

The Greek Economy: 2018 Mid-Year Review

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1. Introduction

This note reviews latest developments and prospects of the Greek economy in 2018. It includes analysis on the outcome of 2017 and Q1 2018 GDP and main features of the macroeconomy, a numerical exercise foreseeing the course of GDP and its components in 2018, review of fiscal economics -including debt sustainability analysis and the cash buffer to assist Greece's exit in the markets-, developments in the banking sector, the modalities of the post-programme regime of the Greek economy and of debt relief, progress on the structural reform and privatizations agenda, and a review of the international environment in which the Greek economy attempts to recover.

The numerical exercise for real GDP growth in Greece in 2018 quantifies trends in components of GDP, with economic rationale offered for each; it takes account of only the expected impact of developments and measures announced so far and of latest developments, both domestic as well as the Eurozone outlook. Under the main scenario, real growth is estimated at 1.8% for 2018. Under an alternative scenario of better developments in country risk and thus investment, growth can move to the area of 2%. The estimate is subject to a number of assumptions, the most important of which is the positive assessment by markets of the June 21st Eurogroup Decision on the post- programme regime of the Greek economy and the debt relief package and consistency in the implementation of structural reforms. Growth is expected to be driven by investments and exports (+9.9% and +7.8% YoY growth rates respectively), while private consumption is expected to stagnate (+0.1% YoY) on the back of a fiscal drag and continuous dissaving by households. The unemployment rate will continue its gradual downward path (20%) and inflation pressures will remain subdued (+0.7% YoY). Significant uncertainty to the growth outlook remains.

In 2017, real GDP in Greece grew by 1.4% YoY, driven by exports and a good Q4 reading in investment. This performance, coming after a mild contraction of -0.2% and -0.3% in 2016 and 2015 respectively, was the first step in the direction of economic recovery. Yet, it was the lowest among all EU-28, pointing to still relatively weak economic dynamics. Growth accelerated to 2.3 YoY% and 0.8 QoQ% in 2018Q1, driven exclusively by the external sector (exports+7.6 YoY%, imports -2.8 YoY%), while investment and private consumption decreased by -12.1 YoY% and -0.4 YoY% respectively. This is the first time Greece achieves 5 consecutive quarters with positive GDP change since 2006. However, the challenge to enter a relatively steep growth path remains.

The latest releases of hard and soft data point to an ongoing improvement in domestic economic activity in 2018Q2 but with some signs of moderation. The unemployment rate stood at 20.2% in April 2018, remaining on a downward path trajectory for a 50th month in a row (-7.7 ppts cumulatively since July 2013). The average inflation rate (HICP, YoY%) decelerated to 0.5% in 2018H1, from 1.4% in 2017H1, while HICP with constant taxes stood at 0.4%, revealing that the base effect from increased indirect taxation has faded away. Nevertheless, upside risks exist for the 2018 inflation rate due to the increase in oil prices (2018H1 average annual change of +40.1%). The average Economic Sentiment Indicator (ESI) in 2018Q2 was higher both relative to 2018Q1 and 2017Q2, with all the other sub-indices of ESI improved except in industry. Finally, PMI manufacturing, despite its drop relative to 2018Q1, it remained above the 50 units boom-bust threshold for a 13th month in a row in June 2018.

On the fiscal front, the primary surplus for the first six months of 2018 was at €0.62 bn, outperforming the -revised downwards- 2018 Budget forecast. The achievement of the target for a primary surplus of 3.5% of GDP for 2018 will be conditional on the significant improvement of the domestic economic activity, the smooth implementation of the post – programme relation with the country's official creditors, and the continuation of the fiscal structural reforms aiming to increase the sustainability of the pensions system, the broadening of the tax base and the fight against tax evasion. The 21 June 2018 Eurogroup decision on debt relief measures supports the sustainability of public debt in the medium and long term but under a very strict framework, based mainly on the achievement of a growth rate above 1.3%, primary surpluses of 2.2% of GDP between 2013-2060, and a benign international environment that will permit market access at rates not above 4.9% on average for the aforementioned period. At the same time, the medium and long-term sustainability of debt requires the continuation of the reform implementation process in the upcoming period and the avoidance of any turning backs in the

reforms already implemented between 2010-2018. This holds, not only due to the policy conditionality on certain debt relief measures, but also because these reforms will significantly contribute to the improvement of the country's productivity, the efficiency of its tax-related policies and of its fiscal management in general. Deviations from the above conditions might bring about risks for the return of public debt to unsustainable levels. Finally, we show that the cash buffer of €24.1bn aiming to support Greece 's exit to markets suffices for covering financing needs for -at least- the next 22 months after the end of the programme and, under certain conditions, until mid-2022.

The Greek banking system continued in Q1 2018 the pattern of pre-tax profitability that started in 2016. However, according to EBA, the NPEs stock of the Greek banking system stood at 41.2% of total loans in Q4 2017, remaining the highest among EU countries. Greek systemic banks have committed to the SSM for a 38% reduction of their NPE stock by end-2019. According to most recent BoG data, the total stock of NPEs was below the respective SSM targets in Q1:2018 (in levels) mainly as a result of the reduction in corporate NPEs. The legislation passed in Parliament recently in the context of the 4th review (amendments in the Law 3869/2010 aiming to expose strategic defaulters and to the Out of Court Workout) will further contribute on the NPEs reduction.

The Eurogroup of 22 June agreement on the successful completion of the 4th ESM programme review, laid out the parameters that will define the medium and – to some extent – the long term economic prospects of Greece. On public debt, the Eurogroup agreed on a three medium-term debt relief measures, out of which one will be implemented unconditionally while the other two will be subject to specific conditionality. For the longer-term, European partners committed to granting further debt relief should this be deemed necessary. Once the current programme expires in August 2018, Greece will enter into Enhanced Post Programme Surveillance under EU Regulation 472/2013, which

foresees quarterly reviews by the competent committees of the institutions (EC/ECB/ESM/IMF). These reviews, which will be made public, 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 up to 2022. The IMF will not activate its Stand-By Arrangement for Greece but will remain engaged in the country's post programme monitoring and is expected to release its DSA in the coming weeks in the context of the Article IV consultation. Meanwhile, Greece will be required to continue its reform efforts and carry out a number of actions pertaining to fiscal and structural reforms, social welfare, financial stability, labour and product markets, privatizations and public administration.

Regarding the external environment, the risks surrounding Greece's growth outlook are assessed as broadly balanced. On the positive side, the prevailing positive cyclical momentum of the euro area could lead to stronger growth in the near term. On the negative side, downside risks continue to relate primarily to global factors, including rising protectionism and developments in financial markets. Trade protectionism has already begun to exert a negative impact on confidence and a further escalation could weigh on investment and employment growth, hurting global growth more significantly. The US administration has already implemented several protectionist measures and is considering imposing even broader ones in the coming months, including an extra 20% tariff on cars imported from the EU, a key sector for a number of major euro area economies. In addition, in spite of the government formation in Italy, political uncertainty remains high and the risk of a renewed sell-off in Italian bonds in the coming months that could re-ignite investor concerns about EU peripheral assets, including Greek assets, cannot be ruled out. Meanwhile, just a few months before the 29th May 2019 Brexit day, negotiations around the UK's departure from the European Union are progressing too slowly, fueling worries over a no-deal scenario.

2. The Picture of the Macroeconomy: 2017 Performance, Legacy issues and Q1 2018 Trends

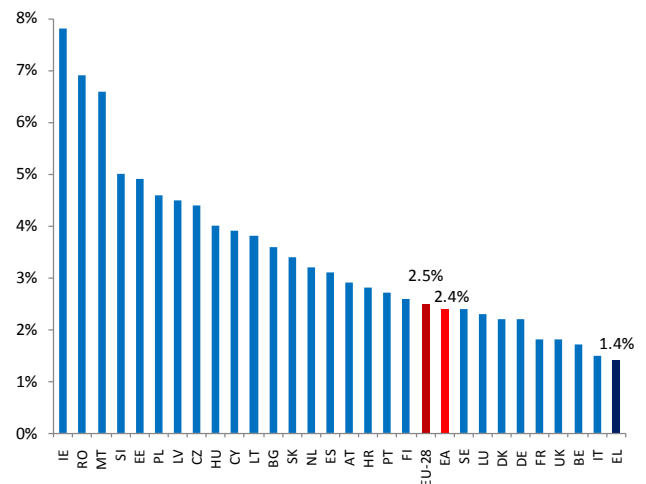
Written by Stylianos G. Gogos

2.1. Greece's Macroeconomic Performance in 2017: A Mild Recovery

Evolution of GDP: *best growth performance in a decade, yet the weakest in EU-28*

Real GDP in Greece, after a mild contraction of -0.2% and -0.3% in 2016 and 2015 respectively, increased by 1.4% in 2017, marking Greece's best economic growth performance in a decade. Undoubtedly, 2017 GDP performance was a first step in the direction of Greece entering a recovery path and leaving its 10-year deep and sustained economic crisis behind. However, as the data point out, the dynamics of the aggregate economic activity are still relatively weak. The growth rate of real GDP in Greece in 2017 was the lowest among all EU-28 member countries (-1.0 pts lower than the EA average, see Figure 1).

Figure 1: Real GDP Growth Rate in 2017, Greece vs EU-28 (%)



Source: Eurostat, Eurobank Research

Demand Side: *Investment supports growth, consumption remains stagnant and imports counterbalance exports*

Looking at the data from the expenditure side of the economy, investment was the main driver behind the expansion of Greece's real output by 1.4% in 2017. As Table 1 depicts, gross fixed capital formation, i.e.

fixed investment, increased by 9.6% (from 1.6% in 2016), contributing 1.1 percentage points (ppts) to the annual growth rate. Inventory investment and private consumption followed with a positive contribution of 0.7 and 0.1 ppts respectively, while government consumption had a negative contribution of -0.2 ppts.

Exports of goods and services increased by 6.8% in 2017, from a contraction of -1.8% in 2016. Exports of services, driven mainly by tourism and transportation, contributed 3.7 ppts to the annual percentage change of total exports while goods contributed 3.0 ppts. However, imports also increased at a quicker rate of 7.2%, from 0.3% in 2016. The component of goods contributed the largest part of the increase, 5.8 ppts, while the component of services contributed 1.9 ppts. All in, net exports reduced Greece's real GDP growth rate by -0.3 ppts in 2017, from -0.6 ppts in 2016.

Table 1: Real GDP in Greece – Expenditure Side Approach (annual percentage change (YoY%) and contribution of the demand side components in percentage points (ppts))

	2016		2017	
	YoY%	cppts*	YoY%	cppts*
GDP	-0.2		1.4	
Private Consumption	0.0	0.0	0.1	0.1
Government Consumption	-1.5	-0.3	-1.1	-0.2
Total Investment**	7.4	0.8	15.7	1.8
Fixed Investment	1.6	0.2	9.6	1.1
Exports	-1.8	-0.6	6.8	2.1
Imports	0.3	-0.1	7.2	-2.4
Domestic Demand		0.5		1.7
Net Exports		-0.6		-0.3

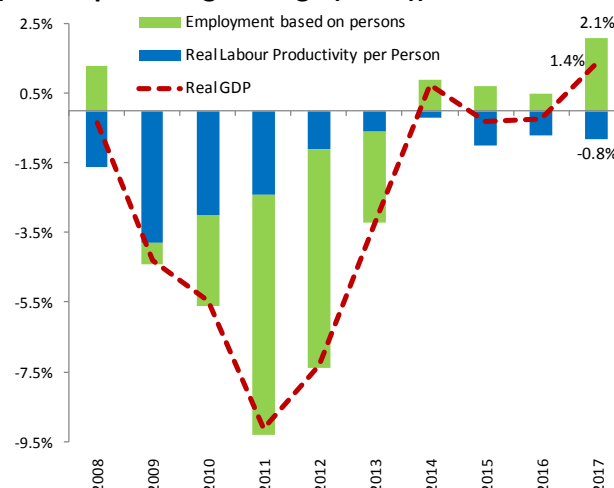
Source: ELSTAT, Eurobank Research

Note: * contribution to real GDP growth in percentage points (ppts), ** total investment (gross capital formation) includes fixed investment and inventory investment

Supply Side: Employment's increase counterbalanced weak productivity; industry the main contributor to value-added growth for a second year in a row

From a supply side perspective, employment – in terms of number of persons - had a positive contribution to Greece's real GDP growth for a 4th year in a row in 2017. According to national accounts data, employment grew by 2.1% in 2017, from 0.5% in 2016. The respective figures in terms of total hours worked were 1.5% and 0.4%. Hence, hours worked per employee decreased on an annual basis by -0.6% in 2017, from -0.1% in 2016.¹

Figure 2: Employment Based on Persons, Real Labour Productivity per Person and Real GDP (annual percentage change (YoY%))



Source: Eurostat, Eurobank Research

The aforementioned annual increase in employment did not translate into equal or higher real GDP growth due to the weak performance of labour productivity.² As Figure 2 presents, the annual percentage change of labour productivity remained on a negative territory for the 10th consecutive year in 2017. More specifically, real output per employee decreased on an annual basis by -0.8%, from -0.7% in

¹ The growth rate of hours of work per employee is approximately equal (for relatively small growth rates) to the difference of the respective growth rates of total hours worked and employment.

² As a reminder, it holds as an identity that: Real GDP \equiv Real Labour Productivity * Employment

Hence, the growth rate of real GDP is approximately equal (for relatively small growth rates) to the sum of the respective growth rates of real labour productivity and employment.

2016. It is worth pointing out that the cumulative drop of labour productivity in the period 2007-2017 was -13.8% (or -10.3% in terms of real output per hour worked). As a result, a considerable proportion of the respective decrease in real GDP (-25.4%) is attributed to the drop of labour productivity. Economically, this is the result of disinvestment that caused a deterioration of the capital-to-worker ratio (taking also into account the drop in the degree of utilization of real capital stock), possibly augmented by negative developments in the technological content of production. Hence, the return of the Greek economy to the pre-crisis (2007) real GDP level requires the implementation of policies that support, not only an increase in employment, but also a boost in labour productivity.

At a sectoral level, Greece's real output expansion by 1.4% in 2017 was mainly supported by the performance in the sectors of industry (except construction), trade, transportation, tourism and arts, entertainment and recreation. In Table 2 we present the contribution of 10 major sectors of economic activity (statistical classification of economic activities in the European Community, Nace Rev 2.) to the annual percentage change of total gross value added (TGVA) produced in Greece for the years 2016 and 2017.

According to this classification, the industrial sector in Greece – 12.9% of TGVA - had the highest contribution to the annual increase of TGVA in 2017 (0.8 ppts, from 0.6 ppts in 2016). Trade, transportation and tourism – 21.1% of TGVA – followed with a contribution of 0.5 ppts (-1.3 ppts in 2016). The sector of arts, entertainment and recreation, repair of household goods and other services – 4.6% of TGVA - exhibited the highest annual increase (9.2 %) in terms of GVA produced. Its contribution to the annual percentage change of TGVA was 0.4 ppts. Finally, the sectors of financial and insurance activities, construction, public and information and communication had a negative contribution to the annual percentage change of TGVA of -0.3, -0.2, -0.2 and -0.1 ppts respectively.

Table 2: Real GDP in Greece – Production Side Approach (annual percentage change (YoY%) and contribution of the NACE Rev 2. A10 Sectors in percentage points (ppts))

Sectors*	2016		2017	
	YoY%	cppts**	YoY%	cppts**
A	-8.8	-0.4	1.3	0.1
B-E	5.4	0.6	6.3	0.8
F	24.3	0.6	-5.6	-0.2
G-I	-6.1	-1.3	2.3	0.5
J	-3.0	-0.1	-2.2	-0.1
K	-1.5	-0.1	-7.3	-0.3
L	-0.1	0.0	0.2	0.0
M-N	-2.3	-0.1	4.4	0.2
O-Q	-1.3	-0.3	-0.7	-0.2
R-U	-1.5	-0.1	9.2	0.4
Total GVA	-1.2		1.4	
Taxes on Products	7.8		1.2	
Subsidies on Products	14.5		1.7	
GDP	-0.2		1.4	

Source: ELSTAT, Eurobank Research

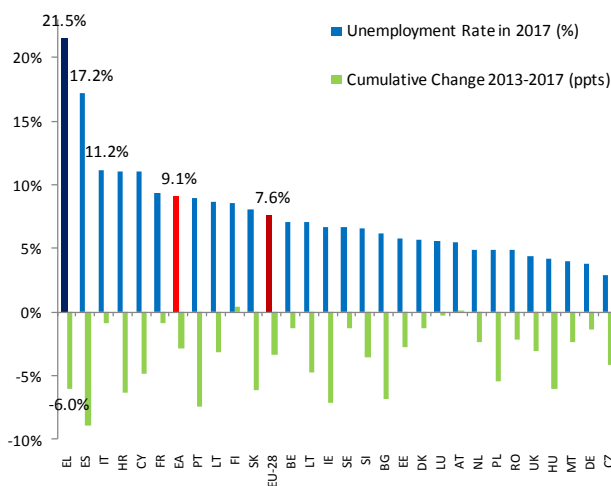
Note: * **A** Agriculture, forestry and fishing, **B-E** Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; water supply; sewerage, waste management and remediation activities, **F** Construction, **G-I** Wholesale and retail trade; repair of motor vehicles and motorcycles; transportation and storage; accommodation and food service activities, **J** Information and communication, **K** Financial and insurance activities, **L** Real estate activities, **M-N** Professional, scientific and technical activities; administrative and support service activities, **O-Q** Public administration and defence; compulsory social security; education; human health and social work activities and **R-U** Arts, entertainment and recreation, repair of household goods and other services, ** contribution to the real growth of total GVA in ppts

Labour market: Unemployment rate drops for a 4th year in a row, yet it remains by far the largest in EU-28

Based on labour force survey data, the unemployment rate in Greece remained on a downward path trajectory for a 4th year in a row in

2017, dropping to 21.5% (year average), from 23.5% in 2016. Moreover, the cumulative change relative to its historical high of 27.5% in 2013 stood at -6.0 pts. As Figure 3 presents, despite the steady decline for 4 consecutive years, the ratio of the unemployed over the labour force in Greece remained by far the largest in EU-28 (+13.9 and +12.4 pts higher relative to the respective figures in EU-28 and EA). Under the recorded average rate of decrease, i.e. -1.5 pts per annum (2013-2017), it will take approximately 9 years for Greece to reach the current level of the unemployment rate in EU-28. However, even that scenario sounds optimistic given the high level of structural unemployment (15.2% in 2017).

Figure 3: Unemployment Rate in 2017, Greece vs EU-28 (%)



Source: Eurostat, Eurobank Research

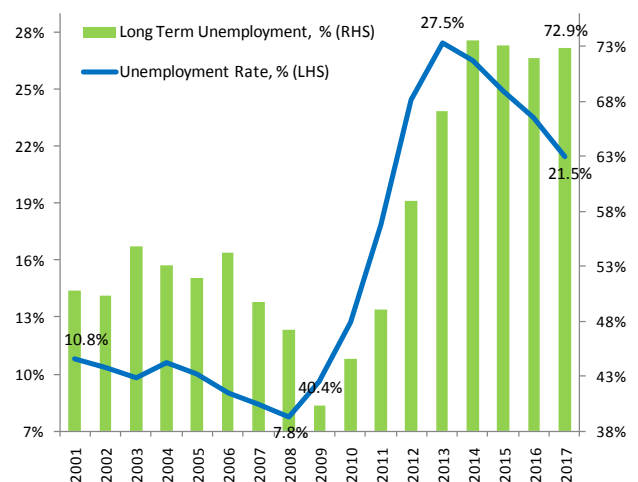
The number of people employed (15 years and over) increased on an annual basis by 2.2% or 79.1 k in 2017, from 1.7% or 62.9 k in 2016.³ On the other hand, unemployment decreased by -9.2% or -103.9 k. Taking into account the aforementioned annual changes, the labour force (employed + unemployed) decreased by -0.5% or -24.8 k people in 2017. Notice that relative to 2013 (historical high for the unemployment rate), employment has increased by

³ Data for employment based on labour force surveys do not match up exactly with the respective series based on national accounts. According to the data from national accounts, the bulk of the expansion of employment in 2017 (over ¾ of the total increase) came from the sectors of trade, transport, tourism, industry and the public sector.

6.8% or 239.5 k people, unemployment has dropped by -22.8% or -303.3 k and the labour force has decreased by -1.3% or -63.8 k. The aforementioned cumulative increase in employment mainly came from the sectors of tourism +91.5 k people, public +73.4 k, trade +48.7 k and manufacturing +33.5 k. Moreover, the 70.8% of the total increase in employment was absorbed in full time jobs and the remaining 29.2% in part time jobs. The share of part time jobs over total employment stood at 9.8% in 2017, marginally lower relative to 2016 (9.9%), however higher by 4.2 and 5.8 pts relative to 2007 and 2001 respectively.

Finally, the continued fall of the labour force (2009-2017 cumulative drop of -261.0 k people) can be explained, at least partially, by the “brain drain” phenomenon. Many workers from Greece – especially younger ones, often with higher education profiles (high human capital stock) - decided to leave the country in order to pursue better work opportunities abroad. Others abandoned the labour force discouraged by the difficulties in finding a job. The brain drain phenomenon, the still high long-term unemployment (72.9% in 2017, see Figure 4), along with the ageing population can cause serious negative effects to Greece’s potential real GDP growth rate in the long-run.

