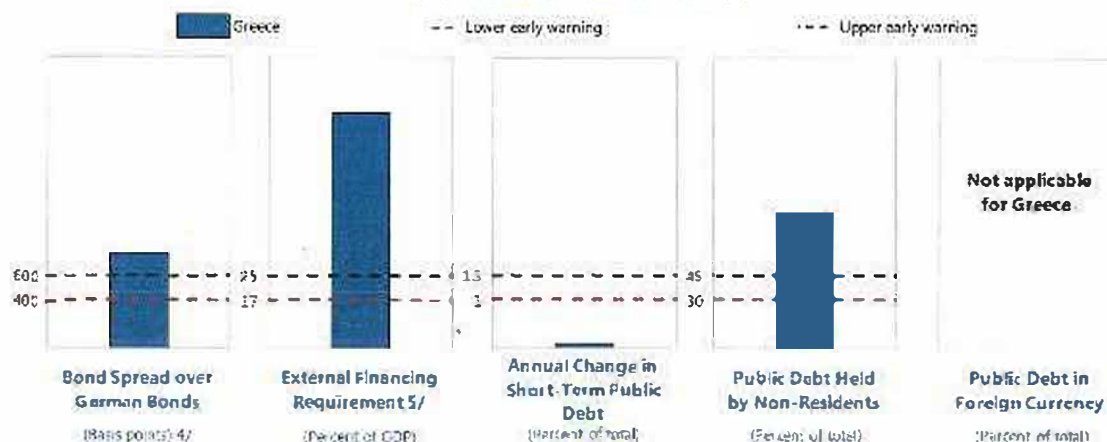
Evolution of Predictive Densities of Gross Nominal Public Debt

(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 45% 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 requirements; 1 and 15 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.

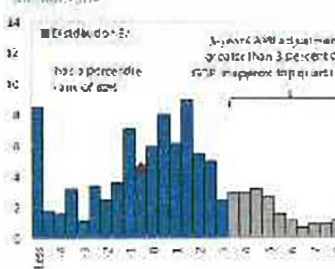
Greece Public DSA - Realism of Assumptions (Restructuring Scenario with Deferrals and Fixed Rates)

