IN-DEPTH ANALYSIS

Greece's financial assistance programme - June 2018

This briefing provides an overview of the economic situation in Greece and the main developments under the third financial assistance programme. This version updates the briefing published on 3 October 2017.

Summary

- Greece's economy returned to growth in 2017, expanding by 1.4%, driven by a surge in investment and accumulation in inventories, on the back of improving economic sentiment. According to the [Spring 2018](#) Commission (COM) forecast, real GDP growth is to accelerate to 1.8% in 2018 and 2.3% in 2019. On the fiscal side, the budget execution data for January-April 2018 showed that the primary surplus (on cash basis) amounted to EUR 2.29 billion, significantly exceeding the budget target. The COM foresees the primary surplus to stand at 3.7% of GDP in both 2018 and 2019, achieving the agreed target of 3.5% of GDP.
- The [Eurogroup of 22 June 2018](#) stated that the Greek authorities have completed all the agreed prior actions of the final review of the ESM programme (which will expire on 20 August 2018). The Eurogroup has agreed on a debt relief package to safeguard Greece's debt sustainability, expressed in terms of Gross Financing Needs. Greece will furthermore be able to retrieve the interest accumulated by the Euro-system on Greek government bonds, if it implements all key reforms adopted under the ESM programme. The Eurogroup has mandated the ESM to disburse € 15 bn to Greece as the last program tranche. It also welcomed the finalization of a comprehensive growth strategy by the Greek authorities and the signature of a co-operation plan between the Greece and the COM's Structural Reform Support Services, which provides the provision of technical assistance to support reform implementation in the coming years.
- On Debt Sustainability Analysis, the COM published its latest version in March 2018 and the IMF in July 2017, on the basis of estimates and assumptions on growth and other macroeconomic indicators available at the time as well as political agreements (on the primary surplus and on the short-term measure adopted to re-profile Greece's debt with EFSF/ESM). The sustainability was

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assessed on the basis of two indicators, namely the Debt-to-GDP ratio and Gross Financing Needs. Both the IMF and the COM analyses suggested that the Greek debt remained unsustainable. The Eurogroup of 21 June based its conclusions on an updated sustainability analysis provided by the European institutions, which is not published yet. The IMF is expected to examine the sustainability of the Greek debt in the coming weeks.

- As regards the banking sector and financial stability, the ECB published - in May 2018 - the results of the latest stress test of the four significant Greek banks. The Supervisory Banking Statistics show that those banks are comparatively well capitalised, but burdened with the highest ratio of non-performing loans (NPLs) in the Banking Union.

1. Latest economic developments

Greece's economy returned to growth in 2017, driven predominantly by a surge in investment and a build-up of inventories[1]. The economic activity expanded in all four quarters, for the first time since 2006, with real GDP growth standing at 1.4% for 2017 as a whole[2]. According to the latest Eurostat data, real GDP expanded by 0.8% q-o-q in the first quarter of 2018, well above the market participants' expectations (0.5% q-o-q) as net exports have become the key driver of growth and inventories' accumulation remained strong, reflecting improved economic sentiment on the back of strengthening external demand. However, it should be noted in this regard that Greek quarterly GDP data have been subject to frequent and large revisions, as evidenced in Table 1 below.

Table 1: Revisions in Greece's quarterly GDP data
(% growth compared to the previous quarter)

	2016				2017				2018
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
Flash estimate May 2016	-0.4	-	-	-	-	-	-	-	-
Estimate Jun 2016	-0.5	-	-	-	-	-	-	-	-
Flash estimate Q2 2016 (Aug 2016)	-0.1	0.3	-	-	-	-	-	-	-
Estimate Q2 2016 (Sept 2016)	-0.2	0.2	-	-	-	-	-	-	-
Flash estimate Q3 2016 (Nov. 2016)	-0.6	0.4	0.8	-	-	-	-	-	-
Estimate Q3 2016 (Dec. 2016)	-0.6	0.4	0.8	-	-	-	-	-	-
Flash estimate Q4 2016 (Feb. 2017)	-0.6	0.3	0.9	-0.4	-	-	-	-	-
Estimate Q4 2016 (Mar. 2017)	-0.7	0.3	0.6	-1.2	-	-	-	-	-
Flash estimate Q1 2017 (May 2017)	-	0.3	0.6	-1.2	-0.1	-	-	-	-
Estimate Q1 2017 (June 2017)	-	0.4	0.7	-1.1	0.4	-	-	-	-
Flash estimate Q2 2017 (Aug. 2017)	-	-	0.7	-1.1	0.4	-	-	-	-
Estimate Q2 2017 (Sept. 2017)	-	-	0.8	-1.0	0.5	0.5	-	-	-
Flash estimate Q3 2017 (Nov. 2017)	-	-	-	-1.0	0.5	0.5	-	-	-
Estimate Q3 2017 (Dec. 2017)	-	-	-	-0.5	0.7	0.8	0.3	-	-
Flash estimate Q4 2017 (Feb. 2018)	-	-	-	-	0.7	0.8	0.3	-	-
Estimate Q4 2017 (Mar. 2018)	-	-	-	-	0.6	0.7	0.4	0.1	-
Flash estimate Q1 2018 (May 2018)	-	-	-	-	-	0.7	0.4	0.1	
Flash estimate Q1 2018 (June 2018)	-	-	-	-	-	0.8	0.5	0.2	0.8

Source: Eurostat.

[1] The rebound in investment contributed by 1.0 p.p. to GDP growth, while increase in inventories added a further 0.5 p.p. Private consumption had only a marginally impact (+0.1 p.p.) due to significant fiscal pressure. On the other hand, net exports and public consumption contributed negatively to growth (by -0.2 p.p.).

[2] The last time real GDP growth exceeded 1% was in 2007.

Looking ahead, the COM foresees in its Spring 2018 **forecast that Greece's economy will expand by 1.9% in 2018 and 2.3% in 2019.** As shown in Table 2, these projections imply a downward revision compared to the previous forecast (Winter 2018) of 0.6 p.p. and 0.2 p.p. respectively, due to a lower carry-over effect for 2018 (as real GDP grow came below expectations in the last quarter of 2017) and lacklustre recovery in private consumption as households appear to be more financially strained than previously assumed and improvements in the labour market seem to take longer to translate into consumption growth. The growth outlook remains conditional upon the orderly completion of the fourth and final review (please note that the Eurogroup of 22 June 2018 confirmed the successful conclusion of the fourth review, see section 4 of this briefing), and the successful conclusion of the ESM programme. The balance of risks surrounding these latest projections is skewed to the downside, reflecting uncertainty linked to investment financing and regional geopolitical tensions.

Table 2: Comparison of the COM and the IMF growth projections for Greece

	2017	2018	2019
COM Winter 2018 Forecast (February 2018)	1.6	2.5	2.5
COM Spring 2018 Forecast (May 2018)	1.4	1.9	2.3
IMF October 2017 WEO	1.8	2.6	-
IMF April 2018 WEO	1.4	2.0	1.8

Sources: COM and IMF forecasts

Inflation, as measured by the Harmonised Index of Consumer Prices (HICP), **somewhat decelerated since the beginning of 2018** due predominantly to decreases in overall goods prices as private consumption has been recovering at a very slow pace and dampening base effects stemming from last year's tax measures turned out to be larger than expected. According to the latest Eurostat data, headline HICP inflation oscillated within a range of 0.2%-0.5% (y-o-y) over the first four months of 2018. Underlying price pressures have also remained subdued[3]. In the latest round of COM projections, the inflation rate is expected to stand at 0.5% for 2018 as a whole, before edging up to 1.2% in 2019.

Greece's current account deficit slightly widened to 0.9% of GDP in 2017[4] as increase in trade deficit[5] and decline in net primary income were only partly compensated by improvement in the balance of current transfers from the rest of the world. For 2018, Greece's current account deficit is expected to somewhat narrow and remain small relative to the size of the economy at 0.4% of GDP[6].

After peaking at 27.9% in September 2013, the unemployment rate further declined to 20.8% in February 2018, according to latest available Eurostat data[7]. This downward trend reflects the

[3] Underlying inflation, as measured by headline HICP excluding unprocessed food and energy, has remained between 0.6% and 0.8% (y-o-y) since the start of this year. The April 2018 reading was 0.8%.

[4] Greece's current account deficit peaked at a record high of 15.8% of GDP in 2008, then gradually declined and reached a balance in 2015. This strong adjustment was initially driven by sharp decline in imports, as the economy entered into unprecedented recession before structural reforms put into place have gradually improved external competitiveness.

[5] The widening deficit in trade of goods was only partly offset by increasing surplus in trade of services.

[6] Given that the current account balance mirrors saving and investment behaviour of the economy and taking into account that the Greek government is running budgetary surpluses, a slight current account deficit indicates that the net saving on the part of the government sector is nearly offsetting private sector dissaving.

[7] The latest ELSTAT data show that the unemployment rate declined to 20.1% in March 2018, while the February 2018 figure was revised downwards to 20.6%.

impact of labour market reforms and improvement in the economic activity. Despite these achievements, Greece's unemployment rate still remains the highest within the EU and continues to affect mainly women and young people[8]. In the Spring 2018 COM forecast, the unemployment rate was projected to stand at 20.1% for 2018 as a whole, before edging further down to 18.4% in 2019. **Greece's general government surplus increased to 0.8% of GDP in 2017, as the primary surplus came in at 4.0% of GDP,** considerably exceeding the target of 1.75% of GDP agreed under the ESM programme[9]. The surge in the primary balance was supported by a set of measures, in particular by the 2016 pension reform and indirect taxation reform. As to 2018, the state budget execution data for the first fourth months showed that the primary surplus (on cash basis) amounted to EUR 2.29 billion, outperforming both the January-April 2018 budget target of EUR 0.374 billion and the January-April 2017 outturn of EUR 1.73 billion. This budgetary over-performance is due to higher-than-targeted revenues and lower-than-budgeted spending. According to the Spring 2018 COM forecast, Greece's general government budget surplus is expected to stand at 0.4% of GDP in 2018 and 0.2% of GDP in 2019 (under the customary "no policy change" scenario). The primary surplus is projected at 3.7% of GDP for both 2018 and 2019, somewhat above the target of 3.5%. For developments in the area of taxes, see also separate EGOV briefing on tax collection in Greece.