Figure 4: Unemployment Rate and Long Term Unemployment (%)

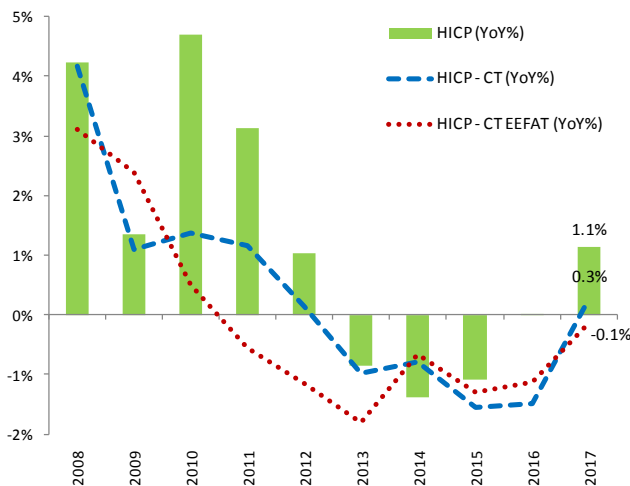


Source: ELSTAT, Eurobank Research

Prices: Inflation picks up due to increases in indirect taxation and energy prices

After 3 years of deflation and 1 year of flat prices (2012-2016 cumulative change of the HICP: -3.3%), the annual percentage change of the HICP in Greece increased to 1.1% in 2017, from 0.0% in the previous year.⁴ However, as Figure 5 presents, the rebound in the general level of prices - measured by the HICP or the national CPI - did not result from a strong rebound in demand or in wage growth. The inflation rate based on the HICP with constant taxes (HICP-CT) stood at 0.3% in 2017. Hence, the largest part of the increase in HICP is attributed to indirect taxation. Furthermore, the annual percentage change of the HICP-CT excluding energy, food, alcohol and tobacco (HICP-CT EEFAT), remained on a negative territory for the 7th year in a row (-0.1% in 2017). To wit, the evolution of indirect taxes and of the prices in energy, food, alcohol and tobacco explain most of the increase in inflation in 2017.

Figure 5: HICP Inflation Rate (HICP YoY%)



Source: Eurostat, Eurobank Research

Note: as HICP-CT we define the overall HICP index with constant taxes. As HICP-CT EEFAT we define the overall HICP-CT index excluding energy, food, alcohol and tobacco

Given the relatively high output gap of the Greek economy (-7.7% of its potential GDP in 2017), which is reflected in the level of the unemployment rate

⁴ The annual percentage change of the national CPI was 1.1% in 2017, the same as that of the HICP, from -0.8% in 2016 (2012-2016 cumulative change of the national CPI: -4.7%).

and in the level of utilization of its capital stock, pressures in core inflation in the near future are expected to remain subdued.

2.2. Greece's Macroeconomic Performance in 2018H1

2018Q1 GDP: growth accelerates due to net exports, but investment and private consumption fall

According to ELSTAT's 2018Q1 quarterly national accounts (provisional data, published in June 4th 2018), the growth rate of real GDP in Greece accelerated to 2.3 YoY% and 0.8 QoQ% in 2018Q1, from 2.0 YoY% and 0.2 QoQ% in the previous quarter (see Table 3). As Figure 6 presents, Greece's annual real GDP growth rate in 2018Q1 was marginally lower than the respective rates in EA (2.5 YoY%) and EU-28 (2.4 YoY%). On a quarterly basis, nevertheless, it was 2 times higher (0.4 QoQ% for EA and EU-28).

The main driver of this economic performance was net exports. Exports of goods and services increased by 7.6 YoY% and 1.4 QoQ% in 2018Q1, while imports declined by -2.8 YoY% and -2.7 QoQ%. Based on the respective changes in the sectors of goods and services, the decrease of the deficit in the balance of goods counterbalanced the decrease of the surplus in the balance of services. On the other hand, domestic demand, i.e. total consumption plus total investment, had a negative contribution to the annual real GDP growth, with investment and private consumption decreasing by -12.1 YoY% and -0.4 YoY% respectively (public consumption increased by 0.3 YoY%).

The annual drop of imports is mostly reflected in the respective decrease of gross fixed capital formation. This argument stands at three facts: (i) based on ELSTAT's 2018Q1 quarterly national accounts, the decrease of imports came exclusively from the sector of goods (-6.1 YoY%, -4.6 QoQ%) with the sector of services exhibiting an annual (13.0 YoY%) and a quarterly (7.3 QoQ%) increase, (ii) according to the commercial transactions of Greece (merchandise trade), the annual decrease of imports of goods was driven exclusively by the category of ships and (iii) the decrease of fixed investment came from the asset type of transport equipment plus weapon systems (-54.8 YoY%, -30.0 QoQ%). With the exception of the aforementioned asset type and that of the intellectual property products (-0.6 YoY%), all the

other categories of capital goods exhibited an annual increase in 2018Q1.⁵

Finally, on a quarterly basis, domestic demand remained almost stagnant due to mutually offsetting effects from the performance of public consumption (-1.7 QoQ%), investment (1.3 QoQ%) and private consumption (0.3 QoQ%).

Overall, real output in Greece expanded on an annual and on a quarterly basis for a 5th quarter in a row in 2018Q1 (5Q-average real GDP growth rate of 1.5 YoY% and 0.6 QoQ%). This is the first time Greece achieves 5 consecutive quarters with positive GDP change since 2006. These results point to an exit of Greece’s economy out of the 3-years stagnation trap. However, the big challenge to enter into a relatively steep growth path remains.

Table 3: Real GDP in Greece – Expenditure Side Approach (YoY% and QoQ%)

	2018Q1		5Q Average*	
	YoY%	QoQ%	YoY%	QoQ%
GDP	-2.3	0.8	1.5	0.6
Private Consumption	-0.4	0.3	0.1	-0.1
Government Consumption	0.3	-1.7	-0.9	0.1
Total	-12.1	1.3	9.9	6.1
Investment**				
Fixed Investment	-10.4	-28.1	5.7	0.8
Exports	7.6	1.4	7.1	1.4
Imports	-2.8	-2.7	5.2	0.5

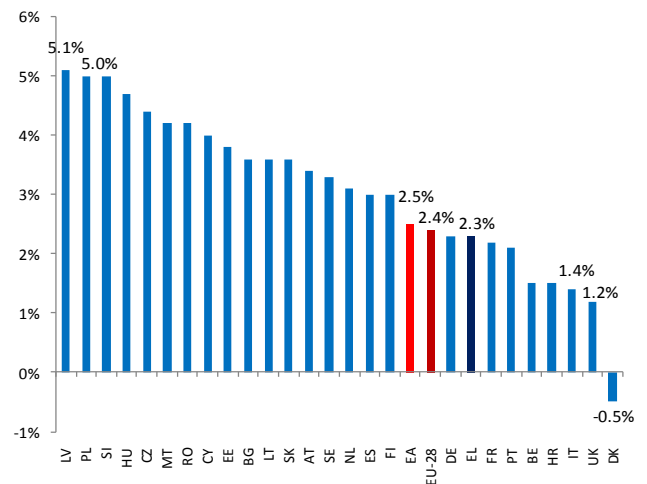
Source: ELSTAT, Eurobank Research

Note: * 5Q average refers to the last 5 quarters, ** total investment (gross capital formation) includes fixed investment and inventory investment

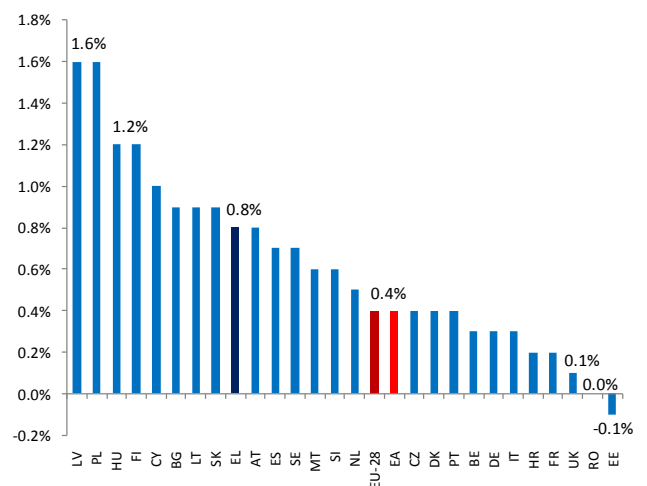
⁵ The results were as follows: dwellings 10.7 YoY%, other buildings and structures 3.9 YoY%, cultivated biological structures 5.2 YoY%, ICT equipment 23.1 YoY% and other machinery and equipment plus weapon systems 18.6 YoY%.

Figure 6: Real GDP Growth Rate in 2018Q1, Greece vs EU-28 (YoY% and QoQ%)

A. Annual % Change of Real GDP in 2018Q1 (YoY%)



B. Quarterly % Change of Real GDP in 2018Q1 (QoQ%)

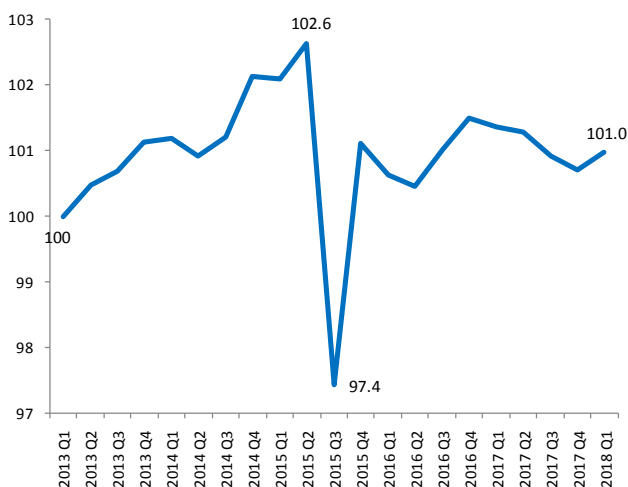


Source: Eurostat, Eurobank Research

On the positive side, foreign demand remains strong and supports growth. On the negative side, private consumption, despite its quarterly increase in 2018Q1, remains weak. Furthermore, 2017 marked the 6th year in a row with a negative gross saving rate for the Greek households (-6.7% of gross disposable income from +7.0% in 2009 according to EL.STAT.). Hence, a not negligible proportion of the current level of private consumption in Greece is funded by dissaving. More specifically, private consumption, which is the component with the highest share by far in GDP (69.4% of nominal GDP in 2017 relative to 54.4% in EA), after increasing by 0.6% in 2014 (for the first time since 2008), shrunk by -0.5% in 2015, and

then, for the next 2 years, it followed an almost flat trajectory. As Figure 7 presents, in 2018Q1, private consumption in Greece was almost equal to its level in 2013Q4. A main driver of this performance relates to the heavy burden of taxation, current and expected. In addition to fiscal measures already implemented, the pre-legislated fiscal package – in the context of the 2nd review of the 3rd economic adjustment programme – with consolidation measures worth 1% of GDP for 2019 (pension cuts) and 1% of GDP for 2020 (reduction of the personal income tax credit) creates negative wealth effects. On a theoretical basis (permanent income hypothesis), the latter, can cause downward pressures to households' consumption expenditures. Finally, investment exhibits high volatility without a steep upward trajectory.

Figure 7: Real Private Consumption (index 2013Q1 = 100)

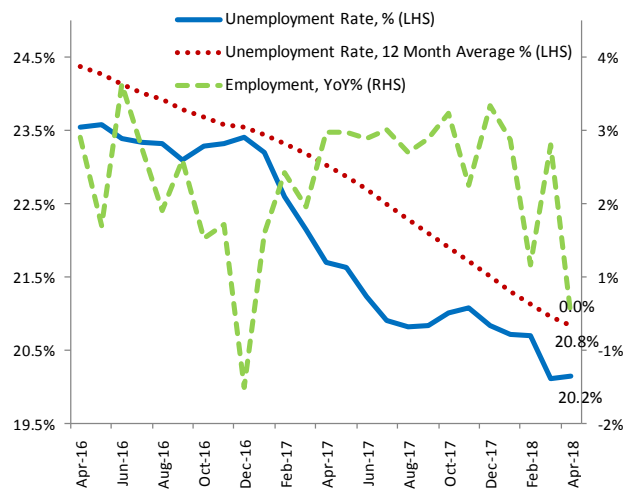


Source: ELSTAT, Eurobank Research

January – April 2018 Labour Market: downward path trajectory continues

Based on ELSTAT's monthly labour force survey data (seasonally adjusted series), the unemployment rate in Greece remained on a downward path trajectory for a 50th month in a row in April 2018. More specifically, the ratio of the unemployed over the labour force stood at 20.2% in April 2018, from 20.8% in December 2017 and 21.7% in April 2017 (see Figure 8). The cumulative drop relative to the historical high of 27.9% in July 2013 stands at -7.7 pts.

Figure 8: Unemployment Rate (%)

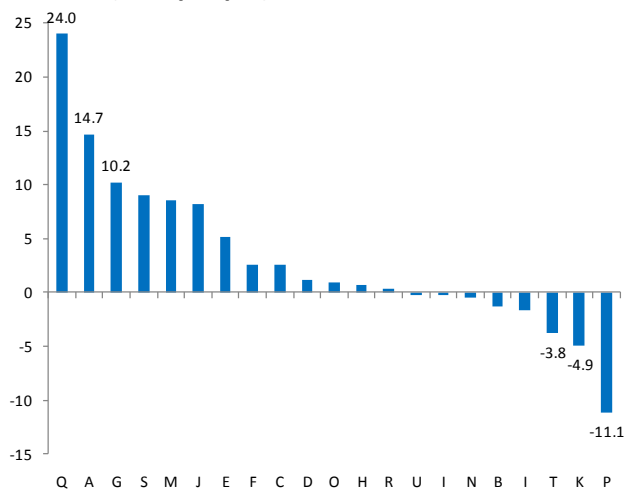


Source: ELSTAT, Eurobank Research

According to ELSTAT's quarterly labour force survey data (non-seasonally adjusted series) employment growth decelerated to 1.8 YoY% or 64.5 k people in 2018Q1, from 2.4 YoY% or 87.7 k in the former quarter. Moreover, full-time employment increased by 2.8 YoY% or 92.2 k people while part-time employment decreased by -7.2 YoY% or -27.8 k people. The number of people unemployed dropped by -10.2 YoY% or -113.5 k and the labour force decreased -1.0 YoY% or -49.0 k. Finally, based on ELSTAT's monthly labour force survey data, annual employment growth dropped to zero in April 2018, with almost all of the decrease in unemployment being absorbed in the respective decrease of the labour force (-94.9 k YoY people).

As Figure 9 shows, the annual increase in employment by 64.5 k people in 2018Q1 mainly came from the sectors of human health and social work activities +24.0 k, agriculture, forestry and fishing +14.7 k, wholesale and retail trade; repair of motor vehicles and motorcycles +10.2 k, other service activities +9.0 k, professional scientific and technical activities +8.5 k and information and communication +8.2 k. On the other hand, the sectors of education (-11.1 k), financial and insurance activities (-4.9 k) and activities of households as employers (-3.8 k) exhibited the highest annual decrease.

Figure 9: Annual Change of Employment in 2018Q1 – Nace Rev 2. One-Digit Categories of Economic Activities (000' people)



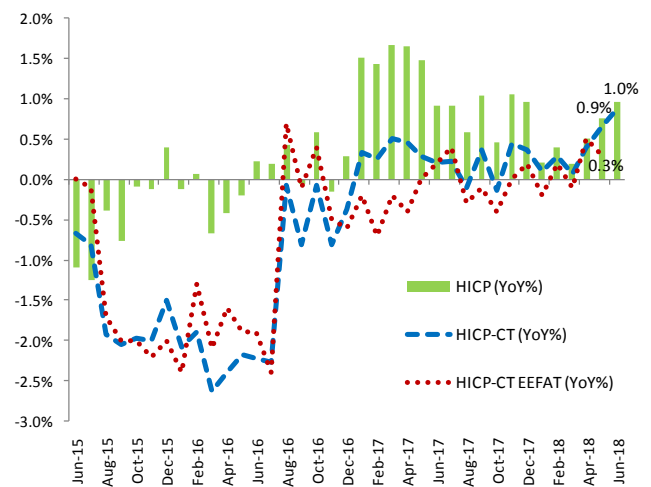
Source: ELSTAT, Eurobank Research

Note: **A** Agriculture, forestry and fishing, **B** Mining and quarrying, **C** Manufacturing, **D** Electricity, gas, steam and air conditioning supply, **E** Water supply; sewerage, waste management and remediation activities, **F** Construction, **G** Wholesale and retail trade; repair of motor vehicles and motorcycles, **H** Transportation and storage, **I** Accommodation and food service activities, **J** Information and communication, **K** Financial and insurance activities, **L** Real estate activities, **M** Professional, scientific and technical activities, **N** Administrative and support service activities, **O** Public administration and defence; compulsory social security, **P** Education, **Q** Human health and social work activities, **R** Arts, entertainment and recreation, **S** Other service activities, **T** Activities of households as employers and **U** Activities of extraterritorial organisations and bodies

2018H1 Prices: inflation decelerates relative to 2017, upside risks for 2018H2 due to the increase in oil prices (see Figure 10)

In 2018H1, the average inflation rate (HICP YoY%) in Greece decelerated to 0.5% from 1.4% in 2017H1. For the same period, HICP-CT, i.e. with constant taxes, stood at 0.4%, from 0.3% in the respective period of the former year. The recorded convergence between the values of these two variables reveals that the base effect from increased indirect taxation has faded away. Nevertheless, upside risks exist for the 2018 inflation rate due to the increase in oil prices (2018H1 average per month annual change of +40.1%).

Figure 10: HICP Inflation Rate (HICP YoY%)



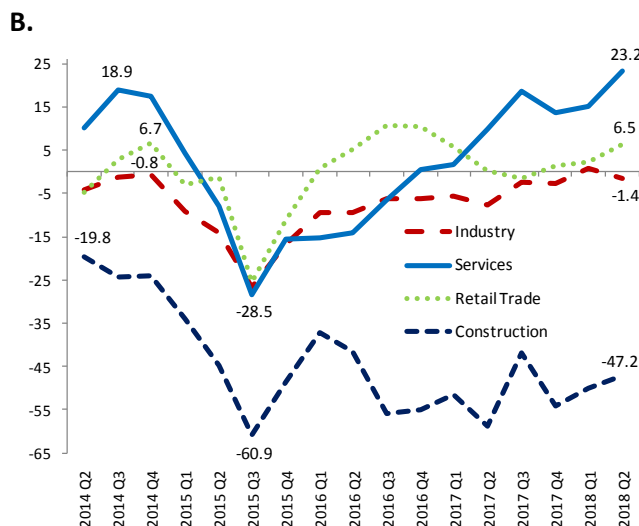
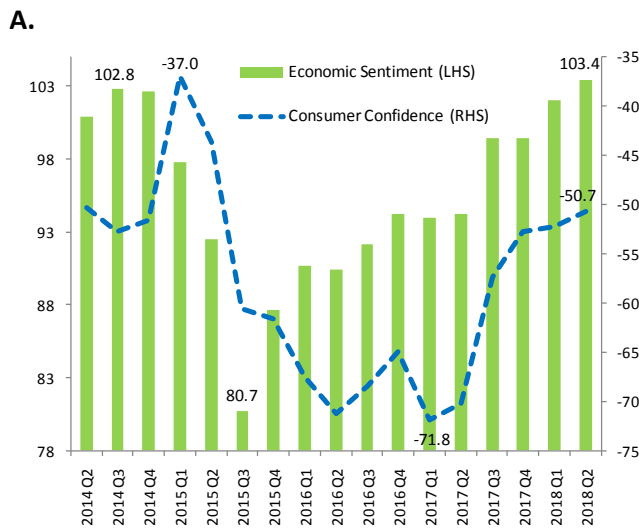
Source: Eurostat, Eurobank Research

Note: as HICP-CT we define the overall HICP index with constant taxes. As HICP-CT EEFAT we define the overall HICP-CT index excluding energy, food, alcohol and tobacco. At the time of writing this report, the observation of June 2018 for HICP-CT EEFAT was not available. Hence, the value of 0.3% stands for the observation of May 2018.

2018Q2 Soft Data: good performance continues in 2018Q2

The latest releases of soft data point to an ongoing improvement in domestic economic activity in 2018Q2. For example, the Economic Sentiment Indicator (ESI), after a significant monthly drop in March 2018, picked up in the following two months and in May 2018 reached its 2nd highest value (104.2 index units) since August 2014. In June 2018 (latest observation) it dropped to 102.5 index units. As Figure 11(A) presents, the average ESI in 2018Q2 was higher relative to both 2018Q1 and 2017Q2. Moreover, as Figure 11(B) depicts, with the exception of the confidence indicator in industry, all the other sub-indices of ESI improved relative to 2018Q1 and 2017Q2.

