

# Greece

## Economic & Financial Outlook

### *In a Nutshell...*

**Economic activity stalled in 2016 for a second consecutive year. Private consumption growth was a solid 1.4% in 2016 and contributed positively to GDP by one percentage point notwithstanding the tax-driven austerity. Investment remained unchanged, while net exports and public consumption subtracted 0.5 pps each from GDP growth.**

**The recovery is projected to strengthen in 2017 and beyond, predicated on an overarching assumption of a confidence reinforcement, which could strengthen economic fundamentals and especially business investment.**

**The new taxes and pension cuts that squeeze households' disposable income are reflected in the marked deterioration of Consumer Confidence, which dipped to -74.4 in March 2017, the lowest level in the last 3.5 years, from -68 units in 2016.**

**Greece recorded a primary surplus for a fourth consecutive year in 2016, which is better than targeted, on the back of (i) the tax rate hikes on consumption and income, (ii) the increase of electronic transactions and (iii) the limited Public Investment Expenditure.**

**An agreement, in principle, reached by the Eurogroup meeting of 7 April in Malta that includes cuts in pensions (1% of GDP) and income tax-free threshold (1% of the GDP) to take place in 2019 and 2020 respectively. A Staff level Agreement is expected to be reached by the end of April, while a "global agreement" by the end of May could contain more specification the medium-term debt relief measures.**

### Macro Dynamics Remain Weak Reflecting Lingering Uncertainty

The economy contracted in Q4 2016 on a quarterly basis, after two straight quarters of growth, registering a 1.2% decline, worse than the one projected in February's flash estimate by ELSTAT. For the year as a whole, the economy stalled in 2016 for a second consecutive year (2015: -0.2%, 2016: 0.0%), yet showing signs of resilience given the imposition of capital controls in July 2015 (Graph 1).

Private consumption growth rate was a solid 1.4% in 2016 and contributed positively to GDP by 1.0 percentage point, despite the tax-driven austerity and the sharp drop in consumer confidence. In particular, the recovery of consumption in 2016 was supported by:

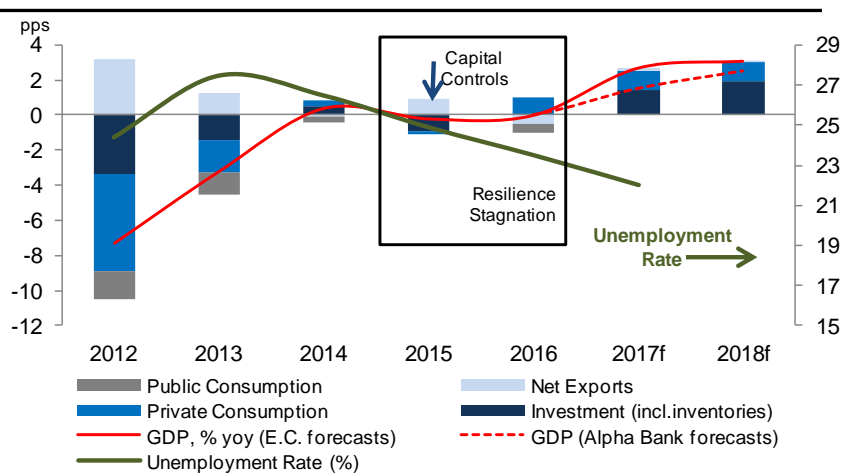
- (i) employment gains and falling oil prices in the first ten months that brought some respite to households' disposable income,
- (ii) households' negative propensity to save (savings to disposable income ratio) in an attempt not only to meet tax obligations but also to retain their standards of living and
- (iii) increase in electronic transactions which resulted in an output move from shadow to official economy.

On the other hand, business investment stalled, while net exports subtracted 0.5 percentage points from GDP growth rate as exports' fall was larger than imports' decline.

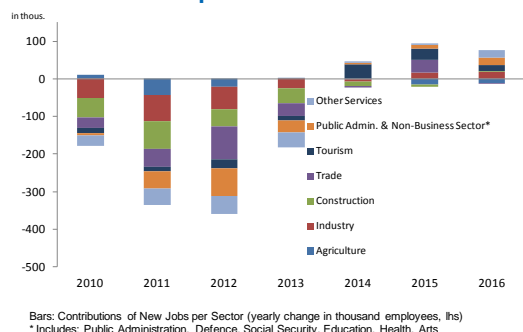
Regarding Greece's 2017 growth outlook, we note that it is surrounded by an unusually high degree of uncertainty, because of the delays in reaching a staff level agreement on the second review of the programme. In any case, economic contraction on Q4 2016 suggests a negative carry-over effect into 2017, to the tune of almost 0.6 percentage points. Our statistical model suggests that the latest has already started taking its toll on the domestic economy.

However, growth dynamics are about to turn positive and shift into a higher gear when uncertainty dissipates. Our baseline scenario, which takes into account only the expected impact of developments and fiscal measures announced so far, envisages an output expansion at a pace around 1.5% in 2017.

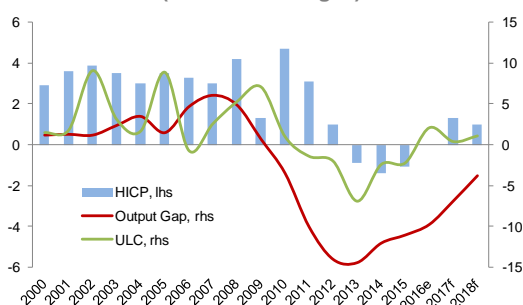
**Graph1. Growth Drivers from 2017 Onwards: Could They Come from the Investment Side?**



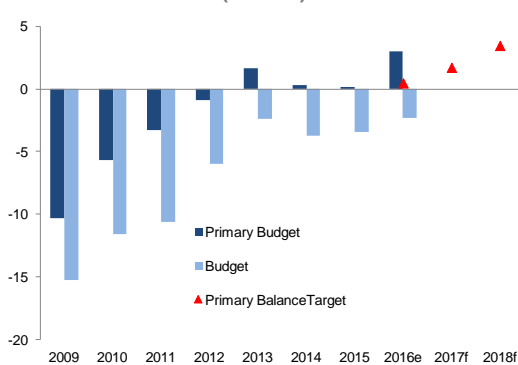
Source: Hellenic Statistical Authority, Alpha Bank calculations

**Graph 2. Employment Evolution per Sector**


Source: Hellenic Statistical Authority (ELSTAT)

**Graph 3. Harmonized Index of Consumer Prices, Output Gap and Unit Labour Cost**  
 (% annual changes)


Source: ELSTAT, EC Forecasts Winter 2017

**Graph 4. Fiscal Discipline is Getting More Intense**  
 (% GDP)


Source: MinFin

Growth momentum, however, might be halted by uncertainties related to domestic and external environment. The projected pick up in growth may fall short of expectations in case of persistent bottlenecks in structural reforms and privatizations. Furthermore, prolonged negotiations of the second review may further delay (i) the inclusion of Greek government bonds to QE programme, (ii) the lift of capital controls, (iii) the specification of medium and long term debt relief measures, and therefore, the return to the markets. Additional downside risks are related to external uncertainties such as the rising euro-skepticism sentiment, the elevated geopolitical tensions in the wider region, the evolution of the refugee crisis as well as the future relations between Europe and UK in the post-Brexit era.