Forecast Track Record, versus program countries

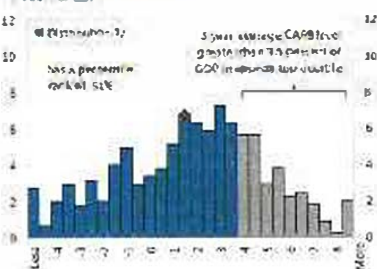


Assessing the Realism of Projected Fiscal Adjustment

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



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

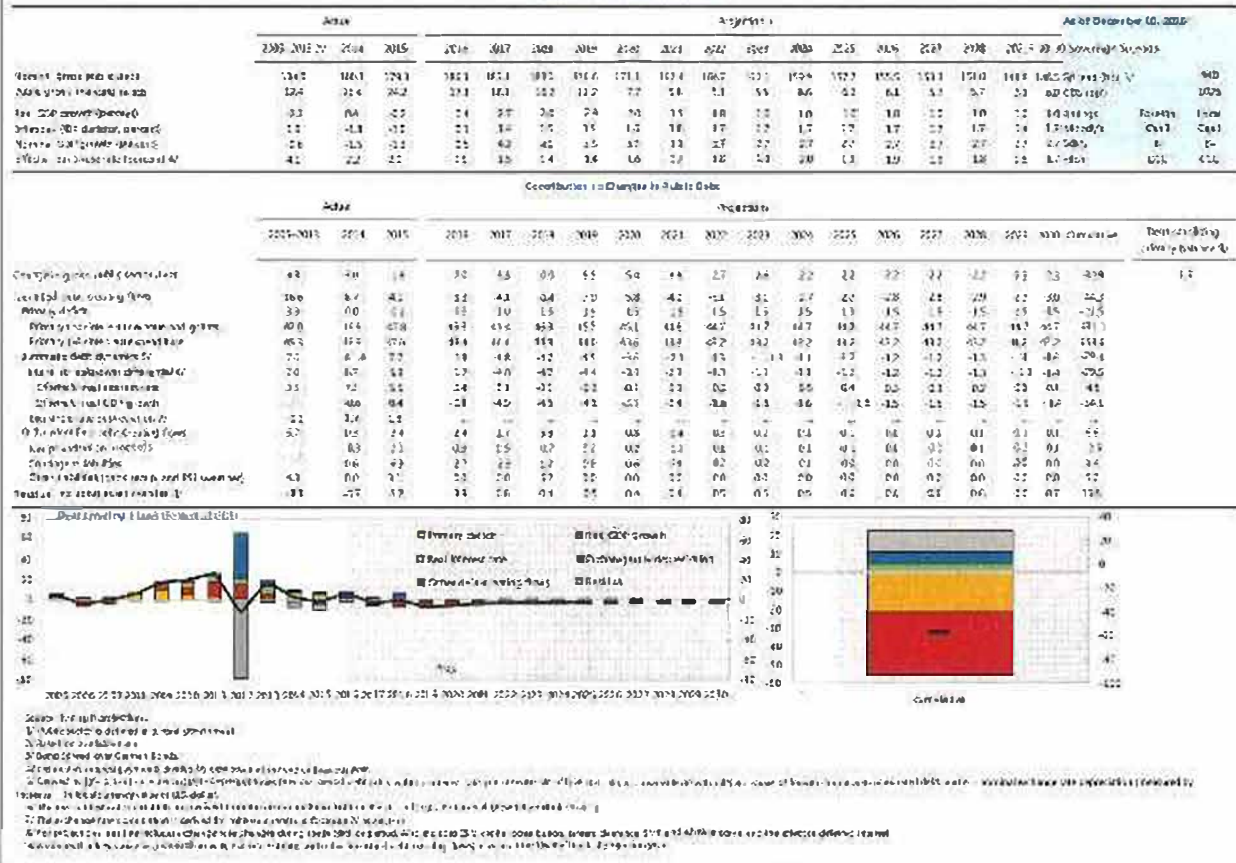


Sources: IMF Staff.
 1. Method of distribution includes program countries domestic raters to all countries.
 2. Projection made in the spring 2010 range of the program year.
 3. Most countries are in the range of 2010 to 2011, 10 advanced and emerging economies with debt greater than 60 percent of GDP. Percent of sample on vertical axis.

Greece: Public Sector Debt Sustainability Analysis (DSA) - Representative Scenario with Defaults and Real Rates

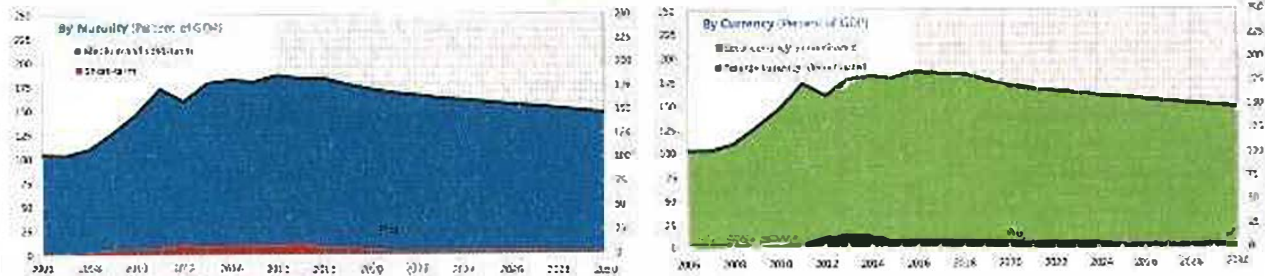
2014-2023 GDP growth projections (IMF staff)

DSAs: Public Sector Debt Sustainability Analysis

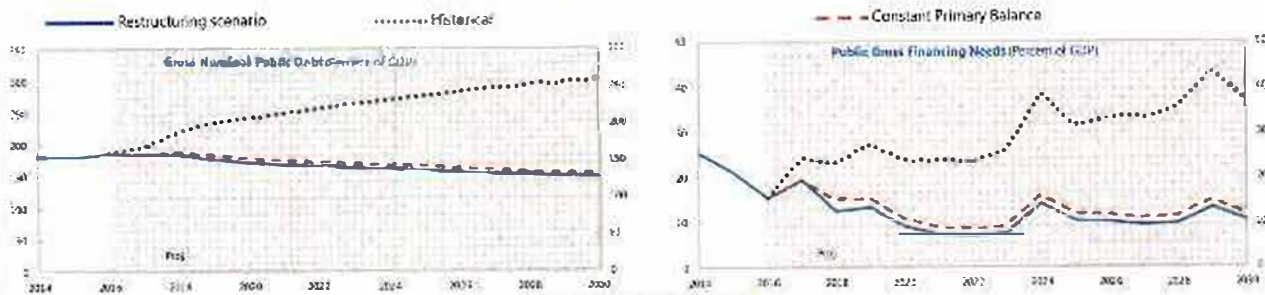


Greece Public DSA - Composition of Public Debt and Alternative Scenarios (Restructuring Scenario with Deferrals and Fixed Rates)