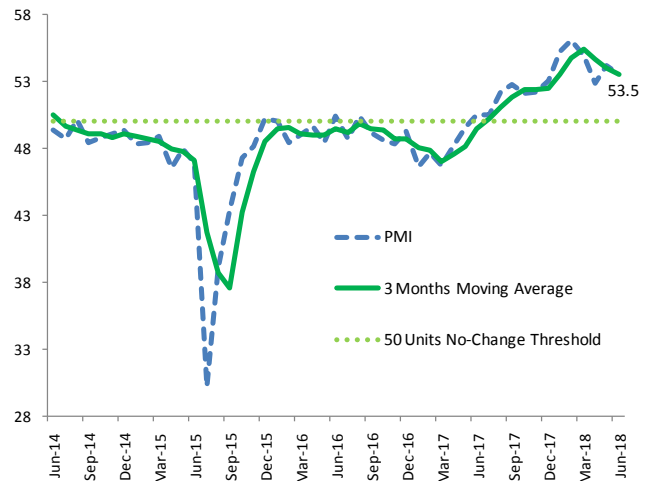
Figure 11: Economic Sentiment Indicator (index units)



Source: IOBE, European Commission, Eurobank Research

Finally, PMI manufacturing, despite its drop relative to 2018Q1, remained above the 50 units boom-bust threshold for a 13th month in a row in June 2018 (see Figure 12).

Figure 12: PMI Manufacturing (index units)



Source: IHS Markit, Eurobank Research

2018Q2 Hard Data: the picture is mixed

Hard data for other economic variables, except unemployment, paint a mixed picture for 2018Q2 . For example, in the period April – May 2018, the average yearly change (YoY%) of the industrial production index increased to 1.4% from -0.3% in 2018Q1. This rebound, however, did not come from the respective index of the manufacturing subsector – whose annual rate of change decelerated to 1.5% in April – May 2018, from 2.1 in 2018Q1 - but from the subsectors of electricity (2.5% from -5.0%), water supply (-0.6% from -3.4%) and mining – quarrying (0.2% from -0.5%). Moreover, the retail trade volume index, a variable which exhibits a strong positive correlation with private consumption, increased by 1.1 YoY% and 0.7 MoM% in April 2018, from 1.7 YoY% and -0.8 MoM% in March 2018 (0.6 YoY% in 2018Q1). Finally, according to ELSTAT’s commercial transactions data, the nominal value of exports of goods excluding oil products and ships increased on an annual basis by 10.3% in April – May 2018. The respective rate of increase for imports was 8.2%.

3. A Numerical Exercise for GDP and its components in 2018

Written by Tasos Anastasatos

Table 4: GDP and its Components, 2018 Real Growth Rates

	2017, bn.	Shares in 2017 GDP	2018 % yoy Real growth
Priv. Consumption	123.3	69.4%	0.1
Gov. Consumption	35.5	20.0%	1.3
Total Consumption	158.8	89.3%	0.4
GCF	20.8	11.7%	9.9
Domestic demand	179.6	101.1%	1.5
Imports	59.0	34.3%	6.8
Exports	61.0	33.2%	7.8
GDP	177.7		1.8
HICP	1.1%		0.7%
Unemployment Rate (% of l. f.)	21.5%		20%

Key points

- This note offers a numerical exercise for real GDP growth in Greece in 2018, taking account of latest developments, both domestic as well as the Eurozone outlook; a quantification of trends in components of GDP is conducted, with economic rationale offered for each. This exercise should not be conceived as an official forecast.
- Under the main scenario, which takes into account only the expected impact of developments and measures announced so far, real growth is estimated at 1.8% for 2018. This is subject to a number of assumptions, the most important of which is the positive assessment by markets of the June 21st Eurogroup Decision on the post-programme regime of the Greek economy and the debt relief package. Under an alternative scenario of better developments in country risk and thus investment, growth can move to the area of 2%.
- Significant uncertainty to the growth outlook remains.

3.1 Introduction

This numerical exercise provides a framework for the 2018 Greek GDP growth outlook by quantifying theoretical macroeconomic relations. By its nature, it should not be interpreted as an exact forecast, especially given the large uncertainties surrounding the macroeconomic landscape. The exercise incorporates the latest developments, both domestic as well as the Eurozone outlook, including the agreement in the June 21st Eurogroup on the post-programme regime of the Greek economy and the accompanying debt relief package, which aims in improving the medium- and longer-term sustainability of the Greek public debt.

3.2 Analysis of the 2017 Growth Performance

The positive reading of a 1.4% YoY real GDP growth in 2017, analysed in the previous section, comprises a welcome development for an economy that has lost over ¼ of its size in a multi-year recession and was stagnating in the previous two years. Having said that, this reading constitutes an underperformance compared to the initial programme forecast of a 2.7% real growth rate. Moreover, it took place amid a favourable external environment in which the Eurozone, Greece's main trading partner, grew by an above potential 2.5%, and ECB's monetary policy continued to follow an ultra-accommodative stance. Therefore, this growth performance should rather be considered modest.

A number of reasons contributed to this result.

- Firstly, the lengthy discussions for the post-programme surveillance scheme and the accompanying debt-relief package have prolonged uncertainty, thereby affecting the investment climate and private consumption.
- Secondly, domestic demand has been affected negatively by the restrictive stance of fiscal policy. A primary fiscal surplus of 4.2% of GDP in programme terms (4% in ESA-2010 terms) was recorded in FY-2017 vs. a 1.75% target. The fact that the budget execution overshoot the target by a wide margin enlarged the fiscal drag on the level of economic activity and constrained the liquidity of the economy.

- In addition to the sheer size of fiscal contraction, the fiscal mix was also highly unbalanced in favour of tax measures. Private consumption in particular has been constrained by an elevated tax burden. The 2017 Budget introduced fiscal measures of marginal worth (i.e. on top of impacts already materialized in previous years) of ca €2bn or ca 1.1ppts of GDP for 2017, all of which came from the revenue side (interventions in the public expenditure side were actually slightly positive in 2017, as seen in MTFs 2018-2021). Tax rates are among the highest in the EU in almost all categories of taxation.
- Households are implementing intertemporal consumption smoothing for the last 6 years in order to maintain their levels of living standards and in expectation of a coming economic recovery. A still significant in size unrecorded economy is also possibly related to the phenomenon, even more so since elevated taxation enhances motives for tax evasion. This divergence between households' disposable incomes and private consumption is reflected in deeply negative levels of savings: the gross saving rate of households remained at -8.3% in 2017 according to AMECO, by far the lowest in the European Union, from -6.8% in 2016. Households' annual flow of savings remains on a negative territory for 6 years in a row between 2011-2017, recording a cumulative dissaving (consumption of wealth) of €32.9bn. Obviously, this cannot continue in perpetuity; either productivity and disposable incomes will rise or downside risks for consumption could materialise. It is plausible to assume that households' expectations of future disposable incomes remain constrained by the demanding fiscal targets of 3.5% of GDP primary surpluses in the years ahead and up to 2022. In accordance to this, private consumption growth rates recorded a slide within 2017, starting from a positive 0.7% YoY real growth rate in Q1, to -0.8% YoY in Q4. On a quarterly basis, private consumption was declining continuously in 2017, before recording a slightly positive QoQ rate of 0.3% in Q1 2018. Despite the deceleration of private consumption in the course of 2017 (+0.1% YoY in real terms, +1.3% YoY in nominal terms in FY 2017), its growth rate exceeded that of households' gross disposable incomes (almost flat in nominal terms) for yet another year in 2017.
- The overperformance of consumption relative to disposable incomes in previous years has been facilitated by the ready availability of cash, given the massive withdrawals of bank deposits before the imposition of capital controls (over €55bn in total since fall of 2014, €40bn during H1 2015 alone). At peak, cash in circulation is calculated to have exceeded €47bn or 27% of GDP, against a 10% EA average. As of recently, cash outside the Greek banking system has started to decline; in April 2018 it stood at €33.5 bn or 18.9% of GDP. Still, return of deposits in Greek banks is slow (ca €5.0 bn in 2017) due to lingering uncertainty and possibly because many individuals may still use cash for consumption and financing of tax obligations.
- Capital controls continue to be in place. They have been alleviated significantly and exporting businesses have learnt to operate in their existence, yet the signalling effect of a country with capital controls within a monetary union continues to weigh.
- The external sector had a negative net contribution to GDP despite a healthy 6.8% YoY real growth of exports, due to imports rising even faster, by 7.2% YoY. This fact is to some extent related to oil prices' increases towards year-end, given that fuel imports account for ca 25% of total goods' imports or ca 20% of total goods & services imports. However, the most important factor behind imports' recovery is structural; it relates to the well-known phenomenon of a high import content of Greek production. In addition, income elasticity of imports is high, an illustration of a still narrow productive basis.
- The growth performance in 2017 was driven, to a large extent, by a strong performance of investment in Q4 2017. However, investment recorded fluctuations in size and changes in sign throughout the year without a consistent upward trend, despite the very low starting basis.

3.3 Q1 2018 Trends and Implications

The +2.3% YoY real growth rate in Q1 2018 was driven exclusively by the external sector, while domestic demand fell, as explained in Section 2. While the real growth of exports of goods & services by +7.6% YoY was more or less in line with trends in 2017, the decline of imports of goods & services by -2.8% was not. Indicatively, if imports had grown by

the average of 2017 quarters (+7.6% YoY), real GDP growth in Q1 2018 would have been slightly negative at -0.3% YoY. Of course, this is only a ceteris paribus calculation, also bearing in mind that imports' fall came primarily from ships purchases, which was then also subtracted by investment. Yet, it is meant to show that imports are expected to resume in next quarters to strongly positive rates of growth. It is indicative that, in the period January-May 2018, while total imports of goods increased by only 0.4%, if ships are excluded, other imports of goods increased by 9.2% YoY. This, to a large extent is a conjectural factor related to a base effect as ships purchases were high in January and April 2017. By contrast, in June-September 2017 ships' purchases were low, hence it is very likely that their contribution to growth will turn into negative in Q3. In addition, oil prices record increases of at least 30% YoY. Therefore, we should expect a stronger increase of imports in the following months.

This consideration, and given the continuous weakness of private consumption, highlights the importance of investment for maintaining positive growth rates. Although the negative growth rate of GCF in Q1 2018 was partly due to a negative base effect (the aforementioned decline in ships' purchase in particular), the variability in investment continues. Note that a favourable base effect exists for Q2 and Q3 2018 but not for Q4 2018. In this respect, reception from the markets of the outcome of the negotiation on the post-programme regime of the Greek economy is critical; if positive, it could help stabilise the investment climate from Q3 2018 onwards. Leading indications sketch a positive picture for Q2 2018 but with some signs of mediation as of recently.

De-escalation of unemployment continues but it remains at exceptionally high levels; in addition, creation of jobs still concerns, to a significant extent, low-skill and part-time jobs. Increase in investment is crucial for the improvement of labour productivity and the creation of more quality jobs.

The successful conclusion of stress tests by Greek banks and the -slow- return of deposits in 2017 and the first months of 2018, which enabled the reduction of Eurosystem dependence for liquidity to €16.3bn in June 2018 (from €20.9bn in May 2018), have improved confidence. Yet, regulatory

obligations to deal with the sizable stock of NPLs continue to comprise a challenge. Effective and swift management of NPLs would significantly improve the ability of the banking system to finance the real economy. Yet, we continue to expect positive credit creation to follow and not to lead the pick-up in economic activity.

3.4 Derivation of real GDP growth estimate for 2018 (1.8%)

This section provides theoretically consistent economic rationale for anticipating and quantifying impacts of various factors on each GDP component. The GDP growth estimate for 2018, which we consider to be feasible, takes into account only fiscal measures that have been legislated by the time of publishing and their impact on disposable incomes and the economic climate. The basis for conducting the exercise is provided from the estimate of full year 2017 GDP, its components' growth and shares. With a 1.4% estimated real expansion and a GDP deflator of 0.7% in 2017, nominal GDP at the end of 2017 stood at €177.7bn. Thus, the 2018 estimate is subject to an additional risk related to basis effects in case these figures change in later data estimates.

Furthermore, the exercise assumes that the agreement on the post-programme regime of the Greek economy and on the package of measures to enhance the sustainability of public debt will be implemented as planned; and that the IMF's Article IV Consultation and the ECB's DSA will not have a negative tone. Any departure from these assumptions poses serious downside risks to the GDP outlook. In particular, the implementation of a number of important reforms and privatizations is critical for the enhancement of the long-term potential of the Greek economy but also for market confidence in the shorter-term and, therefore, for immediate growth prospects. Any effort to overturn previously agreed reforms would have a negative impact on market confidence. Implementation of already voted reforms also relies on the adequacy and timeliness of secondary legislation.⁶

⁶ While inclusion of Greece in the QE has been excluded by the ECB in the absence of a programme, it would have a beneficial impact on economic sentiment, GGB's yields and risk premia for banks' and firms' borrowing costs.

3.5 Evolution of GDP Components

(a) Private consumption (69.4% of GDP): Private consumption predominantly depends on disposable income. As explained above, in 2017, real private consumption is estimated to have grown by 0.1%yoy, while households' real gross disposable incomes declined by -1% (flat in nominal terms), thereby resulting in yet another negative reading of gross household savings. Consumers' intertemporal smoothing of consumption⁷ throughout the crisis was reflected in the large decline of the elasticity of private consumption with respect to disposable income in crisis years compared to the years of rapid growth based on booming consumption, 2001-2008. The divergence between disposable incomes and consumption has persisted for more time than initially thought it would and it peaked in 2017, despite consumption's mediation. This trend, apart from the depletion of savings, it has led to the maintenance of a share of private consumption over GDP (69.4%) which is 15ppts larger than the EA average, despite consumption's multi-year decline. Hence, the increase of productivity -and thus disposable incomes- via a switch towards an exports- and investment-led model is imperative. Else, households will gradually form expectations of permanently lower disposable incomes and consumption will begin to align with those real incomes. On the other hand, the gradual normalization of the investment climate and the incipient recovery in real estate prices might lead slowly into positive wealth effects on consumption.

The 2018-2021 MTFs projects **fiscal measures** of marginal worth (i.e. on top of impacts already materialized in previous years) of ca €0.97bn or ca 0.55ppts of GDP for 2018, almost equally divided between expenditure side and revenue side interventions. The fiscal drag, albeit reduced in comparison to previous years, is still expected to affect negatively levels of economic activity.

⁷ This theory postulates that consumers try to achieve a more balanced level of consumption intertemporally in order to maximise their utility. Hence, when pessimism about future incomes is prevalent, consumption decreases faster than current income. On the contrary, when consumers perceive income cuts as temporary, they run down on their savings and cut consumption by less.

At the end of 2017, net nominal disposable income was estimated (AMECO) to stand at €147.3bn. In order to calculate the impact that measures could cumulatively have on net nominal disposable income, we need to account for the facts that: i) consumption of fixed capital, which is the difference between gross and net disposable incomes, need not equal the amount of investment that will actually be financed by households' incomes, ii) degree of implementation varies across measures, and iii) households and corporations partly finance tax payments by drawing from savings. This is a notion similar to the impact fiscal multiplier, albeit applied only on net nominal disposable income and not on GDP as a whole. The marginal measures implemented in 2018 can be assumed to affect disposable incomes equi-proportionately, given they all concern reductions of domestic agents' incomes (interventions in wages, pensions, social benefits, in healthcare and tax increases). Hence, we estimate that fiscal measures will incur a reduction of net nominal disposable income by ca -€0.97bn or by -0.7% in 2018.⁸

The most important factors affecting net nominal disposable income, apart from fiscal measures, are wages in the private sector, unemployment and profits on capital. As far as nominal **wages** in the private sector are concerned, AMECO projects nominal compensation per employee to increase by 0.9% yoy. Nominal ULCs are projected to increase by a lesser +0.7%, as productivity (GDP/employee) is also assumed to record a slight increase. On one hand, there are factors that may exert downward pressures on wages: (a) a still exceptionally high level of unemployment, (b) despite introduced flexibility in the labour market, high taxation and non-wage costs motivate migration to the grey economy, (c) the full impact of any structural reforms on productivity and thus on wages can only be felt in the longer term. On the other hand, a possible rapid implementation of privatizations and nationally-owned structural reforms following the conclusion of the 3rd Adjustment Programme can lead to a substantial improvement of the economic climate, thereby increasing appetite for consumption, investment and inventory re-building, and reinvigorating the labour market. All in, we assume a 0.8% YoY growth of the

⁸ This is tantamount to a quasi "fiscal multiplier" of ca 1, larger than the typical Year 1 fiscal multipliers of 0.7 estimated for Greece (e.g. see ECB's WP 1760, March 2015). This is due to the nature of the particular fiscal measures.

nominal compensation per employee in order to capture effects not captured already by the fiscal drag. Considering that about 80% of the labour force is employed in the private sector (after taking account of unemployment), and the fact that employed labour has a share of ca 50% in the GDP, this constitutes a €0.5bn or 0.3% increase in net nominal disposable income.

For **unemployment**, the EC projects a decrease to 20.1% of the labour force in 2018, against 21.5% in 2017. The unemployment rate has seen a sustained decrease since late 2014 on the back of (a) a lagged impact of previous labour market reforms, (b) replacement by businesses of expensive full-time workers with part-timers and less expensive new entrants in the labour market, (c) expectations of an economic recovery. However, the recovery has been relatively modest. In addition, labour productivity has been in negative grounds for the past two years due to disinvestment, thereby undershooting trends of hirings. In recent months, de-escalation of unemployment has further decelerated. Based on our assumptions about developments regarding the exit from Programme, we project a continuation of this trend of slow de-escalation and a year average unemployment rate of 20% of the labour force, i.e. ca 78,000 fewer people unemployed compared to 2017. Assuming that the per person loss in disposable incomes from unemployment is approximately equal to the difference between the per capita gross income (ca €16600) and the unemployment benefit (ca €4800), decrease of unemployment will increase the total net nominal disposable income by ca €0.9bn or by 0.6%.

Regarding **profits**, net returns on net capital stock are projected by AMECO to increase by 5.2%. The incipient economic recovery, along with contained wages should give a boost to profitability. Despite disinvestment in previous years, reduction in production has resulted in relatively less intensive use of capital. This is reflected in the capital stock-to-output ratio being 4.2 in 2017 vs 3.4 in 2008 so that capacity utilisation remains low. Hence, as the economy recovers, firms will attempt to use existing capital more intensively before undertaking new investment, thereby increasing returns on existing capital. Productivity-enhancing reforms should also kick-in, albeit only gradually and if not reversed. However, actual profitability will be adversely

affected by the fiscal drag, onerous taxation and, for the sectors serving the domestic market, a still high unemployment rate. In addition, the NPL management process will involve some business consolidation in the medium term. Another decisive factor concerns the still low –in comparison to EU standards- level of market confidence and of predictability of the business environment. Equally importantly, a question remain as to the extent that firm profitability will translate into disposable incomes' increase and thus of consumption or whether firms will need to dedicate resources to pay elevated levels of taxation, serve their stock of past debt obligations and invest. Hence, we downgrade the projection to a 1% increase in actual profitability. Considering a 50% share of capital in the GDP, this means a ca €0.9bn or 0.6% increase in nominal disposable income.

In total, net nominal disposable income is projected to increase by ca €1.3bn or 0.8%. In order to translate this into an increase in real disposable income, we need an estimate about consumer prices. Eurobank Research projects an HICP change of 0.7% (period average) against a projection of +0.5% by the EC and +0.7% by the IMF vs a 1.1% YoY increase in 2017. This is based on the results of previous tax hikes fading out gradually. On the other hand, oil prices are increasing by more than 30% YoY in 2018 and the stance of ECB's monetary policy remains ultra-accommodative. With an HICP change of +0.7%, real disposable incomes should be increased by a mere 0.1%.

Finally, we have to deduce to which extent the change of real disposable income will affect private consumption. According to the aforementioned analysis of reduced intertemporal consumption smoothing, as well as the experience of the relative resilience of consumption in the previous crisis years, we assume an income elasticity of consumption of 0.8. Yet, given the estimated marginal change in disposable incomes, real private consumption is estimated to expand in 2018 by 0.1% (against a projection of +0.5% in both the MTFs 2019-2022 and EC's Spring 2018 Economic Forecasts).

(b) Government consumption: (20% of GDP): the MTFs 2019-2022 and EC project a 1.2% change. Experience of previous years compels to allow for

some modest slippage and thus we pencil a +1.3% change.

