


ISSUER IN-DEPTH

25 July 2019

 Rate this Research

RATINGS

Greece

	Foreign Currency	Local Currency
Gov. Bond Rating	B1/STA	B1/STA
Country Ceiling	Baa1	Baa1
Bank Deposit Ceiling	B1	B1

TABLE OF CONTENTS

OVERVIEW AND OUTLOOK	1
CREDIT PROFILE	2
Economic strength: Moderate	2
Institutional strength: Moderate (-)	8
Fiscal strength: Low (+)	11
Susceptibility to event risk: High (+)	17
Rating range	23
Comparatives	24
DATA, CHARTS AND REFERENCES	25

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Government of Greece - B1 Stable

Annual credit analysis

OVERVIEW AND OUTLOOK

Greece's (B1 stable) credit profile is constrained by the country's elevated debt burden, which peaked at 181.1% of GDP in 2018 and is one of the highest ratios among the sovereigns we rate. Ensuring debt sustainability over the long term will require a sustained prudent fiscal stance for many years to come. Moreover, the economy's growth prospects are only moderate, and the banking system remains weak, with declining but still high nonperforming exposures.

Greece's credit strengths include (1) its relatively wealthy population, with a high per-capita income compared to B1-rated peers; (2) a benign debt-servicing profile that provides fiscal flexibility despite the large debt burden; and (3) significant euro area support, which has provided debt relief, as well as liquidity and technical assistance over the years. Since the end of the last external adjustment programme in August 2018, the Greek government has returned to market-based funding.

The rating could be upgraded if the newly elected government continued to implement the commitments given to the euro area, including reforms that resulted in an improved business climate and stronger investment while maintaining solid public finances. This would lead to a more rapid reduction in the public debt ratio than currently foreseen and stronger institutions over the medium term. Faster-than-expected improvements in the banking sector's health could also be a trigger for a positive rating action.

Conversely, downside pressure on the rating could develop if the Greek government decided to deviate from its commitments and reversed reforms that had been previously agreed and legislated, or if tensions with official creditors re-emerged for any other reason. This would jeopardize the euro area's continued support for the country.

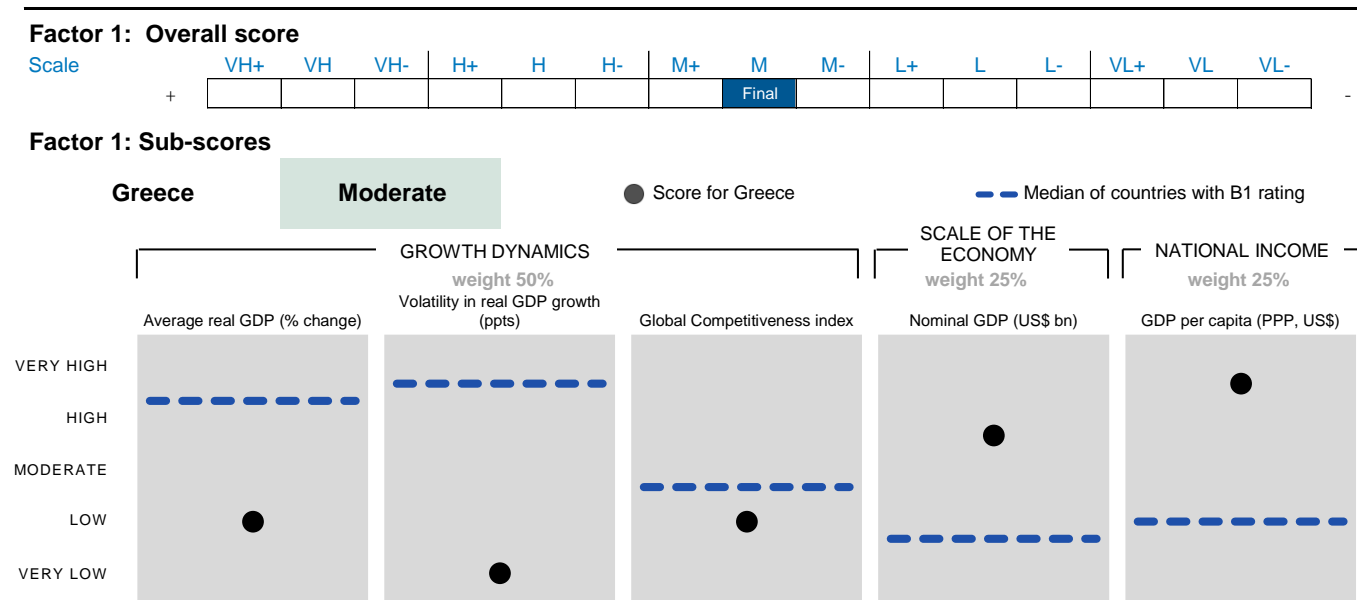
This Credit Analysis elaborates on Greece's credit profile in terms of economic strength, institutional strength, fiscal strength and susceptibility to event risk, which are the four main analytical factors in our [Sovereign Bond Rating Methodology](#).

CREDIT PROFILE

Our determination of a sovereign's government bond rating is based on the consideration of four rating factors: economic strength, institutional strength, fiscal strength and susceptibility to event risk. When a direct and imminent threat becomes a constraint, that can only lower the preliminary rating range. For more information please see our [Sovereign Bond Rating Methodology](#).

Economic strength: Moderate

Exhibit 1



Economic strength evaluates the economic structure, primarily reflected in economic growth, the scale of the economy and wealth, as well as in structural factors that point to a country's long-term economic robustness and shock-absorption capacity. Economic strength is adjusted in case excessive credit growth is present and the risks of a boom-bust cycle are building. This 'credit boom' adjustment factor can only lower the overall score of economic strength.

Note: The Scorecard-indicated outcome is shown in light blue in the scale above. In case the Scorecard-Indicated outcome and Final scores are the same, only the Final score will appear in the table above.

Source: Moody's Investors Service

We assess Greece's **economic strength** as "Moderate", in line with the scores assigned to [Cyprus \(Ba2 stable\)](#) and [Bulgaria \(Baa2 stable\)](#). This balances the country's relatively high wealth levels with the moderate size of the economy – at around \$218 billion – and equally the moderate level of economic diversification. Greece's per-capita income at \$29,123 on a PPP basis is much higher than the median for B1-rated countries of \$10,176. At the same time, Greece's growth performance has been much more volatile than in other countries rated at the B1 level, and has only recently started to recover at a stronger pace. Other countries rated at B1, such as [Albania \(B1 stable\)](#), [Armenia \(B1 positive\)](#) and [Montenegro \(B1 positive\)](#), tend to have lower scores for economic strength.

Exhibit 2

Peer comparison table factor 1: Economic strength

	Greece	M Median	Albania	Montenegro	Bulgaria	Cyprus	Dominican Republic	Portugal
	B1/STA		B1/STA	B1/POS	Baa2/STA	Ba2/STA	Ba3/STA	Baa3/STA
Final score	M		L+	M-	M	M	M	H-
Scorecard-indicated outcome	M		M	M-	M+	M+	M+	H-
Nominal GDP (US\$ bn)	218.0	117.9	15.1	5.5	65.1	24.5	81.4	238.0
GDP per capita (PPP, US\$)	29,123.0	18,424.6	13,344.5	19,043.3	23,155.6	39,973.2	18,424.6	32,006.4
Average real GDP (% change)	1.4	3.0	3.4	3.4	3.2	2.6	6.0	1.7
Volatility in real GDP growth (ppts)	3.9	2.4	1.1	3.4	2.3	3.5	2.4	2.4
Global Competitiveness Index	4.0	4.1	4.2	4.2	4.5	4.3	3.9	4.6

Source: Moody's Investors Service

Moderate growth performance expected to continue

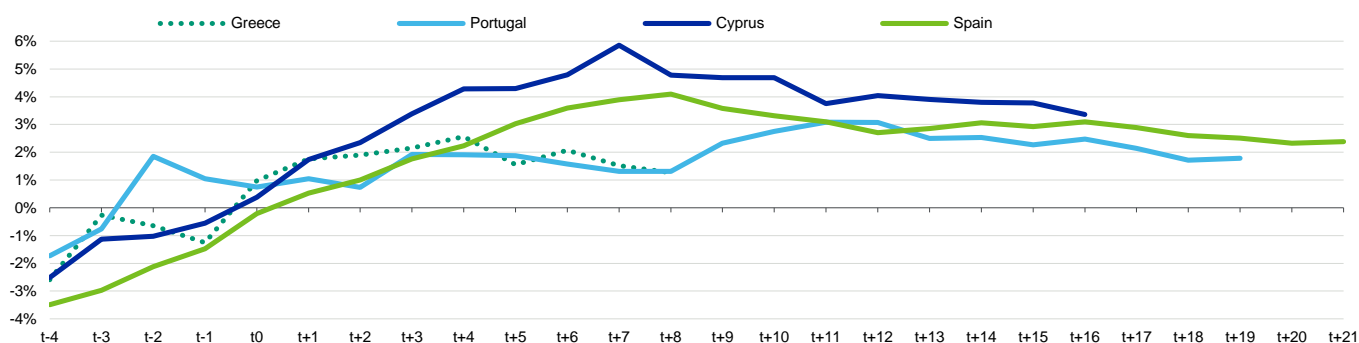
Greece has finally emerged from its long recession in 2016 and last year's real GDP growth of 1.9% was reasonably solid. However, the annual average masks a deceleration in year-on-year terms over the past several quarters. In the first quarter of this year, growth was 0.2% higher than a quarter earlier but just 1.3% above the pre-year level. In nominal terms – more relevant for public finances than real GDP growth – growth has been holding up better at just above 2%, given somewhat higher inflation rates in recent quarters.

In our baseline scenario, we expect growth to regain some momentum over the remainder of the year, expanding by 2.2% this year and a slightly stronger rate of 2.5% in 2020. However, this is still a relatively moderate expansion and more in line with [Portugal's \(Baa3 stable\)](#) pace of recovery at the same point in the country's recovery, rather than the significant acceleration that Cyprus and [Spain \(Baa1 stable\)](#) experienced (see Exhibit 3).

Exhibit 3

Greek recovery path resembles Portugal's moderate expansion

Real GDP growth % year-over-year, first quarter of growth = t0

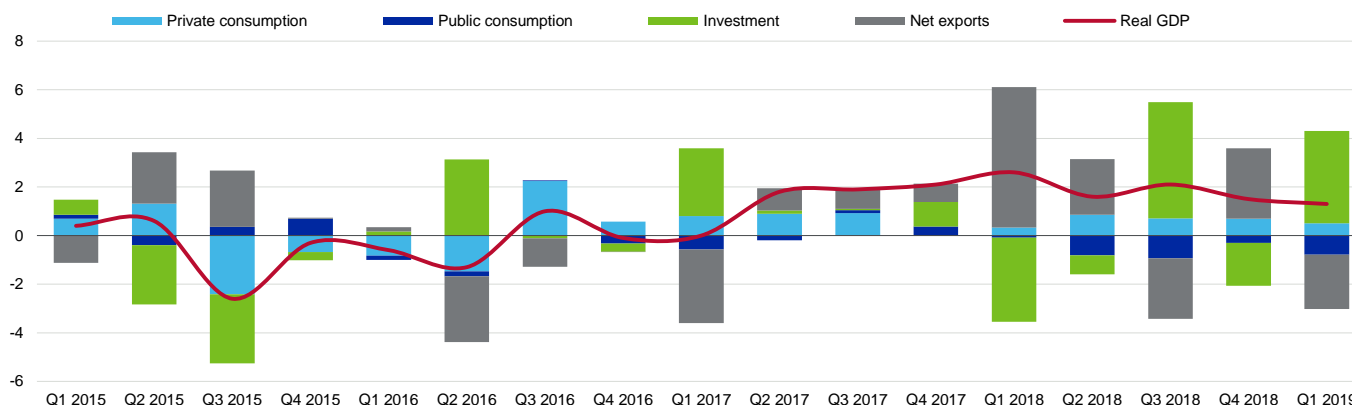


Sources: National Statistical Authorities, Moody's Investors Service

The recovery so far has been mainly driven by exports and to a lesser extent investment and private consumption. We expect a stronger contribution to growth from private consumption and also investment this year and next. Private consumption will likely benefit from the continuing improvement in the labour market. Employment growth has averaged above 2% since late 2017 and the unemployment rate (17.6% in April 2019) is at its lowest level since mid-2011. We expect household consumption to grow by around 1.5% this year, also helped by the 11% increase in the minimum wage in February 2019, a reduction in social security contributions for specific workers. Some of the outgoing government's expansionary fiscal measures implemented in May, in particular for pensioners, will probably also provide a boost to consumption this year. Private consumption could play a stronger role in the coming years, against the backdrop of continued employment growth and tax cuts planned by the new government. In real terms, household consumption remains around 23% below the pre-crisis peak (as of Q1 2019), indicating significant upside potential in the coming years. Despite the substantial hike in the minimum wage, overall wage growth has remained moderate at only 1.8% (seasonally adjusted) for Q1 2019.