Composition of Public Debt



Alternative Scenarios



Underlying Assumptions

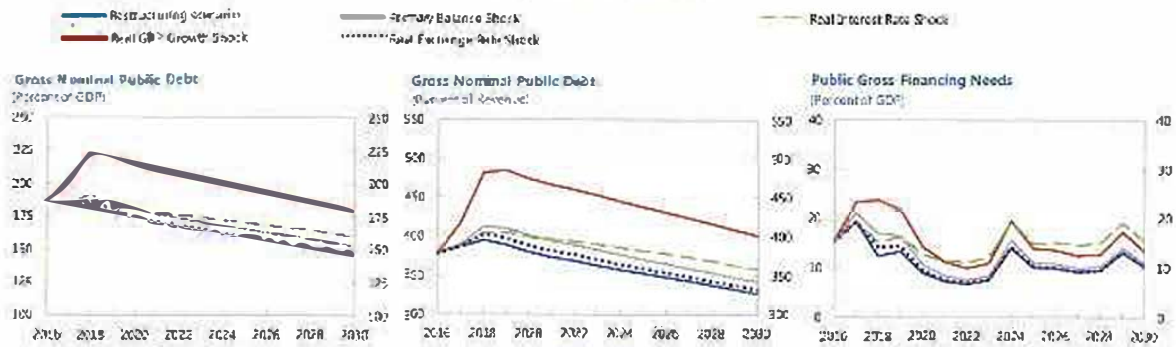
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Restructuring scenario															
Real GDP growth	0.4	1.2	2.6	2.4	2.0	1.5	1.4	1.3	1.2	1.0	1.0	1.0	1.0	1.0	1.0
Inflation	0.1	1.4	1.1	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Primary balance	0.9	1.6	1.5	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Effective interest rate	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Constant primary balance scenario															
Real GDP growth	0.4	2.7	2.6	2.4	2.0	1.5	1.4	1.3	1.2	1.0	1.0	1.0	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	1.7	1.7	1.7	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	0.9	0.9	0.9	0.9	0.9	0.9
Effective interest rate	1.1	1.5	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3

Source: IMF staff

GREECE

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

Macro-Fiscal Stress Tests



Additional Stress Tests



Underlying Assumptions

(Percent of GDP)

	2016	2017	2018	2019	2020	2021	2022	2023	2024		2016	2017	2018	2019	2020	2021	2022	2023	2024
Primary Balance Shock										Real GDP Growth Shock									
Real GDP growth	2.4	2.7	2.6	2.4	2.0	1.7	1.7	1.9	2.0	Real GDP growth	2.1	2.6	2.1	2.1	2.0	1.8	1.8	1.9	2.0
Inflation	0.7	1.6	1.5	1.5	1.6	1.6	1.7	1.7	1.7	Inflation	0.1	0.3	0.0	0.1	0.6	0.9	0.7	0.7	0.7
Primary balance	0.9	0.6	0.1	0.2	0.5	1.1	1.1	1.3	1.5	Primary balance	0.1	-0.8	-0.8	1.1	0.5	1.3	0.5	1.1	1.1
Balance of payments	1.8	1.5	1.7	1.3	1.6	1.8	1.9	2.1	1.6	Balance of payments	1.5	1.5	2.0	1.7	1.7	1.8	2.0	2.0	1.9
Real Interest Rate Shock										Real Exchange Rate Shock									
Real GDP growth	4.4	2.7	2.6	2.4	2.0	1.7	1.7	1.9	2.0	Real GDP growth	0.9	2.7	2.6	2.4	2.0	1.7	1.8	1.9	2.0
Inflation	0.1	1.6	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	0.1	-0.2	0.5	1.3	1.5	1.5	1.6	1.6	1.6	Primary balance	0.0	1.1	1.3	1.1	1.1	1.1	1.1	1.1	1.1
Balance of payments	1.5	1.8	1.9	2.2	2.7	1.8	3.2	3.4	3.3	Balance of payments	1.1	1.8	1.4	1.4	1.8	1.7	1.8	1.9	1.7
Combined Shock										Contingent Liability Shock									
Real GDP growth	0.1	2.2	2.4	2.4	2.0	1.6	1.6	1.8	1.9	Real GDP growth	0.4	-0.4	-0.1	2.0	2.0	2.5	2.6	2.6	2.6
Inflation	0.1	0.3	0.2	0.3	1.1	1.6	1.7	1.7	1.7	Inflation	0.1	0.3	0.3	1.5	1.3	1.6	1.7	1.7	1.7
Primary balance	0.0	1.1	4.0	1.5	1.7	1.8	1.5	1.5	1.6	Primary balance	0.9	-0.1	1.5	2.5	1.3	1.3	1.3	1.3	1.3
Balance of payments	1.7	1.1	1.8	1.9	2.7	1.2	3.4	3.6	3.5	Balance of payments	2.5	1.5	2.2	1.6	1.8	2.0	2.1	2.1	2.0
Lower Growth Scenario																			
Real GDP growth	0.8	1.7	1.8	1.6	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	1.3	1.5	1.5	1.3	1.5	1.5	1.5										
Balance of payments	1.8	1.5	1.4	1.6	1.6	1.8	1.9	2.0	1.8										

Source: IMF staff.