Final consumption: (89.3% of GDP): +0.4%

(c) Gross Capital Formation: (11.7% of GDP): GCF is the most sensitive component of GDP in changes of interest rates and the economic climate. Investment has been falling continuously between 2007-2015, with an interval of a small increase in 2014, reaching €17.3bn or 10.6% of GDP in 2015 from €63.1bn or 27.1% of GDP in 2007. In the last two years, GCF recorded modest increases, reaching €18.5bn in 2016 and €20.8 in 2017. Yet, these increases were not large enough to counterbalance depreciation. As a result, the country's capital stock has continued to decline, recording a massive cumulative decline of €72.5bn in 2010 prices between 2010-2017. The low level constitutes a favorable basis effect for both fixed investment and re-stocking, as firms position themselves for the incipient recovery and expect increased demand. The wage cost competitiveness of the country has been restored to pre-euro levels. In addition, spare capacity exists mostly in sectors serving the domestic market, while exporting sectors may face shortages, considering the long period of suppressed investment, and they might need to replace depreciated assets. On the other hand, there are reasons to be cautious: (a) still low capacity utilization means that enterprises will only invest if they expect demand to increase fast and in a sustained manner, (b) liquidity conditions remain tight; slow return of deposits and the challenge of dealing with NPEs cause delays in the resumption of positive credit expansion (c) capital controls are still in place, albeit gradually being alleviated, (d) country risk has been reduced following the agreement on the post-programme regime of the Greek economy but remains elevated in comparison to other countries of the Euro periphery, reflecting uncertainty on policy implementation and therefore sustainability. This keeps interest rates elevated, thus eliminating positive NPV for many investment projects.

Implemented product market reforms improve the entrepreneurial environment but they will only render their full supply boost in the longer-term. Still, in the shorter-term as well, the most important factors are business sentiment and sovereign risk, which in turn mainly relate to speed and ownership

of structural reforms. Finally, the most imminent locomotive for revitalizing investment is the privatizations programme.

Public investment is projected in the Budget to remain at €6.75bn in 2018, the same level as in 2017; of those, €5.75bn concern projects co-funded by EU's Structural Funds and €1bn concern projects funded solely by national resources. It is worth noting that in 2017, only €5.95bn out of the budgeted €6.75bn were actually used, as public investment is the part of the budget to be curtailed quicker in case there is stress for achieving the fiscal target. Efforts to improve bureaucratic procedures for absorbing EU Structural and Cohesion Funds need to intensify in order to take advantage of the easier requirements for national sources' co-financing.

Taking into account all aforementioned developments, we pencil a +9.9% increase, (against projections of +10.3% by the EC and +11.1% in the MTF5 2019-2022, both excluding inventories).

Given that investment is very sensitive in developments regarding the economic environment and country risk, a more positive assessment by markets on the prospects of policy consistency after the end of the Programme in August, could spur a better performance in the cost of capital and thus in investment. Time is not enough until year end for a dramatic difference but an 11.5%YoY rate of change would be feasible; that would take real GDP growth to the area of 2%.

Domestic demand (101.8% of GDP): +1.5% change.

(d) Exports of g&s (33.2% of GDP): price competitiveness of exports is typically gauged by nominal ULCs, except for tourism for which CPI is more relevant. In 2017, Greece's nominal ULCs increased by 0.8%, partly due to increasing non-wage costs, vs an average 0.2% and 0.8% increases in the EU and EA respectively. Yet, there is a multitude of other factors affecting exports, including origin and destination country's income, transport costs, bilateral exchange rates, economic and political climate, geopolitical situation etc. Favorable developments in these areas contributed to a significant +6.8% YoY increase in Greek exports of goods & services in 2017, despite stability in relative costs. In particular, strong growth by 2.5% in the EA,

Greece's main trading partner, and the gradual alleviation of capital controls contributed positively. A potential normalization of the country risk after the exit from the 3rd Adjustment Programme and the continuing recovery in the Eurozone suggest scope for further increase.

In terms of price competitiveness, nominal ULC is expected to increase by 0.7% in 2018, a rate comparing favorably to Eurozone's 1.4% projected increase. For HICP we projected a change of +1% vs ECB's +1.5% change for the Eurozone as a whole, while other countries competitive to Greece in tourism are projected to record slightly higher inflation rates. With tourism accounting for ca 26% of total Greek exports of g&s in 2017, the combined improvement in competitiveness should be ca 0.6%. In terms of international demand, roughly 50% of Greek exports go to Eurozone countries and another 25% to SE Europe. Eurozone GDP is expected to recover by a further 2.5% in 2018 and SE Europe is expected to maintain a healthy +3.5% rate of real growth (on average, notable differentiations across countries). To be conservative, we assume a unitary elasticity of international demand for Greek exports w.r.t. both trading partners' growth rates, as well as to prices (competitiveness gains). One has to also factor in the expected increase in oil prices by at least 30% YoY, as refined oil products comprise ca 14% of Greek exports of goods and services, also counting in some price elasticity of demand. The overall effect should be a 7.8% increase (against projections of +5.7% by the EC and +5.6% in the MTF5 2019-2022).

(e) Imports of g&s (34.3% of GDP): it is a regularity in the Greek economy that changes in imports are a multiple of respective changes in private consumption, an illustration of the high import content of production, exports and consumption; this was the case in 2017 as well. The incipient recovery and stronger demand for investment goods indicate scope for further increase in 2018. We assume an income elasticity of imports of 1.2, which is close to the empirical elasticity observed in previous years. In addition, one has to factor-in the expected oil price increase, considering that oil accounts for ca 20% of Greek imports of goods & services. As explained, the ad hoc factor of ships' purchases decline is not expected to persist. All in, we project a 6.8% real increase of imports (against projections of +5.5% by both the EC and the MTF5 2019-2022).

3.6 Risks to the Projection

Risks-Negative

Reversals, delays or watering down in the quality of reforms after the conclusion of the 3rd Adjustment Programme; delays in the privatization programme. These would adversely affect investment and consumer confidence and the financing of the public sector, possibly also affecting the liquidity of the private sector. At the extreme scenario, it could cast doubt once again on the ability of the Greek economy to achieve sustainable growth within the Eurozone.

Political wavering and low ownership of reforms could harm confidence and mitigate the growth-enhancing content of reforms, as well as casting doubts at the country's ability to abide by its commitments.

Insistence on a highly imbalanced mixture of measures, biased towards increased tax rates, could undermine sustainability of fiscal consolidation and, conditional on form of implementation, enhance the fiscal drag.

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

A delayed return of deposits to banks and/or delays in dealing with NPLs could adversely affect banks' ability to finance the economy.

Any policy shortcomings which constrain or delay recovery could also reduce social tolerance against the Programme and harm social cohesion.

Weaker-than-projected growth in the Eurozone would adversely affect exports. Escalation of trade wars and Brexit-related jitters important risk factors.

Recovery of tourist arrivals in competitive countries due to climate normalization or improvements in respective costs could limit revenue increase from tourism.

Geostrategic tensions, including a possible resurgence of the refugee crisis, would burden the economic environment, fiscal economics and increase social fatigue.

Risks-Positive

Frontloaded, aggressive agenda of nationally-owned structural reforms and privatizations would boost market confidence and persuade investors of authorities' ownership of the Programme. Medium-term debt relief measures enhance perceptions of debt sustainability. Combined, these could decrease sovereign risk and lending rates for corporates faster than currently expected and trigger a technical reaction of investment and domestic demand in general.

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

A quicker than expected full lift of capital controls would help exports, boost investor confidence and reduce distortions in resource allocation; this pre-requires a reinstatement of depositors' confidence.

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

A stronger growth in the Eurozone and the global economy would benefit exports and tourism.

4. Fiscal Outlook

Written by Theodoros Stamatiou

4.1 2017 fiscal performance: General Government Budget primary surplus overshoot programme target

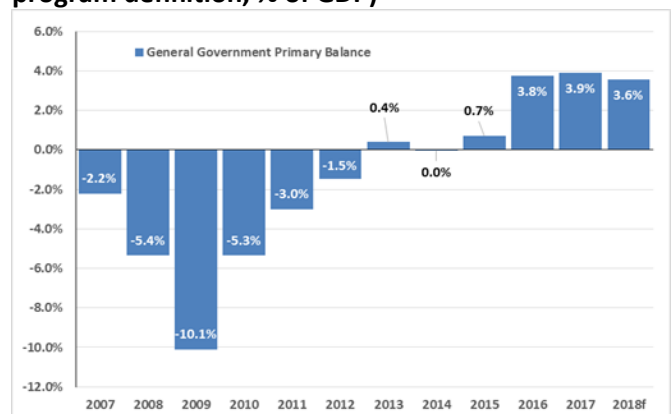
According to the published ELSTAT's fiscal data (1st Notification for 2018), the 2017 General Government primary balance in ESA2010 terms was at a surplus of €7.1bn or 4.0% of GDP, significantly higher compared to the forecast in the 2018 Budget of a 2.6% of GDP surplus. The total 2017 General Government fiscal balance in ESA2010 terms was at a surplus of €1.5 bn or 0.8% of GDP. In Programme Terms, the 2017 primary surplus stood at 4.2% of GDP, significantly higher compared to the respective 2018 Budget forecast of 2.44% of GDP,⁹ and the Third Economic

Adjustment Programme target of 1.75% of GDP.¹⁰

As a result, 2017 was the fourth year with a positive primary balance since 2013 – the 2014 primary balance was approximately zero. In particular, according to recent data from the IMF (World Economic Outlook, April 2018), Greece's primary balance for 2013, 2014, 2015 and 2016 stood at 0.4%, 0.0%, 0.7% and 3.8% of GDP respectively (see Figure 13). Considering that the 2009 primary balance was negative at -10.1% of GDP, these outcomes show that the fiscal consolidation that started in early 2010 in the context of the First Economic Adjustment Programme and continued under the Second and Third Programmes has been impressive by any measure, albeit economically and socially painful.

At the State Budget Level, the 2017 primary balance over-performance was based primarily on ordinary budget and public investment expenditure undershooting the 2018 Budget targets and, at a lesser extent, at better-than-expected ordinary budget net revenue for January – December 2017. By contrast, at the General Government level, the over-performance was mainly due to the better than budgeted General Government revenue, mainly due to Single Social Security Entity's (EFKA) revenue.

Figure 13: Greece – Primary Balance (2007-2022, program definition, % of GDP)



Source: IMF, MTF52019-22

⁹ The respective IMF forecast was at 3.8% of GDP (WEO, April 2018).

¹⁰ For the calculation of the primary balance in the terms set by the Third Economic Adjustment Programme and based on Ministry of Finance data, from the GG balance in ESA2010 terms (€7.1 bn) we have to subtract the (one-off) revenues from the bank recapitalization (€0.2 bn), the privatization programme (€0.01 bn), the ECB's SMP & ANFA programme (€0.4 bn), and add the (one-off) expenditure for the refugee crisis (€0.1 bn) and the tax refunds above the level included in the 2018 Budget for 2017 (€0.9 bn). In other words, the GG primary balance in Programme terms is: €7.1-0.2-0.01-0.4+0.1+0.9=€7.5 or ca 4.2% of GDP.

In more detail:

- **State budget ordinary net revenue** for January-December 2017 amounted to ca €48.97 bn, higher by ca €0.26 bn (or 0.5%) relative to the respective forecast in the 2018 Budget. Similarly, total tax revenue over-performed by ca €0.36 bn (or 0.8%) with respect to what was projected in the 2018 Budget.
- **State budget Public investment budget total revenue** for January-December 2017 amounted to ca €2.45bn in January-December 2017, lower by ca €0.98 bn (or -28.5%) relative to the respective forecast in the 2018 Budget.
- **State budget ordinary expenditure** in January-December 2017 amounted to ca €49.74 bn, undershooting the respective forecast in 2018 Budget by ca €0.78 bn or -1.5%, with primary spending below its 2018 Budget forecast by €0.98 and net interest payments above their respective forecast by €0.21 bn or 3.5%.
- **State budget Public investment budget total expenditure** for January-December 2017 amounted to ca €5.95 bn, lower by ca €0.80 bn or -11.9% compared with the respective 2018 budget forecast.

At the General Government level, the **social security organizations balance** according to the 2018 Budget was expected positive at €1.1 bn. The respective balance in the 2017 Budget was negative – a deficit of €0.3 bn. This improvement was mainly attributed to the better than expected revenue of the Single Social Security Entity's (EFKA) during 2017.

4.2 January-June 2018 Fiscal Performance

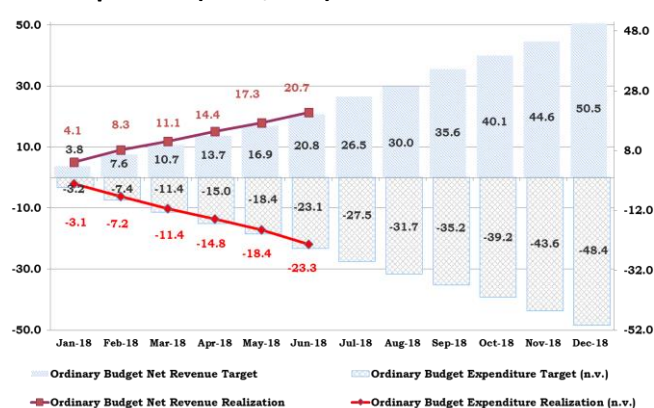
According to the Greek Ministry of Finance's State Budget execution data for January- June 2018, the primary surplus for the first six months of 2018 was at €0.64 bn, significantly higher by €1.10 bn or 236.6% than the respective 2018 Budget forecast (€-0.47 bn). The overall fiscal budget balance for the aforementioned period recorded a deficit of ca €2.30 bn, improved by ca €0.095 bn or 29.2% compared to the respective 2018 Budget target (€-3.25 bn). The over-performance of the primary balance was mainly due to the under-execution of the Public Investment

Budget Expenditure and, to a lesser extent, to the improvement of the state budget net revenue.¹¹

In more detail, ordinary budget net revenue (Figure 14) was at €20.73 bn improved by €0.11 bn or 0.5% compared to the respective MTF5 2019-22 target (Figure 14). This according to our analysis is mainly due to the better than expected Bank of Greece dividend received on February 2018 and at a lesser extent to an improvement on tax revenues. Ordinary budget net expenditure (see Figure 14) was at €23.32 bn, lower by €-0.12 bn or -0.5% compared to the respective MTF5 2019-22 target. Public investment budget revenue was at €1.25 bn, registering an increase of €0.04 bn or 3.7% compared to the respective MTF5 2019-22 target. Public investment budget expenditure was at €0.96 bn registering a decrease of €0.68 bn or 41.5% compared to the respective MTF5 2019-22 target.

According to our analysis, under the working assumptions that a) ordinary budget revenue was at its current level, and b) tax refunds, budget expenditure and PIB revenue and expenditure were at their (MTFS 2019-22) target levels, the January – June 2018 primary balance would have been negative at €0.13 bn but still above the primary deficit target of €0.47 bn.

Figure 14: 2018 State Budget Execution Developments (2017, €bn)



Source: Ministry of Finance

¹¹ The State primary balance target for January – June 2017 is negative at €0.47 bn. This is not unusual, in each year June is the month with the lowest performance in terms of the cash primary balance. The payment of the income and the property tax starts in July and August respectively, the tourist season (VAT revenues) is at its start, the revenues originating from the previous year are concentrated in the first months of the current year but the primary expenditure execution runs on a monthly basis.

With regards to the annual targets, the State primary balance target for 2018 has been revised downwards in the MTFS 2019-2021 at €1.77 bn from €4.26 bn in the 2018 Budget, a difference of ca €2. 49bn. This difference is mainly due to: a) higher tax refunds (€1.64bn) and b) higher ordinary budget primary expenditure (€1.01bn) in the MTFS 2019-22 compared to the 2018 Budget. Despite this revision, the MTFS 2019-2022 still expects the target of the 3rd Economic Adjustment Programme for a General Government primary surplus of 3.5% of GDP to be met and slightly over-performed, at 3.6% of GDP or €6.51 bn. Note that the respective target in the 2018 Budget was at 3.8% of GDP or €7.05 bn, a difference of €0.54bn. The remaining difference of ca €1.96bn between the MTFS 2019-2022 and the 2018 Budget targets is foreseen to be covered mainly from the improved fiscal balance of the legal entities supervised by the Central Government except SOEs (€1.56bn) and from the General Government entities (Local Governments and Social Security Funds, €0.40bn).

4.3 Attainability of the 2018-2022 general government targets

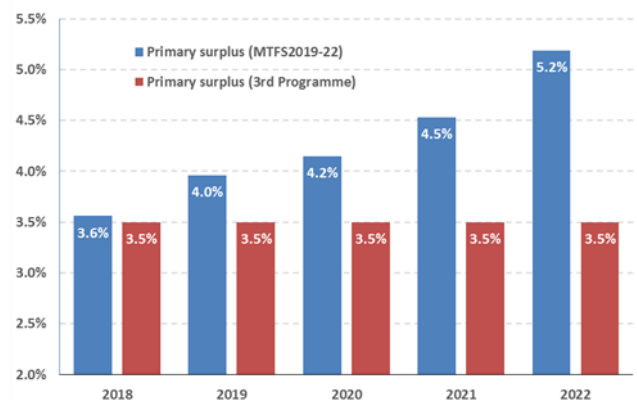
For this year, as mentioned above, according to the Third Economic Adjustment Programme the target for the general government primary surplus is at 3.5% of GDP, which compares with estimates of a 3.56% of GDP surplus penciled in the country's MTFS 2019-22 and a 3.82% of GDP surplus in the 2018 Budget.

According to the MTFS 2019-22, the general government primary surpluses for the period beyond 2018 follow an increasing pattern (see Figure 15). More specifically, the primary surpluses for 2019, 2020, 2021 and 2022 are expected at 3.96%, 4.15%, 4.53% and 5.19% of GDP respectively. The aforementioned pattern is mainly due to (i) the assumed increase of the general government revenues as a result of the expected increase in real GDP for the 2019-2022 period and (ii) measures that were pre-legislated in June 2017 in the context of the 2nd programme review. Namely, these measures included:

- The pension reform to be implemented in 2019 with expected savings of 1.0% of GDP for each year for the 2019-22 period
- The reduction in the personal income tax threshold to be implemented in 2020 with expected net savings of 1.0% of GDP each year for the 2019-2022 period

The difference between the MTFS 2019-22 and the programme primary surplus forecasts, if achieved, could be considered as the fiscal space available to the Greek government for the implementation of both the growth-enhancing tax and spending packages – both agreed in the context of the 2nd programme review too – aiming to alleviate in net terms the impact from the aforementioned fiscal and tax threshold cuts.

Figure 15: Difference between Primary Surpluses in MTFS 2019-22 and Third Economic Adjustment Programme (2019-2022, program definition, % of GDP)



Source: ESM (Third Economic Adjustment Programme for Greece), MTFS2019-22

In our view, the attainability of the aforementioned primary surplus targets for the 2018-2022 period hinges on the following key factors:

- The smooth conclusion of the Third Economic Adjustment Programme for Greece in August 2018 and the reduction of related uncertainty surrounding the post programme relation of

Greece with its official creditors after the end of the Programme

- The full implementation of the medium term debt relief measures.
- The achievement of the 2.0% real GDP growth forecast for 2018 that is assumed in the MTFS 2019-2022. According to the most recent EC and IMF forecasts, real GDP growth for 2018 is now expected at 1.9% and 2.0% respectively. At the same time, the median market forecast for Greece's 2018 real GDP growth stood in 2.0% (average of consensus forecasts published by Bloomberg, Reuters and Focus Economics)
- The achievement of the growth targets for the post 2018 period. According to the MTFS2019-22, real GDP growth is expected at 2.4%, 2.3%, 2.1% and 1.8% for 2019, 2020, 2021 and 2022 respectively
- The continuation of the decreasing path in the unemployment rate that is expected to have a positive effect on tax revenues and social contributions, and also reduce budget expenditure on unemployment benefits
- The progress made by the Independent Authority for Public Revenue in collecting taxes, fighting tax evasion and implementing measures aiming to broaden the tax base.¹²
- The continuation of the increasing trend towards the use of e-payments methods that by definition increase the VAT revenue (and the declared income of the firms). The use of e-payments methods increased significantly as a result of the implementation of the capital control measures in late June 2015 and the incentives created in the last reform of the personal income tax in late 2016.
- The avoidance of an increase in public spending ahead of the 2019 general elections
- The non-continuation of additional General Government arrears to the private sector, in

accordance with the requirements of the current programme

- The increased contribution of the current tax year's revenue to total revenue that will counterbalance the – already – diminishing effect of tax arrears to the public sector.
- The absence of unanticipated geopolitical tensions in the broader region (negative developments in Syria, new escalation of the refugee crisis, etc) and external shocks from a slowdown in the global economy (for example due to Brexit or to the Eurozone and / or China – US trade relations).

4.4 The clearance of the General Government Arrears

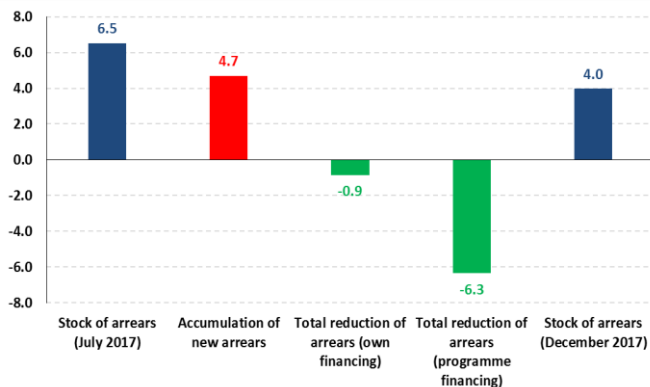
According to the most recent Compliance Report of the Third Economic Adjustment Programme (March 2018), the total outstanding stock of net arrears (net: excluding the estimated impact of the claw-back and rebates in EOPYY) was at €3.97 bn at the end of December 2017, from €6.50 in June 2017 and €9.70bn in June 2016. Between June and December 2017, total funds of €7.21 bn were used for arrears reduction, out of which €6.35 from the ESM loan and 0.87 bn from own resources. According to the Ministry of Finance, total General Government arrears were at €3.33 bn in December 2017, €5.13 bn in June 2017 and €7.28 bn in June 2016. The difference between the arrears reported in the Compliance report and the arrears publicized by the Ministry of Finance (for example in June 2017 this difference was at 6.50-5.13=1.37 bn) was due to the fact that the Ministry of Finance data still do not report unprocessed tax refunds older than 90 days and unprocessed pension claims (see Figures 16 and 17).