Exhibit 4

Contribution of domestic demand to strengthen Real GDP annual growth, contribution by expenditure (pp)

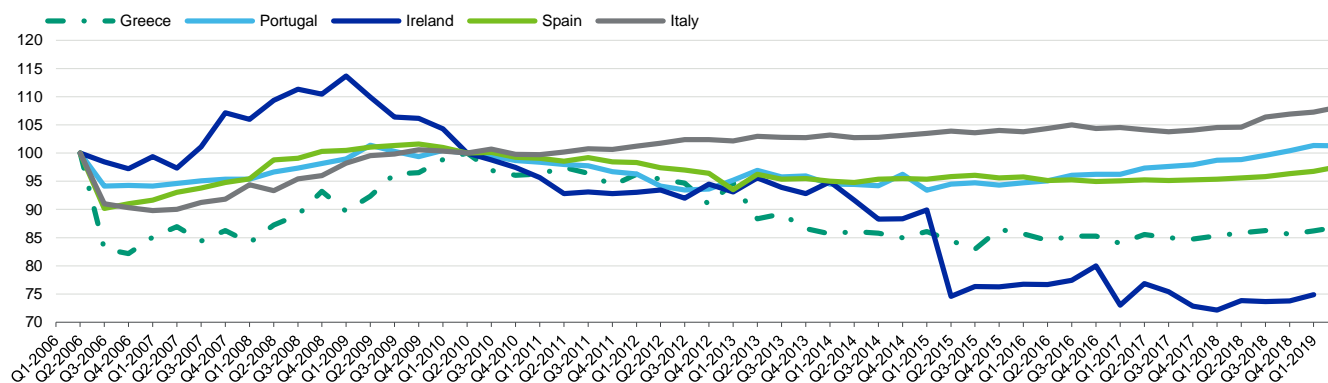


Sources: Eurostat, Moody's Investors Service

Investment and exports will likely remain the other key growth drivers in the coming years. Exports continue to benefit from Greece's improved cost competitiveness, on the back of extensive labour market reforms over the past several years. Unit labour costs have declined by around 13% compared to early 2010, with only Ireland showing a greater improvement (see Exhibit 5). The share of exports in real GDP has consistently increased over the past several years, standing at 34% in Q1 2019, compared to 21%-22% before the crisis (see Exhibit 6).

Exhibit 5

Greece's unit labour costs have declined on the back of labour market reforms Unit labour costs, 2010 = 100



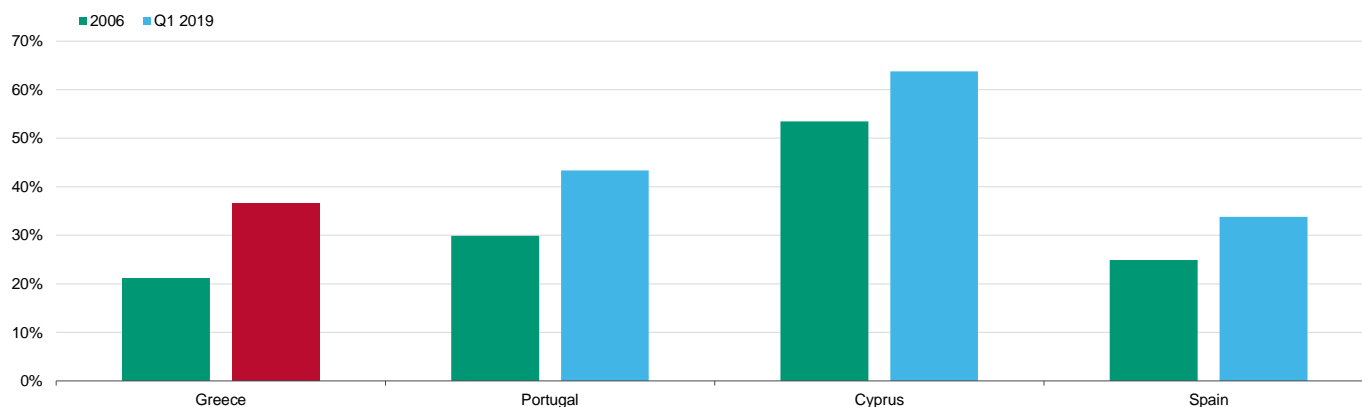
Sources: OECD, Moody's Investors Service

Goods exports (excluding oil products) were 6.5% higher than a year earlier over the January-May period, while services exports were 11.1% higher up to April supported by both the tourism and transportation (mainly shipping) industries. While there were concerns that the steep depreciation of the Turkish lira would increase neighbouring [Turkey's \(B1 negative\)](#) attractiveness for tourists at the expense of Greece, the first few months of the year give no such indication. A significant share of the foreign investment that has flown into Greece in the recent past has been in the tourism sector, including airport infrastructure and hotels, which should support the sector going forward. At the same time, stronger import growth will likely limit the positive net external contribution to growth, and the international environment presents a risk.

Exhibit 6

Share of exports in the Greek economy has increased since the crisis

Exports of goods and services, % of GDP



Sources: National Statistical Authorities, Moody's Investors Service

Stronger investment is crucial for sustained growth

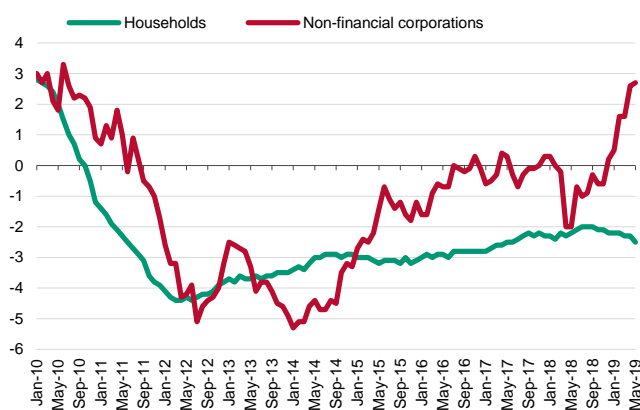
Investment growth was weak last year, however, this followed a strong increase in 2017. We expect a significantly more positive performance this year and forecast gross capital formation to expand at double-digit rates (2018: +1.6%), due to a combination of continued export growth, improving business confidence and political stability after the elections on 7 July.

Investment could become the key growth driver in the coming years, as the new government has campaigned on a more business-friendly platform, including a focus on reinvigorating investment and lowering the high tax burden more rapidly than has been envisaged by the previous Syriza government. Part of the recent weakness has to do with underspending on public investment, which will probably also change under the new government.¹ The finalisation of some key privatisations currently in the pipeline such as the Hellinikon project could also boost Greece's moderate foreign direct investment levels relative to periphery peers. In addition, lending rates for non-financial corporations – a major competitive disadvantage relative to euro area peers – have started to trend down slowly, a development that should accelerate as the cost of risk in the Greek economy declines.² Bank credit to non-financial corporates has finally turned positive since the start of this year (+2.7% year-over-year in May 2019), while bank credit to households is still contracting overall (see Exhibit 7).

Compared to other euro area countries emerging from recession and crisis, Greece's investment performance has been much weaker (see Exhibit 8). Gross fixed capital formation in Portugal and Cyprus has recovered to pre-crisis levels and to around 80% in Spain. In Greece, it is less than a third of its pre-crisis levels.

Exhibit 7

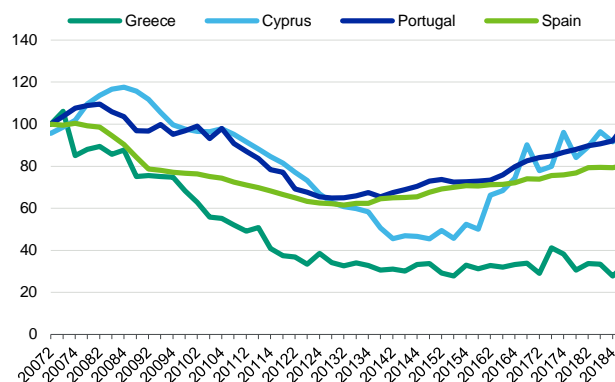
Lending to non-financial corporates has picked up... Bank credit, % annual change



Sources: Bank of Greece, Moody's Investors Service

Exhibit 8

... but Greece's investment performance remains significantly weaker than euro area peers Gross capital formation, Q207 = 100



Note: Smoothed over four quarters in the case of Cyprus.

Sources: National Statistical Authorities, Moody's Investors Service

Stronger investment over the coming years will be important to delivering higher GDP growth rates than the 2% that most external observers currently expect for the coming years. The new government's plans include a reduction in the high corporate tax rate – which is currently seen as a major impediment to investment – to 20% from the current rate of 29% within the coming two years. However, this will likely be contingent on the government achieving its fiscal targets of a primary surplus of 3.5% of GDP per year until 2022. Moreover, even the lower rate would be high compared to those prevailing in neighbouring countries which have benefitted from the relocation of Greek businesses: Corporate tax rates range from 16% in Romania, 12% in Cyprus to 10% in Bulgaria.

Other barriers to investment will probably take longer to correct, although the outgoing government has made some progress with regards to a new investment law that simplifies and accelerates the establishment and licensing of new companies, as well as the establishment of a new agency for operating the cadastre. Remaining obstacles include an inefficient bureaucracy as well as long and cumbersome legal processes and regulations. The new government has pledged to further reduce barriers to foreign investment and embrace privatisations more emphatically than the previous government. It remains to be seen how quickly such steps will be enacted and whether they will lead to much stronger investment from abroad. Given the limitations of the Greek banking sector, we believe that foreign capital will have to be the key driver for stronger investment, at least in the near term.

Medium-term growth prospects depend on continued reform momentum

Apart from a boost to investment, sustained implementation of the reforms initiated under the adjustment programmes will also help to sustain business and household confidence and achieve stronger GDP growth over the medium to long term. Currently, both the EC and the IMF forecast real GDP growth of just around 1% per annum over the medium to long term; such a rate is low even in a European context and even more so against the substantial output losses that Greece experienced.

Low growth assumptions are partly a reflection of Greece's adverse demographics, having suffered from large-scale emigration during the crisis years. The key age cohort of those aged 25-34 years declined by 380,000 (5.6% of the working-age population) between 2010 and 2018, mostly due to emigration. Most leavers have higher education levels, and it will probably require more than lower taxes to entice them back. Deep institutional change is needed to create a modern, efficient and meritocratic public administration and impartial and effective judicial system. While this has been a crucial area for reforms under the last adjustment programme and some progress has been made under the previous government, it will take considerable time and sustained effort for those measures to show their full results. In addition, there are outstanding reform commitments in other areas, that the Greek authorities committed to implement by 2022 (see Exhibit 9).

Exhibit 9

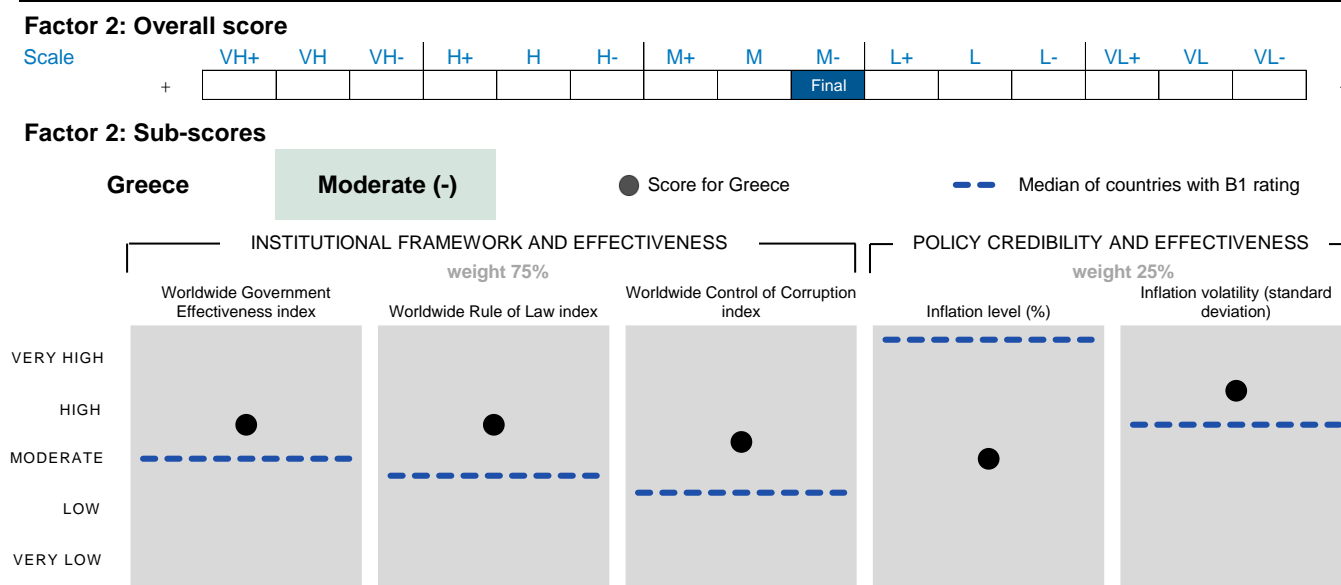
Key remaining reform commitments

Area of reform	Key measures to be implemented	Timeline of implementation
Fiscal policy	Maintain primary surplus at 3.5% of GDP	Every year until 2022
	Full alignment of property tax values with market prices	By mid-2020
	Continue upgrade of IAPR incl. target staff levels in line with strategy plan ("Blueprint")	
	Continue reforms in public financial management, incl. clearance of all arrears and avoidance of future build-up	By mid-2019
	Full implementation of an unified chart of accounts for general government	By 2023
Social welfare	Complete setup of single pension fund	By mid-2020
	Roll-out of primary health care system	By mid-2020
	Complete reform of social safety nets	By end-2019
Financial stability	Eliminate backlog of household insolvency cases	By end-2021
	Relaxation of capital controls in line with roadmap	
Labour and product market reforms	Complete implementation of the investment licensing reform	By mid-2021
	Complete cadastre	By mid-2021
	Complete divestment of part of PPC capacity	By mid-2019
Privatisations	Complete sales already in pipeline	Mostly by mid-2021
	Review/replace SOE boards	By mid-2019
Public administration reforms	Complete replacement of political appointees and performance assessments	By end-2019
	Implement national anti-corruption plan	By mid-2021
	Adopt Labour Law Code and other legal provisions to ensure legal certainty and access to law	By mid-2020

Sources: EC, Moody's Investors Service

Institutional strength: Moderate (-)

Exhibit 10



Institutional strength evaluates whether the country's institutional features are conducive to supporting a country's ability and willingness to repay its debt. A related aspect of institutional strength is the capacity of the government to conduct sound economic policies that foster economic growth and prosperity. Institutional strength is adjusted for the track record of default. This adjustment can only lower the overall score of institutional strength. *Note: The Scorecard-indicated outcome is shown in light blue in the scale above. In case the Scorecard-Indicated outcome and Final scores are the same, only the Final score will appear in the table above.*

Source: Moody's Investors Service

Our assessment of Greece's "Moderate (-)" institutional strength is shared by countries such as Albania, [Senegal \(Ba3 stable\)](#), and [Oman \(Ba1 negative\)](#). The quantitative indicators that we use point to a somewhat higher score but we also take into account Greece's recent episodes of default. In March and April 2012, the first default led to credit losses for private-sector bondholders. A second default occurred as a result of the distressed private-sector debt buyback operation concluded on 12 December 2012.