Recovery is projected to strengthen in 2018 and beyond, predicated on an overarching assumption of a confidence reinforcement, which could strengthen economic fundamentals and in particular business investment. It necessitates investment growth exceeding 10%, so that net fixed capital formation, i.e. gross investment minus depreciation, turns positive again.

### Unemployment Declined with New Jobs in Tourism, Industry and Public Administration

Taking into account the aforementioned trends, conditions in the Labour market continued to improve in 2016 with employment growth averaging 1.7% and the jobless rate declining to 23.5% in December 2016. The increase in employment reflects mainly:

- (i) The higher increase of part time employment compared to the full employment. According to the latest data, 54.7% of the new contracts were part-time and temporary in 2016, outweighing the full time ones (45.3%). The above development contributed to the reduction of unemployment to 23.1% in December 2016, as compared to 25.8% in December 2013.
- (ii) The positive contribution of industry, tourism and other sectors and
- (iii) the speeding up of employment in public administration compared to 2015, which was the second year of job creation in this sector since 2007 (Graph 2).

### Deflation Pressures Eased

Deflation pressures have eased in 2016 as a result of the significant increase of tax rates on consumption and the upward trend in energy prices in the last two months of 2016, while the subdued domestic demand, suggested by the negative output gap, is not yet fuelling inflationary pressures. More specifically, the Harmonized Index of Consumer Prices (HICP) stagnated in 2016 (0.0%) for the first time since 2013, from -1.4% in 2014 and -1.1% in 2015. Energy price increases are expected to drive HICP up in 2017. This was already evident in Q1 2017 when HICP increased to 1.5%, as compared to -0.2% in Q1 2016 (Graph 3).

### Fiscal Performance Better Than Targeted in 2016

On the fiscal front, according to the latest Fiscal Monitor Report of IMF (April 2017), the general government primary surplus is estimated at 3.3% of GDP in 2016, well in excess of the adjustment program target set for 0.5% surplus (Graph 4).

The fiscal outcome was better than targeted on the back of:

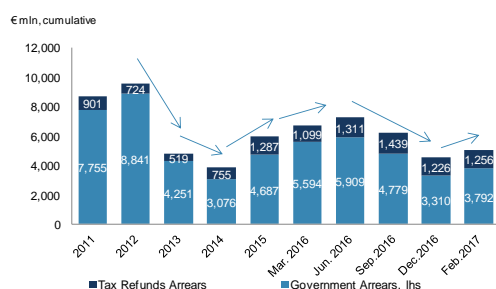
**Firstly**, tax rate hikes on the same level of economic activity resulted in increased tax revenues. This over-performance, measured as the

**Graph 5. Drivers of Fiscal Over-Performance in 2016:** Deviation of the Actual Outcome of Revenues and Expenditure Against the Target Set (€ bn.)



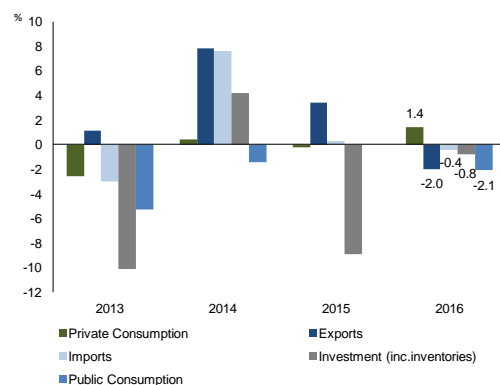
Sources: MinFin

**Graph 6. Government Arrears to the Private Sector** (€ mn.)



Sources: MinFin,

**Graph 7. Main Components of GDP** (% annual changes)



Source: ELSTAT

deviation from the target, came mainly from income taxation and VAT revenues as well as the reduction of the public investment expenditure (Graph 5). However, the primary surplus achieved in 2016 relied mainly on the revenue side and to a lesser extent on spending containment.

**Secondly**, the clearance of government arrears towards the private sector has slowed down and in fact started to bloat again at the beginning of 2017. Moreover, it is noted that the partial clearance of government arrears amounted to Euro 4.5 bn in the end of 2016, from Euro 7.4 bn in the end of June 2016 (Graph 6).

**Thirdly**, the extensive use of electronic transactions widened to some extent the narrow tax base. Since the onset of the crisis, the tax arrears of the private sector has more than doubled, growing at a rate of about €1 billion per month in recent years. Around 40% of this debt is attributable to penalties and fines, with less than half to account for direct and indirect taxes.

### Box 1. The Nexus of Confidence and Growth

Economic Sentiment Indicator is used as a reference variable of GDP (Graph ). The projected increase in growth for the years ahead hinges crucially on the challenge of shifting demand away from consumption and toward investment, given that private consumption is expected to remain subdued in the medium-term. Therefore, the restoration of business confidence is a key contributing factor in lifting investment and supporting the prospects for sustained recovery in economic activity.

Notwithstanding the complexities clouding the effort to measure the effect of improved confidence on the growth dynamics, as a first step, we examined the sensitivity of economic activity to changes in sentiment through a Vector Error Correction Model (VECM). The model estimation is based on quarterly data spanning 2000Q1 throughout 2016Q4. Confidence is approximated through (i) the Economic Sentiment Indicator (ESI), which incorporates the beliefs of agents from both the demand and the supply side of the domestic economy and (ii) the spread of the 10-year government bond yield between Greece and Germany.

As a second step, we examined the impact on the growth outlook of the gradual, adjustment of the ESI and yield spread to levels reached in the second quarter of 2014, during which the Greek State returned to markets. The results suggest that the return of these indicators to the 2014Q2 levels is estimated to contribute, *ceteris paribus*, by one percentage point to real GDP growth.

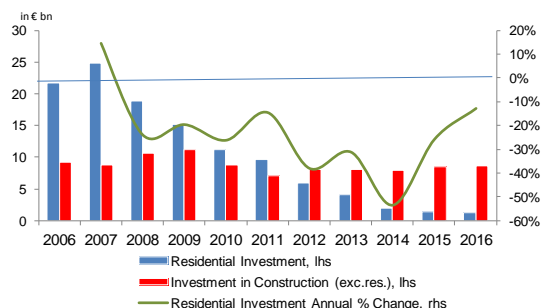
### 2016 GDP: Resilience due to Private Consumption

The GDP breakdown by expenditure reveals that the main drag in 2016 was net exports and public consumption, while private consumption added one percentage point in GDP.

In particular, private consumption remains the main component to explain the stabilization of the economy, as it increased by 1.4% in 2016, against a fall by 0.2% in 2015, despite the capital controls and the tax burden imposed on households and the pension cuts that squeezed household disposable income (Graph 7). Therefore, further strengthening of the private consumption is expected to be limited in the coming years. Public consumption registered a notable decline by 2.1% yoy in 2016, against a zero change in 2015.