According to the most recent General Government data, the stock of arrears at the end of May 2018 was at €3.0 bn, registering a decrease of 11.4% on a monthly basis. Finally, note that according to the aforementioned compliance report, the Greek government should clear the total stock of arrears by the end of the current programme (August 2018).

¹² According to FEIR (2018) the income taxation in Greece is distributed unequally among the population: in 2015 the 20% of the total number of taxpayers declared 53% of the total tax income and paid 80% of the personal income tax. For more information:

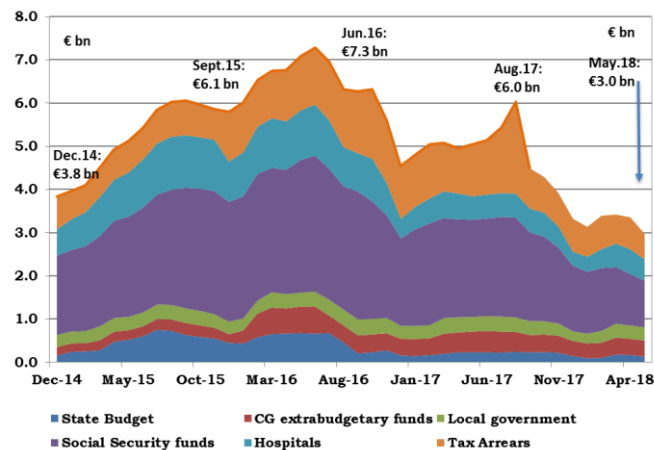
http://iobe.gr/docs/research/RES_29042018_REP_GR.pdf

Figure 16: General Government Arrears to the Private Sector (July-December 2017, € bn)



Source: *ESM (Third Economic Adjustment Programme for Greece), Eurobank Research*

Figure 17: General Government Arrears to the Private Sector (December 2014-march 2018, € bn)

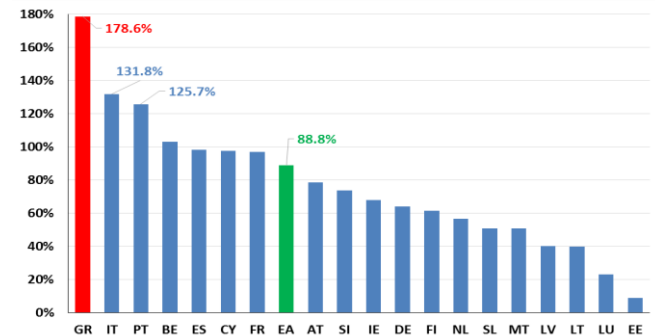


Source: *Ministry of Finance*

4.5 Debt Sustainability Analysis

According to the EC 2018 Spring Forecasts, General Government debt stood at €315.0 bn or 180.8% of GDP at the end of 2016 and €317.4 bn or 178.6% of GDP at the end of 2017. Greece was ranked – for another year – first in terms of General Government debt as a percentage of GDP among Eurozone countries, with Italy (131.8% of GDP) and Portugal (125.7% of GDP) ranking second and third respectively (see Figure 18). According to the European Commission, the Greek public debt is expected to decrease to 177.8% and 170.3% of GDP in 2018 and 2019 respectively.

Figure 18 Eurozone Debt to GDP Ratios (2017, % of GDP)



Source: *AMECO*

The decisions of the 21 June 2018 Eurogroup introduced a number of debt relief measures aimed in improving the medium- and longer-term sustainability of the Greek public debt. In particular: a) a further deferral by 10 years applied to interest and amortization on €96.9bn out of the €131.0 bn of EFSF currently outstanding loans, b) an extension of the weighted average maturity by 10 years, c) the abolition of the step-up interest rate margin on the debt buy-back tranche of the Second Economic Adjustment Programme, conditional on the implementation of a series of structural benchmarks for the 2019-2022 period, and d) the restoration of ECB profits from 2014 and 2017 onwards for a total amount of €5.8bn to be distributed over 2018-2022, conditional on the implementation of a series of structural benchmarks for the 2019-2022 period.¹³

Below, we present an updated Debt Sustainability Analysis (DSA), which takes account of the aforementioned measures.

For comparison reasons we base our DSA analysis on the assumptions of the baseline scenario included in the Third Compliance Report of the Third Economic Adjustment Programme (March 2018) – adjusted for the most recent realized data and forecasts. We present five DSA scenarios. The Baseline scenario (**Scenario A**) includes no debt relief measures and its assumptions are presented briefly below:

- Real GDP: at 1.4%, 1.8% and 1.8% in 2017, 2018 and 2019. Long-term real GDP growth projected to level off to 1.5% after 2022 and to 1.25% after 2030

¹³ <http://www.consilium.europa.eu/en/press/press-releases/2018/06/22/eurogroup-statement-on-greece-22-june-2018/>

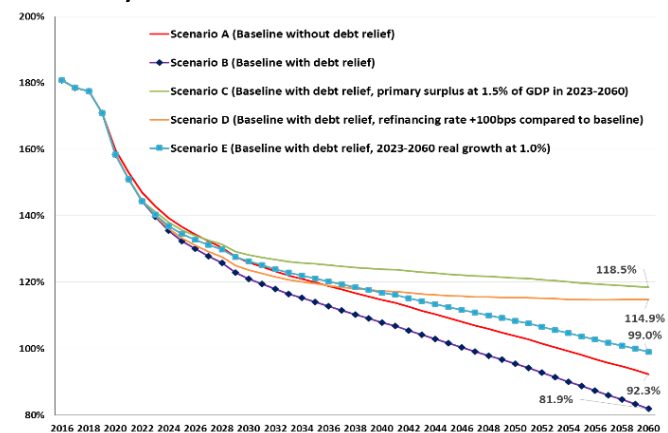
- Inflation: projected to gradually converge, from 0.9% in 2017, to about 2% in 2024 and to maintain this level thereafter
- Primary balance: at 4.2% for 2017 and 3.5% of GDP for 2018-2022. From 2023, decrease of 0.5 p.p. per year, reaching 2.2% of GDP from 2025 onwards.
- Privatization revenues: €14.0 bn from 2017 to 2060, from which € 13.0 bn from non-bank assets.
- Re-financing rate: at 4.9% (average) between 2023 and 2060.

The evolution of Debt-to-GDP ratio is affected positively by debt relief measures, yet it is sensitive to assumptions about nominal growth, re-financing rates and primary surpluses. As an illustration, we present four alternative scenarios as follows:

- **Scenario B:** Assumptions remain unchanged compared to Scenario A but with the aforementioned debt relief measures included.
- **Scenario C:** The primary surplus falls from 2.2% of GDP to 1.5% of GDP between 2023 and 2060 as a result of the fiscal fatigue. All the other assumptions of Scenario B remain unchanged.
- **Scenario D:** The average refinancing rate increases from 4.9% to 5.9% between 2023 and 2060. All the other assumptions of Scenario B remain unchanged.
- **Scenario E:** The average refinancing rate is maintained at 4.9% as in Scenario B and the long term growth rate falls to 1.0% from 1.5% in Scenario B between 2023 and 2060. All the other assumptions of Scenario B remain unchanged.

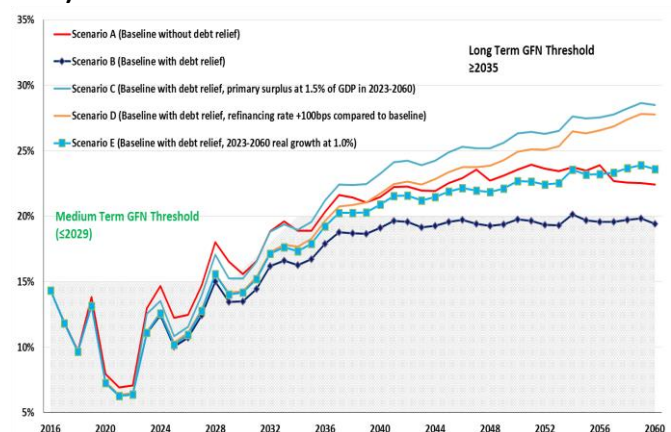
Figures 19 & 20 below present the evolution of the Greek GG debt and the Gross Financing Needs (GFN) as percentages of GDP between 2016 and 2060. Note here that, in view of the long average duration of the Greek public debt and concessionary interest rates, the debt-to-GDP ratio does not provide an accurate representation of debt sustainability. Hence, the Programme has adopted an alternative sustainability criterion that the GFN-to-GDP ratio should be below 15% for the medium term (defined as ca 2038), while for the long term it needs to be below 20%.

Figure 19: Debt Sustainability Analysis (2016-2060, % of GDP)



Source: PDMA, Ministry of Finance, Eurobank Research

Figure 20: Gross Financing Needs (2016-2060, % of GDP)



Source: PDMA, Ministry of Finance, Eurobank Research

Under Scenario A (i.e. without debt relief measures) GG Debt is expected at 92.3% of GDP in 2060 but the GFNs are above the respective targets for both the medium and the long term. Under Scenario B and as a consequence of the debt relief measures, GG debt is expected at 81.9% of GDP in 2060, with the GFNs below the 15% threshold in the medium term and below the 20% in the long run. Clearly, GG debt is considered as sustainable under Scenario B. However, the three alternative scenarios show the sensitivity of the GG debt path to changes in the underlying assumptions. Under Scenario C, a lowering of the primary surplus by just 0.7 percentage points (from 2.2% of GDP to 1.5% of GDP) between 2023-2060 leads to an expected debt to GDP ratio 118.5%

in 2060 and to GFN levels that are unsustainable post 2030. Under Scenario D, an increase in the refinancing rate by 1 percentage point (from 4.9% to 5.9%) between 2023-2060 leads to an expected debt to GDP ratio of 114.9% and to unsustainable GFN levels in the long run due to the substitution of the relatively cheap ESM/EFSF funding with more expensive market funding. Finally, under Scenario E, the lowering of the long term expected growth rate to 1.0% from 1.5% after 2022 and to 1.25% after 2030 under Scenario A, leads to a Debt-to-GDP ratio of 99.0% in 2060 and to unsustainable GFN levels in the long run.

The above exercise shows that, both in terms of the debt –to- GDP ratio and GFN –to- GDP ratio, even for the baseline scenario, the implementation of debt relief measures decided in the context of the June 21 2018 Eurogroup was a necessary precondition for the definition of sustainability to be satisfied. Moreover, small changes in the DSA assumptions could derail the already fragile baseline scenario’s debt-to GDP path. Therefore, the need for further interventions in the official sector held GG debt in the long-term cannot be ruled out, in the case macroeconomic and fiscal assumptions prove too optimistic.¹⁴

4.6 Cash buffer of €24.1bn aiming to cover financing needs for -at least- the next 22 months after the end of the programme

Written by Tasos Anastasatos, Theodoros Stamatou

According to the 4th and final review of the Third Economic Adjustment Programme, the cash buffer aiming to facilitate Greece’s access to the international markets in the post programme period was expected at €24.1bn (Figure 21), on the basis of:

- a) The revenues of ca €4.4 bn from the GGB issuances of 2017 and 2018 used for the build-up of the cash buffer,

- b) The disbursements from the ESM loan (€11.4bn). Note that from the disbursement following the 3rd review of the programme, ca €1.9 bn were used for the cash buffer build-up. From the disbursement of the 4th review, €5.5bn are expected to be disbursed in the segregated account to cover for the debt service needs and ca €9.5 bn will be used for the build-up of the cash buffer.
- c) The repo agreements between the Ministry of Finance and the various General government entities (€8.3 bn)¹⁵ used for the build-up of the cash buffer.

Note that PDMA¹⁶ states that the buffer of €24.1bn accrues *after* €3.3bn have been used for IMF buyback,¹⁷ i.e. cash available before buyback amounts to €27.4bn; this implies repos of €8.3 bn. Yet, the EC 4th Review Compliance Report states that use of subsector deposits through repo operations accumulated between Aug 2015-May 2018 amounts to €13.8bn. Possibly, parts of those have already been used for other purposes. However, after the disbursement of the 4th Review tranche, the MinFin estimates that there is scope for repos to reach again approximately that amount of €13.8bn. Therefore, we use the number compatible with the “official” estimation and it has to be deduced that there is a possibility for repos to be extended again by an additional €5.5 bn. Hence, the cash buffer can be extended to ca €30.0bn as a result of the most extensive use of repo agreements between the Ministry of Finance and General Government’s entities.

According to PDMA, at the end of March 2018 the total level of the repo agreements was at €22.5bn (used not only for the buffer but also for other purposes).¹⁸ The repo figure is currently estimated to be larger, at ca €27.0bn, and thus a cash buffer of €30 bn is attainable.

¹⁴ According to press reports, the IMF in its Article IV publication for Greece confirms the medium term sustainability of the debt according to debt-to-GDP and GFN-to-GDP criteria, but expresses serious doubts over the respective long term sustainability. Reportedly, the ECB shares this view. Moreover, according to the ECB(2011), past experience from other EU countries shows that large primary surpluses have been maintained for a period of 6 to 14 years at the most. For more information: https://www.ecb.europa.eu/pub/pdf/other/mb201106_focus08_en.pdf?728318f731b4d0191ab85cd2e72ee2d2

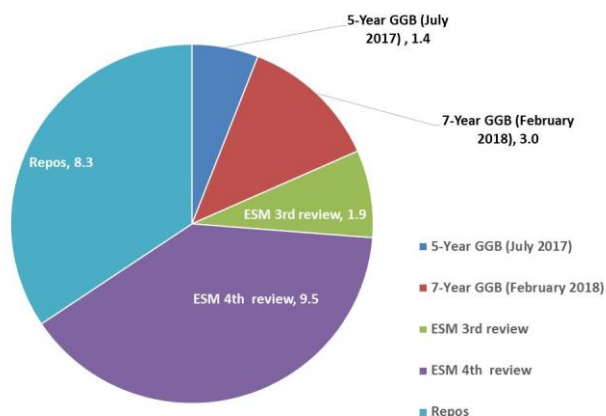
¹⁵ https://ec.europa.eu/info/sites/info/files/economy-finance/compliance_report_4r_2018.06.20.docx.pdf

¹⁶ <http://www.pdma.gr/attachments/article/1566/EUROGROUP%20STATEMENT%20JUNE%202018%20%20MEDIUM-TERM%20DEBT%20RELIEF%20MEASURES.PDF>

¹⁷ According to the Ministry of Finance (PDMA) the debt to the IMF amounts to ca €10.4 bn.

¹⁸

https://minfin.gr/documents/20182/447702/Bulletin+%CE%9D%CE%BF_89.pdf/613dbcb6-17ec-4774-b015-f80bcc3cbb7c

Figure 21: Cash Buffer Components (€ bn, May 2018)

Source: PDMA, Eurobank Research, ESM (4th Review)

According to the PDMA, the cash buffer of 24.1bn is equivalent to 2 years of gross financing needs after the end of the programme or 4 years assuming that the current stock of T-bills will be rolled over.¹⁹

Below we present two scenarios that replicate the results publicized by the PDMA.

Table 5: Financing needs (2018-2023)

Financing needs 2018-2023										
	T-bills	All other (excl. repos)	Total interest	Primary Surplus	Programme instalments	SMP&ANFA Returns	Gross Financing Needs	Cumulative GFN	TFN (%GDP)	GDP
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(1)+(2)+(3)-(4)-(5)-(6)	(8)	(9)=(8)/(10)	(10)
2018	14.40	3.89	6.30	6.40	8.80	0.00	9.39	9.39	5.1%	183.0
2019	0.00	11.75	6.30	6.64	0.00	0.00	11.40	20.79	6.0%	189.7
2020	0.00	5.02	6.39	6.90	0.00	0.00	4.51	25.30	2.3%	197.2
2021	0.00	5.09	6.70	7.16	0.00	0.00	4.63	29.93	2.3%	204.6
2022	0.00	9.85	6.90	7.42	0.00	0.00	9.32	39.25	4.4%	212.0
2023	0.00	12.21	6.80	7.43	0.00	0.00	11.58	50.83	5.5%	212.4

Source: PDMA, ESM, Ministry of Finance, Eurobank Research

Notes: Assumptions: a) Full repayment of the €14.4bn of t-bills by the end of 2018, b) no IMF debt buy-back and, c) the revenues from the ECB's SMP&ANFA programme will be used for investment purposes and not for debt servicing according to the 21 June 2018 Eurogroup agreement.

¹⁹ The EC's calculation that the cash buffer covers financing needs until mid-2020 implies that the EC assumes elimination of the entire €14bn stock of T-bills (which are then added to financing needs). This is deduced given that the EC explicitly states that their calculation of financing needs includes the projected state cash primary balance.

Under **Scenario 1**, we assume that the full stock of T-bills will be repaid by the end of 2018, that there will be no IMF debt buy-back and that the revenues from the ECB's SMP&ANFA programme will be used for investment purposes and not for debt servicing, according to the 21 June 2018 Eurogroup agreement. This scenario matches the EC 4th Review Compliance Report assumption of no liability management exercise in the calculation of financing needs. Also, privatisation proceeds are assumed to be zero for being conservative. Under these assumptions, the cash buffer of 24.1 bn is equivalent to two years of gross financing needs after the end of the programme, i.e until August 2020.

Under **Scenario 2**, we assume that the full stock of T-bills will be rolled-over for the 2018-2023 period, that there will be no IMF debt buy-back, and that the revenues from the ECB's SMP&ANFA programme will be used for investment purposes and not for debt servicing, according to the 21 June 2018 Eurogroup agreement. Under these assumptions, the cash buffer of €24.1 bn is equivalent to almost four years of gross financing needs after the end of the programme, i.e. until August 2022.

Table 6: Financing needs (2018-2023)

Financing needs 2018-2023										
	T-bills	All other (excl. repos)	Total interest	Primary Surplus	Programme instalments	SMP&ANFA Returns	Gross Financing Needs	Cumulative GFN	TFN (%GDP)	GDP
	(1)	(2)	(3)	(4)	(5)	(6)	(7)=(1)+(2)+(3)-(4)-(5)-(6)	(8)	(9)=(8)/(10)	(10)
2018	0.00	3.89	6.30	6.40	8.80	0.00	-5.01	-5.01	-2.7%	183.0
2019	0.00	11.75	6.30	6.64	0.00	0.00	11.40	6.39	6.0%	189.7
2020	0.00	5.02	6.39	6.90	0.00	0.00	4.51	10.90	2.3%	197.2
2021	0.00	5.09	6.70	7.16	0.00	0.00	4.63	15.53	2.3%	204.6
2022	0.00	9.85	6.90	7.42	0.00	0.00	9.32	24.85	4.4%	212.0
2023	0.00	12.21	6.80	7.43	0.00	0.00	11.58	36.43	5.5%	212.4

Source: PDMA, ESM, Ministry of Finance, Eurobank Research

Notes: Assumptions: a) Full repayment of the €14.4bn of t-bills by the end of 2018, b) no IMF debt buy-back and, c) the revenues from the ECB's SMP&ANFA programme will be used for investment purposes and not for debt servicing according to the 21 June 2018 Eurogroup agreement.

The period expected to be covered by the cash buffer of €24.1bn would be further extended if we assume:

- lower interest expenses,²⁰ and / or
- use of the SMP & ANFA revenues of 2018-2022 for debt servicing, and / or
- debt buy-back of the IMF debt,²¹ and / or
- new GGBs issuances.

Indicatively, if we assume that the revenues from ECB's SMP&ANFA programme (€1.0 bn each year from 2019 to 2022) will be used for debt servicing needs, while everything else remains as in Scenario 1 above, the cash buffer of 24.1 bn is equivalent to 26 months of gross financing needs after the end of the programme (i.e until December 2020).