Exhibit 11

Peer comparison table factor 2: Institutional strength

	Greece B1/STA	M- Median	Albania B1/STA	Oman Ba1/NEG	Senegal Ba3/STA	Mexico A3/NEG	Romania Baa3/STA	Armenia B1/POS
Final score	M-		M-	M-	M-	M-	M	M
Scorecard-indicated outcome	M-		M+	H	M	M-	M+	M
Gov. Effectiveness, percentile [1]	60.5	53.3	48.1	54.7	31.3	43.7	35.0	40.1
Rule of Law, percentile [1]	54.7	54.4	32.8	64.9	46.7	24.0	62.7	45.2
Control of Corruption, percentile [1]	51.0	53.3	37.2	61.3	54.0	10.2	54.7	26.2
Average inflation (%)	0.6	2.5	2.2	1.7	0.8	3.7	2.0	2.5
Volatility in inflation (ppts)	1.9	1.6	0.7	1.4	1.5	1.1	2.8	2.9

[1] Moody's calculations. Percentiles based on our rated universe.

Source: Moody's Investors Service

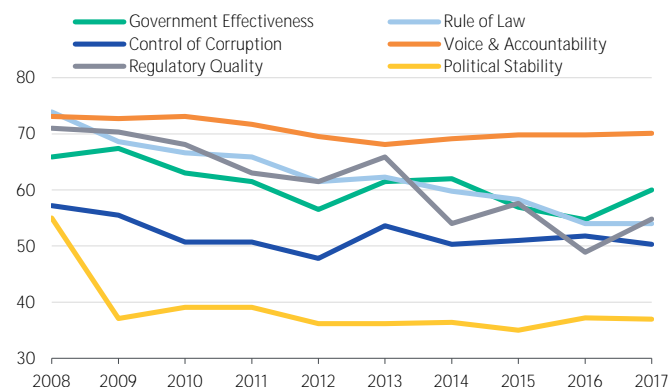
While Greece scores significantly higher on the Worldwide Governance indicators than peers with a similarly low score, Greece's scores for government effectiveness, rule of law and control of corruption are materially lower than those of other euro area countries (see Exhibits 12 and 13) such as Portugal and Cyprus. Greece's scores have also deteriorated over the past decade, although its scores for

government effectiveness and regulatory quality are slowly improving, reflecting the many reforms legislated and implemented during the adjustment programmes. Greece continues to receive significant technical assistance from the euro area in the areas of public and tax administration, which is not usually available for similarly rated countries.

Exhibit 12

Worldwide Governance Indicators have deteriorated over the past decade...

Percentile rank (Moody's rated sovereigns)

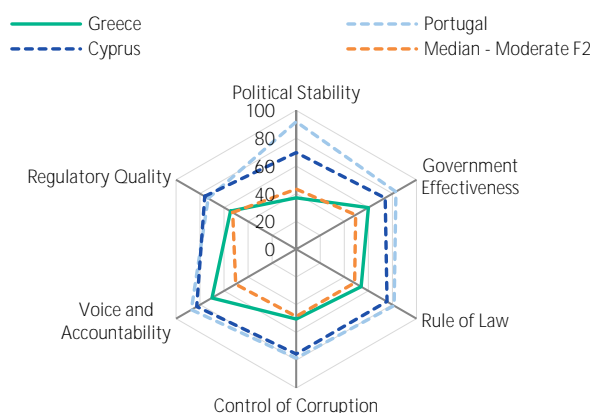


Sources: Worldwide Governance Indicators, Moody's Investors Service

Exhibit 13

...and are weaker than Cyprus and Portugal

Percentile rank (Moody's rated sovereigns), 2017



Sources: Worldwide Governance Indicators, Moody's Investors Service

Efforts to modernise and depoliticise weak institutions are ongoing...

Important progress has been made to bring Greece's previously weak and politicised institutions in line with European standards. The Greek authorities have legislated measures to strengthen the effectiveness and operational independence of key institutions, such as the Greek statistical authority (ELSTAT) and regulatory agencies such as the Hellenic Competition Commission (HCC) and the Regulatory Authority for Energy (RAE). In January 2017, an Independent Authority for Public Revenue (IAPR) was established, which is showing promising signs of improving tax collection and reducing the scope of tax evasion. The government has passed legislation to promote and facilitate the use of electronic payments, which should help to make some of the improvements in tax collection more permanent. The public procurement system has been reformed, with the aim of reducing the scope for corruption. IT systems are being upgraded and used more extensively.

Another important aspect of institutional reforms concerns governance and the introduction of a proper human resource management system in the public administration. Politically appointed senior personnel in the civil service are being replaced on the basis of qualification and competence. Annual performance assessments are being introduced for the first time. The quality of public finance and economic data has improved. The fiscal legal framework has also been upgraded, particularly with regards to binding expenditure ceilings for state-owned enterprises, local governments and extra-budgetary funds.

Privatisation of state assets has recently seen a significant acceleration, an area where the previous Syriza government previously backtracked and allowed vested interests to derail sales. The independent Hellenic Corporation of Assets and Participations (HCAP) is fully operational. A number of high profile asset sales have been announced and several completed, mainly in the transport and infrastructure areas. This is positive, as privatisations not only contribute to reducing public debt but also help to attract foreign capital and know-how and move Greek production towards higher value-added products and services. According to Bank of Greece estimations close to a third of foreign direct investment inflows into Greece over the 2016-18 period were linked to privatisations.

...but continued implementation will be key

Under the last support programme, the Greek government pushed through a very large and broad range of institutional improvements. This gives some confidence that the risk of reform reversal has declined, as the painful reforms have already been put in place. The recently elected New Democracy government has said that it no longer insists on renegotiating the primary fiscal surplus targets

immediately and has said that it will focus first on establishing fiscal credibility. However, it remains to be seen how committed it will indeed be in delivering on Greece's outstanding commitments.

The EC (and to a lesser extent the IMF) will remain closely involved, through its quarterly "enhanced" monitoring missions. The EU and the [European Stability Mechanism \(ESM, Aa1 positive\)](#) as lender under the third adjustment programme have additional leeway in that their positive evaluation of Greece's reform progress will trigger – on a six-monthly basis – the release of debt-relief measures worth around 0.7% of GDP per year. More specifically, the euro area creditors agreed to a staggered return to Greece of €5.8 billion in profits accrued on the bonds held by the European Central Bank and other euro area central banks and the cancellation of an increase in the EFSFs interest margin on a tranche of €11.3 billion.

However, despite these incentives and the close monitoring, there are clear limits to the creditors' powers. In recent months, the Syriza government had slowed down implementation of remaining commitments and in some cases reversed earlier reforms. The increase in the minimum wage by 10.9% as of February this year was far in excess of productivity increases. For young people, the abolition of a lower minimum wage resulted in an even higher effective wage increase of around 20%, which will likely make finding employment even harder for this group, for which the unemployment rate stands at 40.4%. In another reversal of earlier reforms to enhance labour market flexibility, social partners are again able to extend a sectoral or occupational wage agreement to all companies in the sector or occupation. These now apply to 15 sectors, covering around 12% of private-sector employees, including in the crucial tourism-related sectors. According to the Bank of Greece, wage increases stemming from these sectoral agreements have been modest so far, though.³ In May, and with a view towards the upcoming elections, the government introduced a package of fiscal measures at an estimated fiscal cost of 0.7%-1% of GDP. Some of the measures constitute a reversal of earlier commitments and reforms, such as the reduction of selected VAT rates, the re-instatement of a 13th monthly pension payment and the relaxation of eligibility criteria for survivors' pensions.

In any case, it will take time and continued commitment over the long term to reap the full benefits of a modern and efficient public administration. Most of the institutional measures have so far been focused on central administrative agencies, although the objective is to eventually apply the new management and promotion procedures, for example, to the entire public sector. Ultimately, institutional changes in the public administration will need to be accompanied by changes in the behaviour of the wider population, particularly with regards to tax compliance. In this regard, the Syriza government's recent establishment of new installment schemes for paying debts on taxes and social security contributions over a very long (10-year) period is a step backwards in terms of improving Greece's payment culture.

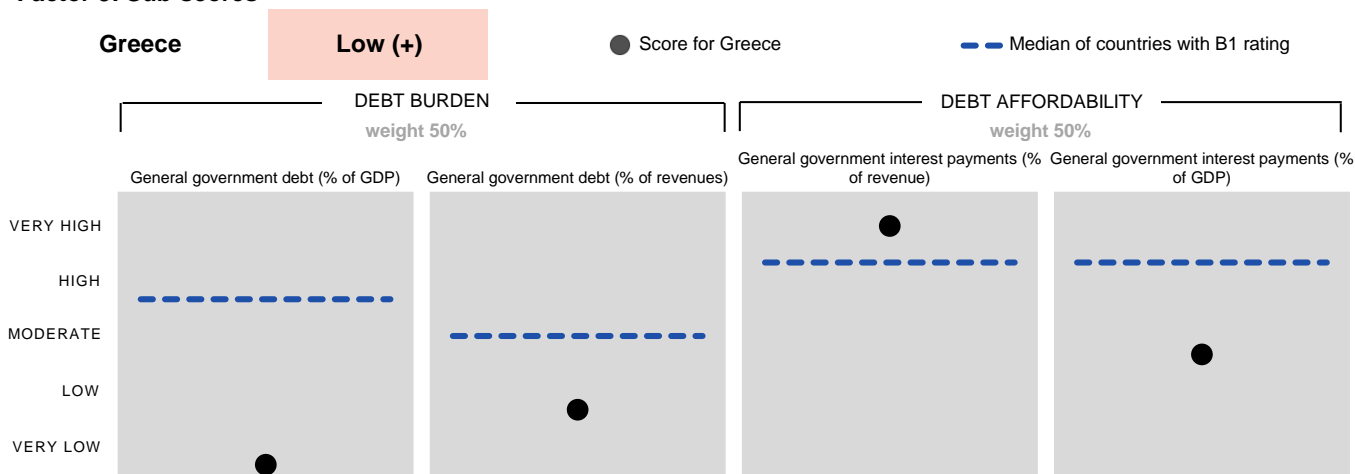
Fiscal strength: Low (+)

Exhibit 14

Factor 3: Overall score

Scale	VH+	VH	VH-	H+	H	H-	M+	M	M-	L+	L	L-	VL+	VL	VL-
+										Final					-

Factor 3: Sub-scores



Fiscal strength captures the overall health of government finances, incorporating the assessment of relative debt burdens and debt affordability as well as the structure of government debt. Some governments have a greater ability to carry a higher debt burden at affordable rates than others. Fiscal strength is adjusted for the debt trend, the share of foreign currency debt in government debt, other public sector debt and for cases in which public sector financial assets or sovereign wealth funds are present. Depending on the adjustment factor the overall score of fiscal strength can be lowered or increased.

Note: The Scorecard-indicated outcome is shown in light blue in the scale above. In case the Scorecard-Indicated outcome and Final scores are the same, only the Final score will appear in the table above.

Source: Moody's Investors Service

Fiscal strength is assessed as "Low (+)", driven primarily by the more than 70 percentage point increase in the country's debt burden since 2008 to a peak of 181.1% of GDP last year, one of the highest in our sovereign rating universe. We expect a gradual reduction in the debt ratio from this year onwards, but Greece's debt burden will remain very high for decades to come.

However, the debt ratio itself is of more limited relevance than for other countries, given the very long maturity structure of the debt and the significant and repeated debt relief provided by Greece's euro area creditors. Hence, Greece's debt affordability (interest payments in relation to GDP and government revenues) is significantly stronger than what the pure debt metrics would suggest. Other countries that share the same fiscal strength score are [Croatia \(Ba2 positive\)](#), Portugal and [Italy \(Baa3 stable\)](#).

Exhibit 15

Peer comparison table factor 3: Fiscal strength

	Greece B1/STA	L+ Median	Croatia Ba2/POS	Portugal Baa3/STA	Italy Baa3/STA	Namibia Ba1/NEG	Serbia Ba3/STA	Honduras B1/STA
Final score	L+		L+	L+	L+	L+	M-	M-
Scorecard-indicated outcome	L+		L+	M-	L+	L+	M-	M-
Gen. gov. debt/GDP	181.1	74.6	74.6	121.5	132.2	47.1	54.5	41.2
Gen. gov. debt/revenue	378.8	224.2	159.9	279.2	284.5	153.0	131.0	155.8
Gen. gov. interest payments/GDP	3.3	3.3	2.3	3.5	3.7	3.5	2.1	2.2
Gen. gov. int. payments/revenue	7.0	7.9	5.0	7.9	8.0	11.5	5.2	8.4

Source: Moody's Investors Service

Substantial fiscal consolidation in past years, most of it structural in nature

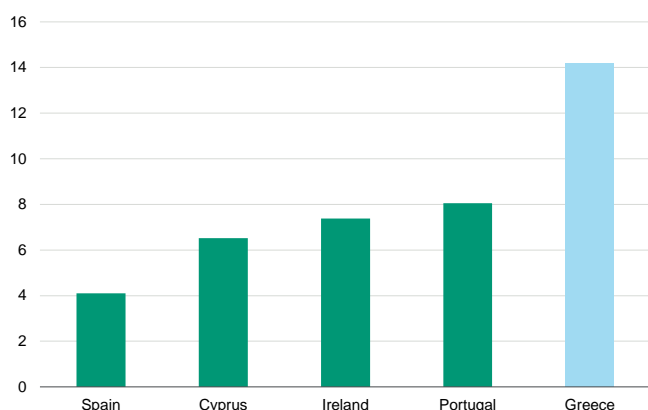
A key focus of Greece's three adjustment programmes has been to put the public finances on a more solid and sustainable footing. Between 2010 and 2018 the budget deficit in structural terms has been cut by 14 percentage points of GDP, an unprecedented fiscal effort. This compares to a structural adjustment of 8% of GDP in Portugal, 7.4% of GDP in Ireland, 6.5% in Cyprus and 4.1% in Spain over the same period (see Exhibit 16).