Greece's debt-to-GDP ratio declined from 180.8% in 2016, the highest level on record, to 178.6% in 2017, as the general government consolidated gross debt rose at a slower pace than nominal GDP (0.8% vs. 2.0% over the period under review). This increase in (the stock of) debt is due to the fact that debt-reducing impact of a large government surplus was more than offset by debt-increasing effect of stock-flow adjustment[10].

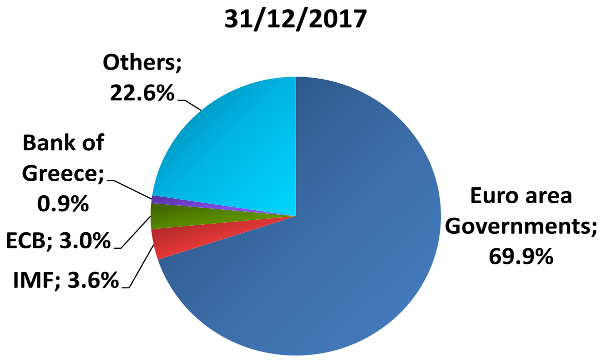
Figure 1 depicts the **distribution of the outstanding debt across different categories of bondholders as of end 2017** (EUR 317.4 billion). These data show that the Euro area governments (including EFSF and ESM) were holding nearly 70% of Greece's general government gross debt, while the shares corresponding to the Bank of Greece, the ECB and the IMF stood at 0.9%, 3.0% and 3.6% respectively. Compared with end-2016 figures, the share of the Euro area governments increased by 1.5 p.p. as additional funds were disbursed under the ESM programme. On the other hand, the shares of Greece's debt owned by the Bank of Greece, the ECB and the IMF declined, by 0.2, 1.2 and 0.5 p.p. respectively, as loans/bonds coming to maturity were repaid.

[8] In February 2018, the unemployment rate among women came in at 26.2% as compared with 16.4% for men. The youth unemployment rate stood at 45.4% (it peaked at a staggering 60.5% in February 2013).

[9] Under the ESM programme, primary surplus target is defined as the primary balance, excluding one-off costs of bank recapitalisations, the revenues under the Securities Markets Programme and the Agreement on Net Financial Assets, as well as part of the privatisation proceeds. Consequently, the 2017 primary surplus target was exceeded by 2.5 p.p. of GDP according to the COM data.

[10] The debt increasing stock-flow adjustment predominantly reflects an increase in cash deposits and a reduction in arrears. Note that Greece returned to bond markets in July 2017 for the first time since 2014, raising EUR 3 billion in 5-year bonds at 4.625 per cent. The issue was oversubscribed as market bids amounted to EUR 6.5 billion. As to 2018, Greece successfully tapped markets in February, raising EUR 3 billion in 7-year bonds at 3.5 per cent. The issue was again oversubscribed by a factor of around 2. However, according to press reports, the Greek authorities do not plan to tap bond markets before the Eurogroup's decision on debt relief.

Figure 1: Greece's general government gross debt by creditor



Source: EGOV calculations based on COM, IMF, ECB and PDMA (Greece's Public Debt Management Agency).
Note: The share held by euro area governments comprises EFSF, ESM and bilateral loans.

Box 1: Legal proceedings against of Mr Georgiou, former head of ELSTAT

For more than six years, legal proceedings against Mr. Andreas Georgiou and two senior staff of the Hellenic Statistical Authority (ELSTAT) are ongoing in Greece. The accusations against Mr Georgiou have been essentially: artificial inflation of the 2009 budgetary deficit of Greece, not putting up the 2009 Excessive Deficit Procedure figures for approval by the ELSTAT Board, not convening the Board of ELSTAT after October 2010, not being fully and exclusively occupied at ELSTAT for the first three months of his term of office and defamation of a former Director of National Accounts in ELSTAT. Eurostat, European Commissioners, the Eurogroup, Members of the European Parliament and international statistical institutes have issued many statements over the years exclusively defending the work of Mr. Georgiou as head of ELSTAT.

On 22 May 2018, the International Statistical Institute made the following statement (signed by 80 former chief statisticians on 18 June 2018): "***On 16 May 2018, the Greek Supreme Court annulled Andreas Georgiou's acquittal by the Appeals Court Council for the alleged felony crime of inflating the 2009 fiscal deficit figures*** *and causing "extraordinary" damage to the Greek economy, which according to the charges amounted to 171 billion euro (about 200 billion USD). If convicted of the alleged crime, Andreas Georgiou can be punished with life in prison.*

This is the second time the Supreme Court has annulled an acquittal decision of the Appeals Court Council, which is unprecedented in the view of many legal experts, and, for observers around the world, quite extraordinary in itself. Furthermore, before the initial acquittal in 2015-16, there were two proposals for acquittal, by an Investigating Judge (in 2013) and by a Prosecutor (in 2014), that also were not accepted. It is therefore extremely puzzling that the Supreme Court continues to dismiss the considered verdicts and judgements of its competent courts and investigators. ***It is all the more so since the fiscal deficit statistics at issue, and the methodology underpinning them, have been repeatedly validated by Eurostat as fully conforming to the highest harmonised statistical standards (...) throughout the EU.*** *Indeed, the methodology and figures are also accepted by the Greek Authorities and have been consistently used by successive Greek Governments since 2011 in requesting international financial assistance. (...)*

The COM, the ECB and the IMF (...) have also fully accepted the figures as the basis for providing assistance since the end of 2010, for considering debt relief to Greece, and for monitoring the performance of the Greek economy.

International commentators are increasingly stating openly that political factors appear to be driving this prolonged prosecution of Andreas Georgiou to serve interests of political forces within Greece and that this will be maintained until the "right" decision is achieved. (...) Along with Andreas, two of his former work colleagues *are also facing a similar situation. (...) We are advised that it is likely to be another 1-2 years before there is even a decision whether they will have to face an open trial. (...)*

For all the above reasons, the international statistical community continues to support A. Georgiou and his colleagues. The ISI calls upon the Greek State to stop these inconsistencies and this injustice. We also call on the European and international partners of the Greek Government, who are reliant on accurate deficit and debt statistics, to take whatever steps are necessary to address the fundamental contradiction of providing for their assistance to Greece on the basis of statistics that are repeatedly challenged at the highest level of the Greek Judiciary."

According to the Financial Times of 10 June 2018 (see also Ekathimerini of 9 June 2018), "***Greece's supreme court has rejected an appeal by the country's former statistics chief to quash his conviction in 2017 on charges of violation of duty***. *According to people with knowledge of the decision****, which has not yet been officially made public****, the supreme court upheld the ruling against A. Georgiou (...) even after the court's own prosecutor asked for the conviction to be annulled. The supreme court decision will bring to an end a long-running case against Mr Georgiou filed by two political appointees to the Elstat board of directors,* ***as the two-year suspended sentence he received cannot be reversed.*** *The case is one of several brought against the former statistics chief since 2013 which have raised questions about commitment to the rule of law in Greece, and is the first to have reached a conclusion. The (...) Syriza government has faced criticism for not addressing the issue of political interference in the judicial system in the case of Mr Georgiou (...)The two Elstat board members (...) who jointly brought the case said that Mr Georgiou should have presented the 2009 budget deficit figures for discussion, possible changes and approval by the board. Their claim disregards Greek and EU legislation specifying that the statistics chief of a eurozone country has "the sole responsibility for deciding on . . . the content and timing of statistical releases".*

On the above mentioned call upon the Greek Government to support Georgiou, Prime Minister Tsipras stated on17 June 2018 in "Die Welt" that, if asked by a Greek Court, he would witness in favor of Georgiou.

The Eurogroup statement of 22 June 2018, concluding the fourth and final review of the ESM programme for Greece, states: "*Preoccupations (...) concern the proceedings against the former President and senior staff of ELSTAT, notably as regards the alleged falsification of fiscal data. The Eurogroup continues to have full confidence that the data validated by Eurostat and delivered by ELSTAT since 2010, including the 2009 general government balance outturn, is in compliance with the rules that are applied in all Member States. The Eurogroup mandates the institutions to continue monitoring the developments in those cases and the supporting actions taken by the Greek authorities, including legislative actions if needed, for instance strengthening the independence of ELSTAT, in full respect of the independence of the judiciary, and report back to the Eurogroup in the context of the post programme surveillance.*

For further background information, see separate EGOV briefing as published last November.

2. Main elements of the third programme

Following Greece's request for further financial assistance of 9 July 2015, the COM signed on 19 August 2015[11] (on behalf of the members of the euro area) a Memorandum of Understanding

[11] On 19 August 2015, the Mr Tsipras, the Greek Prime Minister, also sent a letter to the European Parliament requesting its stronger involvement in the regular review process in implementing the programme. The following day, he resigned, triggering the sixth general elections in eight years, which took place on 20 September. Following his re-election, Mr Tsipras (Syriza) renewed his party's coalition with the Independent Greeks (Anel), the junior partner in his previous government.