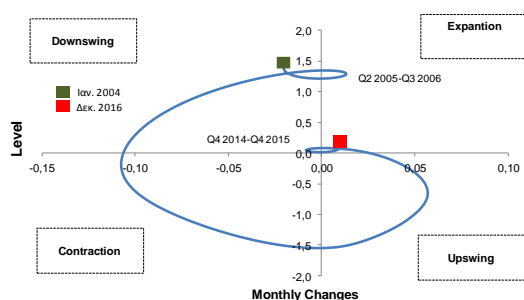
In the external sector, the substantial decline in exports of goods and services by 12% yoy in H1 2016 outpaced the increase in exports registered in H2 2016. As a result, in 2016 exports of goods and

**Graph 8. Investment in Construction**  
(in € bn)



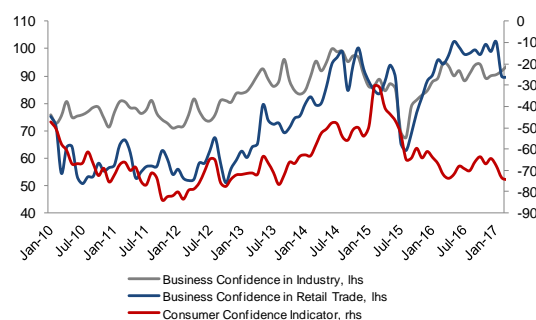
Source: ELSTAT

**Graph 9. Tracer Index in Industry**



Source: E.C., Alpha Bank calculations

**Graph 10. Business Expectations and Consumer Confidence**



Source: IOBE

services declined by 2.0%, while imports of goods and services fell by a mere 0.4%. This led to the negative contribution of the external sector by 0.5 percentage point. The decline of imports is expected to be contained as base effects from the falls in energy prices occurred in 2015-2016 will fade away.

Finally, investment stalled in 2016 (0.1% yoy), against a fall by 0.2% in 2015. Investment excluding residential investment increased for a second consecutive year by 0.9%, mainly due to an increase in investment in machinery and equipment by 5.6% in 2016. Residential investment continued to decline (Graph 8), at a deceleration pace though, by 12.6% yoy in 2016, against a fall by 26% yoy in 2015. Finally, inventories remained unchanged in 2016, as the vigorous positive contribution in H1 2016 was completely offset by the fall in inventories in H2 2016.

### Business and Consumer Confidence: The Two Faces of Janus

In 2016, Economic Sentiment Indicator (ESI) edged up to 91.8 units, from 89.7 units in 2015. At sector level, this positive development stemmed from the increases registered in all indicators, apart from the construction confidence indicator.

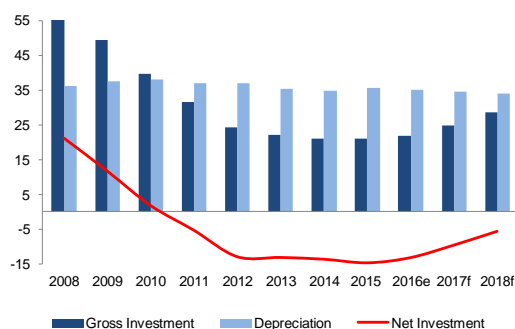
In particular, Business Confidence indicator in Industry improved to 91.2 in 2016, from 81.9 in 2015. Historical developments of business confidence indicator in industry are illustrated by the evolution of the tracer index in industry (Graph 9). The tracer stood at the expansion quadrille on December 2016, though at a lower level than in 2005-2006, but away from the downswing border it remained during Q4 2014 - Q4 2015. Apart from the tracer index improvement, few other indicators proved the strengthening in Q4 2016 such as: (i) the downward trend of the spreads of the 10-year government bonds reaching 7.1% on average in Q4 2016, compared to 11.6% and 15.4% in Q1 2015 and Q2 2015 respectively. The inclusion of Greek government bonds to the QE programme is expected to squeeze further the spreads and allow the access to the markets. (ii) Greek stock prices increased by 4.3% and 13.8% respectively in Q3 2016 and Q4 2016.

The improvement of Business Confidence indicator in Industry continued its upward trend in Q1 2017 to 92 units, from 91.2 in Q4 2016 (Graph 10). However, the heightened uncertainty in Q1 2017 due to the prolonged negotiations for the conclusion of the second review led to a fall in the ESI index overall. In particular, the business expectations in services dipped to 77.9 units in Q1 2017, from 82, business expectations in retail trade slipped back to 94.1, from 99.5 in Q4 2016, while, on the contrary, the expectations in construction improved to 52, from 48.1 in Q4 2016. It is noted though that the construction sector has been severely hit during crisis and still remains in recession.

On the other hand, consumer confidence indicator plunged to -71.8 in Q1 2017, from -65 in Q4 2016, while it collapsed to a 3.5 year low, at -74.4 in March 2017, indicating the worsening expectations for households' future financial situation and savings.

### Weak Investment Undermines Growth Prospects

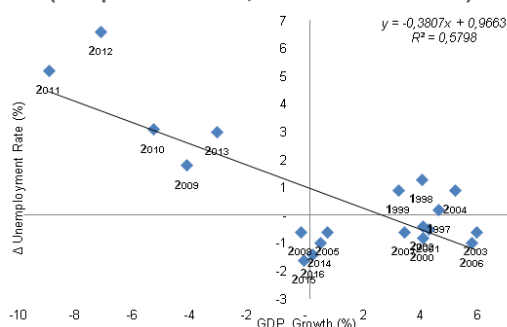
In 2016, the gross fixed capital formation was 63% below its 2008 level amounting to 11.4% of GDP (2008: 22.9% of GDP). This decline was mainly attributed to the collapse of residential investment. In particular, residential investment was merely 0.7% of GDP in 2016, while in 2008 amounted to 7.6%. This decrease was the result of the higher real estate taxation, the tight financing and the fall in household disposable income.

**Graph 11. Investment and Depreciation**  
 (in € bn)


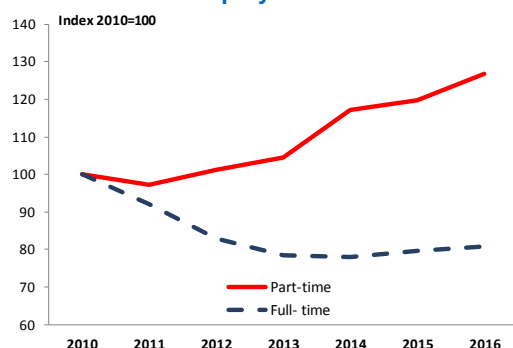
Source: AMECO

**Graph 12. Unemployment Rate and GDP Growth: Okun Law in Greece**

(Sample: 1997-2016, annual observations)



Source: European Commission

**Graph 13. Full-Time/Part-Time Employment**


Source: ELSTAT

By definition, gross investment increases by the purchase of new capital goods but at the same time the value of capital stock is decreasing due to depreciation. During the last years, the negative net investment (difference between gross fixed capital formation and consumption of fixed capital) has reduced the capital stock of the country (Graph 11). In particular, during 2011-2015, depreciation exceeded investment by a cumulative of €59.6 bn. In 2016 disinvestment continued due to low business confidence, capital controls and reduction of public investment program.

From 2017 onwards, given that public investment is projected to remain subdued as long as Greece is in a fiscal discipline mode, investment growth is expected to emerge mainly from private investment and especially from investments in machinery and equipment as well as investment in construction, excluding residential.