Fiscal consolidation accelerated significantly under the Syriza government (see Exhibit 17). Last year, the primary surplus stood at 4.3% of GDP (against a target of 3.5%) and the general government managed an overall surplus of 1.1% of GDP, the government's third successive surplus.⁴ This year's target – a primary surplus of 3.5% of GDP – had also been achievable if the outgoing government had not implemented various measures in May, the cost of which are estimated by the Bank of Greece and the EC at 0.7% and 1% of GDP respectively for the current and also subsequent years. We consequently adjusted our forecast for the primary balance to a surplus of 3% of GDP and a small overall deficit this year. We currently pencil in a return to a slight surplus in the overall budget and a return to a primary surplus of 3.5% of GDP target, pending more details of the new government's fiscal strategy.

Exhibit 16

Greece's structural fiscal adjustment has outpaced other periphery countries...

Structural adjustment between 2010 and 2018, pp of GDP

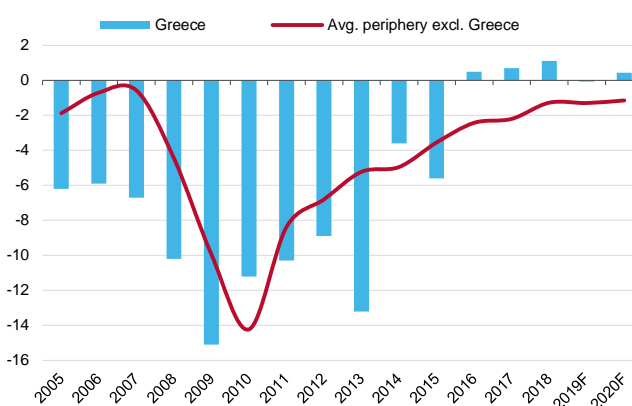


Sources: EC, Moody's Investors Service

Exhibit 17

... and we expect the fiscal account to remain close to balance

General government budget balance, % of GDP



Note: 2019 and 2020 are Moody's own forecasts.

Sources: Eurostat, Moody's Investors Service

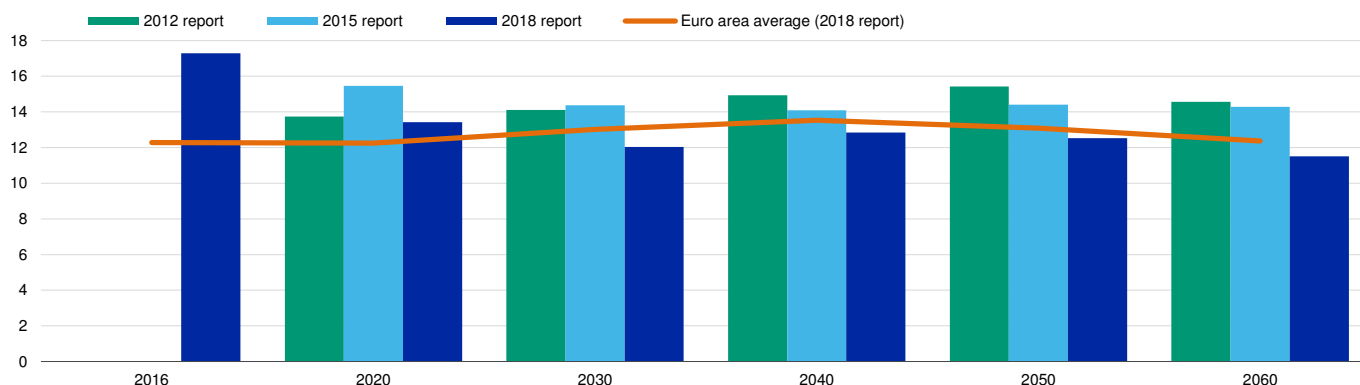
Despite recent developments, we believe that Greece's fiscal accounts will remain reasonably solid over the coming years given the new government's assurances to respect commitments to euro area creditors. Also, most of the consolidation achieved so far reflects structural improvements on the spending side, in particular following deep reforms of the pension and health care systems. The broad thrust of these reforms has not been questioned; indeed health care reforms are continuing broadly according to plan. The reforms being implemented include a major move away from Greece's historic focus on hospitals as the main delivery point of primary health care. Instead, general practitioners will become the main provider with important gatekeeping functions, a significantly cheaper form of health care provision that is standard in most EU countries. Centralised procurement, a push towards the prescription of cheaper generic drugs and wider governance reforms in the health care system are also expected to contribute to significant savings in the coming years.

In a similar vein, Greece has implemented important pension reforms that have placed the pension system on a much more sustainable footing, as acknowledged in the European Commission's latest long-term forecasts, although these do not incorporate the latest pension-related measures (see Exhibit 18). Spending on (old-age) pensions has declined to 13.8% of GDP in 2017, compared to 15.8% in 2012, a reduction of nearly 18% in nominal terms. In particular as a result of the 2016 pension reforms Greece will have to spend significantly less on pensions in the coming decades than it currently does. Over the long term (by 2060) Greece is expected to spend around a full percentage point of GDP less on pensions than the euro area on average – it previously had one of the highest pension outlays in Europe.

Exhibit 18

Pension system is on a more sustainable footing following extensive reforms

Public spending on pensions, gross (% of GDP)



Source: European Commission Ageing Reports 2012, 2015 and 2018, Moody's Investors Service

In addition, the public-sector wage bill has been materially reduced (-22.6% between 2010 and 2018) and is now in line with many euro area peers, although it is still higher than the best performers. The restrictions on permanent hiring in the public sector that have been agreed with the creditors are being respected, although temporary hires have increased.⁵ Also, the interest bill on the public debt has been more than halved between 2010 and 2018, as a result of the low interest rates that Greece's euro area creditors charge on their loans and the various debt-relief measures granted since 2017. While we forecast an increase in the interest bill from this year onwards, reflecting the higher market yields on the government's bond issuances, the interest burden will remain broadly stable at 3.3% of GDP in the coming years.

On the revenue side, tax collection is on an improving trend under the new IAPR, helped by a move towards more electronic processes for both tax returns and tax audits. Recent legal changes will allow the tax authorities to access taxpayers' bank account details, which should further reduce the potential for tax evasion. Property tax is being reformed, with the objective of raising the tax take. Between 2015 and 2018, tax revenues have increased by a cumulative 13.9%, although this increase also partly reflects higher tax rates on categories including personal income tax and property.

But fiscal risks remain and new government's strategy will be important

Despite the positive evolution of the public accounts over the past several years, risks remain. In the near term, they mostly arise from ongoing court cases against key provisions of earlier pension reforms. Greece's highest administrative court has yet to issue a final ruling on the constitutionality of past pension cuts.⁶ In addition, the public sector continues to accumulate arrears towards its suppliers, indicating continued deficiencies in the public sector's financial management. Clearance of all outstanding arrears (€1.4 billion as of end-March 2019) is a key commitment vis-à-vis the euro area.

State budget execution data (on a modified cash basis) for the first five months of the year showed a deficit of 0.9% of GDP, versus a deficit of 0.5% over the same period last year. Tax revenues have been 3.6% above budget, which together with continuing under-spending on public investment helped to counter-balance the significant cost of the 13th monthly pension payment in May. The primary surplus was broadly similar to last year's.

We expect the incoming government to remain committed to the primary surplus target that has been agreed with the euro area creditors (3.5% of GDP until 2022), as a way of gaining credibility with the EC. Judging by its election platform, the new government will aim to shift the fiscal policy mix towards lower tax rates and higher public investment, partly to be financed by broadening the tax base – initiatives that the EC has also been advocating for.

According to the agreement with the euro area creditors, Greece's primary surplus will decline rapidly by 0.5% of GDP each year from 2023 onwards and stabilise at 2.2% of GDP as of 2025. There are clearly risks to this scenario as very few countries have been able to sustain consistently large primary surpluses for very long periods of time irrespective of the cyclical position. After many years of fiscal restraint, social and political pressures to raise spending again will likely increase (as has been the case in other euro area

countries recovering from the crisis). Despite the ongoing reforms, health care spending in particular will face pressures from the ageing population and rapid technological change. The EC forecasts in its latest Ageing Report that spending on health care will rise from 5% of GDP to 5.5% in 2030 and nearly 6% by 2040. See [EC 2018 Ageing Report](#).

General government debt ratio will start to decline from this year onwards

Greece's government debt ratio reached a historic peak of 181.1% of GDP at the end of last year. While the increase from 176.2% in 2017 was mainly due to the accumulation of a large cash buffer in preparation for the return to market funding, Greece's debt ratio will remain very high for decades to come. However, the debt burden has become significantly more sustainable, thanks to very favourable repayment terms on the euro area loans and the extensive debt relief provided by Greece's euro area creditors since 2017. Nearly 80% of Greek central government debt – excluding short-term T-bills and repo transactions with other Greek public-sector entities – is owed to euro area institutions (including the ECB and other euro area central banks). In our baseline scenario, the public debt ratio will decline to around 174% of GDP this year and further to around 154% by 2022, due to large primary surpluses and nominal GDP growth that will exceed the nominal interest rate on the debt.

In June 2018, the creditors agreed to extend the average maturity of the EFSF loan – by far the single biggest lender to Greece at nearly €131 billion or 70% of GDP – by 10 years, and to defer the first principal and interest payment to 2033.⁷ The creditors have also committed to reviewing Greece's debt profile again in 2032 and to provide further maturity extensions if needed, provided that Greece remains on track with its commitments. The euro area's key benchmark for assessing debt sustainability is the government's gross financing needs (comprising the annual fiscal deficit and debt payments due) which should not exceed 15% of GDP for the medium term and 20% in the long run. Euro area creditors have made it clear that they will only ever consider deferral of principal and interest due but no nominal haircuts.

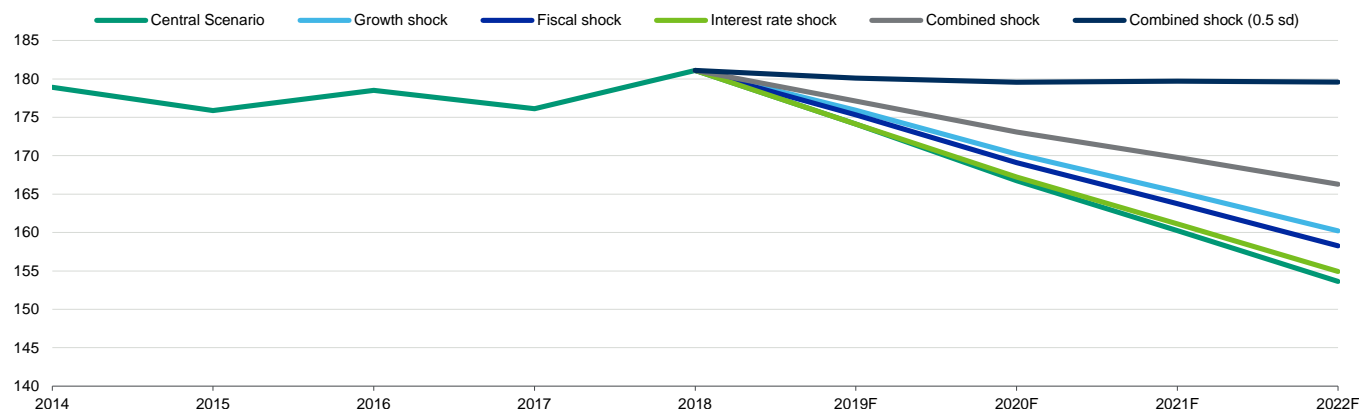
Creditors also provided Greece with a large cash buffer of €11.4 billion last August, which together with the government's existing cash balance gives a very comfortable cash buffer, amounting to €24.3 billion or 13.1% of GDP as of March 2019. This compares with amortization of medium and long-term debt of around €18.4 billion until the end of 2021. Maturities then rise to around €10 billion per year for 2022 and 2023. All central government entities are now required by law to deposit their reserves at the central bank, bringing Greece's liquidity management in line with other advanced countries. The debt management agency PDMA has issued two bonds, raising a total of €5 billion, since the start of the year, further adding to its cash balance. In May, the PDMA also received the consent of its euro area creditors for early repayment of around 40% of its total outstanding obligations to the IMF. By repaying the IMF early, Greece expects to save around €150 million per year, around 2.4% of its interest expense.

While Greece's public debt will remain very high over the medium term, our sensitivity analysis shows that it is relatively well insulated from shocks. The public debt ratio will decline in all our standard stress scenarios, in which we apply various shocks of a 0.25 standard deviation from historic trends. As can be seen in Exhibit 19 the debt trajectory is more susceptible to lower growth and slower fiscal consolidation than to an interest rate shock due to Greece's favourable debt structure, with a very long average maturity and a low share of floating rate debt.⁸ We would have to assume a significantly more severe combined (economic, fiscal and interest rate) shock to see the debt ratio stagnating at around 180% of GDP, a scenario which is unlikely to materialise in the next several years.

Exhibit 19

Public debt is on a declining trajectory under all our standard stress scenarios

General government debt, % of GDP



Negative shocks: All affected variables are projected to remain a permanent 0.25 historical (10-year) standard deviation below the baseline number. The combined shock includes growth, a worsening in the fiscal performance, and a rise in interest rates.

Source: Moody's Investors Service

The EC's longer-term debt sustainability analysis comes to broadly similar conclusions; in its baseline scenario – which assumes that the Greek government will comply with primary balance targets and fully implement all remaining commitments – Greece's government debt ratio would be on a continuous downward path until 2032, when repayments to the EFSF will start. The government debt ratio is forecast to remain above 100% of GDP until 2048. In an adverse scenario, Greece's debt ratio would start rising again from 2033 onwards and reach 160% of GDP by 2060, while gross financing needs would reach the threshold of 20% of GDP by 2041 and exceed it thereafter. Fiscal policy slippage is the key risk, also because it could put the continued support from the euro area in jeopardy. While there is no doubt that the euro area's support for Greece is currently very strong, the political dynamics in creditor countries over the long term are less assured.