(MoU) with Greece for a **third economic adjustment programme of up to EUR 86 billion for the period July 2015 - August 2018** [12], in accordance to Article 13 of the ESM Treaty. The MoU outlined a reform agenda focused on the following areas:

(1) fiscal sustainability;
(2) safeguarding financial stability;
(3) growth, competitiveness, investment; and
(4) modern state and public administration structure.

Greece was to cooperate with the COM's Structural Reform Support Service to demonstrate its commitment. The Greek authorities made a commitment to achieve a **primary surplus**[13] **over the medium-term of 3.5 % of GDP,** so as to progressively strengthen the sustainability of public finances (see Table 3).

Table 3: Primary surplus targets and GDP growth path

Year	Primary surplus target	GDP growth
2015	-0.25%	-2.3%
2016	+0.50%	-1.3%
2017	+1.75%	+2.7%
2018	+3.50%	+3.1%

Sources: MoU and EU Debt Sustainability Analysis of July 2015

3. Latest developments under the third adjustment programme

The MoU of August 2015 had foreseen that "*the conditionality will be updated on a quarterly basis, taking into account the progress in reforms achieved over the previous quarter. In each review the specific policy measures and other instruments to achieve these broad objectives outlined here will be fully specified in detail and timeline*". So far four reviews (leading to disbursements and an updated conditionality) have been concluded since August 2015: The first in June 2016, the second in June 2017, the third one in March 2018 and the final one in June 2018. The programme will end in August 2018.

3.1 The first review (concluded in June 2016)

In June 2016, upon the **conclusion of the first review under the third programme,** the COM published a report on the compliance with the MoU and a supplemental Memorandum of Understanding (sMoU 2016). The sMoU 2016 included, *inter alia*, a number of legislative acts that the Greek Parliament had to adopt prior to the disbursement of the second tranche of the ESM programme (p. 20-23).

The ESM authorised in June 2016 the disbursement of the second tranche of EUR 10.3 billion, since the COM compliance report of 9 June 2016 assessed that the Greek parliament had adopted the agreed legislative acts.

[12] In accordance with Art. 7.2 of Regulation (EU) No 472/2013, the Council shall, on a COM proposal, approve the macroeconomic adjustment programme prepared by the Member State requesting financial assistance.
[13] Under the ESM programme, primary surplus target is set in terms of primary balance, excluding one-off costs of bank recapitalisations, Securities Markets Programme and Agreement on Net Financial Assets revenues as well as part of the privatisation proceeds.

The sMoU 2016 updated the policy conditionality set out in the MoU of August 2015, by **including fifteen key deliverables to be delivered between mid-September 2016 and September 2017** (measures nr. 41-56 in the chapter 6 of the compliance report of June 2016). The sMoU 2016 also stated that the Greek authorities committed to ensuring sustainable public finances, by pursuing the fiscal path agreed in August 2015 that was based on primary surplus targets of 0.5, 1.75 and 3.5 percent of GDP in 2016, 2017 and 2018 respectively. Furthermore, the programme definition of the primary balance was adjusted to exclude migration-related expenditure net of EU transfers to the Greek budget, subject to a proper monitoring mechanism and a cap being defined. To meet the fiscal targets, as a prior action the Government would adopt supporting legislation generating savings equivalent to ¾, 2¼ and 3 percent of GDP in 2016, 2017 and 2018 respectively, through parametric measures, including a holistic pension reform.

3.2 The second review (concluded in June 2017)

In December 2016**,** the Eurogroup welcomed the agreement on a 2017 budget which confirmed the primary balance target of 1.75% of GDP and allowed for the rollout of the Guaranteed Minimum Income; it noted that a staff-level agreement should include measures to reach the fiscal target for 2018 (primary balance of 3.5% of GDP), as well as reforms enhancing growth and competitiveness.

The Eurogroup also endorsed **short-term debt relief measures,** which were adopted by the ESM on 23 January 2017. In its "Explainer of the Short term relief measures for Greece", the ESM states that "*When implemented in full, these measures should lead to a cumulative reduction of Greece's debt-to-GDP ratio of 20 percentage points until 2060, according to ESM estimates in a baseline scenario. It is also expected that Greece's gross financing needs will fall by almost five percentage points over the same time horizon*". However, the ESM did not provide detailed information on its analysis, nor on the assumptions of the model or the specific path of the debt indicators.

On 20 February 2017, Greece paid back €2 billion to the ESM following the sale of an asset by one of the banks that took part in the 2015 banking recapitalisation, financed with ESM loans.

The Eurogroup President stated after the February 2017 meeting that the institutions would work with the Greek authorities on the **additional package of structural reforms, looking at the tax system, the pensions system and the labour market regulation**[14]: "*There will be a change in the policy mix, moving away from austerity and putting more emphasis on deep reforms, which has also been a key element for the IMF.*" He also added that there were no liquidity issues in the short run for Greece, "*... but (...) we all feel a sense of urgency because of the key issue of confidence. If you want economic growth in Greece to continue and to start picking up, confidence is a key factor. That confidence has been returning in the last year and needs to strengthen, and we don't want to jeopardize that.*"

[14] On 5 December 2016, Mr Pedro Martins, Professor from the London School of Business and Management in London and a member of the "**Expert Group for the review of the Greek labour market institutions**" presented to the European Parliament the recommendations adopted by the labour market expert group on 27 September 2016.

The Eurogroup meeting of 22 May 2017 concluded that the second review can be closed if an agreement can be reached at the Eurogroup of 15 June 2017 on the topics of debt sustainability and potential debt relief; a participation of the IMF would also depend on the Eurogroup agreements on the issue of debt.

Box 2: ECJ Judgement on collective redundancies

On 21 December 2016 the European Court of Justice (Judgment in Case C-201/15) ruled in respect of a case related to Greek labour legislation that EU law does not, in principle, prevent a Member State **from** opposing **collective redundancies** in certain circumstances in the interests of the protection of workers and of employment. However, under such national legislation, which must in that case seek to reconcile and strike a fair balance between, on the one hand, the protection of workers and of employment and, on the other, employers' freedom of establishment and their freedom to conduct a business, the legal criteria which the competent authority is to apply in order to be able to oppose projected collective redundancies cannot be formulated in general and imprecise terms.

The Eurogroup of 15 June 2017 **finalized its discussion on the second review.** It welcomed the **adoption of the agreed prior** actions for the second review by Greece's parliament. The actions were part of the set of policy reforms forming **a new supplementary Memorandum of Understanding** (sMou 2017) the country had agreed with the institutions (COM, ECB, ESM and IMF) in May 2017, such as pensions, income tax, the labour market as well as the financial and energy sectors. Their purpose is to make Greece's medium-term fiscal strategy more robust and support the growth-friendly rebalancing of the economy.

The Eurogroup of 15 June 2017 also invited Greece, together with the institutions and relevant third parties, **to develop and support a holistic, growth enhancing strategy**. On debt measures, it referred to its approach agreed in May 2016, which would be implemented after successful completion of the programme, if a new debt sustainability analysis were to confirm that such measures are necessary (see Section 4 below). The Eurogroup welcomed Greece's commitment to maintain a **primary surplus of 3.5% of GDP until 2022 and a fiscal path consistent with the European fiscal framework thereafter** (according to COM, "equal to or above but close to 2.0% of GDP" in the period of 2023-2060). Against this background, during the Eurogroup meeting, **the IMF** informed of its intention to recommend to the IMF's Executive Board the approval in principle **of Greece's request for a 14-month standby arrangement**; indeed, the in-principle approval by the IMF was decided in July 2017 (see Box 3). More information on the June 2017 Eurogroup decisions on Greece is available in the Eurogroup statement on that meeting.

On 16 June 2017, the COM published the Compliance Report, linked to the completion of the Second Review. It assessed that "*The Greek authorities have acted to complete the prior actions agreed in the supplemental sMoU 2016 required for the disbursement of the third tranche of the ESM programme (...)* ***Based on the above considerations, the ESM programme is on track, paving the way for the next disbursement to Greece*** *of an amount necessary to cover the outstanding debt service until the expected completion of the next review, and an amount to help clear the sizeable stock of arrears in line with the agreed clearance plan."* The report presents a list of 140 prior actions that have been completed in 2016 and 2017; these concern mainly the adoption of legislation on the following thematic areas: fiscal policies, post-programme fiscal package, tax policies, public revenue reforms, public administration, public financial management, public procurements, social welfare system, financial stability, labour and product markets, education and training, regulated professions, land use incl. cadaster, network industries and privatization.

Between 26 and 27 June 2017, a twelve-member **European Parliament** delegation belonging to the Financial Assistance Working Group conducted a fact-finding mission in Athens. Roberto Gualtieri, mission leader and chair of the FAWG, stated at the end of the meeting: "*The agreement reached at the last Eurogroup is a good step forward. However, more can be done, more has to be done to clarify what will be the required profile of the primary surplus in the coming years. This is directly linked to the details of debt relief measures, on which maximum certainty has to be provided*."

In addition to the Compliance Report of June 2017, two MoU-related documents were published in July 2017: The second Supplemental Memorandum of Understanding (sMoU 2017) updating the policy conditionality set out in the original MoU, and the updated Technical Memorandum of Understanding accompanying the MoU.

On the basis of the Eurogroup agreement of 15 June 2017, the compliance report of 16 June 2017 and the completion of national procedures, the ESM **disbursed** in July 2017 €7.7 billion (€6.9 billion were disbursed for debt servicing needs and €0.8 billion for arrears clearance). With this disbursement, the creditors acknowledged that Greece adopted the agreed prior actions for the second review in the areas of pensions, income tax, labour market as well as the financial and energy sectors. A second disbursement for arrears clearance of €0.8 billion was carried out in October 2017, on the basis of progress regarding arrears clearance. It was the last payment under the second review.