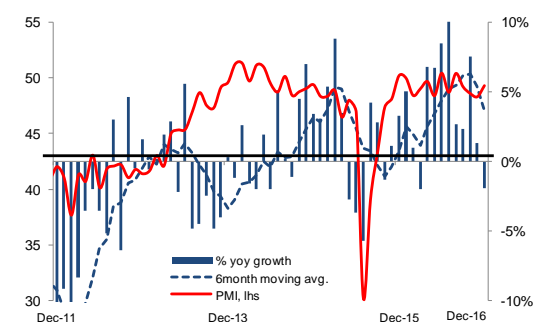
### Box 2: Applying Okun Law in Greece

The contemporaneous statistical relationship between the changes in the unemployment rate ( $\Delta U$ ) and real GDP growth ( $\Delta Y$ ), usually referred as version of Okun's Law<sup>1</sup> takes the simple form:  $\Delta U_t = \alpha + \beta \Delta Y_t$ . The coefficient of this linear benchmark regression,  $\beta$ , typically expected to be negative, measures the sensitivity of the unemployment rate with respect to changes in real GDP (Graph 12). The intercept,  $\alpha$ , indicates the change in the unemployment rate if real GDP remains unchanged. The value of the ratio  $-\alpha/\beta$  indicates the level of real GDP growth consistent with a stable unemployment rate.

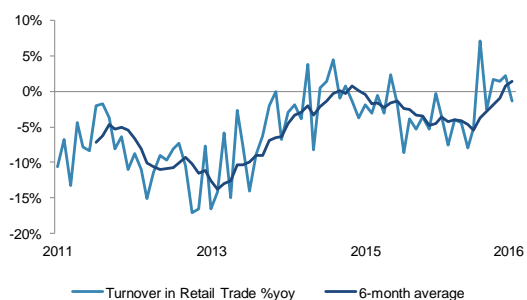
We estimate this linear relationship for Greece, using annual data over the period from 1997 to 2016. According to the results obtained, a zero real GDP growth is associated with an increase in the unemployment rate by approximately 1 percentage point, as implied by the estimated value of the intercept  $\alpha$ . In addition, taking into account the estimated value of the Okun coefficient (at approximately 0.4), a minimum 2.5% real GDP growth is required for the unemployment rate to start falling.

However, as shown in the graph on the left, the performance of the unemployment rate in the past three years does not corroborate the findings above. In particular, while the pace of economic activity growth remained broadly stable (2014: 0.4%; 2015: -0.2%; 2016: 0.0%), the unemployment rate (as % of total labour force) has significantly declined, from 26.5% in 2014 to 23.5% in 2016. This puzzling phenomenon may be explained by the fact that the observed decline in the unemployment rate over this period is mostly related to a reduction in structural unemployment rather than in cyclical unemployment implied by Okun Law. More specifically, the increased labour market flexibility along with the prolonged job search period led to an adjustment of labour supply to vacancies. These developments are reflected to the significant ongoing shift from full-time employment to part-time employment (Graph 13). The share of part-time employment as percentage of total employment (seasonally adjusted data) in the 15-64 age group has risen to 9.8% in Q22016 from 5.8% in Q12009. Following the breakdown of the data by age, gender and sector of economic activity it is evident that the share of part-time employment (as % of total employment) has been on an upward trend in all age groups, albeit more pronounced for those aged 15-24 (Q12009: 14.2%; Q22016: 27.4%).

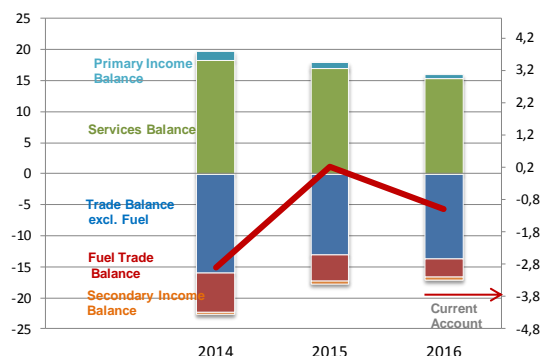
<sup>1</sup> Okun, A. (1962), "Potential GNP: Its measurement and Significance", in Proceedings of the Business and Economics Statistics Section, American Statistical Association, pp.98-104

**Graph 14. Manufacturing Production Index**  
 (% y-o-y change)


Source: ELSTAT

**Graph 15. Turnover Index in Retail Trade**  
 (% y-o-y change)


Source: ELSTAT

**Graph 16. Balance of Payments**  
 (in € bn.)


Source: Bank of Greece

## Hard data: Main Indicators in 2016

**Disposable Income:** Real household disposable income fell by 2.1% in Q3 2016 on a yearly basis, against no change in Q2 2016. The main source of household income, compensation of employees increased at a slower pace by 1.4% y-o-y in Q3 2016, from 2.9% in Q2 2016. This development illustrates the fact that the employment gains registered in the first nine months of 2016 originated from the increase of part-time instead of full time employment, thus the contribution of salaries to households' purchasing parity remained subdued.

On the other hand, the main drag on the disposable income came from direct taxation (-1.8 pps) and net social transfers (-1.5 pps).

**Industrial Production:** The general index of industrial production increased by 2.3% in 2016, against a small increase of 1.0% in the same period of 2015. The positive outlook for the Greek industry is attributed mainly to the significant increase of manufacturing production (Graph 14). It is worth noting that main sectors of industry continue to register increases, as they managed to export most of the production.

**Retail Sales:** Retail sales fell by 2.1% in 2016, for eight years in a row, against a fall by 2.8% in 2015. Despite the increase in November 2016 by 2.2% y-o-y in turnover index in retail sales (current prices), for the third consecutive month, the index edged down to a negative territory back in December, as it fell by 1.3% y-o-y (Graph 15). The increase in November was mainly attributable to increased sales by 11.6% y-o-y of "books, stationery and other items" which include electronic devices, due to the positive impact of "Black Friday" discounts on sales. VAT increases in various categories of products and services imposed in August 2015 further dented retail sector, while at the same time, retail trade confidence indicator failed to improve significantly.

**New Passenger Car Registrations:** According to the Bank of Greece, new passenger car registrations increased by 10.7% in 2016, on top of a 13.8% increase in 2015. This is mainly attributed to new registrations of leased cars driven by the increased tourism activity, as well as the renewal of the large companies' car fleet during the last couple of years.

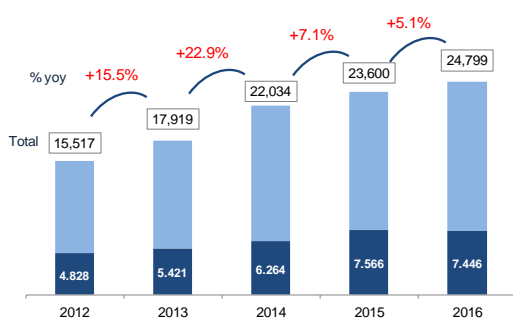
**Private Building Activity:** In 2016, private building activity recorded a 6.9% decrease in volume, a 5.6% decrease in the number of issued building permits and a 5.2% decrease in surface, as compared to the same period of 2015. This is mainly attributed to the negative performance of the sector during the first six months of 2016, while from July to November there was a continuous increase in private building activity.