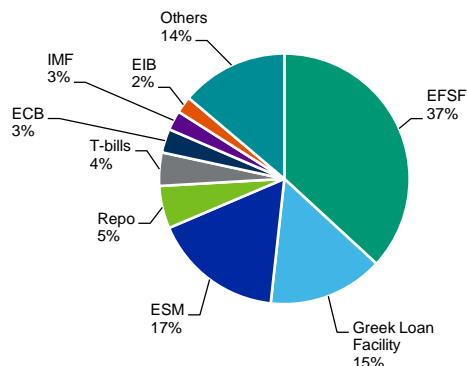
Cost and structure of debt mitigate elevated levels, debt affordability is strong

The associated credit risks of Greece's large debt burden (mainly interest rate volatility and refinancing risks) are mitigated by the debt's structure, low interest rates and the long tenor. Over 90% of the government debt is at fixed rates now compared to a share of just 30% in 2016, before the euro area's short-term debt-relief measures. The average interest rate on the debt is just 1.61%, compared to 4.54% in 2011, before the first round of official-sector debt relief and the restructuring of private-sector debt in 2012.⁹ And the weighted average maturity of the government's debt stock is now over 21 years (as of April 2019) compared to 6.3 years in 2011, with the ESM and EFSF loans having particularly favourable repayment terms. The weighted average maturity of the ESM loans (€59.9 billion) is 32 years, while the EFSF loans (€130.9 billion) now have a weighted average maturity of 42 years. 98% of the debt is denominated in euros, essentially eliminating any foreign-currency risk.

Exhibit 20

Debt is predominantly owed to the official sector...

Debt composition by funding instrument, % of total (April 2019)

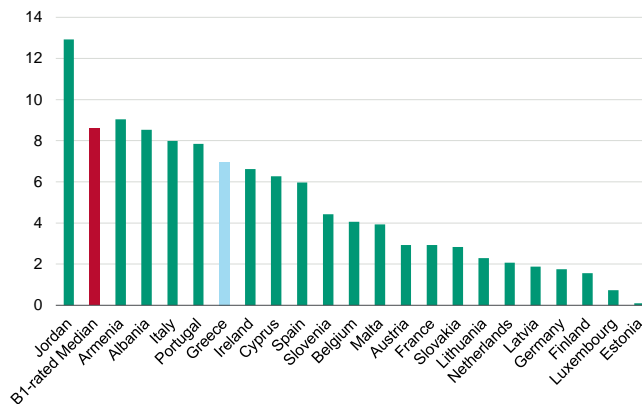


Sources: PDMA, Moody's Investors Service

Exhibit 21

... and affordability is stronger than B-rated peers but also compared to Portugal and Italy

General government interest payments as % of general government revenue (2019F)



Note: Moody's forecasts.

Source: Moody's Investors Service

As a result, Greece's interest payments as a share of government revenues – our preferred indicator to gauge the affordability of the debt burden – are low and will remain so for an extended period, even assuming a return to regular issuances in the capital markets. At a ratio of around 7%, Greece's debt affordability is stronger than Portugal's and Italy's and significantly lower than other countries rated at the B1 level (see Exhibit 21).

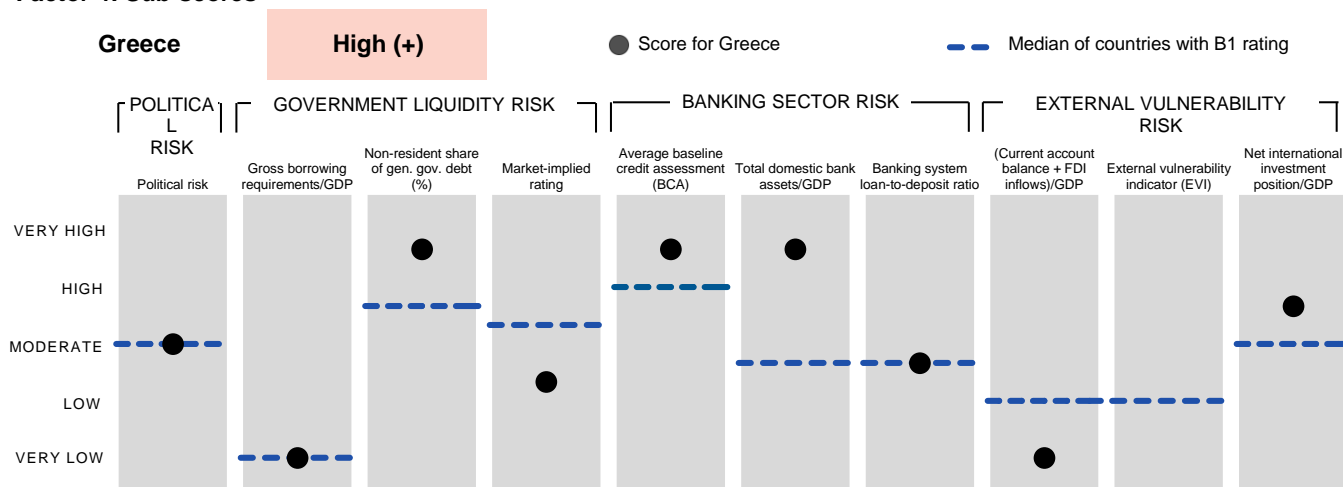
Susceptibility to event risk: High (+)

Exhibit 22

Factor 4: Overall score

Scale	VL-	VL	VL+	L-	L	L+	M-	M	M+	H-	H	H+	VH-	VH	VH+
+												Final			
-															

Factor 4: Sub-scores



Susceptibility to event risk evaluates a country's vulnerability to the risk that sudden events may severely strain public finances, thus increasing the country's probability of default. Such risks include political, government liquidity, banking sector and external vulnerability risks. Susceptibility of event risk is a constraint which can only lower the preliminary rating range as given by combining the first three factors.

Note: In case the Scorecard-Indicated outcome and Final scores are the same, only the Final score will appear in the table above.

Source: Moody's Investors Service

We consider Greece to have a "High (+)" **susceptibility to event risk** driven by risks related to the banking sector, which continues to have weak asset quality and low profitability. In addition, Greek banks have a large share of lower-quality capital in the form of deferred tax assets (DTAs), although we now attach more value to those that are eligible for conversion into deferred tax credits under the relevant law (around 72% of total DTAs for the four largest Greek banks as of March 2019). In contrast, liquidity has materially improved with the banks no longer relying on emergency liquidity assistance from the Bank of Greece and the Eurosystem. Bank deposits of non-financial corporations and households have been gradually returning since 2015, and stood at €133 billion as of May 2019. Our assessment of Greece's susceptibility to event risk is similar to that of Cyprus and Turkey.

Political event risk reduced to "Moderate (-)" to reflect more stable domestic political situation

We recently reduced our political risk score to "Moderate (-)" from the previous "Moderate" to reflect the prospect for a significantly more stable political situation following the general elections on 7 July. For the first time since 2009, a single party – the opposition New Democracy – has obtained an absolute majority of seats in parliament. That said, the score remains higher than in many other European countries, to reflect the need for successive governments to pursue prudent fiscal policies and implement further institutional and structural economic reforms as agreed with the creditors, against a background of still weak but improving institutional capacity. Other sovereigns with the same domestic political risk score include Italy and Spain.

Exhibit 23

Peer comparison table factor 4a: Political risk

	Greece B1/STA		Italy Baa3/STA	Spain Baa1/STA	Hong Kong Aa2/STA	Brazil Ba2/STA	Albania B1/STA	Portugal Baa3/STA
Final score	M-		M-	M-	M-	M-	L+	VL
Geopolitical risk	VL	--	VL	VL	M-	VL	VL	VL
Domestic political risk	M-	--	M-	M-	L+	M-	L+	VL

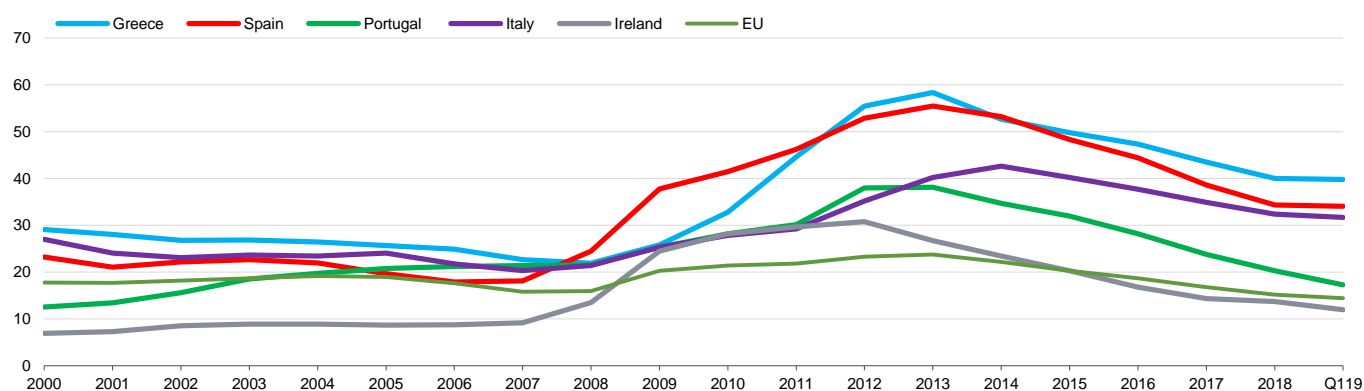
Source: Moody's Investors Service

The newly elected government has campaigned on a platform of accelerating investment and economic growth, which will be crucial to maintaining popular support for reforms. Unemployment remains very high, in particular for the young (see Exhibit 24) and the share of the population at risk of poverty has risen materially during the crisis years. Support for the poorest households has been stepped up significantly under the adjustment programme, with the introduction of a Social Solidarity Income (SSI) to provide support for the poorest households and a social safety net of last resort. It currently provides support to around 500,000 people or nearly 5% of the Greek population. The scheme is complemented by active labour market policies to support re-integration into the labour market as well as a new means-tested housing benefit scheme introduced at the start of this year.

Exhibit 24

Youth unemployment is declining, but remains very high

Youth unemployment rate, % (15-24 class age of the population)



Sources: OECD, Moody's Investors Service

Government liquidity risk at "Low (+)" reflects manageable financing needs in coming years

We assess government liquidity risk as "Low (+)", given the significant maturity extensions provided by the euro area creditors and the existence of a large cash buffer that covers more than two years of the Greek government's gross financing needs.

Exhibit 25

Peer comparison table factor 4b: Government liquidity risk

	Greece B1/STA	L+ Median	Italy Baa3/STA	Croatia Ba2/POS	Jamaica B3/POS	Cyprus Ba2/STA	Portugal Baa3/STA	Jordan B1/STA
Final score	L+		L+	L+	L+	L+	M-	M-
Scorecard-indicated outcome	L-		L-	VL+	L	VL	VL	M-
Gross borrowing req./GDP	8.2	7.3	18.7	11.7	5.8	17.4	13.9	21.1
Gen. gov. ext. debt/gen. gov. debt	89.2	63.0	32.2	38.4	61.0	75.8	56.0	42.7
Market funding stress indicator	Baa3	Ba2	Baa2	A2	Ba1	Aa3	Aa3	B1

Source: Moody's Investors Service

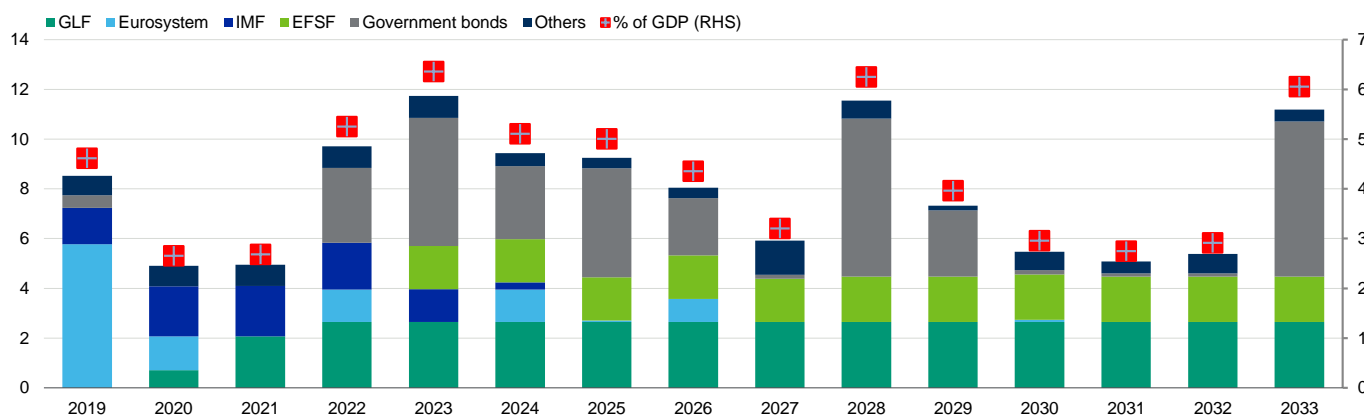
The Greek government has issued three bonds this year, and bond spreads have declined materially, even more so after the general elections in early July. The government has raised €7.5 billion in medium and long-term debt this year, above its initial target of i€5-7

billion, but will probably issue again in the coming months, to further cement its presence in the market, benefit from the declining yields and use the proceeds to further improve its maturity structure through liability operations.

Greece's maturity profile is benign at least until 2022, when maturities increase to around €10 billion per year. The large cash buffer provides confidence that the government can avoid accessing the market in times of heightened volatility. The early repayment of part of the IMF loan will probably be on the agenda again in the coming months, which would provide some interest savings to the government. Also, the government has materially improved its cash and liquidity management, and now manages an important part of the general government's cash balances at the Single Treasury Account at the Bank of Greece. The cash buffer is held in a separate account and can only be accessed for debt-servicing purposes, providing another level of comfort for investors.

Exhibit 26

Greece's debt-maturity profile benefits from long repayment terms from the euro area
€ billion (LHS) and % of GDP (RHS), as of April 2019



Note: Including extension of EFSF loans agreed by Eurogroup in June 2018.