3.3 The third review (concluded in March 2018)

The **September 2017 Eurogroup** discussed the state of play regarding the Greek programme. The Eurogroup President also raised concerns over recent developments relating to legal proceedings against the former President of the Hellenic Statistical Authority (see Box 1 above).
On 22 January 2018, the Eurogroup welcomed the implementation of almost all of the agreed prior actions for the third review. Notably, the Greek authorities have adopted the 2018 State Budget which is compliant with the agreed primary surplus target of 3.5% of GDP. Moreover, the Eurogroup stated that the draft Compliance Report of 20 January 2018 (**finalized in March 2018**) shows that the Greece has **over-achieved the fiscal targets set for 2015-2017**. Furthermore, the Eurogroup mentioned progress regarding **structural reforms in a number of areas (stronger tax collection through the Independent Authority of Public Revenue, enhanced fairness and effectiveness of the social welfare system, opening of regulated professions, product and energy markets and improving the investment licensing system).** It also stated **progress on NPL resolution** through further actions related to the effective operationalization of the out-of-court workout scheme and the start-up of electronic auctions.

Finally, the January 2018 Eurogroup confirmed the start of the technical work by the Eurogroup Working Group on the growth-adjustment mechanism, as part of the medium-term debt relief measures to be implemented, if needed, following the successful conclusion of the programme, in line with the Eurogroup agreement of June 2017; in this context, it invited the European institutions and the IMF to take into account the holistic Greek growth strategy when updating the Debt Sustainability Analysis.

Following the full implementation of the prior actions and the completion of national procedures, the ESM endorsed on 27 March 2018 a supplemental MoU and approved the fourth tranche of €6.7 bn. Immediately after the endorsement, a first disbursement of €5.7 bn was made to cover Greece's debt servicing needs, to allow the further clearance of arrears and to support the build-up of the cash buffer of the Greek State, in order to support Greece's return to the market. The final disbursement (€1 bn) pertaining to the third review was conducted **on 15 June 2018**, which was conditional on a positive reporting by the European Institutions on the clearance of net arrears using also own resources and a confirmation from the European institutions that the unimpeded flow of e-auctions has continued. It brings the total sum of ESM funds disbursed to Greece to €46.9bn.

Further programme documents on the third review are the technical MoU of 22 March 2018, the Asset Development Plan (privatisation programme) of December 2017, and the government pending actions (dated 18 January 2018) under the privatisation programme. Note also that the annex of the Compliance Report on the third review includes an updated Debt Sustainability Analysis (see also section 4 of this briefing).

3.4 The fourth review (concluded in June 2018)

After the **Eurogroup meeting of 21 June 2018**, the President of the Eurogroup **stated** "*today, the institutions confirmed Greece has implemented all the 88 prior actions under the fourth and final review. This shows Greece has successfully completed its ESM programme.*" He added that: (1) there will be no follow-up programme in Greece; (2) altogether, Greece adopted over 450 policy actions during this ESM programme alone; (3) over 240 billion euros were disbursed at low interest rates during the three three fully-fledged programs; (4) the Eurogroup has agreed on a debt relief package to safeguard Greece's debt sustainability; they include substantial upfront measures such as a 10 year extension on EFSF loans and 10 year deferral on interest and amortization. this will allow Greece to return to market financing, issuing bonds across the maturity curve; (5) Greece is committed to preserve its programme achievements, by completing the reforms that were enacted under the programme and continuing to implement further reforms, with the aim of increasing its growth potential; (6) Greece will furthermore be able to retrieve the interest accumulated by the Euro-system on Greek government bonds, by semi-annual payments until 2022, if it implements all key reforms adopted under the ESM programme. The institutions will monitor this via the so–called "Enhanced Surveillance" that will be activated in the next few weeks; (7) the IMF will actively participate in this monitoring; (8) the Eurogroup has mandated the ESM to disburse 15 billion euros to Greece as the last program tranche, subject to the completion of national procedures. Overall, Greece will be leaving the programme with a sizeable cash buffer of 24.1 billion euros covering the sovereign financial needs in the next 24 months. This represents a significant backstop against any foreseeable risk; (9) with all these measures, based on a new Debt Sustainability Analysis *[comment by EGOV: not yet published]* by the institutions, the Greek debt is sustainable going forward.

The specific commitments to ensure the continuity and completion of reforms adopted under the ESM programme, mentioned in the above statement by the President of the Eurogroup are published **here;** they contain measures by mid-2022.

The **Eurogroup statement of 22 June 2018** confirms that the Greek authorities have completed all the agreed prior actions of the final review of the ESM programme and that the ESM programme will end in August 2018. It notes that is important to continue these reforms, which provide the basis for a sustainable growth path with higher employment and job creation. It also welcomes the finalization of a comprehensive growth strategy by the Greek authorities and the "*signature of a 'Cooperation and Support Plan' between the Greek authorities and the European Commission's Structural Reform Support Services, which provides the continued provision of technical assistance to support reform implementation in the coming years.*"

Furthermore, it contains the following messages on debt sustainability (see also section 4 of this briefing):

"The Eurogroup returned to the sustainability of Greek debt on the basis of an updated debt sustainability analysis provided by the European institutions. The implementation of an ambitious growth strategy and of prudent fiscal policies will be the key ingredients for debt sustainability. In this context the Eurogroup welcomes the commitment of Greece to maintain a primary surplus of 3.5% of GDP until 2022 and, thereafter to continue to ensure that its fiscal commitments are in line with the EU fiscal framework. Analysis of the European Commission suggests that this will imply a primary surplus of 2.2% of GDP on average in the period from 2023 to 2060.

The Eurogroup agreed to implement, in addition to the short-term debt measures already in place, the following medium-and long-term debt measures in order to ensure that the agreed GFN objectives are respected also under cautious assumptions.

For the medium term, this includes the following upfront measures:

- *The abolition of the step-up interest rate margin related to the debt buy-back tranche of the 2nd Greek programme as of 2018.*
- *The use of 2014 SMP profits from the ESM segregated account and the restoration of the transfer of ANFA and SMP income equivalent amounts to Greece (as of budget year 2017). The available income equivalent amounts will be transferred to Greece in equal amounts on a semi-annual basis in December and June, starting in 2018 until June 2022, via the ESM segregated account and will be used to reduce gross financing needs or to finance other agreed investments.*

The two measures mentioned above are subject to compliance with policy commitments and monitoring, as outlined below.

- *A further deferral of EFSF interest and amortization by 10 years and an extension of the maximum weighted average maturity (WAM) by 10 years, respecting the programme authorized amount.*

We agreed that based on a debt sustainability analysis to be provided by the European institutions, the Eurogroup will review at the end of the EFSF grace period in 2032, whether additional debt measures are needed to ensure the respect of the agreed GFN targets, provided that the EU fiscal framework is respected, and take appropriate actions, if needed. The Eurogroup will take into account a positive assessment in the post programme surveillance, particularly in the fiscal area and economic reform policies.

In this context, for the long term, the Eurogroup also recalled the May 2016 agreement on a contingency mechanism on debt which could be activated in the case of an unexpectedly more adverse scenario. If activated by the Eurogroup, it could entail measures such as a further re-profiling and capping and deferral of interest payments of the EFSF to the extent needed to meet the GFN benchmarks defined above."

In addition, the Eurogroup statement provides further specifications of the above summarised debriefing by the President of the Eurogroup, including that it welcomes the intention of the COM to activate the Enhanced Surveillance procedure in the coming weeks and also the support for this approach by the Greek authorities. "*The quarterly reports under Enhanced Surveillance will enable closer monitoring of the economic, fiscal and financial situation and the post programme policy commitments and will serve as a basis for the Eurogroup to agree on the return of SMP-ANFA income equivalent amounts and the cancellation of the step-up interest margin on EFSF*."

In its statement of 22 June 2018, the Eurogroup also expressed serious concerns on the proceedings against the former President and senior staff of ELSTAT (see Box 1) and against the members of the Committee of Experts (CoEx) of The Greek privatisation agency TAIPED and reaffirmed its full confidence in the work of the experts, which was also confirmed by the Hellenic Court of Auditors.

Finally, the Eurogroup stated on 22 June 2018 that "*the ESM governing bodies are expected to approve the disbursement of the fifth and last tranche of the ESM programme amounting to EUR 15 bn. Out of this total amount, EUR 5.5 bn will be disbursed to the segregated account, to be used for debt servicing and EUR 9.5 bn will be disbursed to a dedicated account set up to build up cash buffers, to be used for debt service in case of needs. Such an account will be subject to appropriate safeguards and any possible future utilization of its funds for an efficient debt management will be agreed by the Greek authorities with the ESM/European institutions. Overall, Greece will be leaving the programme with a sizeable cash buffer of EUR 24.1 bn covering the sovereign financial needs for around 22 months following the end of the programme in August 2018, which represents a significant backstop against any risks*."

The IMF welcomed the successful implementation of the ESM programme and the further specification of the debt measures given by euro area Member States (see Box 3).

The conclusion of the fourth review, declared by the Eurogroup and its President on 22 June 2018, is based on a detailed COM assessment included in the Compliance Report of 20 June 2018 (published on 22 June 2018) which concludes "*On the basis of this analysis of compliance with the draft supplemental Memorandum of Understanding , all prior actions required to conclude the fourth review have been completed*."