Moreover, in 2016, the real estate market remained under pressure, as apartment prices dropped by 2.2% y-o-y albeit at a slower pace than in 2015 (-5.1%). In 2008-2016, apartment prices recorded a cumulative decline of 41.3%. The recovery in the real estate sector depends, inter alia, on the evolution of households' disposable income, the unemployment rate and the financing conditions.

**External Sector:** According to the Balance of Payments data, Current Account (CA) recorded a deficit of Euro 1.1 bn in 2016, against a small surplus of Euro 0.2 bn in 2015 (Graph 16). The deficit in 2016 was mainly due to the decrease of services surplus which was not outweighed by the narrowing of trade deficit.

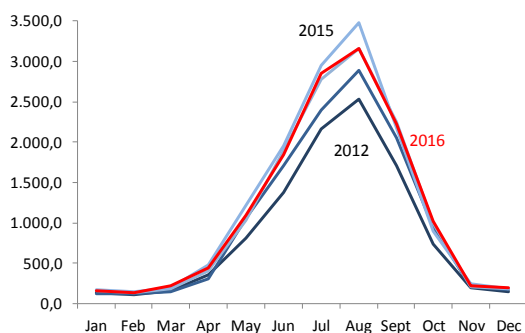
In particular, the service and trade balance that represent the largest part of the CA, recorded a deficit of Euro 1.3 bn in 2016, against a deficit of Euro 0.3 bn in 2015. The surplus in the services balance shrunk by 9.5% on a yearly basis, as tourism and transport receipts declined.

**Graph 17. Tourist Arrivals, excl. cruises**  
(in thousands)



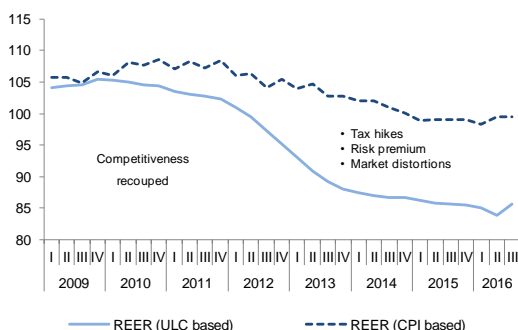
Source: Bank of Greece

**Graph 18. Tourism Receipts per month**  
(thousands. €)



Source: Bank of Greece

**Graph 19. Competitiveness**



Source: Eurostat

## The contribution of tourism to GDP was limited in 2016 due to poor receipts

Tourist arrivals hit a new record high in 2016, as they increased by 5.1% in 2016 compared to 2015 despite the Brexit, the upsurge of international terrorism and the adverse outcome of the refugee crisis with the closure of the “Balkan Route” in March 2016 (Graph 17). Nevertheless, tourism receipts did not prove to be equally resilient, as during the 2016 tourism receipts plummeted by 6.4% y-o-y against an increase of 5.5% in 2015. Tourism receipts fatigue actually started in 2014 and was more intense in 2016. The main reason has been the fall in the average expenditure per trip of foreign visitors, which is related to:

1. The decrease of the average duration per trip of non-residents from 7.7 nights in 2014 to 6.9 in 2016.
2. The discounts offered by the Greek tourism companies to foreign visitors in light of the refugee crisis, to cope with competition and attract last minute bookings.
3. The foreign visitors’ mix with increasing share of “low spenders”, i.e. visitors from the Balkan countries vs tourist arrivals from Eurozone countries as well as independent travelers vs organized tours.

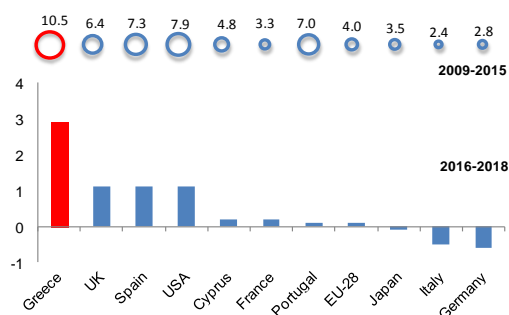
Due to the above, tourism receipts in 2016 (€13.2 bn) did not reach those of 2015 (€14.2 bn), despite the fact that they recovered during the last months of the year (Graph 18). The tourism activity in Greece in 2016 evolved with some delay obviously affected by the tension of the refugee crisis during the first quarter of the year when the vast majority of the pre-bookings usually take place.

In 2017, arrivals are also expected to be on an upward trend (based on the pre-bookings evolution) but vulnerabilities, related to the refugee crisis and terrorism upsurge, remain. According to the Greek Tourism Confederation (SETE) tourism receipts are going to increase at least by 5.3%, while the World Travel and Tourism Council estimates that the total contribution of tourism to GDP is going to increase to 19.4% of GDP in 2017, from 18.6% in 2016.

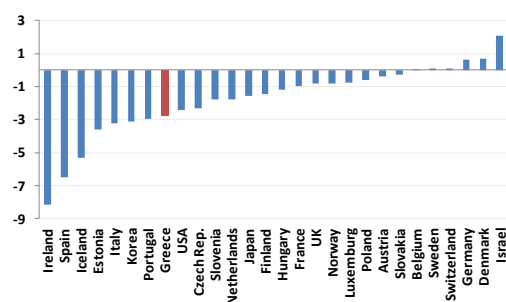
## Price and ULC Competitiveness Revisited

Internal devaluation along with labour market flexibility resulted in significant declines in unit labour cost. It is indicative that real effective exchange rate measured by unit labour cost shows that the competitiveness gap is almost cancelled out during the adjustment period. However, competitiveness measured by CPI improved only slightly implying rigidities in the product market that prevent price adjustments (Graph 19). This misalignment partially explains why exports fail to increase significantly in the previous years.

The collapse in nominal wages together with price rigidities led to small productivity gains. Moreover, increases in social contributions imposed during the fiscal consolidation process, increased the non-wage labour cost reducing the incentives for future employment creation at levels consistent with radical reduction in unemployment.

**Graph 20. Fiscal Consolidation in Selected Countries (primary balance % of GDP)**


Source: "Statistical Annex of European Economy", European Commission, Autumn

**Graph 21. 2007-2013 change in the share of education and investment ("productive spending") in primary expenditure (% of OECD countries)**


Source: OECD

**Box 3: Fiscal Space Wanted**

The first Memorandum of Understanding (MoU) in May 2010, marked the beginning of a long and painful journey to fiscal consolidation that is still underway. Graph 20 depicts in the most striking way the notable discrepancy between the fiscal consolidation in Greece and in selected countries. Evidently, fiscal consolidation in Greece is remarkably more sizeable even compared to the fiscal consolidation achieved by countries like Cyprus and Portugal that had also followed fiscal adjustment programmes. Altogether, fiscal consolidation in 2009-2018 will amount to the sizeable 13.4% of GDP suppressing fiscal space. "Fiscal space" is defined "as room in a government's budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy"<sup>1</sup>. As such, the size of fiscal space is determined by the debt level, the interest rate and the debt profile, with low debt level, low interest rate and a long repayment horizon leaving more space. In the case of Greece, the debt parameters *de facto* determine to a great extent the primary balance surplus, leaving limited fiscal space that it is even more compressed when the State is committed to deliver high primary balance surpluses under the MoU.