Sources: PDMA, Moody's Investors Service

Banking sector risk is High (+)

Banking-related risks are scored at "High (+)" and remain one of Greece's key vulnerabilities. However, the risks emanating from the banking sector are gradually declining, as the systemic banks have shown further gradual improvements in most aspects of their credit profiles. We recently changed the outlook to positive on the ratings of three of the largest banks (all four systemic banks now have a positive outlook on their ratings), and [our overall outlook for the banking sector is positive](#), in expectation of continuing improvements in banks' funding profile and asset risk. ¹⁰

Exhibit 27

Peer comparison table factor 4c: Banking sector risk

	Greece B1/STA	H+ Median	Cyprus Ba2/STA	Iraq Caa1/STA	Lebanon Caa1/STA	Turkey B1/NEG	Tunisia B2/NEG	Vietnam Ba3/STA
Final score	H+		H+	H	H-	H-	H-	H-
Scorecard-indicated outcome	H+		H+	--	H-	M+	H	H-
Baseline credit assessment	caa1	caa1	caa1	--	caa1	b3	caa1	b1
Total dom. bank assets/GDP	158.4	158.4	--	--	440.9	104.5	115.8	--
Loan-to-deposit ratio	107.2	110.3	113.4	--	34.0	117.6	140.8	--

Note: Including extension of EFSF loans agreed by Eurogroup in June 2018.

Source: Moody's Investors Service

In particular, banks' liquidity positions have improved substantially, as private-sector deposits have been returning and the banks have regained access to financial markets along with rising inter-bank repo funding. Consequently, Greek banks have fully eliminated their reliance on Emergency Liquidity Assistance (ELA) from the Bank of Greece and have reduced their dependence on cheap, long-term ECB funding, which now represents a very small part of the funding mix (€8.1 billion, or around 3% of total assets as of end-

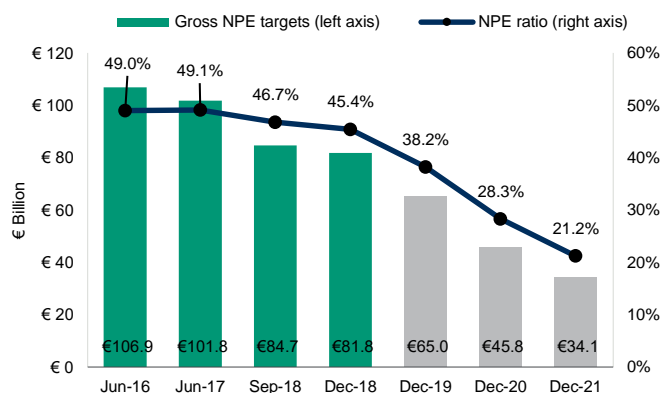
May 2019).¹¹ In October 2018, Greece further relaxed capital controls that had been in place since June 2015 to allow unlimited cash withdrawal for domestic deposits.

Regulatory capital ratios are sound, but the still large share of DTAs (around 60% of the reported CET1 capital of Greek banks as of March 2019) undermines the quality of capital, as their eligibility for conversion into cash or bonds is contingent on the Greek government's creditworthiness. We have started to recognize part of the DTAs as tangible common equity following the latest sovereign rating upgrade to B1 earlier this year, and expect stable capital ratios going forward.

Despite these improvements, the standalone credit profile of Moody's-rated banks remains weak at caa1 on average, which mainly reflects their continuing weak asset quality. Nonperforming exposures (NPEs) stood at €80 billion or 45.2% of total gross loans in March 2019, compared to a peak of €107 billion (49%) in March 2016. The banks have committed to a quarterly NPE reduction plan, according to which they will have to reduce their NPEs to €34.1 billion or around 21% of gross loans by end-2021, a reduction of over 57% compared to current levels. So far the banks have managed to achieve their targets mainly via sales and also securitisations of NPE portfolios, which will likely accelerate in the coming months (see Exhibits 30 and 31). Stronger economic growth going forward would help in improving recovery rates and probably also strengthen investor interest in purchasing NPL portfolios. Both the Hellenic Financial Stability Fund (HFSF) and the Bank of Greece have recently presented plans for a more systemic clean-up of banks' balance sheets, with the more advanced HFSF plan currently being reviewed by the European Commission. It would involve setting up an asset protection scheme similar to Italy's GACS model, and could turn into an important tool for an accelerated pace of NPE reduction beyond the currently available set of tools (such as e-auctions, out-of-court workouts, sale of NPE portfolios to third parties. The Bank of Greece proposal is less advanced.¹²

Exhibit 28

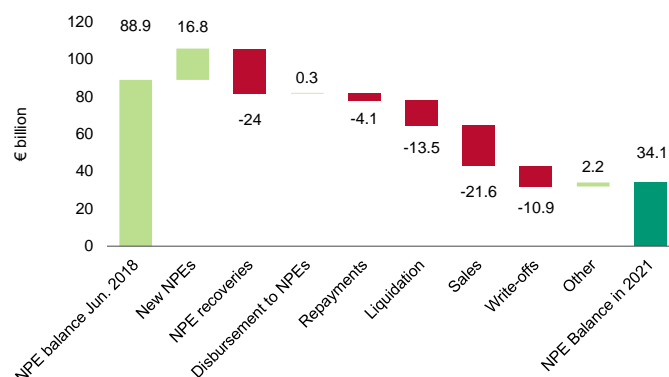
Greek banks face aggressive NPE reduction targets... Gross NPE targets, 2019 - 21



Sources: Bank of Greece, Moody's Investors Service

Exhibit 29

...the lion's share of which is expected to come from recoveries and sales Methods of reducing NPE balance according to the Greek banks' targets



Sources: Bank of Greece, Moody's Investors Service

External vulnerability risk is "Low" given a much improved current account

We assess Greece's external vulnerability risk as "Low". Greece has managed to reduce its current account deficit materially, from around 20% of GDP at the peak before the crisis to deficits of around 2-3% of GDP in recent years.

Exhibit 30

Peer comparison table factor 4d: External vulnerability risk

	Greece B1/STA	L Median	Portugal Baa3/STA	Cyprus Ba2/STA	Angola B3/STA	Egypt B2/STA	Ireland A2/STA	Spain Baa1/STA
Final score	L		L	L	L	L	L	L-
Scorecard-indicated outcome	L+		L	H-	VL-	VL+	H-	L-
(Curr. acc. bal. + FDI inflows)/GDP	-0.9	-0.7	1.5	-8.4	3.5	0.7	-8.5	4.1
Net international inv. position/GDP	-137.9	-53.1	-100.8	-114.6	-29.1	-62.3	-142.5	-77.1

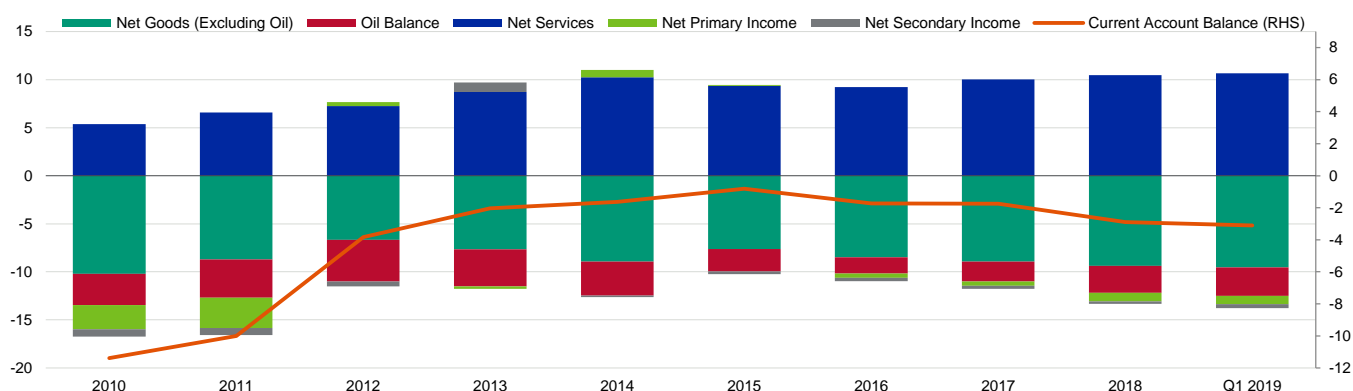
Source: Moody's Investors Service

The significant improvement was initially driven by a compression of imports during the crisis years as domestic demand slumped. Since 2012, the recovery of the tourism sector has led to an improvement in the services balance, with Greece benefitting from unfavourable geopolitical developments in other tourism destinations, but also the sector's increased cost competitiveness and investments in the sector. More recently, the deficit has been on an increasing trend again, standing at 3.1% of GDP for the four quarters up to Q1 2019 (see Exhibit 34), compared to a low of 0.8% of GDP in 2015. We expect the goods trade balance to deteriorate further, as stronger economic growth – driven by domestic demand – will likely lift import growth again, while the surplus in the services balance is expected to increase as well and nearly compensate the trade deficit in goods. The overall current account deficit will likely hover around 2% of GDP.

Exhibit 31

Rising services surplus has been key contributor to current account improvement

Current account by component, % of GDP

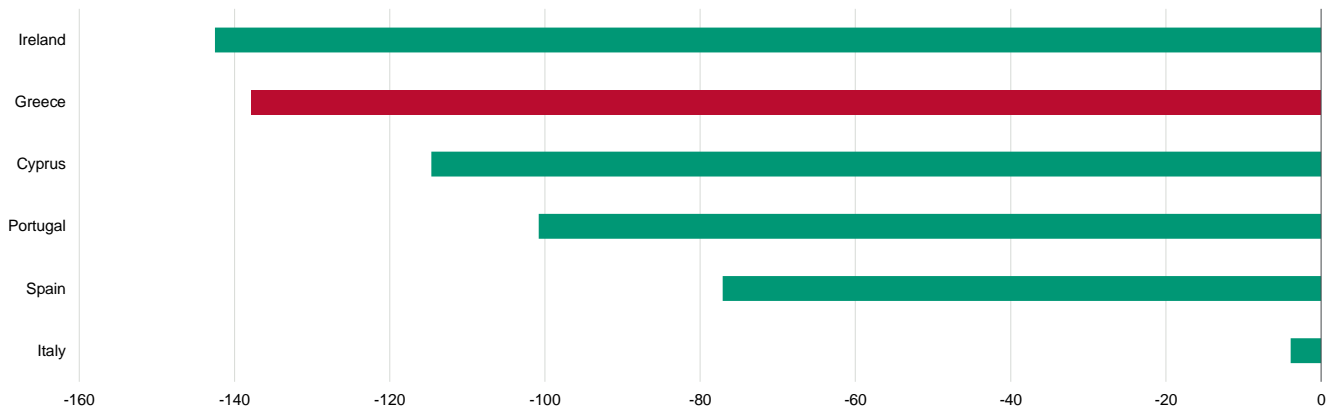


Note: 2019 is four quarter cumulative (Q218 to Q119)

Sources: Bank of Greece, Moody's Investors Service

Similar to other euro area periphery countries, Greece has a very large negative external debtor position, which in 2018 stood at 138% of GDP (see Exhibit 35). It reflects the past build-up of external debt, most of which is now owed to official creditors and therefore benefits from long grace periods and low interest rates. Thus, the long maturity structure will keep the net International Investment Position (IIP) highly negative for many years to come.

Exhibit 32

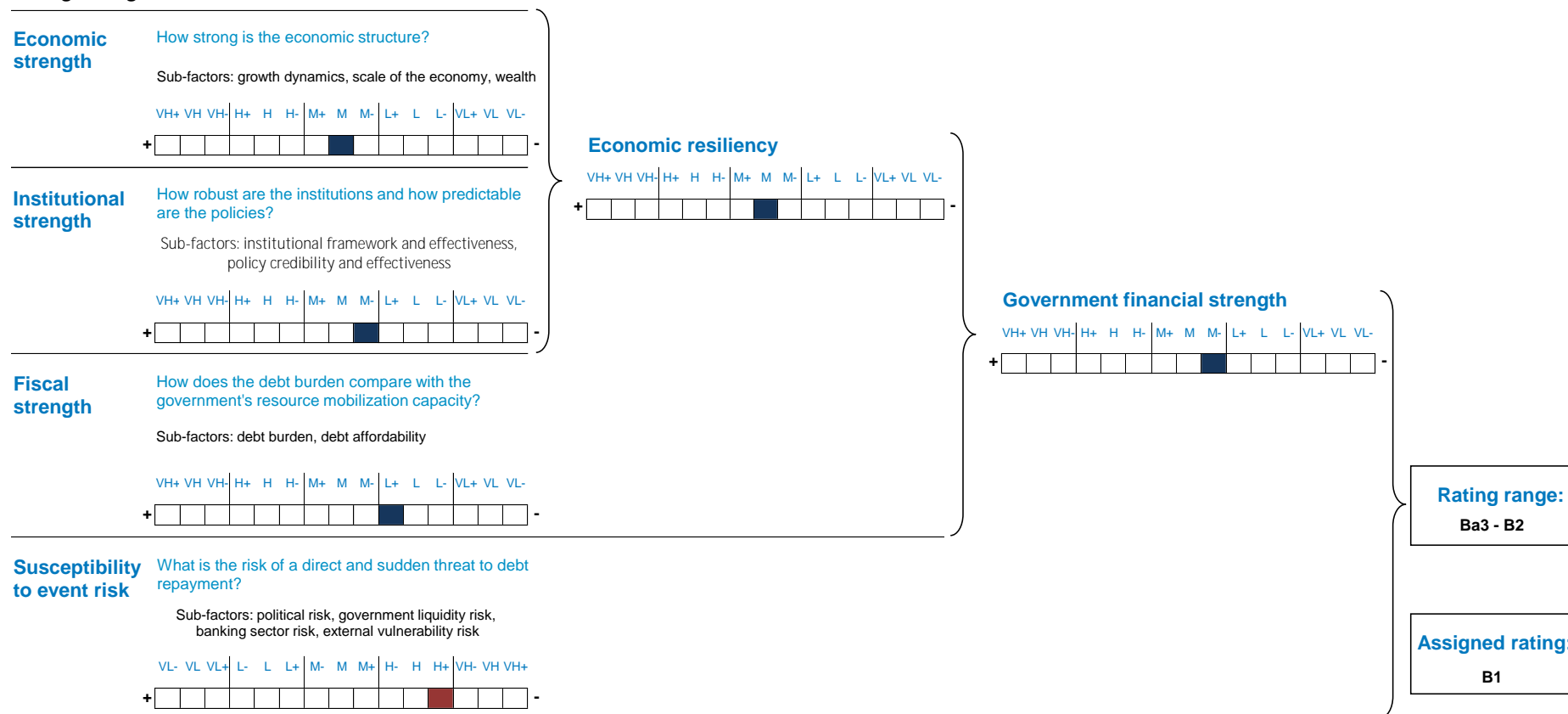
Greece's negative net IIP position is similar to rest of euro area periphery
NIIP as % of GDP, 2018*Sources: Eurostat, Moody's Investors Service*

Rating range

Combining the scores for individual factors provides an indicative rating range. While the information used to determine the grid mapping is mainly historical, our ratings incorporate expectations around future metrics and risk developments that may differ from the ones implied by the rating range. Thus, the rating process is deliberative and not mechanical, meaning that it depends on peer comparisons and should leave room for exceptional risk factors to be taken into account that may result in an assigned rating outside the indicative rating range. For more information please see our [Sovereign Bond Rating Methodology](#).