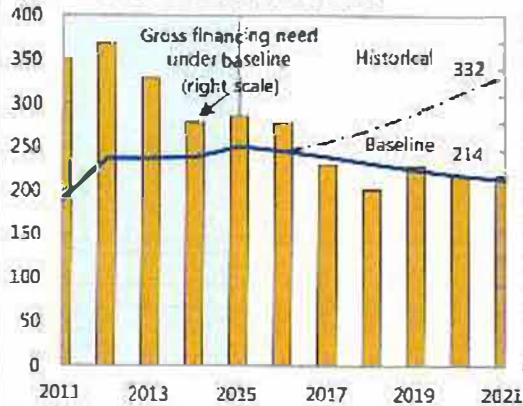
	2011	2012	2013	2014	2015	Projections						Debt-to-GDP (Lending non-Intergov Curr acc balance % ¹)	
	2016	2017	2018	2019	2020	2021							
Baseline: External debt	217.2	217.0	217.3	233.5	251.1		245.7	239.2	231.3	224.3	218.1	215.7	5.1
1. Change in external debt	2.7	46.0	7.9	7.0	12.6		-5.4	-6.5	-7.9	-7.0	-6.2	-2.5	
2. Net external debt (ending Dec 31) in \$Bn	414.4	463.0	425.2	437.7	451.6		440.3	432.7	424.4	417.4	411.2	409.2	
3. Current acc. balance and debt-to-GDP ratio (Dec 31)	3.5	-1.7	2.1	2.6	-2.8		1.7	-3.0	-2.7	-2.9	-2.7	-2.8	
4. Debt-to-GDP ratio (Dec 31) in %	61	54	62	62	72		67	61	60	60	60	59	
5. Exports	253.3	261.1	264.4	274.3	281.0		278.8	271.1	263.1	256.1	251.7	249.1	
6. Imports	251.7	52.1	53.3	14.7	15.2		21.5	43.2	29.1	30.1	30.2	30.7	
7. Net exports (current acc. balance) in \$Bn	1.6	4.4	2.8	14.7	-1.1		-1.6	-1.9	-2.7	-1.4	-1.4	-1.5	
8. Net external debt (beginning Jan 1) in \$Bn	261.5	261.5	184.7	174.7	173.3		172.3	171.3	168.3	165.3	162.3	160.3	
9. Current acc. balance from external interest	3.5	5.1	5.1	4.3	2.7		3.2	3.1	2.7	2.7	2.7	2.4	
10. Debt-to-GDP ratio (Jan 1) in %	17.6	16.1	17.4	18.1	16.6		17.1	16.6	16.0	15.7	15.4	15.1	
11. Net external debt (beginning Jan 1) in \$Bn	22.2	-0.9	6.1	4.3	3.0		-0.2	-1.4	-2.4	-3.1	-3.1	-3.1	
12. Net external debt (beginning Jan 1) in % of GDP	4.0	3.2	12.9	6.1	3.7		2.5	4.1	5.3	5.0	5.2	5.3	
13. Exports (debt-to-exports ratio in percent)	742.3	824.3	742.4	733.3	837.4		886.1	829.3	771.6	713.8	691.2	674.3	
14. Net external financing (net balance of current acc. and capital) in \$Bn	327.8	251.3	355.6	214.0	180.1		177.1	168.1	158.1	151.1	144.1	141.1	
15. Net external financing (net balance of current acc. and capital) in % of GDP	11.1	11.7	12.6	9.7	9.2		10.1	10.1	10.1	10.1	10.1	10.1	
Scenario with key variables at their historical averages 5/							246.7	235.8	221.7	200.3	210.8	211.6	11.8
Key Macroeconomic Assumptions Underlying Baseline							Historical Average	2016-2021 Average	2022-2025 Average				
Real GDP growth (annual %)	-0.1	-1.3	3.0	3.0	2.7	2.7	2.7	2.7	2.4	2.0	1.5		
GDP deflator (annual % change in percent)	3.7	3.4	1.4	1.3	1.4	0.7	0.7	0.7	1.0	1.5	1.5		
Real GDP (annual % change in percent)	4.4	2.5	2.5	2.4	4.0	2.5	2.5	2.5	1.2	1.2	1.1		
Growth rate of GDP deflator (annual % change in percent)	11.2	3.7	3.6	1.1	2.0	2.1	1.6	1.0	1.0	1.0	1.0		
Growth rate of GDP deflator (annual % change in percent)	4.3	12.2	10.1	3.1	16.4	4.4	1.2	-1.1	1.4	1.2	1.2		
Growth rate of GDP deflator (annual % change in percent)	2.5	1.7	4.1	2.5	2.3	1.1	0.6	2.3	5.0	7.7	2.4		
Growth rate of GDP deflator (annual % change in percent)	2.5	2.6	2.6	4.1	3.1	2.0	1.6	0.8	0.7	1.2	1.5		
1/ Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. Debt-to-GDP ratio (Lending non-Intergov Curr acc balance) in % of GDP. 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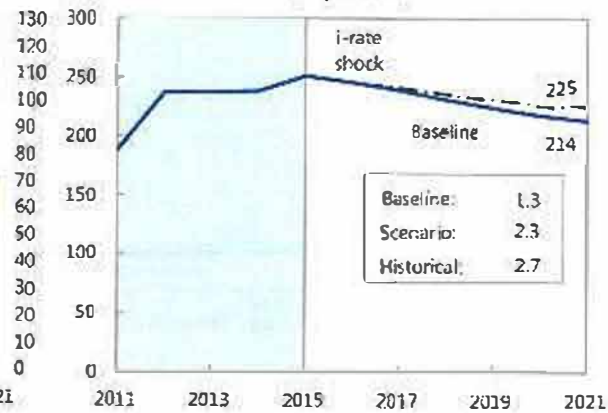
Greece: External Debt Sustainability: Bound Tests 1/ 2/