Before the Eurogroup meeting of 21 June 2018, the only available official document was the draft supplemental Memorandum of Understanding (draft sMoU 2018) of 23 May 2018, which contained a number of statements, assessments and updated requests for prior actions in the following areas:

- Restoring fiscal sustainability
- Safeguarding financial stability
- Growth, competitiveness and investment
- A modern State and public administration

On the Growth Strategy for Greece the draft sMoU presents the following information:

*"The Greek authorities have presented a draft **Growth Strategy** to the Eurogroup on 27 April 2018, which sets out key priorities in the areas of **ensuring fiscal sustainability, strengthening the business environment, wage setting framework, ensuring effective functioning of network industries and management of state assets, fostering fair and inclusive growth, and strengthening the financing of growth (financial instruments, development bank, reduction of non-performing loans).** It it also aims at designing sectorial priorities in areas such as transport and logistics, energy, circular economy, agri-food, manufacturing, shipping, pharmaceutical sector, health and environment, tourism and culture. The Growth Strategy builds upon reforms agreed under the programme as well as existing medium-term action plans in key areas. The authorities will consult social partners and other stakeholders in finalising the growth strategy. Where the draft growth strategy remains general in scope, the authorities will use it as a basis for further elaborating and operationalising concrete policy measures, so as to enhance its traction and credibility. The authorities will implement the Strategy with the assistance of a Scientific Development Council including social partners and sectoral business organisations as well as an Advisory Panel of foreign investors.*

The statements on public finances in Greece include the following messages:

*"The general government primary balance in programme terms reached 4.2% of GDP in 2017, significantly outperforming the programme target for three consecutive years. **The outturn of 2017 was***

supported by a large amount of measures, in particular the 2016 pension reform and the reform of indirect taxation, while the yield from the Personal income tax reform was below expectations. An additional boost was provided by sizeable payments of tax arrears through the Voluntary Disclosure Initiative and through social contributions, while most of the overperformance was however accounted for by lower-than-expected spending, in particular on investment."

"The authorities, ***as a prior action, will bring forward the implementation of the personal income tax measures to 2019 if the IMF, in cooperation with the European institutions and the Greek authorities, in the context of the final programme review, considers that, based on a transparent forward looking assessment, a frontloaded implementation is needed in order to reach the agreed 3.5% primary surplus fiscal target in 2019, which should be reached without growth-detrimental measures,*** *and if needed will adopt legislation, in agreement with the institutions, to ensure the exact achievement of the fiscal target,* ***in a manner that is positive for growth****. In addition and based on an assessment and agreement by all institutions and in consultation with the Greek*

Box 3: The role of the IMF in the second and third Greek programmes

The second programme (2012-2015): In February 2017, the IMF published its critical ex-post evaluation. The report draws a number of lessons, including that "*When the political base for reforms is fragile, or insufficient ownership is apparent or likely, program design should be more conservative from the start*".

As regards the **third programme** (2015-2018): While the European Institutions expected that the IMF came on board financially, the IMF was ready to participate financially only if euro area creditors provide further debt-relief:

- The June 2017 Eurogroup welcomed Greece's commitment to maintain a primary surplus of 3.5% of GDP until 2022 and a fiscal path consistent with the European fiscal framework thereafter (according to COM of equal to or above but close to 2.0% of GDP in the period of 2023-2060). Against this background, the Eurogroup announced that the IMF management will shortly recommend that its Executive Board approve in principle a new, 14-month Standby Arrangement for Greece.
- The June 2017 Compliance report on the completion of the second Review of the third programme includes a section on post-programme debt sustainability measures which states inter alia: "*Taking on board the statements of the Eurogroup, the policy package agreed with the Greek authorities in the context of the second review of the ESM programme has been developed on the basis of a shared conditionality among all institutions, which could provide a basis for the IMF to come on board with a new financing programme. This includes policies to enable Greece to achieve and sustain a primary surplus of 3.5% of GDP over the medium-term. To this end, it includes a fiscal package that was enacted on 18 May 2017, but which would enter in to force as of 2019. This provides additional guarantees to the achievement of the fiscal targets in the medium term, in view of divergences in projections between the European institutions and the IMF. Moreover, it helps restructure public finances in a more growth-friendly manner and brings pension expenditure and the tax-free threshold closer to the European average.*"
- The IMF Executive Board approved on 20 July 2017 an "in Principle €1.6 Billion Stand-By Arrangement" for Greece: "*The arrangement, which supports the authorities' economic adjustment program, has been approved in principle, which means it will become effective only after the Fund receives specific and credible assurances from Greece's European partners to ensure debt sustainability, and provided that Greece's economic program remains on track. A second Executive Board decision is needed to make the arrangement effective. The arrangement will expire on August 31, 2018, shortly after the expiration of the European Stability Mechanism program.*"

- However, the IMF managing Director stated on 20 July 2017 on the conditions of the application of the In-principle Agreement: *"As we have said many times, even with full program implementation, Greece will not be able to restore debt sustainability and needs further debt relief from its European partners. A debt strategy anchored in more realistic assumptions needs to be agreed. I expect a plan to restore debt sustainability to be agreed soon between Greece and its European partners. Effectiveness of the new Stand-By Arrangement is contingent on this agreement on debt relief, as well as implementation of the program."*
- The Eurogroup statement of 22 June 2018 includes that the *"IMF management welcomed the successful implementation of the ESM programme and the further specification of the debt measures given today by Member States. Although the Fund's own Stand-By Arrangement (SBA) can no longer be activated, the IMF confirmed its continued involvement in Greece in the post-programme surveillance framework alongside the European Institutions."*

authorities, following a transparent process, the authorities will adopt the necessary secondary legislation for the ***implementation of the expansionary package starting in 2019****.* ***The amount to be implemented will be in line with the institutions' projected over-performance relative to the agreed medium-term targets – on the assumption that the contractionary measures will have already*** *been built into the baseline scenario – in order to ensure the achievement of the targets."*

4. Debt Sustainability Analyses

The Debt Sustainability Analysis (DSA) is the tool used to assess whether a country has the capacity to pay its debt (see Box 4). In the context of lending activities of international institutions:

- Article 13.1 of the ESM Treaty, as well as Article 6 of EU Regulation (EU) No 472/2013 on surveillance of Member States with serious difficulties with respect to financial stability, requires the COM to assess whether the public debt of a Member State requesting financial assistance is sustainable.
- Similarly, Article V.3 of the IMF agreements, which sets the conditions governing the use of IMF resources, requires that the receiving country have the capacity to repay its debt to IMF.

For Greece, DSAs are developed by the COM, by the IMF and by the ECB. The latter requires a positive assessment of debt sustainability as an eligibility criterion for it to buy treasury bonds in the context of *Quantitative Easing*; on 29 May 2017, Mario Draghi stated at the "Monetary dialogue" in ECON that the ECB will decide on the basis of "*the ECB's own assessment of debt sustainability*". Nevertheless, the ECB has not published, so far, its DSA for Greece.

The IMF published its latest DSA in July 2017, while the COM published its latest DSA in March 2018 (as part of the "Compliance Report - Third Review"). They incorporated the estimates and assumptions, as well as the political agreements on the primary surplus targets and on the short-term measures adopted to re-profile Greece's debt with EFSF/ESM available at the time. Nevertheless, **the two DSAs differ substantially**, for both the methodological framework and the assumptions of the models.

According to the Eurogroup statement of 22 June 2018, the European institution provided an updated DSA, which is not yet available. The IMF Director stated *"We will examine the sustainability of Greece's debt in the course of our upcoming Article IV Consultation with Greece, which starts next week"*.

She also noted that the European institutions still have more optimistic macroeconomic assumptions than those of the IMF.

Table 4 presents the **main assumptions** underlying the COM and IMF models. The COM document is much less detailed than the IMF's one, and while the IMF time horizon extends to 2080, the COM's one extends to 2060. As for the GDP growth and the primary surplus, the COM assumptions correspond to the 2017 Autumn forecast, and the IMF assumptions correspond to WEO 2017: both institutions revised recently their estimates (see Table 5).

Among the main differences, one can note that:

- **GDP growth** forecasts: the long term growth is expected to be 1.25% by the COM and 1% by the IMF.
- The **primary surplus**: in June 2017, the Eurogroup welcomed "*the commitment of Greece to maintain a primary surplus of 3.5% of GDP until 2022 and thereafter a fiscal trajectory that is consistent with its commitments under the European fiscal framework, which would be achieved according to the analysis of the European Commission with a primary surplus of equal to or above but close to **2% of GDP** in the period from 2023 to 2060*". The Eurogroup statement of the 22 June states that fiscal commitments in line with the EU fiscal framework will imply a primary surplus of 2.2% of GDP from 2023 to 2060. Nevertheless, the IMF assumes **1.5%** at most after 2022.
- The **spending projections** are affected also by demographic assumptions that impact the pension system: Greek authorities expect lower inflows and higher exits than the IMF, due to much higher mortality rate than the one assumed by the IMF (p.28).
- **Expected privatisation revenues** differ substantially: the IMF expects EUR 2 billion, while the COM estimates them at EUR 17 billion.
- The IMF expects **banks recapitalization** needs to be EUR 10 billion, while the COM foresees no further bank recapitalization. The two assumptions could be judged in the light of the results of the stress test on the four major Greek banks published by the ECB and the liquidity situation on 31 December 2017 (see section 5 below and a specific EGOV paper).