Exhibit 33

Sovereign rating metrics: Greece



Source: Moody's Investors Service

Comparatives

This section compares credit relevant information regarding Greece with other sovereigns that we rate. It focuses on a comparison with sovereigns within the same rating range and shows the relevant credit metrics and factor scores.

Compared to its rating peers at the B1 level, Greece stands out in terms of the size of the economy and its wealth. Moreover, the extent of external support that it receives (derived from its euro area membership) surpasses any other B-rated credit, who tend to have access only to regular multilateral institutions. Greece also compares well in terms of its fiscal consolidation efforts and the extent of rebalancing of its external accounts. Key weaknesses compared to peers are the very high level of public debt at over 180% of GDP and comparatively weak GDP growth (1.4% over a ten-year period) with only moderate prospects going forward.

Exhibit 34

Greece Key Peers

	Year	Greece	Jordan	Tunisia	Montenegro	Albania	Armenia	B1 Median	Western Europe Median
Rating/Outlook		B1/STA	B1/STA	B2/NEG	B1/POS	B1/STA	B1/POS	B1	Aa2
Rating Range		Ba3 - B2	Ba2 - B1	B2 - Caa1	Ba1 - Ba3	Ba3 - B2	Ba3 - B2	Ba3 - B2	Aa2 - A1
Factor 1		M	M-	L+	M-	L+	L+	M-	H+
Nominal GDP (US\$ bn)	2018	218.0	42.2	39.9	5.5	15.1	12.4	50.5	445.2
GDP per capita (PPP, US\$)	2018	29123.0	9433.5	12371.7	19043.3	13344.5	10176.1	10176.1	52137.4
Avg. real GDP (% change)	2014-2023	1.4	2.5	2.4	3.4	3.4	4.3	3.4	1.8
Volatility in real GDP growth (ppts)	2009-2018	3.9	1.0	1.7	3.4	1.1	6.2	1.7	2.4
Global Competitiveness index	2017	4.0	4.3	3.9	4.2	4.2	4.2	4.2	5.2
Factor 2		M-	H-	M-	M+	M-	M	M-	VH
Government Effectiveness, percentile [1]	2017	60.5	50.3	41.6	51.0	48.1	40.1	47.4	88.3
Rule of Law, percentile [1]	2017	54.7	59.8	54.0	50.3	32.8	45.2	39.4	89.0
Control of Corruption, percentile [1]	2017	51.0	62.0	52.5	53.2	37.2	26.2	37.2	91.2
Average inflation (% change)	2014-2023	0.6	2.1	5.3	1.6	2.2	2.5	2.5	1.3
Volatility in inflation (ppts)	2009-2018	1.9	2.5	1.2	1.5	0.7	2.9	2.5	1.1
Factor 3		L+	L-	VL+	M+	L	L	L+	H+
Gen. gov. debt/GDP	2018	181.1	94.4	77.0	70.6	69.9	51.4	51.4	59.9
Gen. gov. debt/revenue	2018	378.8	361.1	291.1	165.7	252.9	222.7	244.4	126.9
Gen. gov. interest payments/revenue	2018	7.0	12.8	10.0	5.6	8.1	10.0	8.1	3.3
Gen. gov. interest payments/GDP	2018	3.3	3.4	2.6	2.4	2.2	2.3	2.2	1.6
Gen. gov. financial balance/GDP	2018	1.1	-4.6	-4.8	-3.8	-1.6	-1.6	-1.6	0.3
Factor 4		H+	M+	H	M+	M	M	M+	L
Current account balance/GDP	2018	-2.9	-7.0	-11.2	-17.2	-6.7	-9.1	-6.2	2.5
Gen. gov. external debt/gen. gov. debt	2018	89.2	42.7	74.0	84.1	46.3	79.8	70.9	45.9
Net international investment position/GDP	2018	-138.4	-107.7	-136.9	--	-48.7	-76.1	-60.9	6.9

[1] Moody's calculations. Percentiles based on our rated universe.

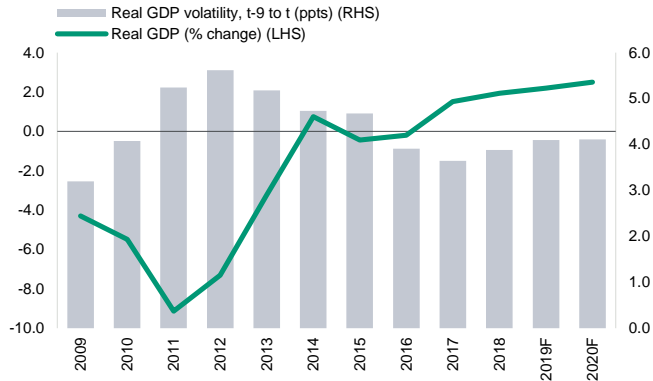
Source: Moody's Investors Service

DATA, CHARTS AND REFERENCES

Chart pack: Greece

Exhibit 35

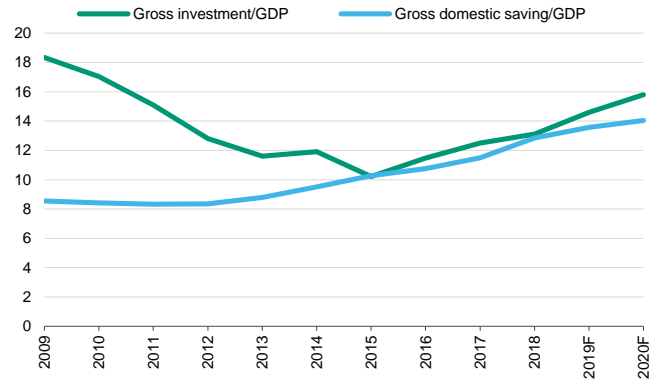
Economic growth



Source: Moody's Investors Service

Exhibit 36

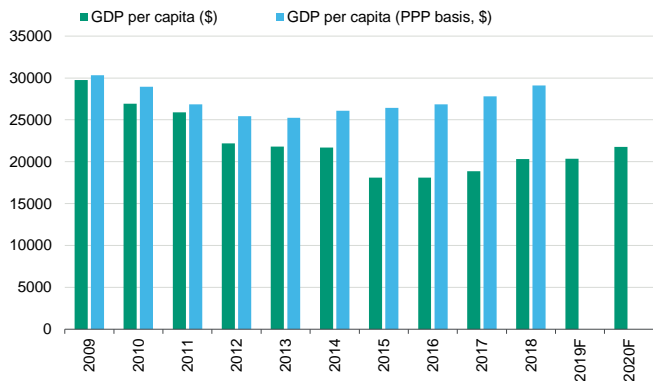
Investment and saving



Source: Moody's Investors Service

Exhibit 37

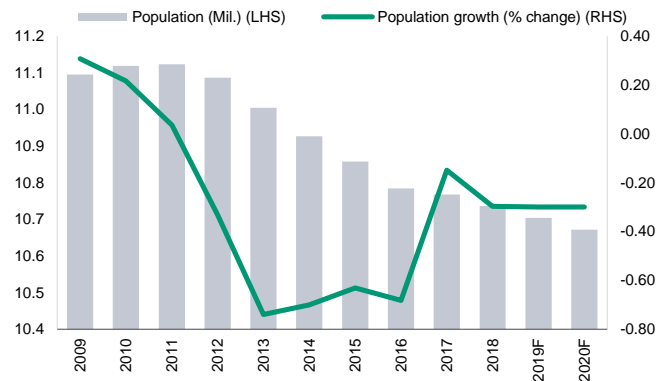
National income



Source: Moody's Investors Service

Exhibit 38

Population

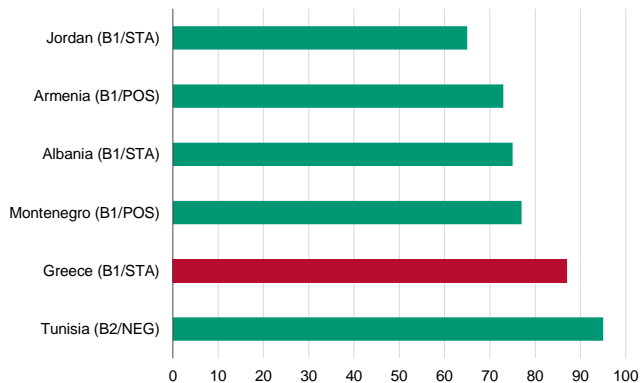


Source: Moody's Investors Service

Exhibit 39

Global Competitiveness Index

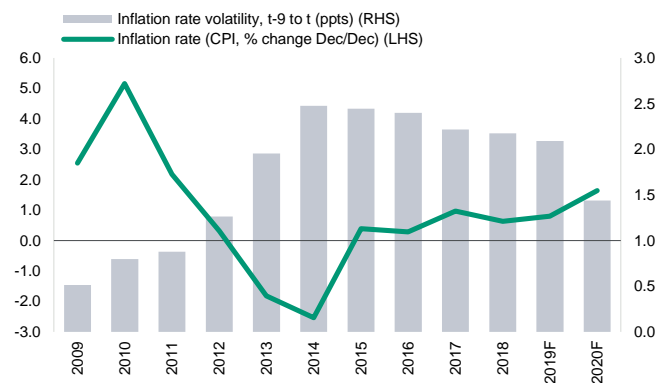
Rank 87 out of 138 countries



Source: World Economic Forum

Exhibit 40

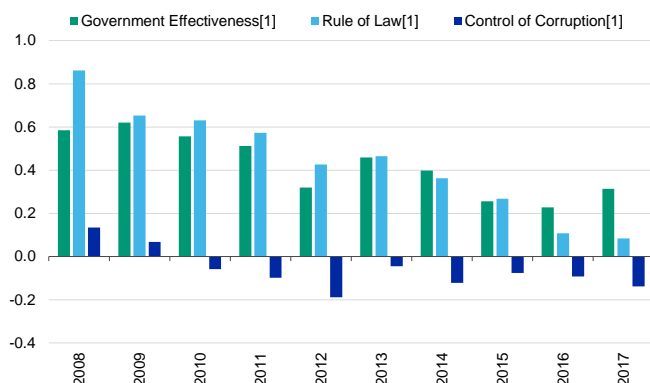
Inflation and inflation volatility



Source: Moody's Investors Service

Exhibit 41

Institutional framework and effectiveness

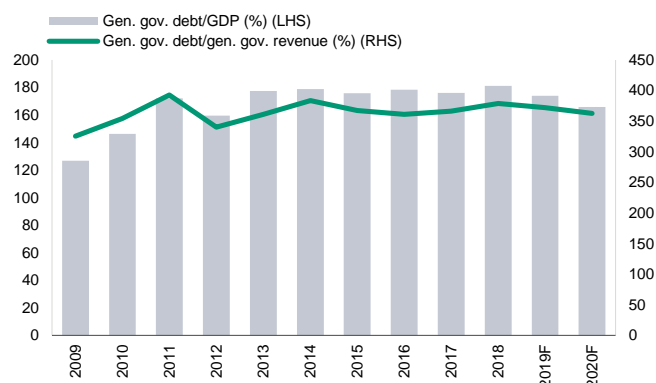


Notes: [1] Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions.

