

# ANNUAL REPORT

## 2014



FEBRUARY 2015



**BANK OF GREECE**  
EUROSYSTEM



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## 2014

Presented to the 82nd General Meeting of Shareholders  
on 26 February 2015 by Governor Yannis Stournaras



FEBRUARY 2015



**BANK OF GREECE**  
EUROSYSTEM

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## GENERAL COUNCIL

<b>Yannis Stournaras*</b>	<b>Chairman – Governor</b>
<b>Ioannis Papadakis</b>	<b>Deputy Governor</b>
<b>John (Iannis) Mourmouras**</b>	<b>Deputy Governor</b>
Ilias Plaskovitis*	Member of the MPC and Member
Charalampos Stamatopoulos	»
Georgios-Spyros Tavlvas	»
Andreas Andreadis	Member
Dimitrios Asimakopoulos	»
Evangelos Geraniotakis	»
Georgios Mylonas	»
Christos Polyzogopoulos	» <i>Term of office expires in 2015***</i>
Michael Chandris	»
<i>Attending</i> Stavroula Miliakou	General Commissioner of the State

\* By Presidential Decree 91/26.6.2014 (Government Gazette A 139/26.6.2014), Mr. Yannis Stournaras was appointed Governor of the Bank of Greece for a six-year term, in accordance with Article 29 of the Bank's Statute.

\*\* By Presidential Decree 121/19.9.2014 (Government Gazette A 195/19.9.2014), Mr. John (Iannis) Mourmouras was appointed Deputy Governor of the Bank of Greece for a six-year term, in accordance with Article 29 of the Bank's Statute.

\*\*\* The term of office of Mr. Christos Polyzogopoulos, elected by the Annual Ordinary General Meeting of Shareholders of 24.4.2012, expires at the current Annual Ordinary General Meeting, in accordance with Article 21 of the Bank's Statute.



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# REPORT OF GOVERNOR YANNIS STOURNARAS

BY ORDER OF THE GENERAL COUNCIL ON THE BALANCE SHEET OF 31 DECEMBER 2014  
TO THE ANNUAL ORDINARY GENERAL MEETING OF SHAREHOLDERS

## I OVERVIEW OF ACTIVITIES IN 2014

### I FINANCIAL RESULTS FOR 2014

The Bank's profits in 2014 came to €654.5 million, down from €831.1 million in 2013.

The Bank's total net income for 2014 amounted to €1,118.2 million, compared with €1,610.9 million in 2013. Total expenses came to €463.7 million, down from €779.7 million in 2013.

In accordance with Article 71 of the Bank's Statute, the General Council has decided to propose to the General Meeting of Shareholders that the profits of 2014 be allocated as follows: €13.3 million, or 12% of the Bank's capital, to be distributed as dividend, with the balance (€641.2 million) to be transferred to the State.

In greater detail, the Bank's income and expenses in financial year 2014 were as follows:

#### Income

The Bank's total net income from Eurosystem monetary policy operations, interest and commission fees, and other revenue from domestic and foreign operations decreased by 30.6% to €1,118.2 million, from €1,610.9 million in 2013.

Specifically:

Net interest income and income from financial operations and the reallocation of Eurosystem monetary income totalled €1,003.5 million, down by 31.9% from €1,473.9 million in 2013.

Net income from fees and commissions increased by 4.7% to €73.5 million, from €70.2 million in 2013.

Income from equity shares and participating interests declined by €25.2 million to €29.0

million, from €54.2 million in 2013. Most of this decrease is accounted for by lower income from the interim profit distribution of the European Central Bank (ECB) for 2014.

The ECB, by decision of its Governing Council, made an interim profit distribution of €840.7 million to the national central banks (NCBs) of the Eurosystem on 30 January 2015. The Bank of Greece received €24.4 million, in proportion to its share in the capital of the ECB. The remaining profit of the ECB was distributed to the NCBs in February 2015, and the amount allocated to the Bank of Greece will benefit its results for 2015.

Finally, other income decreased by 4.0% to €12.1 million, compared with €12.6 million in 2013. The bulk of this amount is income from operations carried out by the Printing Works Department (IETA) on behalf of the Greek State.

#### Expenses

Total expenses decreased by €316.0 million to €463.7 million in 2014, from €779.7 million in 2013, mainly on account of reduced provisioning (€130.1 million in 2014, compared with €468.8 million in 2013).

Specifically:

The Bank's operating costs excluding provisions (staff costs, pensions, depreciation, other costs) increased by €22.7 million (7.3%) to €333.6 million, from €310.9 million in 2013, mainly on account of consultancy fees for the auditing of the banking system and other administrative expenses.