5 2018 Banking Sector Outlook

Written by Theodoros Stamatiou

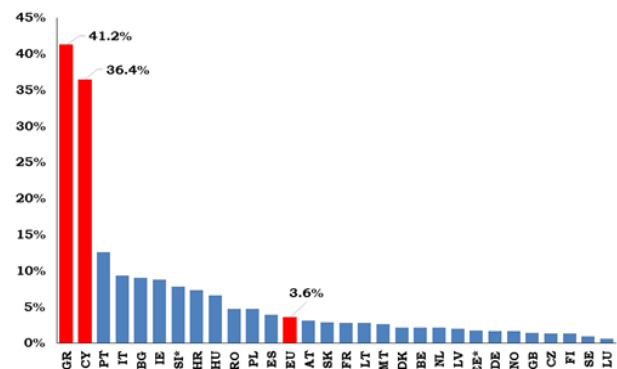
5.1 Banking Sector Performance

In the years after the outbreak of the sovereign debt crisis, Greek banks faced strong pressures due to the severe economic recession and the PSI, culminated in the bank holiday and capital controls in the summer of 2015. Greek banks underwent four strict stress tests in the 2012-2015 period, leading to three recapitalizations of €64bn cumulatively. However, 2017 was the second year in a row that the domestic banking system returned to marginal pre-tax profitability on a consolidated basis, following a number of loss-making years, due to an improvement in operating results and a significant decline in the provisioning of bad debts. This trend continued in the first quarter of 2018 too. Regarding capital adequacy, the CET1 ratio of the four significant credit institutions stood at 2017 at 17.1% vs. a Eurozone CET1 ratio average of 14% from 16.9% in 2016.²² According to the SSM, the respective CET1 figures for the first quarter of 2018 were at 16.2% for Greek Banks and 14.6% for Eurozone banks. Hence, the European Banking Authority (EBA) classifies Greek

banks among the adequately capitalized ones within the EU.

Non-performing loans remain the most serious problem for the Greek banks. The ratio of Non-Performing Exposures (NPEs) as a percentage of total loans is the highest among the euro-area banks (see Figure 22). According to EBA, Greek banks' NPEs, including restructured loans, were at 41.2% of total loans, while the respective euro-area average was at 3.6% of total loans. However, significant progress was made during 2017 regarding NPEs reduction. Greek Banks committed back in 2015 to their supervisors to reduce their stock of NPEs by 38% until the end of 2019, with quarterly monitoring of the progress relative to various KPIs.

Figure 22: Non Performing Exposures (2017Q4, EU, % total loans)



Source: European Banking Authority

In particular, on the basis of the operational targets that Greek banks submitted to the Bank of Greece and the SSM, they are obliged to reduce the absolute amount of NPEs, from €106.9 bn in September 2016, to €64.6 bn (-40.0%) by December 2019 and the absolute amount of NPLs from €78.3 bn in September 2016 to €38.6bn (-51%) by December 2019. The targets are back-loaded, with more ambitious NPEs reductions planned for the second half of 2018 and 2019. According to the Bank of Greece, at end-March 2018 total NPEs excluding off-balance sheet items were at €92.4 bn, from €94.4 bn at the end of December 2017, registering a quarterly decrease of 2.1% and an annual decrease of 11.1% (NPEs at €103.9 bn at the end of March 2017). As a result, the

²⁰ Interest expenses appearing in the calculations above are on an accrual basis and not on a cash basis; the latter will be substantially lower due to the deferral granted by the Eurogroup decision.

²¹ Up to €5.0 bn could be used for the IMF's debt-buy back; in such a case, it would be reasonable that the most expensive tranche of the loan will be paid-back first.

²² Bank of Greece, Annual Report of the Governor of the Bank of Greece, February 2018.

Greek banks' NPE stock level was lower by ca €1.3 bn relative to their respective end of March 2018 NPEs reduction plan target. The improvement was mainly due to higher write-offs. On the other hand, sales of NPEs, liquidations and collections were slightly worse compared with end-December 2017. ²³ The quarterly cure rate remained at the same level as in the fourth quarter of 2017 at 1.8%, a little lower than the default rate that increased in the last quarter reaching 1.9%, thus reversing the good performance noticed in the fourth quarter of 2017. NPEs reduction is expected to be supported by:

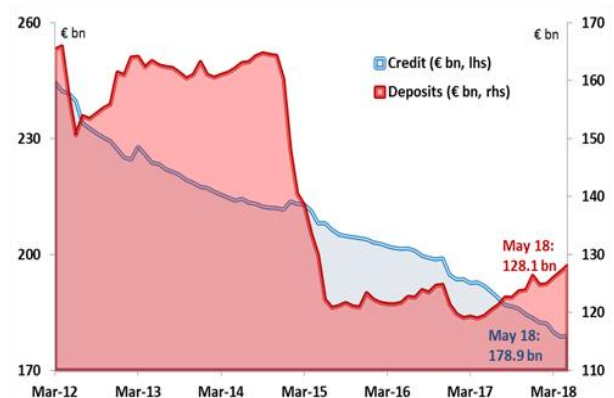
- the legislation passed in Parliament recently in the context of the 3rd and 4th reviews of the 3rd Economic Adjustment Programme and included amendments in the Law 3869/2010,
- the e-auctions framework aiming to expose strategic defaulters, and
- the Out of Court Workout for firms that are deemed as solvent.

The ongoing private sector – households and non-financial corporations - deleveraging during 2017 was mainly the result of the aforementioned process aiming to reduce the NPEs of the Greek banks. At the same time, credit and deposits' growth (both the demand and supply sides) were negatively affected by a number of factors, including the uncertainty and delays that surrounded the conclusion of the 2nd review of the Third Economic Adjustment Programme (initially planned for the end of 2016 but actually completed in June 2017), the deferral of the medium-term debt relief measures for the end of the programme "if needed", and the fiscal drag by the measures agreed in the context of the 1st review of the programme. According to the Bank of Greece, at the end of December 2017, the private sector domestic credit balance stood at €183.6 bn or 103.3% of GDP, from €194.7 bn or 111.8% of GDP at the end of December 2016, registering an annual decrease of -6.1%. At the end of June 2018, the private sector's credit balance was at €178.5 bn, registering a year to June decrease of -2.8% and an annual decrease of -6.3% (see Figure 23).

On the other side of the ledger, private sector domestic deposits amounted to €126.4 bn or 71.1%

of GDP in December 2017, from €121.4 bn or 69.7% of GDP in December 2016, registering an annual increase of €5.0 bn or 3.9%. General government deposits also recorded an annual increase of 6.5% at the end of December 2017. The increase in private sector deposits was reflected in a decrease of the cash outside the Greek banking system, which at the end of December 2017 was at €35.9 bn or 20.2% of GDP, from €43.3 bn or 24.9% of GDP a year earlier. Note that the cash outside the banking system was at 17.3% of GDP in September 2014, just before the start of the last run on deposits and the implementation of the capital controls measures at the end of June 2015 due to the uncertainty created by the Presidential elections of December 2014, the subsequent general elections of January 2015 and the delay in the conclusion of the final review of the Second Economic Adjustment Programme for Greece, which was initially scheduled before the end of 2014. According to the European Central Bank, the Eurozone average cash in circulation at the end of December 2017 was at 10.5% of GDP. According to the most recent data, at the end of June 2018, cash outside the Greek banking system was at €32.4 bn or 17.7% of GDP, registering a year-to-June decrease of 9.8%. Even though this decrease is notable, the level of the cash outside the banking system is significantly above the Eurozone average of 10%, indicating there is still uncertainty and room for improvement. Furthermore, according to the most recent Bank of Greece data, private sector's deposits at the end of June 2018 were at €129.4 bn registering a year to June increase of 2.4% and an annual increase of 7.5%.

Figure 23: Loans & Deposits (3/2012-3/2018, € bn)



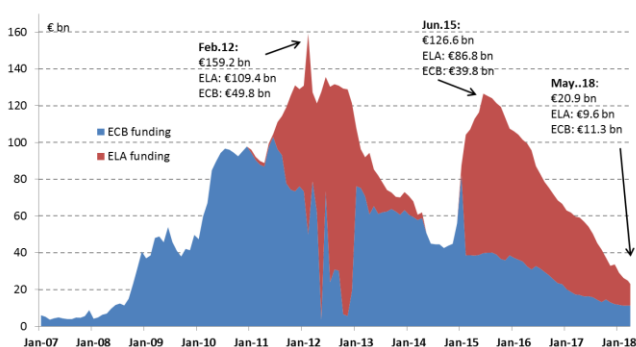
Source: Bank of Greece

²³ Bank of Greece, Report on Operational Targets for Non-Performing Exposures, June 2018 & June 2017.

The improvement in private sector deposits, along with deleveraging, the renewed access to the interbank funding markets, and the reinstatement of the ECB's waiver in mid-2016 in the context of the first review of the Third Economic Adjustment Programme, allowed a significant reduction in the Greek banks' dependence on the Eurosystem for liquidity (see Figure 24). At the end of December 2017, total Eurosystem funding was at €33.7 bn, from €66.6 bn at the end of December 2016, a reduction of 49.5%. In more detail, the funding from the ECB was at €12.1bn at the end of December 2017, from €23.0 bn at the end of December 2016, while the Emergency Liquidity Assistance from the bank of Greece was at €21.6 bn at the end of December 2017, from €43.7 bn at the end of December 2016.

In the first five months of 2018, total Euro system funding continued the downward pattern of 2017. According to the most recent Bank of Greece data, total Eurosystem funding at the end of May 2018 was at €20.9 bn, from €33.7 bn at the end of 2017 registering a year to March decrease of 38.0%. In more detail, ECB and ELA funding at the end of May 2018 was at €11.3 bn and €9.6 bn respectively.

Figure 24: Eurosystem Funding (2011-2018, € bn)



Source: Bank of Greece

The four Greek systemic banks, according to the respective ECB announcement in May 5 2018, completed successfully the 2018 EBA stress tests. The latter were conducted in the framework of the Europe-wide EBA 2018 stress test exercise but the publication of results on Greek banks was brought forward, ahead of the end of the Third Economic Adjustment Programme, in order to provide

adequate time for action in the banking system if necessary. The results of the 2018 EBA Stress tests for the remaining Eurozone significant banking institutions will be published in October 2018. In more detail, according to the ECB, the results of the 2018 EBA Stress test for the four Greek systemic Banks showed that the average capital depletion in terms of the CET1 ratio under the adverse scenario was at €15.5 bn or 9.0%.²⁴ That scenario covered a three-year period (up to 2020) and assumed static (end of 2017) IFRS9 restated balance sheets. Note that according to the ECB a) the stress test was not a pass-or-fail exercise as no predetermined capital thresholds that would trigger a need for recapitalization were specified and b) due to the static balance sheet assumption, divestments not completed before end-2017 were not taken into account in the stress test, even if already agreed upon, which might have resulted in lower capital ratios than if divestments with a positive capital impact had been considered.

5.2 2018 Banking Sector Outlook

Conditional on no major surprises we expect that the Greek banks will continue to reduce their ELA exposure in the second half of 2018 with a view to eliminate it. The post-programme regime of the Greek economy can cause delays in the ELA reduction. The ECB has already made it clear that the post-programme regime of the Greek economy agreed in the 21 June Eurogroup does not qualify for a waiver.²⁵ The cancellation of the waiver, will affect the eligibility of marketable debt instruments issued

²⁴ According to the ECB, the capital depletion stood at 8.56 percentage points for Alpha Bank (CET1 ratio from 20.37% in the baseline to 9.69% in the adverse scenario), 8.68 percentage points for Eurobank-Ergasias (CET1 ratio from 16.56% in the baseline to 6.75% in the adverse scenario), 9.56 percentage points for the National Bank of Greece (CET1 ratio from 15.99% in the baseline to 6.92% in the adverse scenario) and 8.95 percentage points for Piraeus Bank (CET1 ratio from 14.52% in the baseline to 5.90% in the adverse scenario).

²⁵ The President of the ECB, Mario Draghi, at the Governing Council's Press Conference in 26 July 2018, while noting the successful actions undertaken by the Greek Government so far, he made clear that participation to the ECB's QE programme requires the existence of a waiver for the marketable debt instruments issued or fully guaranteed by the sovereign and domestic banks. According to the ECB President, the current waiver will expire at the end of the current programme in August 2018.

or fully guaranteed by the sovereign and domestic banks. Considering that Greece's credit rating is significantly below the investment grade, such an event would force Greek banks to transfer all their liquidity needs from the ECB to the ELA facility or to substitute with market financing. Such an event, even though manageable in terms of the actual interest cost (we estimate that the additional cost of financing via the ELA facility, if needed, is expected at €60-70 mn), will also have a negative effect in the process for the gradual abolishment of capital controls. This process is conditional on the return of the Greek economy to "normal conditions" and to a restoration of confidence. Clearly, the cancellation of the ECB's waiver after late August constitutes a step in the opposite direction.

We also expect that, starting from mid-2018 onwards, the Greek banks will further intensify their efforts towards NPE reduction. The NPEs related initiatives by the European Commission and / or the ECB are expected to play a significant role in the reduction of the NPEs related risk not only in Greece but also at the Eurozone level.²⁶

Under these circumstances and conditional on the realization of our macroeconomic scenario for 2018, the credible implementation of the agreement for the post-programme period, the continuation of the process for the abolishment of the capital controls introduced at the end of June 2015, and the unobstructed continuation of the NPEs reduction process, Greek banks can have a significant contribution to economic recovery, in particular in the following directions:

1. The funding of all large-scale infrastructure projects.
2. The use of the available EU-originated funds for the funding of domestic investment projects
3. The facilitation of the restructuring of the Greek economy via the NPEs resolution / restructuring process. Freeing up resources currently trapped in unproductive uses and non-viable businesses is essential for the expansion of the economy's

productive capabilities, in conjunction with the transformation of its growth model towards exports- and investment-driven growth.

4. The gradual increase in the supply of credit as a result of the space that will be created via the reduction of the NPEs and the positive environment in terms of credit demand.
5. The ongoing contribution in the fight against tax evasion via the enhancement of the e-payments environment.

6 Progress in ESM programme implementation and the next day

Written by Anna Dimitriadou

6.1 ESM programme implementation

On 22 June the Eurogroup announced the successful conclusion of the 3rd economic adjustment programme for Greece that was signed in August 2015 and officially ends in August 2018 and laid out the parameters that will define the medium and – to an extent – the long term economic prospects of the country.

On the conditionality front, the Eurogroup acknowledged the completion of all agreed prior actions of the fourth and final review that comprised 88 prior actions, some of which entailed primary or secondary legislation while others concerned the implementation of existing legislation. To this effect, on 14 June 2018 a multi-bill was voted in Parliament including amendments and provisions about: the OCW framework (Law 4469/2017), the household insolvency framework (Law 3869/2010), the NPLs resolution framework (Law 4354/2015), the investment licensing framework (Law 4442/2016), the arbitration and mediation procedures in the labour market, welfare benefits, social security contributions, supplementary pensions, the social solidarity income, the Code of Civil Procedure and the Insolvency Code, the execution of clawbacks in the health sector and inclusion of additional items under the clawback, the Renewable Energy Source (RES)

²⁶ For more information on the respective initiatives: <https://www.bankingsupervision.europa.eu/press/pr/date/2018/html/ssm.pr180711.en.html> and <https://ec.europa.eu/transparency/regdoc/rep/1/2018/EN/COM-2018-133-F1-EN-MAIN-PART-1.PDF>

account, the Single Treasury Account, land uses, the anti-smuggling framework in the tobacco industry and the assessment and mobility schemes for public sector employees. Additionally, the multi-bill included the Medium Term Fiscal Strategy 2019-2022, which foresees annual GDP growth of 2.0% in 2018, 2.4% in 2019, 2.3% in 2020, 2.1% in 2021 and 1.8% in 2022.

The Eurogroup also underlined the importance of the implementation of the legislated reforms in the period ahead and welcomed the ownership of the reform process as manifested in the Greek authorities' comprehensive growth strategy.

The final loan tranche of the ESM programme amounts to €15 bn, out of which €5.5 bn will be used for debt servicing and €9.5 bn will be disbursed to a dedicated account for the cash buffer and will be used for debt management upon agreement between the Greek authorities and the European institutions. The cash buffer at the end of the programme will be in the order of €24.1 bn, which is estimated by the EC to cover Greece's sovereign financing needs for around 22 months after August 2018.

6.2 Debt relief

On the fiscal front, the Eurogroup confirmed the primary surplus target of 3.5% of GDP up to 2022 and of 2.2% of GDP on average for the period 2023 to 2060. Debt sustainability is to be assessed against the previously agreed benchmarks for gross financing needs, which should remain below 15% of GDP in the medium term and below 20% of GDP thereafter.

The Eurogroup also agreed on a number of medium-term debt relief measures as follows:

1. The abolition of the step-up interest rate margin related to the debt buy-back tranche of the 2nd Greek programme as of 2018. According to a preliminary analysis by the Public Debt Management Agency²⁷ (PDMA) this measure represents annual interest savings of c. €0.2 bn.

2. 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), which according to the PDMA amount to €5.8 bn. 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.
3. A further deferral by 10 years of interest and amortization on c. €96.9 bn (according to PDMA) of EFSF loans and an extension of the maximum weighted average maturity (WAM) by 10 years, respecting the programme authorized amount.

The first two debt relief measures will be granted to Greece conditional on compliance with agreed policy reforms, which will be monitored by the institutions (EC/ECB/ESM/IMF) as envisioned in the post-programme surveillance framework.

For the long-term period, the Eurogroup agreed to review its debt sustainability analysis at the end of the EFSF grace period in 2032 and adopt additional debt relief measures then, if needed, in accordance to the May 2016 agreement on a contingency mechanism on debt, which could be activated in the case of an unexpectedly more adverse scenario. In this case, the debt measures could include the further re-profiling and capping and deferral of interest payments on the EFSF loans in order to meet the aforementioned GFN benchmarks.

The modalities of debt relief had been a friction point between France, Italy, Spain and the IMF on one side, and Germany and some other EU countries on the other side. The first group favoured substantial, frontloaded debt relief, with the IMF in particular contending that although Greece has made good progress on policies, more is needed to be done to satisfy its standards²⁸ for debt sustainability.

²⁷ PDMA, "Eurogroup Statement June 2018: Medium-term debt relief measures", <http://www.pdma.gr/en/debt-instruments->

[greek-government-bonds/announcements/1566-eurogroup-statement-june-2018-medium-term-debt-relief-measures](http://www.pdma.gr/en/debt-instruments-greek-government-bonds/announcements/1566-eurogroup-statement-june-2018-medium-term-debt-relief-measures)

²⁸ IMF Press Briefing, 17 May 2018,

Germany, on the other hand, supported instead a smaller extension of grace periods and maturities and a rather substantial cash buffer that would allow Greece to refrain from borrowing from the financial markets for a few years. The 22 June Eurogroup agreement on debt constitutes middle ground and, in essence, allows Greece more time to finish the work that it has started in order to fully restore the trust of the financial markets and return to investment grade.

It is worth noting that the so called “French proposal”, which envisaged the automatic activation of debt relief measures once GDP growth were to fall below a certain threshold, was not included in the 22 June Eurogroup agreement.

6.3 Post-programme framework

Upon completion of the current ESM programme and at least until 2022, Greece will be subject to the Enhanced Post Programme Surveillance (EPPS) framework as foreseen in EU Regulation 472/2013. This framework has never been used before and is stricter than the one applied to other programme countries. Generally, its features are proportionate to the seriousness of the problems faced by the Member State, which has to adopt measures aimed at addressing the sources or potential sources of its difficulties. Progress is monitored through regular reporting by the competent technical teams, which are granted access to all necessary information regarding the economic, fiscal and financial situation of the Member State. In the case of Greece in particular, based on what is known so far, there will be quarterly reviews by the institutions (EC/ECB/ESM/IMF) to assess the economic, fiscal and financial situation and the post programme policy commitments. These quarterly reviews 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 up to 2022. The reviews will be made public, thus allowing the markets to be simultaneously informed about the achieved progress.

6.4 IMF participation

The IMF is carrying out its own debt sustainability analysis in the context of the Article IV consultation. According to its staff concluding statement published on 29 June, the debt relief agreed at the 22 June Eurogroup is considered to have significantly improved debt sustainability over the medium term. For the longer-term however, the IMF staff argue that assumptions about GDP growth and Greece’s ability to run large primary fiscal surpluses are too ambitious and it is thus arguable whether Greece can sustain market access without further debt relief. As a result, the European partners’ commitment to provide additional debt relief if needed is welcome but it is noted that further debt relief should be contingent on realistic assumptions, particularly as regards Greece’s ability to maintain such high primary surpluses for such a protracted period of time. The DSA in the context of the Article IV consultation is expected to be published towards the end of July/beginning of August.

In the staff concluding statement, the IMF argues in favour of a growth-friendly rebalancing of the fiscal policy mix in order to support inclusive growth while meeting fiscal targets. To this effect, the Greek government is strongly encouraged to implement the already legislated fiscal package for 2019 – 2020 (pension reform delivering net savings of 1% of GDP in 2019 and a reduction of the personal income tax credit to broaden the tax base in 2020) and increase targeted social support and investment spending. The IMF also points to the importance of tackling very high NPEs, further boosting productivity and labour force participation, improving public sector efficiency and governance and safeguarding the independence of the statistical authority.

As regards the IMF’s involvement in Greece, although the Stand-By Arrangement will not be activated, the Fund will remain engaged in Greece’s post programme monitoring.

6.5 Reforms – prior actions

Under the 3rd ESM programme, an ambitious and wide reform programme has been implemented, spanning a number of areas such as public administration, healthcare, labour and product markets, social security, the tax system and the banking system and complementing the reforms that had been carried out during the previous economic adjustment programmes. These aim at improving the efficiency of the state sector and markets' operations and assisting the transformation of the Greek growth model into one driven by exports and investments. The long-term goal is to ensure dynamic and sustainable GDP growth rates. In the shorter-term, the continuation of reforms aims at boosting market confidence and supporting Greece's return to the financial markets in a sustainable manner. In fact, rating agencies are citing Greece's commitment to reforms along with fiscal prudence and resolution of the NPEs problem as the most important factors to lead Greece's sovereign bonds to investment grade. These issues are considered to be key for the consistent decline of the debt to GDP ratio and the containment of the State's Gross Financing Needs (GFN) as a percentage of GDP.