Table 4: Debt Sustainability Analyses - Key assumptions used by COM and IMF

	Year	EU	IMF
GDP real growth (year-on-year)	2017	1.6%	2.1%
	2018	2.5%	2.6%
	2019	2.5%	1.9%
	2020		1.9%
	2021		1.8%
	2022	1.5%	1.0%
	2023	1.5%	2.0%
	2024	1.5%	1.4%
	Long-term	1.25%	1.0%
Primary surplus	2017	1.8%	1.7%

(percentage GDP)	2018	3.5%	2.2%
	2019-2022	3.5%*	3.5%*
	2023	3%	1.5%
	After 2025	2.2%	1.5%
Privatisation revenues	2017-2060	17bn	2bn
Banks' recapitalisation needs	2017-2018	0	10bn euro
Interest rates on Greek Government bonds	2018	3.5%	6%
	2019	4.1%	4.5-6%
	2020	4.4%	
	2030	5.2%	
	2040	5.0%	
	2060	4.5%	

Sources: COM DSA March 2018; 2018, and IMF-DSA July 2017
Note: * agreed at the Eurogroup meeting of 15 June 2017, for 2019-2022, and formalised in the SMoU.

Table 5: Comparison of previous (2017) and latest (2018) estimates and forecasts for GDP growth and primary surplus, COM and IMF

		COM		IMF	
		Autumn 2017	**Spring 2018**	**Autumn 2017**	**Spring 2018**
GDP growth	**2017**	1.6%	1.4%	2.1%	1.4%
	2018	2.5%	1.9%	2.6%	2.0%
	2019	2.5%	2.3%	1.9%	1.8%
Primary surplus	**2017**	1.8%	2.5%	1.7%	3.7%
	2018	3.5%	3.5%	2.2%	2.9%
	2019	3.5%*	3.5%	3.5%*	3.5%

Sources: COM March 2018 DSA/2017 Autumn forecast, COM 2018 Spring forecast, IMF 2017 DSA and IMF 2018 WEO

Both analyses provided a path for the evolution of the two main indicators used to assess the debt sustainability, namely the **Debt-to-GDP** ratio and the **Gross Financing Needs-to-GDP** ratio (see Box 4).

Box 4: The analytical frameworks for Debt Sustainability Analyses

The Debt Sustainability Analysis (DSA) is an analytical framework that helps assessing a country's capacity to service its public debt over time, while financing its policy objectives without compromising its stability.

DSAs are essentially constituted of projections and forecasts for the relevant economic indicators. As for all forecasts and projections, they are based on models and assumptions that vary across institutions and time. The longer the forecast horizon, the greater small differences in the assumptions will impact the outcomes.

The IMF, the COM and the ECB have developed their own methodological frameworks, which include a "**baseline scenario**" as well as "**alternative scenarios**" that are built up under different assumptions regarding macroeconomic developments, financial conditions and policy variables (i.e. budgetary decisions, including expenditures, revenues and privatisations).

* * *

For the assessment of the debt sustainability, **two indicators** are typically used:

- The general government **Debt-to-GDP** ratio, which provides an overall measure of the country's debt compared to the size of its economy;
- The general government **Gross Financing Needs-to-GDP (GFN-to-GDP)**, which quantifies the country's debt payment obligations (principal plus interests, plus new primary deficit), in relation to its economy. This indicator takes into account the debt structure (i.e. maturity, interest rates and interest deferrals).

The two indicators are interrelated, though the GFN-to-GDP ratio seems to better capture the country's short- and medium-term financial stability risks. In fact, low financing needs are generally associated with lower debt rollover and thereby reduced financial stability risks, and *vice versa*.

In practice, it is difficult to establish **numerical thresholds for debt sustainability**. As to the debt-to-GDP ratio, thresholds appear to vary across countries, depending on macroeconomic fundamentals and debt management capacities (e.g. Argentina defaulted when its debt was around 60% of GDP, while Japan continues to sustain debt of more than 200% of GDP). The IMF benchmark is set at 85%.

Regarding the GFN-to-GDP indicator, the IMF guidelines (p. 32) indicate that the ratio would need to remain below 15%-20% to ensure debt sustainability. In its statement of May 2016, the Eurogroup had agreed to assess debt sustainability for Greece in terms of the GFN-to-GDP ratio, which "*should remain below 15% during the post programme period for the medium term, and below 20% of GDP thereafter.*"

In its publication on Greece, however, the IMF states that "*Under the GFN framework, achieving debt sustainability requires maintaining low GFNs 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 ... 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.*"

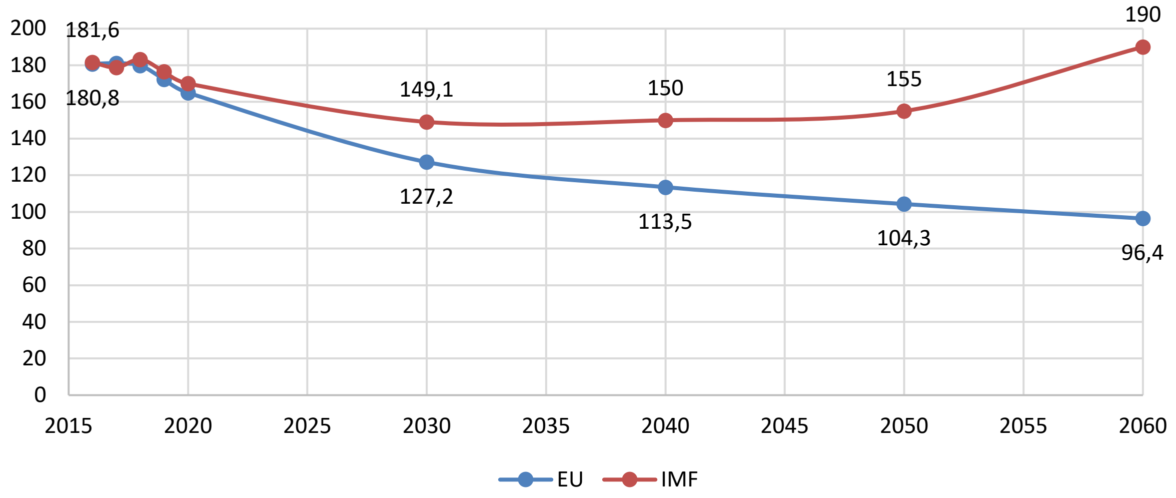
A recent ESM publication presents the results of a study that shows how the combination of the two indicators (debt stock and GNF flow) increases the sovereign risk, measured in terms of sovereign bond yields. It also documents that the sovereign roll-over needs are critical in increasing this risk.

As shown in Figures 3 and 4, based on the latest DSAs, **the EU institutions have a significantly more optimistic baseline scenario than the IMF**. As a result, debt relief needs seem significantly smaller under the EU scenario. These Figures also show that the differences between the EU and the

IMF baseline projections increase over time for both the Debt-to-GDP and the GFN-to GDP indicators, with the IMF analysis being substantially more pessimistic in each case.

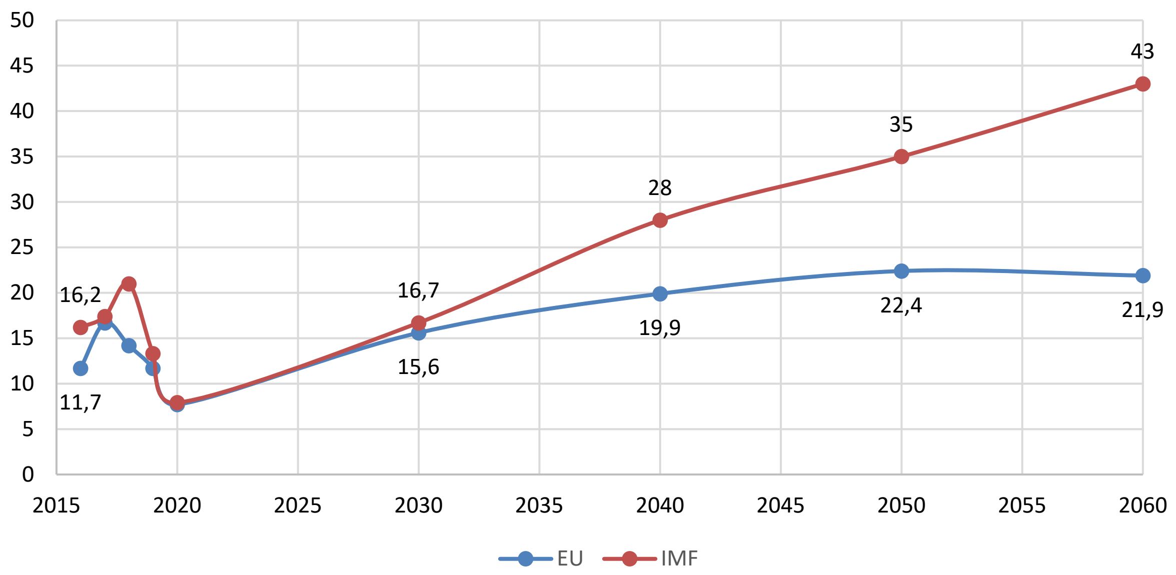
Nevertheless, **both analyses point to serious concerns regarding the sustainability of Greece's public debt over the projection horizon**.