Staff costs and expenses for pension benefits increased slightly by €3.5 million (1.4%) to €258.7 million, from €255.2 million in 2013. This increase is attributable to the adjustment

of the Bank's overall liabilities to its staff for pension benefits, on the basis of an actuarial study prepared under the applicable accounting principles.

Other administrative expenses increased by €10.1 million to €47.0 million in 2014, from €36.9 million in 2013.

Depreciation declined by €0.6 million to €13.9 million in 2014, from €14.5 million in 2013.

This year, consultancy fees for the auditing of the banking system increased by €9.7 million to €14.0 million, compared with €4.3 million in 2013.

Provisioning remained high in 2014, with the setting aside of €130.1 million, bringing cumulative provisions to €6,788.7 million on 31 December 2014.

High provisioning is in line with the principle of prudence followed by the ECB and NCBs of the Eurosystem. This practice aims both to strengthen the financial position of the Bank of Greece, thereby enabling it to fulfil its duties in the best way possible, and to enhance its ability to address risks.

## **2 BANK OF GREECE ORGANISATION AND OPERATION**

### **Organisational restructuring**

The merger or elimination of units within the Bank and the reassignment of tasks continued in 2014, with a view to achieving greater synergies, a more effective use of existing staff (reduced by 910 over the past seven years), better financial supervision and monetary policy implementation, avoiding possible overlaps, as well as lower operating costs and operational risk.

In particular, the Human Resources and Organisation Department, the Department of Private Insurance Supervision, the Supervision of Credit and Related Financial Institutions

Department, the Government Financial Operations and Accounts Department, the Legal Department, the Economic Analysis and Research Department and the Printing Works Department saw certain organisational adjustments. Moreover:

- as a result of the launch of the Single Supervisory Mechanism, a new “Supervised Institutions Inspection Department” was established and the functions of the existing supervisory Departments were adjusted accordingly;
- the Resolution Unit was restructured in the context of the operation of the Single Resolution Mechanism and in view of the implementation of the Bank Recovery and Resolution Directive (2014/59/EU);
- the Special Unit entitled “Centre for Culture, Research and Documentation” was upgraded to Department;
- the research activities of the Economic Analysis and Research Department expanded to issues relating to a National Climate Change Adaptation Strategy.

### **Development of Operating Regulations for the Bank's Units**

The operational framework of the Bank's units is updated in line with new requirements through the adoption of Operating Regulations, with a view to facilitating the units' seamless operation and more efficient supervision and control. In the course of 2014, the General Council of the Bank approved eight section-level Operating Regulations.

### **Buildings and technical works**

In 2014 the Technical and Administrative Support Department continued its maintenance and remodelling of the Bank's buildings and premises in Attica and other regions (branches and outlets), as part of a broader effort to improve working conditions, adapt the premises to new organisational structures, enhance the



physical security of facilities and transactions, and introduce more eco-friendly solutions.

In order to enhance the physical security of the Bank's buildings, a unified signal receiving centre is to be established, which will supervise all security systems installed in the Bank's network. This state-of-the-art centre will be gradually upgradeable.

### Research activities

The Bank of Greece continued to take active part in ongoing research on issues pertaining to the Greek and European economy, in the context of the Eurosystem's research activities. Researchers from the Bank of Greece participated in the Household Finance and Consumption Survey, the Macroprudential Research Network and the Wage Dynamics Network; the latter plans to conduct a business survey to assess the labour market response to the crisis (more information on these research networks is available at <http://www.ecb.europa.eu/home/html/researcher.en.html>).

Bank of Greece publications in 2014 included nineteen Working Papers and two issues of the Economic Bulletin. Research collaboration programmes continued, leading to the release of jointly conducted studies by experts from the Bank of Greece and from domestic and foreign academic institutions with the participation of post-graduate students from Greek universities, in areas such as (1) the compilation of a quality index for Greek export products, (2) macro-sector model simulation for an analysis of the crisis impact in Greece, (3) the examination of savings and investment in the euro area and (4) the pass-through of the effects of US monetary policy to Europe's and Asia's economies.

Other events included seminars, lectures and research workshops with speakers from Greece and abroad, aiming to ensure that economists from the Bank of Greece and the broader academic community remain abreast of current research developments.

### Centre for Culture, Research and Documentation

In April 2014, the Administration decided to upgrade the Centre for Culture, Research and Documentation to Department. It should be recalled that the Centre was established in March 2013 as a Special Unit and consists of four Sections (Museum and Collections; Library; Historical Archive; Research, Publications and Administrative Support).