(External debt in percent of GDP)

Baseline and historical scenarios

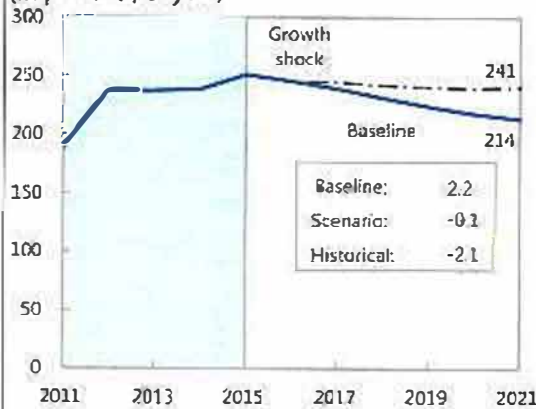


Interest rate shock (in percent)



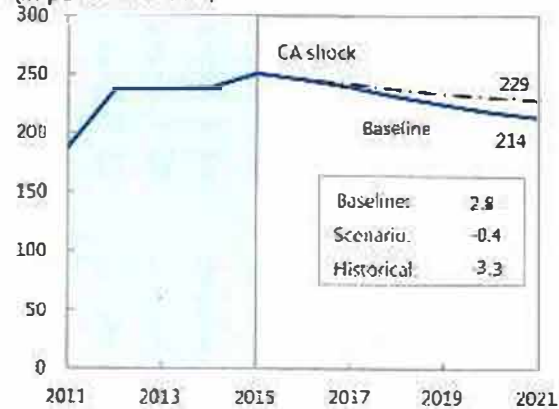
Growth shock

(in percent per year)

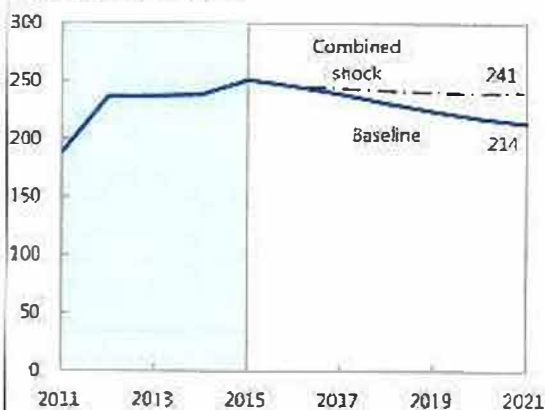


Non-interest current account shock

(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 million 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

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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



Appendix I. Draft Press Release

Press Release No. 17/x
FOR IMMEDIATE RELEASE
[February, xx, 2017]

International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

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

On February xx, 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 potential growth. In this

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?

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 Assessment¹

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¹ 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>.