Too high primary surpluses for too long may exhaust fiscal space when it is most needed taking into account the ¼ GDP loss during the crisis and the fact that prolonged and deep has endangered economy's growth dynamics by exacerbating long-term and youth unemployment, depleting public and private investment and leading high-skilled labour force to leave the country. However, the use of available fiscal space could catalyze private economic activity especially if two preconditions are fulfilled: a) On the expenditure side, spending takes the form of well-targeted public spending initiatives focused on areas that boost growth. These include high quality infrastructure investment, education and skills, what OECD calls "productive spending"<sup>2</sup>. This kind of investment has been decreasing for Greece as seen in Graph 21 b) On the revenue side, harmful and excessive taxes are cut as well as the labour tax wedge<sup>3</sup> is narrowed<sup>4</sup>.

It is worth-noting that making use of the fiscal space to address low growth or wide negative output gap should be addressed in the context of fiscal discipline, securing no long-term effect on the debt to GDP ratio. To this direction, allocation of resources should be chosen depending on each country's most pressing needs and specificities. Moreover, effective public governance and strong institutions are key for a successful fiscal initiative. Therefore, to enhance the growth impact of the fiscal initiative, Greece should accompany the creation and use of fiscal space with structural reforms which will enhance product market competition, labour productivity, public sector governance and will improve inclusiveness.

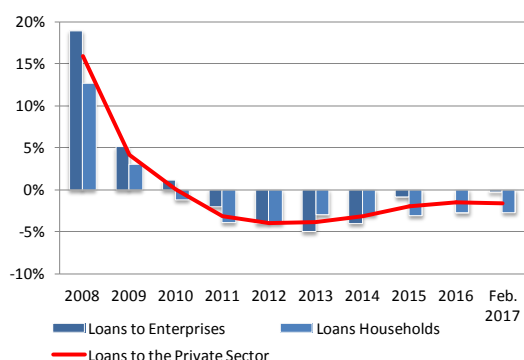
<sup>1</sup> Peter Heller, *Finance and Development*, Vol. 42, Number 2, June 2005.

<sup>2</sup> See also "Using the fiscal levers to escape the low-growth trap", OECD Economic Outlook, No 100, November 2016.

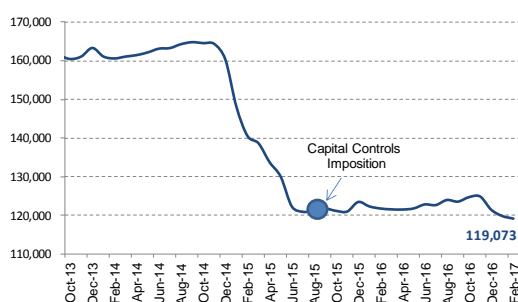
<sup>3</sup> "Labour tax wedge" is defined as the tax burden on labour income resulting from personal income tax and social security contributions.

<sup>4</sup> See also "Available fiscal space varied across countries", ECB Annual Report 2016, 10.4.2017.

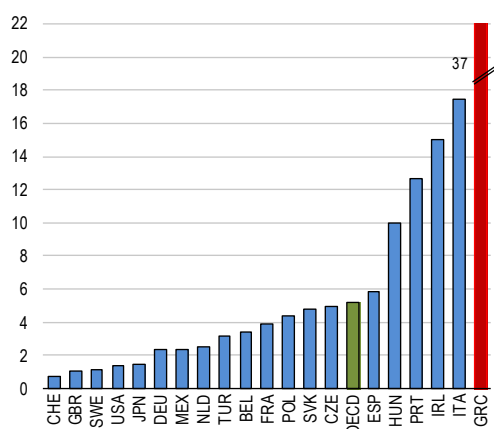


**Graph 22. Credit to Domestic Private Sector**  
 (% y-o-y change)


Source: Bank of Greece

**Graph 23. Private Sector Deposit Evolution**  
 (in € mn)


Source: Bank of Greece

**Graph 24. NPLs as per cent of total gross loans, (% Q2 2016)**


Source: OECD

## Banking System, Financing and Liquidity Conditions

In 2016, Greek Banks showed signs of stabilization, achieved marginal profitability before taxes, met gradually their commitments according to their business plans and strengthened their capital base. The banking system's capital adequacy (CET1 September 2016: 18.1%<sup>1</sup>, on a consolidated basis) and coverage ratio (ca 50%<sup>1</sup>) are at high level, creating an important capital buffer which is able to absorb further turbulences and support the significant effort of managing and drastically reducing the non-performing exposures (NPEs). However, the structural weaknesses of the banking system remain, mainly due to the high stock of NPEs (2016: 50.0%<sup>2</sup>) and the low level of deposits. The reduction of the NPEs is crucial to further stabilize the banking system, to ensure the sustainability of the banks' business model and to resume credit expansion.

The contraction of credit to the private sector, which started at Q2 2012 as a result of the economic crisis, continued at a slower pace<sup>3</sup> in 2016 (December 2016:-1.5%<sup>4</sup>, December 2015:-2.0%) (Graph 22). At the end of December 2016, the private sector loan outstanding amounted to €195.2 bn from €204.3 bn at the end of December 2015. Furthermore, in February 2017 loans to the private sector decreased by 1.6% yoy. The private sector deposits outstanding<sup>3</sup> stood at €121.4 bn. in December 2016 and accounted for the 83% of the total private sector deposits, while corporation deposits amounted to €20.6 bn. Finally, total deposits in the banking system that include, apart from deposits of the private sector, those of General Government and foreign residents amounted to €157.5 bn in December 2016, registering a marginal decrease of 0.2% y-o-y.

In February 2017, private sector deposits outstanding stood at €119.1 bn, lower by €2.3 bn compared to December 2016 outstanding amount (Graph 23).

In 2016, the use of electronic means of payment, by corporations and households, has increased as a result of capital controls. Specifically, the number of payment cards increased in the H1 2016 by 440 thousands as compared to the H2 2015. The use of electronic payments is expected to expand further mainly due to the fact that corporates and households are getting more familiar as well as due to the expected tax reforms, such as connecting the income tax free threshold with the electronic transactions value.

The stabilization of the Greek economy from H2 2016, and the establishment of a framework for the management of non-performing loans are estimated to set favourable conditions for the banking system. It is noted that Greece has the highest NPLs ratio among OECD countries (Graph 24).

<sup>1</sup> Bank of Greece\_ Governor's Annual Report, February 2017.

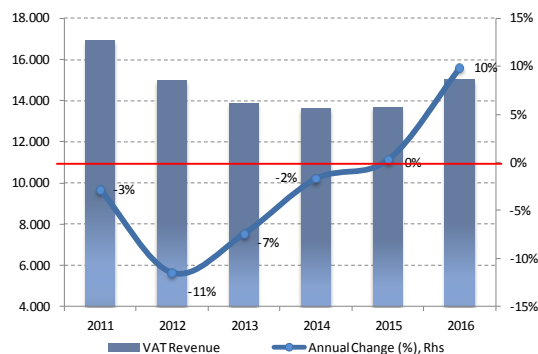
<sup>2</sup> Bank of Greece\_Report on operational targets for NPEs.

<sup>3</sup> According to the Bank of Greece, as of December 2016, deposits and loans of the Consignment Deposits and Loan Fund are excluded from the domestic deposits and credit as the institution has been reclassified from the financial sector to the general government sector.