The mandate of the Centre is to serve as a hub for advancing and highlighting the role of the Bank of Greece in the country's economic, social and cultural development. Its responsibilities include running the Museum and the Library, managing and curating the Bank's historical archives, managing and expanding the Bank's collections, overseeing relevant publications and research, holding exhibitions and organising cultural events, educational programmes, conferences and seminars. In 2014, the Centre organised, inter alia, tribute events for litterateur Elias Venezis, who served with the Bank, and Xenophon Zolotas, who was the Bank's Governor for 19 years, as well as a presentation of the books *History of the Bank of Greece 1928-2008* and *The Chronicle of the Great Crisis – Bank of Greece 2008-2013*, published by the Bank.

The Museum continued to provide financial education to the public. Since opening towards the end of 2010, the Museum has had over 15,000 visitors, mostly from secondary schools and universities. At the end of 2014, the Museum inaugurated its temporary exhibition entitled "Xenophon Zolotas: The Professor and the Bank of Greece", on the occasion of the 110th anniversary of his birth.

### Climate Change Impacts Study Committee (CCISC)

The Bank's Climate Change Impacts Study Committee (CCISC), in the context of the current second stage of its work and of its broader activities, is studying key sectors of both the Greek economy and society, with a view to develop a national climate change adaptation strategy (NCCAS).

In December 2014 a memorandum of cooperation was signed between the Ministry of Environment, Energy and Climate Change, the Biomedical Research Foundation of the Academy of Athens and the Bank of Greece, which provides for the implementation of the National Climate Change Adaptation Strategy with an aim to tackle the impact of climate change at national level. The experience of CCISC in economic and other effects of climate change will be utilised in this project.

A report entitled Greek tourism and climate change: adaptation policies and a new growth strategy was published in digital form in November 2014. The report records the economic effects of human-induced climate change on Greek tourism and recommends policy measures in this field, to be part of a broader strategy for the adaptation of the Greek economy to climate change. The report was the outcome of cooperation of scientists and tourist industry representatives that participated in a conference organised jointly by the Bank of Greece, the Mariolopoulos-Kanaginis Foundation for the Environmental Sciences and the Research Centre for Atmospheric Physics and Climatology of the Academy of Athens in July 2013.

### **3 DECISIONS AND EXPIRY OF GENERAL COUNCIL MEMBERS' TERM OF OFFICE**

As the terms of office of both Governor George A. Provopoulos and Deputy Governor

Eleni Dendrinou-Louri came to an end on 19 June 2014, the General Council decided on 11 June 2014 (6th meeting) to recommend me to the Cabinet, under Article 29 of the Bank's Statute, for the position of Bank of Greece Governor for a six-year term of office. The recommendation was adopted by the Cabinet and the appointment was finalised with the publication of Presidential Decree 91/26 June 2014 in the Government Gazette.

Moreover, the General Council decided on 5 September 2014 (8th meeting) to recommend Mr. John (Iannis) A. Mourmouras to the Cabinet, under Article 29 of the Bank's Statute, for the position of Bank of Greece Deputy Governor for a six-year term of office. The recommendation was adopted by the Cabinet and the appointment was finalised with the publication of Presidential Decree 121/19 September 2014 in the Government Gazette.

The term of office of Mr. Christos Polyzoopoulos, elected by the Annual Ordinary General Meeting of Shareholders of 24 April 2012, expires at the current Annual Ordinary General Meeting, in accordance with Article 21 of the Bank's Statute. For this reason, the General Meeting will be called upon to elect a new General Council Member for a three-year term in his place.

The outgoing General Council Member is eligible for re-election.

## II EXIT FROM THE CRISIS AND RETURN TO ECONOMIC GROWTH

### I AGREEMENT WITH OUR PARTNERS TO AVOID A STALLING OF RECOVERY AND TO BOLSTER GROWTH

After six years of severe recession, the downturn came to an end in 2014, with economic activity resuming positive growth rates. This development, combined with the elimination of the high fiscal and current account deficits and the implementation of significant structural reforms, arguably suggests that the necessary conditions are now in place for a definitive exit from the crisis and for accelerated growth in the immediate future.

However, this optimistic outlook is clouded by protracted uncertainty over the ongoing renegotiations of our agreements with our partners, the final outcome of which cannot as yet be predicted. The outcome of these negotiations will ultimately determine Greece's future in the years ahead. The Bank of Greece therefore stresses the need, at this crucial time, for a coordinated national effort within the euro area, in close collaboration with European and international institutions, to ensure that the sacrifices made by Greek citizens will not have been in vain and to facilitate the economic restructuring needed for sustainable growth.

### 2 ECONOMIC RECOVERY IN 2014 IN A DEFLATIONARY ENVIRONMENT

2014 marked the return of economic activity to positive growth rates after six consecutive years of deep recession, during which GDP contracted by more than 25%. The available quarterly GDP data indicate that the recession has clearly been winding down since the first quarter of 2014, with year-on-year growth in 2014 returning to positive territory (0.8%) for the first time since 2007, driven by higher exports of goods and services and increased private consumption. More specifically, in the period from January to September 2014:

**Exports** increased by 8.4%, largely as a result of improved competitiveness, with a strong

performance from tourism and shipping exports.