Figure 3: Debt-to-GDP (%)



Source: EGOV based on COM March 2018 DSA and IMF July 2017 DSA

Figure 4: GFN-to-GDP (%)



Source: EGOV based on COM March 2018 DSA and IMF July 2017 DSA

According to the IMF staff, (p.21) "*debt and GFN are projected to reach around 150 and 17 percent of GDP by 2030, respectively, but become explosive thereafter. These unsustainable dynamics reflect the need to gradually replace a large amount of concessional debt with market financing at much higher rates.*"

On 15 June 2017, the Eurogroup stated that "***In order to take into account possible differences between growth assumptions in the DSA and actual growth developments over the post-programme period, the EFSF reprofiling would be recalibrated according to an operational***

***growth-adjustment mechanism to be agreed**. This mechanism will be fully specified as part of the medium-term debt relief measures, following the successful implementation of the ESM programme to make sure the GFN benchmarks (...) are respected and to ensure that the ceiling established by the EFSF Programme Authorized Amount is respected. The Eurogroup mandates the Eurogroup Working Group (EWG) to work further on this as of 2018. At the end of the programme, conditional upon its successful implementation and to the extent necessary, this second set of measures will be implemented. The exact calibration of these measures will be confirmed at the end of the programme by the Eurogroup **on the basis of an updated DSA** in cooperation with the European institutions, so as to ensure debt sustainability and compliance with the European fiscal policy framework. This DSA, while based on cautious assumptions, will also take into account the impact of growth enhancing reforms and investment initiatives."*

The IMF Managing Director stated in a press release of 15 June 2017 that "*release of resources under the IMF* approval in principle *arrangement would be conditional upon Greece's European creditors providing commitments for debt relief sufficient to secure debt sustainability... Furthermore, **assessment of debt sustainability would be guided solely by the IMF's own debt sustainability analysis***". In a previous statement, the IMF had declared that sustainability is expressed in terms of GFN, which should not exceed 20% of GDP.

5. Banking sector and financial stability

Stress test of the four significant Greek banks

On 31 January 2018, the European Banking Authority (EBA) formally launched the 6th round of EU-wide stress tests, carried out at the highest level of consolidation on a sample of large banks that have a minimum of EUR 30 billion in assets and in total cover about 70% of the banking sector in the EU.

The four significant Greek banks (Alpha Bank, Eurobank, National Bank of Greece - NBG - and Piraeus Bank) underwent a stress test following the same methodology and approach as that EU-wide EBA exercise, but with an accelerated timetable in order to complete the test before the end of the European Stability Mechanism's Stability Support Programme for Greece in August.

The ECB published the stress test results for those banks on 5 May 2018. The banks' CET1 capital was under the adverse scenario depleted by 8.56 pp in case of Alpha Bank, 8.68 pp in case of Eurobank, 9.56 pp in case of National Bank of Greece (NBG) and 8.95 pp in case of Piraeus Bank, all of that equivalent to an aggregated loss of €15.5 billion in CET1 capital.

Overall, even though the 2018 stress test scenario resulted in a higher capital depletion than in a similar exercise carried out in 2015, the residual levels of CET1 capital were still stronger, benefitting from significantly higher levels of CET1 available at the starting point and recapitalisations carried out since 2015 (see Table 6 below).

In the 2018 exercise, there was no predetermined pass-or-fail level specified, and the ECB explained that "*any recapitalisation decision will be taken on a case-by-case basis, after assessing each bank's situation in the light of the results of the stress test and any other relevant supervisory information, following a holistic approach*" [own emphasis].

However, if the outcome of the 2018 exercise was to be judged under the rules of the 2015 exercise – which at that time set the threshold that banks were required to maintain a minimum CET1 ratio of 8% under the adverse scenario, well above the regulatory minimum of 4.5% – three of the four banks (Eurobank, NBG, and Piraeus Bank) would have been below the threshold (for more details see a previous EGOV briefing).

Table 6: Results of the 2018 stress test, in comparison to that of 2015, by bank

Bank	CET1 ratio, starting point end-2017	Estimated 2020 CET1 ratio under adverse scenario	Capital depletion under adverse scenario	CET1 ratio, starting point H1 2015	Estimated 2017 CET1 ratio under adverse scenario*	Cumulative stress test impact on CET1 (capital depletion)
	2018 EU-wide stress test exercise			Greek 2015 Comprehensive Assessment		
Alpha Bank	18,25%	9,69%	−8.56 pp	12,7%	5,2%	−7.5 pp
Eurobank	17,93%	6,75%	−8.68 pp**	13,7%	5,3%	−8.4 pp
NBG	16,48%	6,92%	−9.56 pp	11,6%	4,3%	−7.3 pp
Piraeus Bank	14,85%	5,90%	−8.95 pp	10,8%	3.0%	−7.8 pp

* The "Estimated CET1 ratio under adverse scenario" for the 2015 exercise reported here shows the isolated effect of the stress test, not that of the asset quality review that was carried out in parallel. The combined effect resulted in much lower CET1 ratios (Alpha Bank: 2.1%; Eurobank: 1.3%; NBG: -0.2%; Piraeus Bank: -2.3%).

** For Eurobank, the difference between the starting-level CET1 and estimated 2020 CET1 excludes a negative impact of 250 basis points related to the phase-out of grandfathered preference shares subscribed by the Greek State. These preference shares were converted into Tier 2 instruments in January 2018 and, due to the static balance sheet assumption, have not been included in the stress test results.

Supervisory Banking Statistics

Since the second quarter 2016, the ECB publishes aggregate Supervisory Banking Statistics on directly supervised significant banks, among those on the four significant Greek banks; that dataset regularly reports on general statistics, balance sheet composition and profitability, capital adequacy, leverage and asset quality, funding, liquidity, and data quality.

The most recent data published on 30 April 2018 refers to the fourth quarter 2017.

As can be seen in Table 6, at the end of 2017 the four significant banks were **comparatively well capitalised**, their average CET1 ratio exceeded the average of all banks under direct ECB supervision.

However, the Greek banks are burdened by the highest ratio of **NPLs** in the whole Banking Union, their NPL ratio is several times larger than that of other European banks. The Bank of Greece's Banking Supervision Department publishes more details in that respect, in particular a quarterly report on Operational Targets for Non-Performing Exposures, the most recent version of which was published on 6 June 2018. That report indicates that over the past quarter NPL ratios somewhat improved due to write-offs, and NPL coverage ratios improved mainly due to additional provisioning following the introduction of IFRS 9. According to the table of Revised Operational Targets included in that report, banks aim to achieve a Non-Performing Exposure ratio of 43.1% by the end of 2018.

The significant Greek banks were **overall loss-making** in 2017, in particular due to the high level of NPLs, resulting in a negative Return on Equity (see Table 7). As can be seen in Supervisory Banking Statistics Fourth quarter 2017 (see table T02.01.2: Profit and loss figures by country), the required impairments and provisions for NPLs "eat away" a considerable part of the Greek banks' operating income, approximately 60% thereof, as compared to approximately 15% for the average bank under ECB supervision.

Table 7: Key performance indicators of Greek significant banks, compared to all significant banks (for Q4 2017 and Q4 2016)

	Averages of all significant banks		Averages of Greek significant banks	
	Q4 2016	Q4 2017	Q4 2016	Q4 2017
Non-performing loans ratio	6.2%	4.9%	45.9%	45.0%
Return on equity	3.2%	6.0%	-7.9%	-1.4%
CET 1 ratio	13.8%	14.6%	17.0%	17.0%
Total capital ratio	17.3%	18.1%	17.1%	17.1%
Leverage ratio (fully phased-in)	5.0%	5.4%	n.a.	11.3%
Loan-to-deposit ratio	120.0%	116.9%	120.2%	110.7%
Liquidity coverage ratio	136.1%	143.6%	n.a.	"confidential"

Source: Data taken from the ECB Supervisory Banking Statistics Fourth quarter 2017 and Fourth quarter 2016

Finally, the most recent ECB's Supervisory Banking Statistics point to a **problem regarding the Liquidity Coverage Ratio** (LCR): According to Regulation (EU) 2015/61, banks have to maintain an LCR of at least 100 % as from 1 January 2018. At the end of 2017 – so technically the day before the 100% LCR level becomes binding – the four significant banks **still had an average LCR ratio of below 100%.** The exact amount is not disclosed but marked confidential (see table T05.01.2), but it is evident that the aggregate ratio is below 100% (see table T05.02.2).

Greek bond offerings

Following its return to the international bond markets in July 2017, **Greece successfully placed** another oversubscribed issue of **seven-year bonds in February 2018,** raising EUR 3bn at a yield of 3.5 per cent.