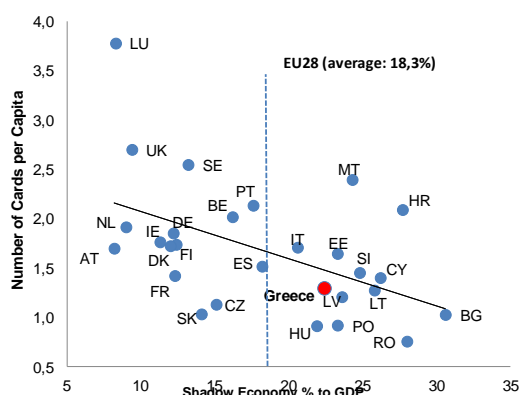
<sup>4</sup> Growth rates are calculated taking into account reclassifications and transfers of loans/corporate bonds, write-offs and exchange rate variations.

## The Surge in Electronic Transactions

Since the beginning of the economic crisis in Greece and until 2014, the number of credit cards in use and the number of terminals at points of sale (POSs) gradually decreased both due to contracting consumer spending, as a result of household disposable income decrease, and the new possibility of the same POS terminal to serve transactions of different banks. Furthermore, a positive side-effect of the capital controls imposition in June 2015, was an increase in the number of cards and the number of transactions made via electronic payments. This, as

**Graph 25. VAT Revenue Evolution**  
 (in € mn)


Source: MinFin

**Graph 26. Shadow Economy % to GDP and Number of Cards per Capita, 2015**


Sources: ECB, F.Schneider "Size and Development of the Shadow Economy of 31 European and 5 other OECD Countries from 2003 to 2015"

mentioned earlier, contributed also to the 10% increase of the VAT revenues in 2016 (Graph 25).

More specifically:

During 2011-2014, the compound rate of decrease in the number cards and the number of POSs was 10% and 46% respectively as result of recession. Nevertheless, in 2015 after the imposition of capital controls, the number of debit and credit cards increased by 8.4%, pre-paid cards by 28.4% and the number of POSs by 12.3%. Especially in the second half of 2015, the number of transactions with payment cards increased by 128%, compared to the first half of 2015 (Bank of Greece, Monetary Policy Report, June 2016). This increase is mainly due to the imposition of capital controls in June 2015. The upward trend is expected to continue in 2017 as individuals are getting more and more familiar with the use of new technologies in carrying out their payments. As a result, in the following years the use of electronic payments is estimated to increase further and act as a catalyst in the fight against tax evasion and shadow economy.

Nevertheless, transactions in Greece are traditionally cash based. The extent in the use of cash in transactions is depicted, among others, with the currency in circulation and in 2015 the money in circulation in Greece accounted for the 52% to GDP vs only 10% in the Eurozone. The economic crisis in Greece especially after 2012 caused the gradual increase of money in circulation, despite the contraction of economic activity, as there was a trend of cash withdrawals from the banking system due to the increase of uncertainty. During 2012-2015, Greece experienced an increase of the currency in circulation per capita of about 14%, the bigger part of which was evident in 2015 (10%).

#### Box 4.: Electronic Transactions and Shadow Economy: A Negative Correlation

The extended use of electronic payments enhances the transparency in the economy and helps to contain the shadow economy and tax evasion, as electronic payments are more easily traced. The empirical examination between the number of cards in circulation per capita and the shadow economy as a percentage of GDP shows their negative correlation (Graph 26). The higher the number of cards per capita, the smaller the percentage of the shadow economy in GDP.

In Greece, in 2015, the number of cards per capita stood at 1.3, while the percentage of shadow economy to GDP stood at 22.4%.

Furthermore according to a study<sup>1</sup>, an increase in the use of electronic payments by 10% annually for four consecutive years, may cause a reduction in the shadow economy up to five percentage points (as a % to GDP).

<sup>1</sup> Friedrich Schneider "The Shadow Economy in Europe, 2013."

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## Economic Data – Greece

as of 10/04/2017

Macroeconomic Environment	ANNUAL				QUARTERLY					MONTHLY					
	2013	2014	2015	2016	2015 IV	2016 I II III IV				2016 Okt. Noe. Dec.			2017 Jan. Feb. Mar.		
<b>AGGREGATE DEMAND</b>															
GDP at current prices (€ billion), SA	180.7	177.9	175.7	175.9											
(annual % change)	-5.5	-1.5	-1.3	0.1	-0.5	-1.0	0.3	1.8	-0.8						
GDP at constant prices 2010 (€ billion), SA	184.2	185.0	184.5	184.5											
(annual % change)	-3.2	0.4	-0.2	0.0	0.7	-0.7	-0.4	2.0	-1.1						
<b>Components (annual % change, at constant prices)</b>															
Private Consumption	-2.6	0.4	-0.2	1.4	-0.4	-0.6	-0.7	6.1	1.1						
Public Consumption	-6.4	-1.4	0.0	-2.1	2.5	-3.5	-1.5	-1.3	-2.0						
Gross Fixed Capital Formation	-8.4	-4.6	-0.2	0.1	14.0	-10.2	17.8	12.6	-13.8						
Exports of Goods and Services	1.5	7.8	3.4	-2.0	-2.6	-11.0	-9.9	11.0	5.7						
Imports of Goods and Services	-2.4	7.6	0.3	-0.4	-2.7	-10.0	-2.1	13.8	3.0						
<b>LABOUR MARKET (annual % change)</b>															
Nominal Unit Labour Costs <sup>(1)</sup>	-6.3	-2.7	-1.2		0.0	3.0	4.6	0.5							
REER Unit Labour Costs <sup>(2)</sup>	-6.3	-2.6	-6.4		-1.5	1.0	1.5								
Unemployment Rate (%) <sup>(3)</sup>	27.5	26.5	24.9	23.5	24.4	24.0	23.5	23.2	23.1	23.3	23.4	23.5	23.5		
<b>PRICES (average annual % change)</b>															
National CPI	-0.9	-1.3	-1.7	-0.8	-0.6	-0.9	-0.9	-1.0	-0.4	-0.5	-0.9	0.0	1.2	1.3	1.7
National CPI excl. Fresh Fruits - Vegetables & Fuels (BoG)	-1.7	-0.7	-0.5	-0.1	0.3	0.2	0.3	-0.3	-0.7	-0.5	-1.0	-0.6	-0.6	-0.7	0.1
HICP (Harmonised Index)	-0.9	-1.4	-1.1	0.0	0.1	-0.2	-0.1	0.2	0.2	0.6	-0.2	0.3	1.5	1.4	1.7
GDP Deflator, SA	-2.4	-1.8	-1.0	0.1	-1.1	-0.3	0.7	-0.2	0.4						
<b>PUBLIC FINANCES</b>															
General Government Primary Balance (€ billion, cumulative) <sup>(4)</sup>	2.9	0.5	0.3		4.1	3.2	3.3	3.2	5.0	4.9	6.1	5.0	1.4	2.6	
G.G. Primary Balance (% of GDP)	1.7	0.3	0.2												
General Government consolidated Gross Debt (€ billion) <sup>(8)</sup>	320.5	319.7	311.5		321.3	321.0	328.3	323.7	326.4						
G.G. Gross Debt (% of GDP)	177.4	179.7	177.4												
<b>EXTERNAL BALANCE &amp; COMPETITIVENESS INDICATORS</b>															
Current Account Balance (€ billion) <sup>(5)</sup>	-3.6	-2.9	0.2	-1.1	0.2	-2.2	-2.6	1.6	-1.1	-0.2	-1.2	-0.9	-0.3		
Current Account Balance (% of GDP) <sup>(5)</sup>	-2.0	-1.6	0.1	-0.6	0.1	-1.3	-1.5	0.9	-0.6						
Greece: Real Effective Exchange Rate Index (CPI based) <sup>(6)</sup>	-0.7	-1.8	-4.5	0.7	-2.4	0.4	1.4	0.2	0.5						
Greece: Nominal Effective Exchange Rate Index <sup>(6)</sup>	2.0	0.7	-2.7	1.3	-1.8	1.3	2.0	0.8	1.1	0.6	1.9	0.8	0.5	-0.4	-0.4
Tourism Competitiveness Index (rank out of 140) <sup>(7)</sup>	32		31												