Some of the most important reforms carried out under the current and past ESM programmes may be summarized as follows:

- Insolvency framework: liberalization of the servicing and sale of NPLs, modernization of the household insolvency framework for household and corporate debts, establishment of the out-of-court workout mechanism, adoption of operational targets agreed by the banks and the supervisors (BoG/SSM) to reduce NPEs by 38% by 2019.
 - Markets and institutions: liberalization of product & services markets and opening up of closed professions, implementation of a number of OECD Toolkits I, II and III recommendations, establishment of Independent Authority for Public Revenue (IAPR).
 - Pension system: following major reforms during previous ESM programmes, another significant reform effort took place under the current programme with a view to reducing medium- and long-term costs and tackling structural problems. A further rationalisation of the pension system will take effect in 2019 generating savings of 1% of GDP.
- Labour market: transfer to the State of the competence to set the minimum wage (abolition of the General Collective Labour Agreement), suspension of "favourability principle", Supreme Labour Council becomes the competent authority to oversee collective dismissals and abolition of the Labour Minister's veto power, fast-track judicial procedure for the resolution of disputes concerning strikes, increase of quorum for 1st degree unions to declare strikes to 50 percent.

Nevertheless, the reform process is far from complete and progress in this front will be closely monitored under the Enhanced Post Programme Surveillance (EPPS) that Greece will be subject to at least until 2022. According to the 22 June Eurogroup, the conditionality of the EPPS covers the following areas:

1. Fiscal and structural reforms: emphasis will be given on attaining the agreed primary surplus targets, the adjustment of the property tax rates based on market values, the enhancement of the Independent Authority of Public Revenue and the improvement of public financial management.
2. Social welfare: focus will be on the set up of the single pension fund (EFKA), the modernization of the health care sector in particular through the establishment of the primary health care centres (TOMYs) and the central procurement body (EKAPY) and the completion of the social safety nets reform.
3. Financial stability: special attention must be given to the resolution of NPLs, the exit strategy for the sale of the HFSF stakes in banks and the further relaxation of capital controls.
4. Labour and product markets: with regard to the labour market, emphasis should be placed in safeguarding competitiveness in line with Law 4172/2012, while in the product markets further actions must be taken to improve the investment

licensing framework, complete the cadaster and reform the energy sector.

5. HCAP and privatizations: the Asset Development Plan and the Strategic Plan of the HCAP are to be continuously implemented while important privatization projects (AIA, DESFA, HELPE, Alimos marina, Egnatia motorway, DEPA commercial and network, AIA shares, EYDAP, EYATH, ports of Alexandroupolis and Kavala, etc.) must be completed.
6. Public administration: efforts should be directed towards modernizing human resource management in the public sector, carrying out the legal codification and implementing all GRECO (Groupe d'Etats contre la Corruption) anti-corruption recommendations.

It should be noted that a number of officials have raised concerns as to the extent of ownership of the reforms by the Greek government, which stem from the following: 1) delays in the implementation of certain significant reforms, 2) a rhetoric of some coalition government MPs about overturning some implemented reforms once the programme expires (particularly in the labour market), and 3) backtracking in areas that do not strictly fall under the 3rd ESM programme conditionality (e.g. the abolishment of Law 4009/2011, which was widely considered as a significant step towards better higher education and had been voted by 250 MPs in a total of 300).

At the same time, the 2018 OECD economic survey of Greece²⁹ acknowledges the progress achieved since the start of the adjustment programmes but also identifies a number of areas where reform effort needs to be intensified. These areas are: government spending and public administration, taxation, financial stability and insolvency procedures, product markets and business environment, public investment, infrastructure and privatization, labour market, education and vocational training and social policy. The goal should be the steady shift of the production process towards internationally tradable

goods & services and away from state-dependent revenues. It is therefore evident that the reform effort is a continuous process that transcends the duration and requirements of the 3rd Economic Adjustment Programme and should be followed consistently in the years to come.

6.6 Privatizations

The privatizations programme is central to the 3rd Economic Adjustment Programme due to its potential contribution in reducing public debt and, more importantly, in improving the economy's efficiency and attracting FDI. In spite of various delays and obstacles, on the whole, significant progress has been achieved in the past two years with the completion of some key projects:

- Establishment of the Hellenic Corporation of Assets and Participations S.A. (HCAP)
- Concession of 14 Regional Airports (€2,150 mn)
- Privatization of OLP (€368.5 mn)
- Privatization of OLTH (€231.9 mn)
- Sale of Astir Palace Vouliagmenis S.A. (€95 mn)
- Sale of TRAINOSE S.A. (€45 mn), and
- Sale of 5% stake in OTE (€284 mn)

Proceeds in 2017 amounted to c. €1.4 bn while the sale of the 67% stake of OLTH and 5% of OTE will create proceeds of c. €516 million. If the concession of Hellenikon, the extension of the concession of the AIA and the sale of DESFA and ROSCO materialize in the 2nd half of 2018, then additional proceeds of over €1.5 bn are expected before the end of 2018. The European Commission foresees total privatization revenues in the area of €14 bn (or €11.5 bn excluding revenues from the sale of non-bank assets) over the period 2018-2060.

The status of the projects that are underway is discussed in the following paragraphs.

²⁹ OECD Economic Survey of Greece 2018, April 2018, <http://www.oecd.org/eco/surveys/economic-survey-greece.htm>

Public Power Corporation (PPC) – Divestiture of lignite-fired power units

In 17 April 2018 the European Commission decided to make legally binding under EU antitrust rules the measures submitted by Greece in 19 January 2018 to ensure fair access to lignite-fired power generation for the competitors of PPC. To that effect, in 24 April 2018, the Hellenic Parliament approved the bill for the divestment of the agreed lignite-fired capacity units of the PPC, following the Hellenic Republic's commitments vis-à-vis the European Commission to adopt structural measures regarding access to lignite in the framework of the COMP/38700 case. The bill foresees that PPC will divest the lignite-fired units of Meliti (including the licensed unit for Meliti 2) and Megalopoli 3 and 4. The divestiture will also include the transfer of the necessary employees and lignite mines. According to the European Commission, the assets to be divested will allow the purchasers to compete immediately and more effectively in the Greek wholesale market. The tender process has been launched and six investment schemes submitted expressions of interest for the acquisition of 100% of the share capital of the Meliti and/or the Megalopoli divestment businesses.³⁰ It should be noted that the divestiture is facing resistance from PPC employees, trade unions, local communities and some governing coalition MPs in spite of the fact that the relevant bill contains a non-dismissal clause for six years for the staff originating from PPC. Be that as it may, in an interview (TA NEA, 14-15 April 2018) the Minister of Environment and Energy George Stathakis appeared confident that through a systematic dialogue and information sharing process, convergence of opinions will eventually be achieved.

Public Power Corporation (PPC) – sale of a 17% stake

The 2 March 2018 Compliance Report foresaw that the Greek government must launch by June 2018 the

³⁰ The six investment schemes are: 1) BEIJING GUOHUA POWER COMPANY LIMITED AND DAMCO ENERGY S.A. (CONSORTIUM), 2) GEK-TERNA S.A., 3) ELVALHALCOR HELLENIC COPPER AND ALUMINIUM INDUSTRY S.A., 4) ENERGETICKÝ A PRŮMYSLOVÝ HOLDING, A.S. ("EPH"), 5) INDOVERSE (CZECH) COAL INVESTMENTS LIMITED and 6) MYTILINEOS S.A.

tender for the sale or other form of monetization of 17% of PPC provided that it generates at least equivalent financial benefits to the Hellenic Republic compared to the sale. Nevertheless, according to the Minister of Environment and Energy George Stathakis (TA NEA, 14-15 April 2018), this process will be launched once there is a clearer picture regarding the progress of the divestiture of the lignite-fired power units, i.e. towards the end of 2018.

Hellenic Gas Transmission System Operator (DESFA)

The agreement for the sale of DESFA's 66% stake was signed on 20 July 2018, between HRADF, Hellenic Petroleum SA (HELPE) and "SENFLUGA Energy Infrastructure Holdings S.A.", the company set up by the Preferred Investor consortium comprising of the companies Snam S.p.A., Enagás Internacional S.L.U. και Fluxys S.A., for a total bidding offer of €535 million. The HRADF will receive €251.28 million (the remainder of the price will be paid to HELPE) while DESFA's current business plan foresees the implementation of an investment plan of €330.66 million by 2023. The Sale & Purchase Agreement was signed after the approval of the Court of Auditors and the Competition Commission. The transaction is expected to be completed by year end.

Hellenic Petroleum (HELPE)

In 30 May 2018, five investment schemes expressed their interest for the acquisition of a majority stake (at least 50.1% jointly by HRADF and Paneuropean Oil and Industrial Holding S.A.) in the share capital of HELPE. On 18 July 2018, the BoD of the HRADF qualified the two investors, Glencore Energy UK LTD and Vitol Holding B.V. that meet the criteria to participate in the second phase of the tender. After signing the confidentiality agreement, the investors, will receive the documents of phase B and will be granted access to the virtual data room.

Public Gas Corporation (DEPA)

Delays have been observed regarding the sale of 65% of DEPA where, according to the 2 March Compliance Report, all obstacles for the launch of the tender should have been lifted by March 2018. According to the Minister of Infrastructure, George Stathakis, the

Public Gas Corporation (DEPA) will be separated into two entities: (i) an infrastructure company, which will have all the networks of the country as well as international projects and will remain under public control with the State keeping its 65% share, and (ii) a commercial company in which the State will retain a 14.9% share. The tender process is reportedly scheduled to commence in September.

Hellinikon Project

The sale of Hellinikon was completed in March 2014 and the payment of the first installment was initially due in 2015. However, the financial closing is still pending and construction works are unlikely to begin before 2019. In the past few months progress was made with the signing of the draft Presidential Decree approving the Integrated Development Plan and the revision of the legislative framework to allow for the operation and tendering procedure of a casino license on the Hellinikon site. Additionally, the multi-bill that was voted in Parliament in 14 June contained provisions regarding the management of the public areas of the Hellinikon site. Nevertheless, according to the Government Pending Actions, 13 actions are still to be carried out in the following months in order for the financial transaction to be completed by the end of 2018. The most challenging of these are the tender and award of a casino license and the physical relocation of a number of entities that are still housed on the site (Hellenic Centre for Marine Research, Municipal facilities, Civil Aviation Authorities and private users).

Athens International Airport

The 20-year extension of the Athens International Airport concession agreement was signed in 30 September 2017 by the Greek State, the HRADF and the “Athens International Airport SA” (AIA). Originally the net proceeds from the transaction stood at €483.87 million but the financial closing of the transaction was delayed subject to clearance by the European Commission Directorate General for Competition (DGComp). The preliminary view of DG COMP is that the extension agreement does not involve unlawful State aid and may proceed but at a

higher price of c. €1.36 bn (incl. VAT). The closing of the extension of the AIA concession agreement will open the way for the sale of the 30% stake in AIA held by HRADF.

Egnatia motorway

In 14 November 2017, the HRADF Board of Directors launched an international tender process for a concession agreement in relation to the financing, operation, maintenance and commercial exploitation of the Egnatia motorway and the three vertical road axes for a maximum period of 40 years. In 2 February 2018, the HRADF announced that nine investment schemes submitted expressions of interest for the right to use and exploit Egnatia motorway. In 16 May 2018 the HRADF announced the seven prequalified

investment schemes,³¹ which meet the criteria to participate in the second phase of the tender. Meanwhile, the Ministers of Infrastructure & Transport and Finance have issued a Joint Ministerial Decision setting out the new toll pricing policy, which will be implemented immediately upon its approval by the European Commission Directorate General for Mobility and Transport (DGMOVE). According to the Government Pending Actions, Egnatia motorway is the project with the most pending actions (15 in total).

Other important privatization projects

Apart from the aforementioned projects, the HRADF Asset Development Plan (20 December 2017) includes a number of other important privatization projects which, however, are still at a preparatory stage. These are:

1. 10 ports.³² Concession to exploit specific and/or combined port activities in 10 ports. According to

³¹ 1) ANAS International Enterprise S.p.A., 2) DIOLKOS S.A., 3) GEK TERNA S.A. – EGIS PROJECTS S.A., 4) FREYJA HOLDINGS SARL [Macquarie European Infrastructure Fund 5 L.P. / Macquarie European Infrastructure Fund 5 SCSp], 5) ROADIS Transportation Holding S.L.U. - AKTOR CONCESSIONS S.A., 6) SICHUAN COMMUNICATIONS INVESTMENT GROUP CO., LTD – DAMCO ENERGY S.A., 7) VINCI HIGHWAYS S.A.S – VINCI CONCESSIONS S.A.S – MYTILINEOS HOLDINGS S.A.

³² Alexandroupoli, Elefsina, Lavrio, Rafina, Igoumenitsa, Corfu, Kavala, Volos, Patra, Heraklion.

- press reports,³³ the ports of Alexandroupoli, Igoumenitsa and Corfu will be the first to be exploited, in this order and with the first tender scheduled to be launched in August or September 2018. The 2018 State budget foresees revenues of €28 million from small ports and marinas in 2018 and €66.4 million in total.
2. Sale of 30% of Athens International Airport. The sale procedure will be launched once the 30-year concession agreement (mentioned above) has been completed.
 3. Marinas. According to its Asset Development Fund (December 2017), the HRADF has been granted the right for the concession and exploitation of 17 marinas. However, information is given only about 8 of those. The exploitation of each marina is at a different maturity level. In 16 May 2018, the HRADF announced that for the next phase of the Alimos marina tender, eight investment schemes³⁴ meet the eligibility criteria while the tender for the exploitation of the marina of Pylos was declared incomplete, as no investment scheme submitted a binding offer.
 4. Thessaloniki Water and Sewerage Company (EYATH). According to its Asset Development Plan, HRADF has a 74% stake in EYATH and plans to sell a 24% stake. The 2018 State Budget foresees revenues in the order of €35 million in 2018; however, the project is yet at too early a stage for this projection to materialize.
 5. Athens Water and Sewerage Company (EYDAP). The 2018 State Budget foresees revenues in the order of €64 million in 2018; however, the project is yet at too early a stage for this projection to materialize.
 6. Hellenic Company for Rolling Stock Maintenance S.A. (EESSTY or ROSCO). On 3 July 2018 the HRADF declared TRAINOSE SA as the preferred investor for the acquisition of 100% stake in EESSTY SA. The financial offer stood at €22 million. The Court of Audit will now perform precontractual review and assessment; subject to its approval the Share Purchase Agreement will be signed.
 7. Hellenic Post (ELTA). ELTA is included in the portfolio of the HRADF Asset Development Plan (December 2017) but with no further information regarding its exploitation.
 8. Real estate properties (e-auctions VII and VIII). According to the HRADF Asset Development Plan (December 2017), the HRADF owns 91 real estate properties whose exploitation is taking place gradually depending on the legal, technical and commercial characteristics of each property. The 2018 State Budget foresees revenues from the sale of real estate of €24.8 million in 2018.

³³ Kathimerini, Sunday 22 April 2018

³⁴ 1) AKTOR CONCESSIONS SA and TEK – TEK ART KALAMIS VE FENERBAHCE MARMARA TURIZM TELESISLERI SA, 2) ATESE SA (ENGINEERING COMMERCIAL CONSULTING SOCIETE ANONYME - PRIVATE SECURITY SERVICES COMPANY), 3) AVIAREPS- COSMOS CONSORTIUM, 4) INTRAKAT SA, 5) LAMDA DOGUS MARINA INVESTMENTS SA, 6) KASOS SA, 7) PORT ADHOC SAS- DREAM YACHT METITERRANEE - J&P AVAX SA, 8) PORTO CARRAS SA

Privatisation	Privatisation revenues (in million euros)			Installments / Concession fees								
	Total Amount	Paid Amount	Completion of transaction	2011	2012	2013	2014	2015	2016	2017	2018	
Rights for the use of the 900 MHz and 1800 MHz spectrum bands	393.50	424.50	2011	316.70				34.20	35.90	37.70	100.00	
License for the installation and operation of gaming machines (VLTs)	560.00	560.00	2011	474.00		86.00						
Extension of the contract for the conduct of lottery games between the Greek State and OPAP for 10 years	375.00	375.00	2011	375.00								
NBG - ALPHA - Piraeus Bank shares	14.70	14.70	2012		5.20	9.50						
Sale of selected buildings abroad (London, Tashkent, Brussels)	30.30	30.30	2013			30.30						
Sale of the State Lotteries license **	490.00	190.00	2013			190.00						
Sale of a 33% share in OPAP S.A.	652.00	634.00	2013			622.00	3.00	3.00	3.00	3.00	3.00	
OPAP S.A. shares	21.60	21.60	2013			21.60						
Lease for 90 years of the International Broadcasting Centre (IBC)	81.00	81.00	2013			81.00						
E-AUCTION I	11.05	10.59	2013				8.00	1.90	0.37	0.30		
Sale of selected buildings abroad (Dusseldorf)	0.80	0.80	2014				0.80					
Paliouri	14.00	14.00	2014				7.00	3.00	2.00	2.00		
Digital Dividend	385.00	361.67	2014				114.00	189.80	29.60	28.27	26.90	
Sale and leaseback of selected public buildings (28 properties)	261.30	261.30	2014				261.30					
E-AUCTION II	1.80	1.06	2014					0.50	0.30	0.30		
E-AUCTION III	8.50	6.90	2015					5.30	0.80	0.80		
Sale of selected buildings abroad (Belgrade)	2.40	2.40	2015					2.40				
Xenia Hotel Skiathos	2.60	2.60	2015					2.60				
Agios Ioannis Sithonias property	9.60	9.60	2015					9.60				
Mutual Horse Race Betting	40.50	40.50	2015					8.10	12.20	20.20	2.00	
E-AUCTION VI	0.44	0.26	2015					0.10	0.16	0.05		
Sale of selected buildings abroad (New York, Washington)	10.60	10.60	2016						10.60			
Sale of selected buildings abroad (Rome, Yerevan)	10.80	10.80	2016						10.80			
Sale of selected buildings abroad (Ljubljana)	0.60	0.60	2016						0.60			
Port of Piraeus (OLP) (51% + 16%)	368.50	280.50	2016						280.50			
E-AUCTION VI	18.51	3.80	2016						3.80	3.70		
Astir Palace Vouliagmeni	95.00	95.00	2016						95.00			
Property at Kassiope, Corfu	23.00	10.00	2016						10.00	3.00	3.00	
Modiano Market, Thessaloniki	1.90	0.76	2016						0.38	0.38	0.38	
Sale of 2 Airbus aircrafts	3.84	3.84	2016						3.84			
E-AUCTION V	0.83	-	2017							0.83		
Regional Airports	2,150.00	-	2017							1234.00	22.90	
Property at Afantou, Rhodes	42.10	-	2016							27.50	21.00	
Hellinikon Concession	915.00	-	2017								300.00	
TRAINOSE	45.00	45.00	2017							45.00		
EESSTY (ROSCO) *	5.00		2018								5.00	
Port of Thessaloniki (OLTH)	231.92		2018								231.92	
Hellenic Telecommunications Organisation (OTE) 5% *	250.00		2018								250.00	
Egnatia motorway *	50.00		2018								50.00	
Hellenic Petroleum (HELPE) *	500.00		2018								500.00	
Athens International Airport - Concession	483.80		2017							240.00		
Athens International Airport - 30% *	500.00		2018								500.00	
Thessaloniki Water & Sewerage Company (EYATH) *	35.00		2018								35.00	
Public Power Corporation (PPC) *	100.00		2018								100.00	
DEPA *	250.00		2018								250.00	
DESFA *	188.00	-	2018								188.00	
Athens Water & Sewerage Company (EVDAP) *	64.00		2018								64.00	
Other properties *	110.00	-	2017								31.00	
E-AUCTION VI *	20.00	-	2017							9.75		
Small ports and marinas *	66.40		2018								28.00	
E-AUCTION VII *	35.70		2018								24.80	
Total number of privatisation projects: 51	9,931.59	4,737.70		1,165.70	5.20	1,040.40	394.10	260.60	499.85	1,656.70	2,736.90	

Notes

* 14 projects for which no binding bids have been submitted. The amount of € 2,174.1 million comes from estimates.