Source: Worldwide Governance Indicators

Exhibit 42

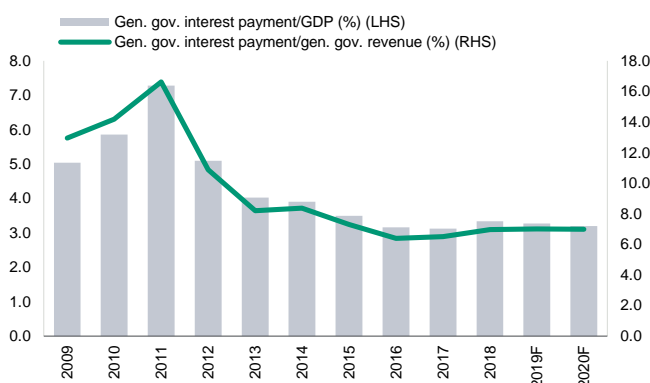
Debt burden



Source: Moody's Investors Service

Exhibit 43

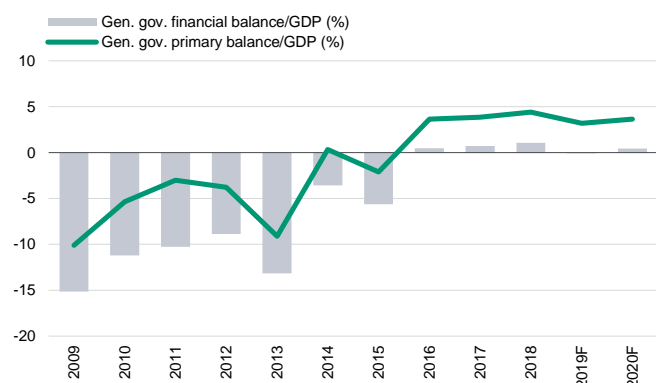
Debt affordability



Source: Moody's Investors Service

Exhibit 44

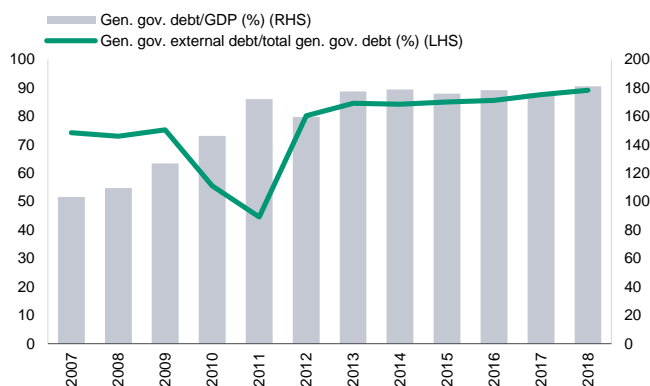
Financial balance



Source: Moody's Investors Service

Exhibit 45

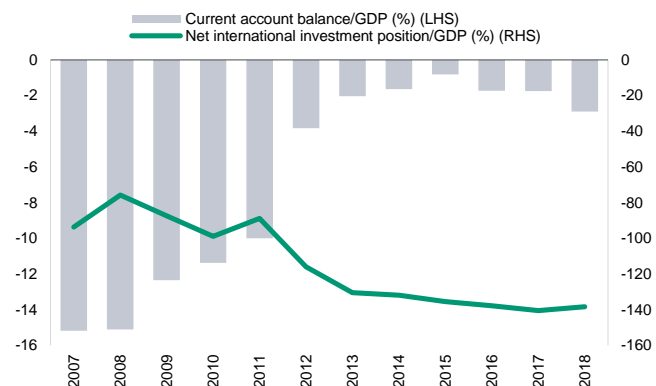
Government liquidity risk



Source: Moody's Investors Service

Exhibit 46

External vulnerability risk



Source: Moody's Investors Service

Rating history

Exhibit 47

Long Term Ratings		Outlook	Review Action		Short Term Ratings		Action Date
Foreign Currency	Local Currency		Foreign Currency	Local Currency	Foreign Currency	Local Currency	
B1	B1	STA	-	-	-	-	Mar-19
B3	B3	POS	-	-	-	-	Feb-18
Caa2	Caa2	POS	-	-	-	-	Jun-17
Caa3	Caa3	STA	Confirmed	Confirmed	-	-	Sep-15
Caa3	Caa3	RUR	Possible Downgrade	Possible Downgrade	-	-	Jul-15
Caa2	Caa2	NEG	-	-	-	-	Apr-15
Caa1	Caa1	RUR	Possible Downgrade	Possible Downgrade	-	-	Feb-15
Caa1	Caa1	STA	-	-	-	-	Aug-14
Caa3	Caa3	STA	-	-	-	-	Nov-13
C	C	NOO	-	-	-	-	Mar-12
Ca	Ca	DEV	-	-	-	-	Jul-11
Caa1	Caa1	NEG	-	-	-	-	Jun-11
B1	B1	RUR	Possible Downgrade	Possible Downgrade	-	-	May-11
B1	B1	NEG	-	-	-	-	Mar-11
Ba1	Ba1	RUR	Possible Downgrade	Possible Downgrade	-	-	Dec-10
Ba1	Ba1	STA	-	-	-	-	Jun-10
A3	A3	RUR	Possible Downgrade	Possible Downgrade	-	-	Apr-10
A2	A2	NEG	-	-	-	-	Dec-09
A1	A1	RUR	Possible Downgrade	Possible Downgrade	-	-	Oct-09
A1	A1	STA	-	-	-	-	Feb-09
A1	A1	POS	-	-	-	-	Jan-07
A1	A1	STA	-	-	-	-	Nov-03
A1	A1	-	-	-	-	-	Nov-02
A2	A2	-	-	-	-	-	Jul-99
Baa1	A2	-	Confirmed	-	-	-	May-98
Baa1	A2	-	Possible Downgrade	-	-	-	Feb-98
Baa1	A2	-	-	-	-	-	Jan-97
Baa1	-	-	-	-	-	-	Dec-96
Baa3	-	-	Possible Upgrade	-	-	-	Nov-96
Baa3	-	-	-	-	-	-	May-94
Baa1	-	-	-	-	-	-	Jul-90

Note: [1] Table excludes rating affirmations. Please visit the issuer page for [Greece](#) for the full rating history

Source: Moody's Investors Service

Annual statistics

Exhibit 48

Greece

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019F	2020F
Economic structure and performance												
Nominal GDP (US\$ bil.)	330.1	299.5	287.9	245.8	239.9	237.0	196.7	195.2	203.2	218.0	217.9	232.4
Population (Mil.)	11.1	11.1	11.1	11.1	11.0	10.9	10.9	10.8	10.8	10.7	10.7	10.7
GDP per capita (US\$)	29,752	26,939	25,885	22,173	21,803	21,693	18,113	18,104	18,869	20,309	20,355	21,778
GDP per capita (PPP basis, US\$)	30,347	28,955	26,850	25,452	25,248	26,098	26,428	26,850	27,812	29,123	--	--
Nominal GDP (% change, local currency)	-1.8	-4.8	-8.4	-7.6	-5.5	-1.1	-0.8	-0.4	2.1	2.5	3.3	3.8
Real GDP (% change)	-4.3	-5.5	-9.1	-7.3	-3.2	0.7	-0.4	-0.2	1.5	1.9	2.2	2.5
Inflation (CPI, % change Dec/Dec)[1]	2.5	5.2	2.2	0.3	-1.8	-2.5	0.4	0.3	1.0	0.6	0.8	1.6
Unemployment rate (%)	9.6	12.8	17.9	24.5	27.5	26.6	25.0	23.6	21.5	19.3	17.4	16.4
Gross investment/GDP	18.3	17.0	15.1	12.8	11.6	11.9	10.2	11.5	12.5	13.1	14.6	15.8
Gross domestic saving/GDP	8.6	8.4	8.3	8.4	8.8	9.5	10.3	10.8	11.5	12.9	13.6	14.0
Nominal exports of G & S (% change, US\$ basis)	-24.3	5.7	11.1	-4.1	3.3	5.4	-19.1	-5.4	14.2	17.5	1.3	6.0
Nominal imports of G & S (% change, US\$ basis)	-25.5	-3.1	1.1	-12.4	-2.3	3.6	-24.8	-3.0	15.0	14.8	1.9	7.4
Real exports of G & S (% change)	-18.5	4.9	0.0	1.2	1.5	7.7	3.1	-1.8	6.8	8.7	3.7	2.0
Real imports of G & S (% change)	-20.4	-3.4	-9.4	-9.1	-2.4	7.7	0.4	0.3	7.1	4.2	4.0	3.5
Net exports of goods & services/GDP	-9.8	-8.6	-6.8	-4.4	-2.8	-2.4	0.1	-0.7	-1.0	-0.3	-0.5	-0.9
Openness of the economy[2]	47.7	52.8	57.8	61.8	63.5	67.1	63.1	60.8	67.0	72.5	73.7	73.7
Government Effectiveness[3]	0.6	0.6	0.5	0.3	0.5	0.4	0.3	0.2	0.3	--	--	--
Government finance												
Gen. gov. revenue/GDP	38.9	41.3	43.8	46.9	49.1	46.6	47.9	49.4	48.1	47.8	46.8	45.8
Gen. gov. expenditures/GDP	54.1	52.5	54.1	55.7	62.3	50.2	53.5	48.9	47.3	46.7	46.8	45.3
Gen. gov. financial balance/GDP	-15.1	-11.2	-10.3	-8.9	-13.2	-3.6	-5.6	0.5	0.7	1.1	-0.1	0.4
Gen. gov. primary balance/GDP	-10.1	-5.3	-3.0	-3.8	-9.1	0.3	-2.1	3.6	3.9	4.4	3.2	3.6
Gen. gov. debt (US\$ bil.)	431.5	442.7	462.2	402.3	441.6	386.8	338.5	332.4	381.7	383.3	384.0	388.9
Gen. gov. debt/GDP	126.7	146.2	172.1	159.6	177.4	178.9	175.9	178.5	176.2	181.1	174.0	165.9
Gen. gov. debt/gen. gov. revenue	325.5	354.3	392.8	340.5	361.0	383.7	367.5	361.4	366.5	378.8	372.2	362.6
Gen. gov. interest payments/gen. gov. revenue	12.9	14.2	16.6	10.9	8.2	8.4	7.3	6.4	6.5	7.0	7.0	7.0
External payments and debt												
Nominal exchange rate (local currency per US\$, Dec)[4]	0.7	0.7	0.8	0.8	0.7	0.8	0.9	0.9	0.8	0.9	0.9	0.8
Real eff. exchange rate (% change)	1.3	-0.7	0.7	-3.2	-1.0	-1.7	-5.6	0.2	0.6	0.6	--	--
Relative unit labor cost	99.6	100.0	97.8	96.2	91.8	91.8	90.9	90.9	90.9	91.4	--	--
Current account balance (US\$ bil.)	-40.8	-34.1	-28.8	-9.4	-4.9	-3.9	-1.6	-3.4	-3.6	-6.3	-3.8	-5.1
Current account balance/GDP	-12.3	-11.4	-10.0	-3.8	-2.0	-1.6	-0.8	-1.7	-1.8	-2.9	-1.7	-2.2
Net foreign direct investment/GDP	0.1	-0.4	-0.2	0.4	1.5	-0.1	-0.2	2.3	1.5	1.6	1.7	2.3
Net international investment position/GDP	-87.5	-99.0	-88.8	-115.9	-130.4	-131.9	-135.4	-137.8	-140.5	-138.4	--	--
Official forex reserves (US\$ bil.)	0.2	0.1	0.0	0.0	0.2	0.7	1.5	1.9	2.3	2.1	2.1	2.2

[1] Harmonized Index of Consumer Prices (HICP)

[2] Sum of Exports and Imports of Goods and Services/GDP

[3] Composite index with values from about -2.50 to 2.50: higher values suggest greater maturity and responsiveness of government institutions

[4] Euro adopted on January 1, 2001

Source: Moody's Investors Service

Moody's related publications

- » **Rating Action:** [Moody's upgrades Greece's rating to B1, stable outlook](#), 1 March 2019
- » **Credit Opinion:** [Government of Greece – B1 Stable: Update following rating upgrade to B1 from B3 and outlook change to stable from positive](#), 1 March 2019
- » **Issuer Comment:** [Government of Greece: Change in government could accelerate growth-friendly economic policies, a credit positive](#), 8 July 2019
- » **Issuer In-Depth:** [Government of Greece : FAQ on sustainability of recent credit improvements](#), 7 March 2019
- » **Issuer Comment:** [Government of Greece: Approval for Greece's early repayment of IMF loans is credit positive](#), 8 May 2019
- » **Issuer Comment:** [Government of Greece: Greece's return to market-based funding is credit positive](#), 31 January 2019
- » **Sector In-Depth:** [Cross-Sector - Greece: Greece's improved credit profile and competitiveness benefit domestic issuers](#), 8 March 2019
- » **Sector Comment:** [Banks - Greece: Greek banks fully repay Emergency Liquidity Assistance amid improved funding and liquidity](#), 3 April 2019
- » **Outlook:** [Banking System Outlook - Greece: Deposit growth and declining problem loans underpin our positive outlook](#), 3 June 2019
- » **Rating Methodology:** [Sovereign Bond Ratings](#), 27 November 2018

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Related websites and information sources

- » [Sovereign risk group web page](#)
- » [Sovereign ratings list](#)
- » [Greek Ministry of Finance](#)
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Endnotes

- 1 According to the EC, public investment was 0.4% of GDP below budget plans last year. See European Commission, [Enhanced Surveillance Update, June 2019](#).
- 2 Lending rates for corporates (loans of up to €1 million) stood at 4.32% in April 2019, compared to 4.52% a year earlier and as high as 5.9% in April 2014. Source: European Central Bank and Haver.
- 3 The relevant law has been suspended during the adjustment programmes but was reinstated in September last year. It provides for an extension of wage agreements to an entire sector or occupation if more than 51% of the work force in a sector or occupation are covered
- 4 The government used part of the outperformance to distribute around 0.5% of GDP back to pensioners and those on low wages, as a "social dividend".
- 5 The current rule implies the replacement of one retiree by one new permanent hire, so as to contain the public work force. In previous years, only one in three retirees was replaced.
- 6 In another recent legal decision the same court upheld the legality of past cuts in civil servants' seasonal bonuses and dismissed any claims submitted for retroactive payments of these salaries, removing another key source of uncertainty to the budget.

- ⁷ The euro area creditors had already provided some short-term debt relief measures in early 2017, to smooth Greece's repayment profile and reduce interest rate risk.
- ⁸ Slightly more than 9% of the debt is at floating rates now, after taking into account derivatives, compared to over 50% in 2017. The average maturity of the central government's debt was 21.1 years as of end-April 2019.
- ⁹ The Greek government defaulted twice on private sector creditors in 2012. The first default was through a distressed bond exchange that took place in March and April 2012 and the second through the subsequent buyback in December 2012.
- ¹⁰ On 16 July 2019, [the outlook was changed to positive from stable on the Caa1 long-term deposit ratings of Alpha Bank AE, Eurobank Ergasias S.A. \(Eurobank\) and National Bank of Greece S.A. \(NBG\)](#).
- ¹¹ See "[Sector Comment - Banks - Greece: Greek banks fully repay Emergency Liquidity Assistance amid improved funding and liquidity](#)", 3 April 2019
- ¹² Under the BoG proposal announced in November 2018, a large portion of banks' NPEs and a portion of their deferred tax credits (DTCs) would be transferred to a special purpose vehicle (SPV). This, in essence, would function as a 'bad-bank', which would acquire nearly half of the stock of NPEs held by the country's four largest banks.

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