Sources: Hellenic Statistical Authority, EC, UNWTO, BoG, Min Fin

<sup>(1)</sup> NSA, Nominal Unit Labour Cost based on hours worked

<sup>(2)</sup> Compared to 37 countries.

<sup>(3)</sup> Defined as unemployed/labour force (seasonally adjusted data, period average).

<sup>(4)</sup> Yearly data are according to the definition of primary balance used under the Economic Adjustment Programme for Greece, while quarterly and monthly data are compiled from cash based public accounting data (without the impact of the support to financial institutions).

<sup>(5)</sup> Quarterly data are cumulative.

<sup>(6)</sup> As of reference month July 2015, the Bank of Greece will implement a significant change to its balance of payments compilation methodology, using ELSTAT's trade statistics instead of the settlements data used until June 2015 inclusive.

<sup>(7)</sup> The index is CPI-based and includes the 28 main trading partners of Greece. A positive sign denotes loss of competitiveness of Greece's trade partners.

<sup>(8)</sup> Travel and Tourism Competitiveness Report 2015. The smallest the number, the better.

<sup>(9)</sup> Yearly data as defined in the Maastricht Treaty.

Business Economy	ANNUAL				QUARTERLY					MONTHLY					
	2013	2014	2015	2016	2015 IV	2016 I II III IV				2016 Okt. Nov. Dec.			2017 Jan. Feb. Mar.		
<b>(annual % change unless otherwise indicated)</b>															
<b>INDUSTRY</b>															
Industrial Production Index <sup>(1)</sup>	-3.2	-1.9	1.0	2.3	2.5	-1.1	4.8	1.7	3.7	7.0	2.0	2.2	7.2	10.8	
Manufacturing Production Index	-1.1	1.8	1.8	4.0	2.1	1.1	7.3	5.1	2.3	7.5	1.3	-1.9	1.1	6.1	
Turnover Index in Industry	-5.9	-1.1	-10.1	-5.1	-10.4	-13.4	-12.4	1.4	4.6	-2.5	3.0	13.5			
<b>CONSTRUCTION ACTIVITY</b>															
Production Index in Construction (WDA, 2010=100) <sup>(1)</sup>	-8.2	15.5	3.1	22.9	5.9	-8.1	15.5	76.8	18.6						
Index of Apartment Prices	-10.9	-7.5	-5.1	-2.2	-5.1	-4.2	-2.5	-1.5	-0.6						
Private Building Activity (volume in 000m <sup>3</sup> ) <sup>(2)</sup>	-25.6	-5.8	-0.2	-6.9	5.9	11.9	-30.9	38.4	-9.5	5.7	9.4	-25.9			
<b>TRADE</b>															
Turnover Index in Retail Trade <sup>(3)</sup>	-8.6	-1.1	-2.8	-2.1	-2.9	-5.0	-5.8	1.9	0.6	1.4	2.2	-1.3			
Turnover Index in Wholesale Trade <sup>(3)</sup>	-12.1	0.2	-4.4	-2.0	-2.0	-4.6	-3.7	2.8	-2.0						
<b>CAR TRADE</b>															
Turnover Index in Car Trade <sup>(3)</sup>	-3.1	18.6	7.8	7.3	9.0	-2.0	15.4	18.6	-2.0						
New Passenger Car Registrations <sup>(2)</sup>	3.1	30.1	13.8	10.7	2.1	-0.3	19.5	16.8	4.0	22.8	15.9	-21.8	24.8	32.0	44.7
<b>SERVICES</b>															
<b>(cumulative)</b>															
Tourism Receipt, BoG (incl. cruises)	16.4	10.2	5.5	-6.4	5.5	-0.1	-5.8	-5.5	-6.4	14.2	-13.8	4.7	-2.4		
Tourism Receipt (€ million)	12,152	13,393	14,126	13,220	14,126	515	3,929	12,085	13,220	1,026	219	193	165		
Tourist Arrivals, BoG (excl. cruises)	15.5	23.0	7.1	5.1	7.1	-6.2	-1.6	3.5	5.1	17.3	11.7	15.6	-6.9		
Tourist Arrivals (in thous. people)	17,919	22,033	23,559	24,799	23,559	1,621	7,446	21,345	24,799	2,174	717	564	520		
Turnover Index in Tourism (hotels & restaurants) <sup>(3)</sup>	4.8	11.8	3.1	0.2	-9.1	-11.2	-1.3	2.6	4.3						
<b>EXPECTATION INDICES (units)</b>															
Economic Sentiment Indicator	91.6	100.5	89.7	91.8	87.6	90.6	90.3	92.1	94.1	94.3	92.9	95.1	95.1	92.9	93.4
Index of Consumer Confidence	-69.4	-54.0	-50.7	-68.0	-61.6	-67.5	-71.2	-68.4	-65.0	-63.6	-66.9	-64.4	-67.8	-73.3	-74.4
Index of Bus. Expect. in Industry	87.8	94.6	81.9	91.2	82.9	90.6	91.9	91.1	91.2	94.2	89.2	90.1	90.5	91.8	93.7
Index of Bus. Expect. in Construction	65.0	80.4	56.4	55.7	58.8	68.0	62.9	43.9	48.1	39.2	49.4	55.6	58.1	46.2	51.8
Index of Bus. Expect. in Retail Trade	70.2	89.1	81.0	98.0	82.4	93.6	100.2	98.6	99.5	97.9	101.6	99.0	102.5	90.1	89.6
Index of Bus. Expect. in Services	70.4	87.2	70.6	76.1	70.5	69.0	74.3	79.3	82.0	84.2	85.1	76.7	78.5	76.9	78.3
Index of Bus. Expect. in Tourism <sup>(4)</sup>	80.3	102.9	91.2	89.6	78.0	75.1	85.4	101.4	96.1	109.1	96.0	83.3	88.2	92.7	96.8

Sources: Hellenic Statistical Authority, Bank of Greece, IOBE

<sup>(2)</sup> Bank of Greece data

<sup>(3)</sup> Turnover at current prices.

<sup>(4)</sup> Accommodation, Restaurants and Travel agencies

Blank indicates not available data.