Annex 1: Greece - Key macroeconomic indicators

	2013	2014	2015	2016	2017	2018[f]	2019[f]
Real GDP growth – *% change on previous year*							
Greece	-3.2	0.7	-0.3	-0.2	1.4	1.9	2.3
EA	-0.3	1.3	2.1	1.8	2.4	2.3	2.0
GDP per capita – *Purchasing power parities, Euro*							
Greece	19,200	19,800	20,200	19,700	n.a.	n.a.	n.a.
EA	28,800	29,500	30,900	31,000	n.a.	n.a.	n.a.
General government budget balance – *% of GDP*							
Greece	-13.2	-3.6	-5.7	0.6	0.8	0.4	0.2
EA	-3.0	-2.5	-2.0	-1.5	-0.9	-0.7	-0.6
General government structural budget balance* – *% of potential GDP*							
Greece	2.6	2.4	2.2	4.4	4.0	2.5	1.6
EA	-1.3	-0.9	-0.8	-0.8	-0.6	-0.8	-1.1
General government gross debt* – *% of GDP*							
Greece	177.4	178.9	176.8	180.8	178.6	177.8	170.3
EA	93.9	94.2	92.1	91.1	88.8	86.5	84.1
Interests paid on general government debt – *% of GDP*							
Greece	4.0	4.0	3.5	3.2	3.2	3.3	3.5
EA	2.8	2.6	2.3	2.1	2.0	1.8	1.8
Inflation (HICP) – *% change on previous year*							
Greece	-0.9	-1.4	-1.1	0.0	1.1	0.5	1.2
EA	1.4	0.4	0.0	0.2	1.5	1.5	1.6
Unemployment – *% of labour force*							
Greece	27.5	26.5	24.9	23.6	21.5	20.1	18.4
EA	12.0	11.6	10.9	10.0	9.1	8.4	7.9
Youth unemployment – *% of labour force (15 – 24 years)*							
Greece	58.3	52.4	49.8	47.3	43.6	n.a.	n.a.
EA	24.4	23.7	22.3	20.9	18.8	n.a.	n.a.
Current account balance** – *% of GDP*							
Greece	n.a.	-2.1	0.0	-0.7	-0.9	-0.4	-0.5
EA, adjusted	n.a.	2.5	3.2	3.6	3.5	3.4	3.4
Exports – *% change on previous year*							
Greece	1.5	7.7	3.1	-1.8	6.8	5.7	4.6
EA	2.1	4.7	6.4	3.3	5.3	5.4	4.4
Imports – *% change on previous year*							
Greece	-2.4	7.7	0.4	0.3	7.2	5.5	4.4
EA	1.3	4.9	6.7	4.6	4.3	5.2	4.5
Total investments – *% change on previous year*							
Greece	-8.4	-4.7	-0.3	1.6	9.6	10.3	12.1
EA	-2.5	1.8	3.3	4.6	3.2	4.2	3.4
Total investments – *% of GDP*							
Greece	12.2	11.5	11.5	11.7	12.6	n.a.	n.a.
EA	19.6	19.7	19.7	20.3	20.5	n.a.	n.a.
General government investments – *% of GDP*							
Greece	3.4	3.7	3.9	3.5	4.6	4.0	4.2
EA	2.8	2.7	2.7	2.6	2.6	2.6	2.7
Total final consumption expenditure – *% change on previous year*							
Greece	-3.5	0.2	-0.1	-0.3	-0.2	n.a.	n.a.
EA	-0.4	0.8	1.7	1.9	1.5	n.a.	n.a.
Households final consumption expenditure – *% change on previous year*							
Greece	-2.8	0.6	-0.5	-0.1	0.1	n.a.	n.a.
EA	-0.8	0.8	1.8	2.0	1.6	n.a.	n.a.
Income Inequality (Gini Coefficient) – *Scale 0-100: 0 = total income equality; 100 = total income inequality*							
Greece	34.4	34.5	34.2	34.3	n.a.	n.a.	n.a.
EA	30.6	30.9	30.8	30.7	n.a.	n.a.	n.a.
Unit labour cost – nominal – *% change on previous year*							
Greece	-6.9	-1.8	-1.3	-0.2	0.9	0.6	0.8
EA	1.2	0.6	0.4	0.7	0.8	1.4	1.0

Sources: Data are extracted from Eurostat on 12/06/2018 except for: (*) COM/AMECO database; forecast data (f) and (**) from COM Spring 2018 forecasts.

Notes: The gross debt is non-consolidated for intergovernmental loans; Euro Area composition is EA18 until 2014 and then EA19 ; the current-account balance is based on National Accounts (ESA 2010).

Annex 2: Greece's Macroeconomic Imbalance Scoreboard

Indicators			Threshold	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
External imbalances and competitiveness	**Current account balance as % of GDP**	**3 year average**	-4/+6%	-13.9	-14.2	-12.9	-11.2	-8.4	-5.3	-2.5	-1.3	-1.0	-0.7
		Year value	-	-15.1	-12.3	-11.4	-10.0	-3.8	-2.0	-1.6	-0.2	-1.1	-0.8
	Net international investment position as % of GDP		-35%	-75.8	-87.5	-99.0	-88.8	-115.9	-130.4	-131.9	-136.1	-139.3	-140.9
	Real effective exchange rate - 42 trading partners	**% change (3 years)**	± 5% EA	2.4	4.8	2.8	1.8	-5.0	-4.4	-5.6	-5.6	-3.8	-2.4
		% change y-o-y	-	1.6	2.4	-1.2	0.6	-4.4	-0.6	-0.6	-4.5	1.3	0.8
	Share of world exports	**% change (5 years)**	-6%	4.8	-10.3	-14.2	-15.7	-25.2	-25.6	-18.4	-21.0	-19.1	-9.8
		% change y-o-y		1.2	-5.7	-11.5	-6.7	-5.1	0.7	3.4	-14.3	-4.5	5.8
	Nominal unit labour cost (2010=100), based on persons	**% change (3 years)**	9% EA	7.4	15.8	14.0	6.8^{p}	-2.3^{p}	-10.0^{p}	-10.4^{p}	-9.8^{p}	-3.3^{p}	-0.6^{p}
		% change y-o-y	-	5.3	7.1	1.0	-1.4^{p}	-2.0^{p}	-6.9^{p}	-1.8^{p}	-1.3^{p}	-0.2^{p}	0.9^{p}
Internal imbalances	**House price index (2015=100), deflated**, % change y-o-y		6%	-2.5^{e}	-4.7^{e}	-8.0^{e}	-7.5^{e}	-12.1^{e}	-9.1^{e}	-5.1^{e}	-3.6^{e}	-1.5^{e}	-2.2^{e}
	Private sector credit flow as % of GDP		14%	15.5	2.2	5.5	-6.5^{p}	-5.9^{p}	-6.4^{p}	-2.7^{p}	-3.3^{p}	-1.7^{p}	n.a.
	Private sector debt as % of GDP		133%	113.0	116.5	128.1	130.2^{p}	131.5^{p}	129.1^{p}	128.0^{p}	126.1^{p}	124.7^{p}	n.a.
	General government gross debt (EDP) as % of GDP		60%	109.4	126.7	146.2	172.1	159.6	177.4	178.9	176.8	180.8	178.6
	Unemployment rate	**3 year average**	10%	8.4	8.6	10.0	13.4	18.4	23.3	26.2	26.3	25.0	23.3
		Year value	-	7.8	9.6	12.7	17.9	24.5	27.5	26.5	24.9	23.6	21.5
	Total Financial Sector Liabilities, non-consolidated % change y-o-y,		16.5%	4.4	10.1	8.3	-3.7	-2.6	-17.2	-8.4	15.6	-16.6	n.a.
Employment indicators	**Activity rate - % of total population aged 15-64,** 3 year change in p.p.		-0.2 pp	0.3	0.7^{b}	1.3	0.6	0.1b	-0.3	0.1	0.3	0.7	0.9
	Long term unemployment rate - % of active population aged 15-74, 3 year change in p.p.		0.5 pp	-1.5	-1.0^{b}	1.5	5.1	10.6	12.8	10.7	3.7	-1.5	-3.9
	Youth unemployment rate - % of active population aged 15-24, 3 year change		2.0 pp	-3.9	0.7	10.3	22.8	29.6	25.3	7.7	-5.5	-11.0	-8.8

Source: Eurostat MIP Scoreboard indicators, updated on 12/06/2018. Notes: ^{p} (Provisional); ^{e} (Estimated); b (Break in time series); see also MIP procedure.

Indicators above/ below the thresholds

Annex 3: Greece's progress towards EU2020 targets

Indicator	Greece			EU28	
Employment rate (% of population aged 20-64)	**70**		**Target 2020**	**75**	
	57.8		2017	72.2	
	56.2		2016	71.1	
	54.9		2015	70.1	
	53.3		2014	69.2	
Expenditure on R&D (% of GDP)	**1.21**		**Target 2020**	**3**	
	n.a.		2017	n.a.	
	1.01		2016	2.03	
	0.97		2015	2.04	
	0.83		2014	2.03	
Greenhouse gas emission[1]	**Total n.c.s.t.[1]** (Index 1990 = 100)	**Non-ETS 96[1]** (Index 2005 = 100)	**Target 2020**	**Total 80** (Index 1990 = 100)	
	n.a.	n.a.	2017	n.a.	
	89.69	74.30	2016	77.64	
	93.00	72.70	2015	77.99	
	96.54	71.00	2014	77.41	
Share of renewable energy (%)	**18[2]**		**Target 2020**	**20**	
	n.a.		2017	n.a.	
	15.2		2016	17.0	
	15.4		2015	16.7	
	15.3		2014	16.1	
Primary energy consumption (million tonnes of oil equivalent-TOE)	**27.1**		**Target 2020**	**1,483**	
	n.a.		2017	n.a.	
	23.5		2016	1542.7	
	23.7		2015	1531.9	
	23.7		2014	1508.6	
Early school leaving (% of population aged 18-24)	**9.7**		**Target 2020**	**10**	
	6.0		2017	10.6	
	6.2		2016	10.7	
	7.9		2015	11.0	
	9.0		2014	11.2	
Tertiary educational attainment (% of population aged 30-34)	**32**		**Target 2020**	**40**	
	43.7		2017	39.9	
	42.7		2016	39.1	
	40.4		2015	38.7	
	37.2		2014	37.9	
Population at risk of poverty or social exclusion (thousand - % of total population)	**Reduction by 450 thousand**	**n.c.s.t.**	**Target 2020**	**Reduction by 20 million**	**n.c.s.t.**
	n.a.	n.a.	2017	n.a.	n.a.
	3,789	35.6	2016	118,036	23.5
	3,829	35.7	2015	119,049	23.8
	3,885	36.0	2014	122,026	24.4

Source: Eurostat (data extracted on 12/06/2018).
Note: (1) The Effort Sharing Decision (2009/406/EC) sets country-specific targets for non-ETS emissions only and an EU target for ETS-emissions. For Greece, non-ETS emissions will be reduced by 4% compared to 2005 levels. For the EU, ETS-emissions will be reduced by 21% compared to 2005 level and overall emissions by 20% compared to 1990 levels. (2) Greece committed to a target of 18% by 2020, increased to 20%, by national legislation (Law 3851/2010).
n.c.s.t. = "no country specific target"; n.a = "not available".