** Out of the €490 million, €300 million were ascribed directly to the Greek State

Source: 2018 State Budget

The External Environment

Written by Paraskevi Petropoulou

8.1 The Global Economy

The Greek economy's effort to recover takes place amid a global environment of strong growth but with rising risks. Global economic growth strengthened in 2017 to 3.7%, the highest pace of growth in 6 years, supported by a further acceleration in global trade, broadly accommodative monetary policies, a more expansionary fiscal policy stance in a number of developed economies and continuing strong consumer spending. However, after a strong 2017, data across the globe pointed to a loss of momentum in economic activity in early 2018. Coming, though, from cyclical high levels, the slowdown seems to suggest just a soft patch rather than a severe deterioration. Provided that trade tensions between the US and major trading partners do not escalate further, the prevailing market view is that global expansion will remain broad-based and solid this year and the next. Global GDP is projected to rise by 3.7% in 2018, slightly lower compared to an estimate of 3.8% and 3.9% from the OECD and the IMF, respectively. For 2019, market consensus is for a global growth rate of 3.6%, lower relative to a 3.9% projection from both the OECD and the IMF. Factors driving global growth seem to remain at play including strong investment, improving productivity growth, further labor market strengthening and fiscal easing in many economies, especially in the US, and to a lesser extent, the euro area. Given a backdrop of a further reduction in output gaps and higher oil prices, inflation pressures are expected to rise. Yet, risks of a significant overshooting of the major Central Banks' target seem limited as wage growth remains subdued, leaving scope for just a gradual withdrawal of monetary policy accommodation.

While the 2018-2019 outlook appears favorable, risks are skewing to the downside. Trade protectionism has already begun to exert a negative impact on confidence and a further escalation could weigh on

investment and employment growth, hurting growth more significantly. The US administration has already implemented several protectionist measures and intends to impose even broader ones in the coming months, including greater control over foreign direct investment in the US. Geopolitical concerns have pushed oil prices higher year-to-date, threatening, if sustained, to act as a drag on consumption growth and economic activity. Another risk is a higher than expected pickup in inflation that could trigger a hawkish repricing of monetary policy expectations. In addition, political risks are looming across the world including Italy, Brexit talks, EU sanctions on Russia and mid-term elections in the US (November 2018). US fiscal expansionary policy is another source of concern on the view that, should it push US growth much higher than projected and inflation moves well above target, the Fed will likely have to step up the pace of rate tightening.

According to the advance estimate, US GDP increased at an annual rate of 4.1% in Q2 2018, the fastest pace in nearly four years from 2.2% in Q1 2018 mainly driven by a rebound in personal consumption largely due to substantial fiscal boost and robust employment growth. Looking ahead, sizable fiscal stimulus (\$1.5trn in total tax cuts over 2018-2027 & \$250bn in additional government spending in 2018-2019), and accelerating consumer spending, are anticipated to continue lifting growth higher in the coming quarters, averaging 2.9% in 2018, from 2.3% in 2017, in line with the OECD and the IMF estimates. For 2019, market consensus is for a slowdown to 2.5% as the positive impulse from the fiscal stimulus fades, compared to an estimate of 2.7% and 2.8% from the IMF and OECD, respectively. Above trend economic growth, highly expansionary fiscal policy and higher wage growth are expected to keep the Fed on track for further gradual rate tightening with the pace of hikes remaining data dependent.³⁵

³⁵ The Fed's latest quarterly "dot plot" published in mid-June, implied two more rate hikes of 25bps each in the remainder of this year, three more rate hikes in 2019 and one in 2020.

8.2 Eurozone: Political uncertainty in Italy remains; investors concerned about contagion risks

Greece's immediate environment, the Eurozone enjoyed a broad based economic recovery in 2017 with real GDP growing by 2.4%, the fastest pace in a decade and above potential for the third consecutive year,³⁶ with record employment, recovering investment and improved public finances. The sudden slowdown in GDP growth to 0.4%QoQ in Q1 2018, below the average quarterly performance of 0.7%QoQ in 2017, and poor Q2 2018 sentiment surveys and economic indicators, have raised questions over whether the loss of growth momentum is temporary or more fundamental factors are at play. Speaking at the 26 July ECB press conference, President Mario Draghi acknowledged once again that growth has moderated from last year's very high levels due to a combination of supply-side constraints at both the domestic and the global level, weaker impetus from global trade, uncertainty related to geopolitical developments (i.e. trade war) and temporary factors. The ECB President said explicitly that Q1 weakness is persisting into Q2. However, he stressed that, even though growth has moderated as of late, the latest economic indicators and survey data have stabilized and continue to point to ongoing solid and broad-based economic growth. Indeed, certain economic indicators (i.e. capacity utilization in manufacturing & services) remain above their respective long-term average while sentiment data is still at high levels, consistent with a relatively healthy pace of growth around 2% over the period 2018-2019. Market consensus for 2018 GDP growth has been revised downwards in the wake of poor Q1 GDP data, to 2.2% from 2.5% earlier this year, in line with the OECD projection and slightly higher compared to an estimate of 2.1% from both the EU Commission and the ECB. For 2019, consensus is for a slowdown to 1.9%, in line with the ECB and slightly below the EU Commission and OECD forecast of 2.0% and 2.1%, respectively.

³⁶ According to the European Commission (Spring 2018 Economic Forecast), the growth rate of potential GDP in the euro area is estimated at around 1.5%.

However, even though the ECB supports the view that growth remains solid, uncertainty surrounding the extent to which the Eurozone recovery is slowing has undoubtedly increased. This uncertainty is even greater due to renewed political jitters and downside risks related to global factors, including the threat of a global trade war. Against this background, the ECB reinforced the forward guidance on interest rates in June with a commitment to leave the key interest rates unchanged at their present levels "at least through the summer of 2019" and as long as it is necessary for inflation to converge towards its medium-term target. This points to continuing favorable lending conditions for businesses and households across the euro area, including Greece. The ECB's aim was presumably to mitigate the risk of investors unduly bringing forward their rate tightening expectations after the formal announcement of its plan to taper the asset purchases programme in Q4 2018 at a reduced monthly pace of €15bn from the current €30bn and conclude the programme in December 2018.³⁷

Political uncertainty in Italy: Turning to the EMU periphery, political uncertainty is back and is not expected to dissipate anytime soon. Ending three months of political turmoil in Italy following the inconclusive outcome of the 4 March election, the left-wing populist Five Star Movement (M5S) and the right-wing populist League³⁸ agreed in early June on a new government with Giuseppe Conte as premier and economics professor Giovanni Tria as Finance Minister. This development averted the likelihood of a repeat election that —judging from the latest opinion polls— could probably have strengthened the two anti-establishment parties.

However, it is too soon to declare the all-clear. The Five Star/League government programme envisions costly fiscal measures (i.e., flat income tax, basic income), that against a backdrop of chronic slow

³⁷ From 2015 when the asset purchase programme started, designed to fulfil the ECB's stability mandate, its balance sheet has doubled to €4.5 trillion (as of 31 December 2017).

³⁸ The Five Star and the League secured 32.7% and 17.4% of the vote, respectively, on the 4 March election.

growth and ballooning levels of government debt (132%-of-GDP in 2017, the second highest in the EU after Greece) could bring into question Italy's fiscal sustainability. This in turn, could potentially trigger a downgrade spiral, noting that all three major rating agencies assign Italy just two notches above non-investment grade. Furthermore, some of the proposed structural policies (i.e., Eurozone economic governance, EU budget), were viewed by markets as a challenge to EU rules, risking to put the new government on a collision course with European authorities. Adding to the above, the risk of a government crisis or snap elections in the not too distant future cannot be ruled out. Besides the slim majority in both houses, the heterogeneous nature of the coalition means that frictions within the government could potentially emerge down the road. In addition, judging from recent opinion polls, the League could benefit the most from new elections as its public support could increase significantly compared to the March election outcome. Therefore, should opinion polls continue to favor the League, the likelihood the party to withdraw its support from the government opening the way for new elections, cannot be ruled out. That said, in spite of the government formation in Italy, political uncertainty remains high and the risk of a renewed sell-off in Italian bonds that could re-ignite investor concerns about EU peripheral assets, including Greek assets, cannot be ruled out. Markets are still nervous awaiting clues on government policy priorities and especially whether the Five Star/League government intends to infringe EU fiscal rules calling into questions the country's fiscal sustainability. We could have a better understanding on the government's intentions no earlier than late September when the government has to present in the Italian Parliament—and in Brussels by mid-October—the updated Economic and Financial Document (DEF) that constitutes the basis of the 2019 budget law.

Decisions of the June European Council: The likely violation of EU fiscal rules by a highly indebted country, the third largest in the euro area, has raised fears over broader systemic jitters, further reducing

the willingness of northern EU countries to support plans on the deepening of the Economic and Monetary Union. Indeed, as expected, the 28/29 June European Council meeting failed to take far-reaching decisions on the euro area reform. The most tangible result was the agreement to strengthen the role of the European Stability Mechanism. ESM was established in September 2012 to safeguard and provide instant access to financial assistance programmes for Member States when needed. The EU leaders agreed to empower the ESM to provide the common backstop to the Single Resolution Fund (SRF) in the form of a credit line.³⁹ The backstop would be activated to facilitate the orderly resolution of ailing banks in the event that the SRF runs out of funds, even after imposing losses on the banks' shareholders and creditors. It is tentatively planned to enter into force by 2024, replacing the direct bank recapitalization instrument in order to release ESM lending capacity.⁴⁰ With respect to the third pillar of the EU banking union, the European Deposit Insurance Scheme (EDIS),⁴¹ no decisions were reached. Northern European countries including Germany and the Netherlands were reportedly strongly opposed, insisting that legacy problems in the banks, in particular in Italy, should first be addressed. The leaders only agreed to start

³⁹ The Single Resolution Fund (SRF) is financed via contributions from the Euro area banking sector. It will be used for resolving failing banks, after other options, such as the bail-in tool, provided that all conditions of the regulatory framework are met, including the bail-in of 8% of total liabilities of the bank concerned. The SRF entered into force in 19 August 2014 and will be built up over a period of 8 years. Its target size is 1% of covered deposits, or approximately €55bn. The leaders also agreed at the June EU Summit, the ESM to have a bigger role in designing and monitoring financial assistance programs, but the details are to be worked out by Eurozone finance ministers by December 2018.

⁴⁰ The current lending capacity of the ESM is estimated at around €700bn.

⁴¹ The first pillar of the EU Banking Union, the Single Supervisory Mechanism (SSM) was launched in 2013. The second pillar, the Single Resolution Mechanism (SRM) whose aim is to have consistent rules for the resolution of banks across the euro area, followed in 2014.

negotiations on the issue at some undefined point in the future.⁴²

However, the issue that dominated discussions in the EU Summit was migration, an issue of particular importance for Greece which has experienced a dramatic rise in the number of refugees and migrants in recent years. According to the published conclusions, the leaders agreed, among others, to (i) share responsibility for migrants rescued at sea, a key demand of Italy's Prime Minister; (ii) share out refugees through the transfer in "controlled centres" inside the European Union to process asylum requests "only on a voluntary basis" by EU Member States; (iii) improve control of the EU's external borders; (iv) take necessary measures to counter secondary movements of asylum seekers between Member States; and (v) increase financing for Turkey, Morocco and other North African states to prevent illegal migration to Europe.

The EU-wide migration agreement was particularly important for German Chancellor Angela Merkel due to an internal dispute within the ruling coalition over migration policy. Horst Seehofer, Germany's Interior Minister and Chairman of Christian Social Union in Bavaria (CSU), the sister party of Merkel's Christian Democratic Union (CDU), had threatened to leave the government unless the EU Summit agreement would give him the power to move ahead with his plan of preventing "second migrants" (i.e. migrants who have already applied for asylum in another EU Member State) from entering Germany. Despite the perception of significant progress on the migration issue at the EU Summit, Mr. Seehofer rejected the deal, bringing Germany's coalition government to the brink of collapse. At the eleventh hour, CDU and CSU reached a compromise on asylum policy foreseeing setting up so-called "transit centres" exclusively on

⁴² The EU leaders also offered a vague promise of further discussions on other elements of deeper EU integration including the sovereign debt restructuring when market access for EMU sovereigns is challenged. The Franco-German proposal of a common Eurozone budget was not even mentioned in the published Council conclusions, postponing any discussions on the issue to the December EU Summit.

the German-Austrian border (i.e., in Bavaria) for already registered asylum seekers where their applications will be examined in a fast-track procedure. In order to establish this new border regime, the German government has to seal bilateral agreements with other EU countries on the return of secondary migrants to their first EU country on their arrival (geographically, the obvious candidate are Greece, Italy and Spain). If these EU countries refuse to take back asylum seekers, they will be sent back to Austria on the basis of an agreement with Austria that is yet to be reached. However, it is far from certain that Austria's right-of-center government will accept migrants rejected by Germany. Speaking at the European parliament, Austrian Chancellor Sebastian Kurz threatened to close the country's borders, in response to Germany's new stricter asylum policy.

8.3 Main Risks

Risks of a global trade war: After signing the "Tax Cuts and Jobs Act" into law in late 2017, which envisions \$1.5trn in total tax cuts over the 2018-2027 budgetary time frame, the US administration appears to be shifting towards a more protectionist trade policy as a tool to rein in external imbalances. Pledging to protect US companies ("America First"), US President Donald Trump signed presidential actions earlier this year to impose tariffs on a range of imported goods such as solar panels & washing machines, steel and aluminum products, based on "national security" concerns. Eight leading US trade partners (Canada, China, the EU, India, Japan, Mexico, Russia & Turkey) replied with their own countermeasures. On the grounds of potential violation of intellectual property practices, the US-led rise in protectionism continued with the US administration implementing in early July 25% tariffs on \$34bn worth of industrial machinery and electrical products from China,⁴³ putting an additional \$16bn in

⁴³ The US has been running trade deficits since early 1980s. By far the largest US trade deficit is with China, accounting for more

tariffs under review. Assuming full implementation of the US tariffs —and barring a further escalation of trade dispute with US import tariffs spreading to a wider range of goods, and possibly services, and trading partners responding with tit-for-tat retaliation measures— the overall direct impact from the announced tariff measures on global growth should be generally modest. Looking at the risks of a trade war, an IMF study estimates that, if the US rises import tariff against the rest of the world by 10% and the rest of the world retaliates with a 10% tariff hike against the US, this would lead to a 1.0% fall in world trade and would shave global GDP by 0.5%.⁴⁴ Speaking on the issue at a panel discussion in early April 2018, ECB Governing Council member Benoît Cœuré argued that, according to ECB staff simulations, under a hypothetical scenario where the US raises tariffs on all imports of goods by 10%, and its trading partners retaliate on the same scale, world trade in goods could fall by up to 3% already in the first year after the change in tariffs and world GDP by up to 1%. Euro area GDP would also decline, but by less than in the US.⁴⁵

However, if trade dispute escalates, the global economy will edge closer to a full-blown trade war among major economies which could seriously undermine global growth. At this stage, the prevailing market view is that there is a decent chance the US and China to return to the negotiating table and reach a mutually satisfactory deal in the foreseeable future. However, the likelihood of at least a brief period of a further escalation of trade dispute ahead of the mid-US elections in early November with a more negative impact on business confidence, global

than half of total US trade deficit in the last decade. In 2017, the US trade balance with China stood at a \$337bn deficit or 59% of total US trade deficit.

⁴⁴ Jesper Lindé and Andrea Pescatori, July 2017, The Macroeconomic Effects of Trade Tariffs: Revising the Lerner Symmetry Result, IMF working paper No. 17/151, <https://www.imf.org/en/Publications/WP/Issues/2017/07/07/The-Macroeconomic-Effects-of-Trade-Tariffs-Revisiting-the-Lerner-Symmetry-Result-44990>

⁴⁵ Benoît Cœuré: “The consequences of protectionism”, <https://www.ecb.europa.eu/press/key/date/2018/html/ecb.sp180406.en.html>

trade and investment, has certainly increased. After all, the US administration intends to impose even broader tariffs on China in the near-term. The US Trade Representative proposed in mid-July further action in the form of an additional 10% tariff on targeted goods imports from China worth \$200bn while the US President has explicitly threatened to impose tariffs on all \$500bn of goods imported from the country. In addition, in response to EU enacted retaliatory tariff of 25% on €2.8bn US goods following the US imposition of tariffs on steel and aluminum,⁴⁶ Donald Trump suggested in mid-June the possibility of an extra 20% tariff on cars imported from the EU.⁴⁷ At a meeting held in Washington on 25 July with EU Commission President Jean-Claude Juncker, the US President agreed to hold back on his threat on any new customs duties, including car duties, for as long as the two sides will be engaged on talks aiming to completely eliminate tariffs and remove non-tariff barriers to trade. In return, the EU agreed to rump up imports of US liquefied gas and soybeans. Undoubtedly, the agreement is a positive surprise, diffusing fears of a further escalation of trade war for the time being. But this does not suggest that the EU-US trade dispute has been resolved. The US threat of auto tariffs could easily resurface if negotiations do not progress as planned (e.g. administrative roadblocks for the EU to fulfil the commitment for increased soybean). Under the scenario that the US administration eventually deems increased tariffs on EU car imports as appropriate, the effect could be bigger than any of the other US tariff actions imposed so far. EU metal exports to the US account for a tiny share of GDP estimated at less than 0.1%, suggesting that the direct impact on the economy is likely to be negligible. However, EU car industry exposure to the US is more significant, estimated at 0.3% of GDP. In more detail, in 2017, the US accounted for 10% of

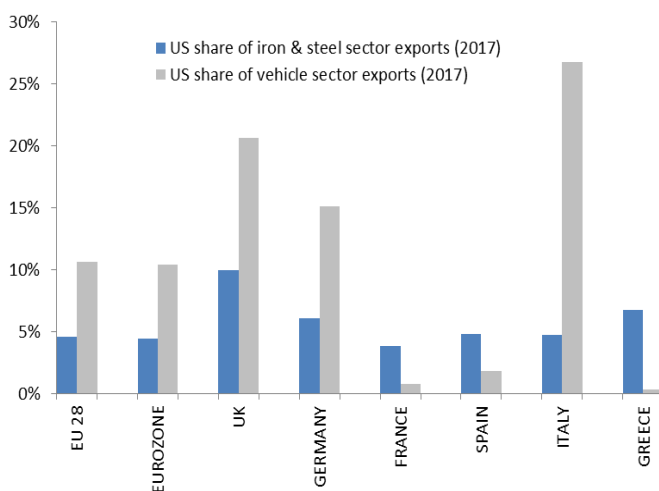
⁴⁶ The US has imposed tariffs on \$7.7bn of EU steel and aluminum imports. Aiming to impose countermeasures of the same magnitude, the EU is considering to impose another €3.6bn of tariffs on US imports, if the WTO complaint is not resolved within the next three years.

⁴⁷ The US tariff on EU cars is currently 2.5%, one fourth that of the EU, and 25% on trucks including SUVs. In 2017 terms, car exports from Germany to the US were worth c. 0.8% of its GDP.

total iron and steel exports from the UK, 6.7% from Greece, 6.1% from Germany, 4.8% from both Spain and Italy and 3.8% from France. As regards car industry exposures, over the same year, the US made up 27% of Italian passenger car exports, 21% for the UK and 15% for Germany and just 0.4% for Greece (see Figure 25).

Geopolitical jitters: Geopolitics is back in investors' spotlight. The US President decided in early May to withdraw the US from the Joint Comprehensive Plan of Action (aka Iran nuclear deal) that was agreed in July 2015 and re-impose a wide range of sanctions that were waived under the accord in January 2016, most notably on the petroleum sector, after the expiry of 90-and 180-day wind-down periods (ending on August 6 and November 4, respectively). With Venezuela's crude oil production having decreased significantly over the past two years and pending US sanctions threatening Iran's oil supply, oil prices have moved higher year-to-date. Brent crude hit a 3 ½ year high of \$80.50/br on 22 May before easing to levels below \$75/br in the following weeks. In spite of its latest down move, it remains some 37% higher YoY on global supply jitters, posing a modest headwind to global economic activity while supporting inflation.

Figure 25: EU- US share of iron & steel/vehicle sector exports



Source: Eurostat, Economic Research

The thread of a “no-deal” Brexit: Brexit was also included in the agenda of the June 28/29 EU Summit, as it comprises a potential source of disruption to Eurozone economic activity, depending on the nature of the final withdrawal agreement and especially the future principles that will govern the UK/EU trade relationship. In the published conclusions, the Council expressed concern at the lack of progress on reaching an agreement on the legal text of a backstop solution for Ireland/Northern Ireland to prevent a hard border. This is a prerequisite for a Brexit agreement so as negotiations to move on to the nature of the future UK/EU trade relations. The issue will be addressed at the next EU Summit on 18 October 2018, which was the original deadline for Brexit negotiations to be concluded to allow time for the European Council, the European parliament and the UK parliament to ratify the deal by the exit day on 20 March 2019. However, with the timeline falling behind scheduled, the risk of a no EU/UK Brexit deal cannot be ruled out completely.⁴⁸ The UK is a major trading partner in goods and services for the EU. For Greece, the UK is one of the largest trading partners in services. In 2016, the UK accounted for 15.7% of total Greek exports of services and 19.5% of total Greek imports. In terms of goods, over the same year, the UK accounted for 4.2% of total exports and 2.8% of total Greek imports.

⁴⁸ If no agreement is reached by March 2019 —or there is agreement on a transition period, but non on a future EU/UK relationship— then, by default, the UK will need to move to trading under the World Trade Organization (WTO) regime, either in March 2019 or on the expiry of the transition period. This means that exports to the EU would be subject to the same customs checks, tariffs and regulatory barriers the UK and EU currently apply on trade with other countries. The UK's exports to the EU and other WTO members would also be subject to the importing countries' most favoured nation tariffs (MFN).

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