**Private consumption** increased by 1.5%, on the back of stabilised real disposable income, a declining general level of prices and reduced uncertainty.

Other significant positive developments were the recovery of total employment by 0.3% and of dependent employment by 2.3%, while the number of the unemployed decreased for the first time since 2008, by 3.3%. Nevertheless, the unemployment rate remains high – it is actually the highest in the EU. Another major concern is that the long-term unemployment rate continues to rise, which increases the risk of human capital depreciation.

Unit labour costs decreased further in 2014, on the back of higher productivity and lower employer contributions, thereby contributing to the economy gaining in competitiveness. Structural competitiveness in Greece has been showing signs of improving since 2013. More specifically, according to the World Economic Forum's global competitiveness index, Greece moved up the ranking to 81st place, from 91st in 2012, while according to the World Bank's ranking on the "ease of doing business", Greece advanced to 61st place, from 65th and 89th, respectively, in the past two years. However, low access to financing, red tape and tax policy instability remain the biggest drags on the international competitiveness of Greek businesses.

The over-performance against the primary surplus target set in the Economic Adjustment Programme by 1.2% of GDP in 2013 was a milestone achievement that provides a solid base for the attainment of the fiscal target in 2014 for a third consecutive year. However, the general government fiscal outcome in 2014 faces downward risks, largely associated with domestic political developments combined with a back-loaded revenue schedule. These uncertainties have increased following the completion of the state budget execution for

2014, which pointed to significant tax revenue shortfalls, especially in December.

Despite an increase in public investment, total investment remains particularly low, reflecting a decrease in private investment mainly on account of limited bank lending and the high cost of borrowing. The fall in private investment concerned primarily residential investment, whereas productive business investment has started to show signs of recovery. For the first time since 2008, the increase in investment in the third quarter of 2014, albeit moderate at 1%, may be signalling a longer-lasting recovery trend.

The year 2014 was marked by deflation, as a result of shrinking unit labour costs, subdued aggregate demand, a weaker inflationary impact from indirect taxes and – especially in the last months of the year – declining international oil prices. Equally conducive to the deflationary trend were the structural reforms in product and labour markets.

### 3 INTERNATIONAL ENVIRONMENT

The positive developments in economic activity and employment occurred against a background of subdued foreign demand reflecting sluggish growth mainly in the euro area. The global economy is expected to have grown by 3.3% in 2014, driven by emerging and developing economies in Asia, albeit to a lesser extent than in the recent past, and by certain advanced economies, namely the United States and the United Kingdom. Looking ahead, growth in 2015 is projected to pick up slightly in tandem with rising world trade volumes, on the back of the marked decline in international oil prices.

The euro area, after two years of recession, is expected to post a positive growth rate of 0.9% in 2014 that is projected to rise to more than 1% in 2015. Underlying this projected growth are mainly stronger private consumption and investment, owing, amongst other factors, to

the very accommodative monetary policy stance of the Eurosystem, milder fiscal consolidation and, gradually, a rebound of exports reflecting the depreciation of the euro since mid-2014.

Inflation in the global economy and the euro area stood at low levels. In the euro area, the drop in energy and food commodity prices, the past appreciation of the euro and timid growth all contributed to a significant slowdown in inflation, which moved into negative territory in late 2014 and early 2015.

The lower prices of crude oil are expected to bolster global economic activity in 2015, while the increase in risks to the global financial system as a result of lower revenue and the financial difficulties of certain oil exporting countries is expected to be limited.

These forecasts are subject to considerable uncertainty on account of heightened geopolitical risk and the high levels of public and private debt. However, the reduction of external macroeconomic imbalances at the global level in recent years, in many cases of a structural nature, has made the global economy less vulnerable to financial and other shocks.

### 4 ECB MEASURES TO AVERT THE RISKS OF DEFLATION AND RECESSION IN THE EURO AREA

The main challenge for the Eurosystem in 2014 was to prevent a deflationary environment from taking hold in the euro area. To this end, the Governing Council lowered the key ECB interest rates on two occasions, in June and September 2014, bringing the rate on the main refinancing operations (MROs) and the deposit facility rate down by a total of 20 basis points each, to 0.05% and -0.20%, respectively.

In addition, the Eurosystem introduced a programme of targeted longer-term refinancing operations (TLTROs), i.e. a series of eight open market operations to be conducted

between September 2014 and June 2016, enabling euro area banks to borrow at a low fixed rate. The amount that each bank is entitled to borrow is not unlimited, but depends on the volume of its lending to the real economy. The maturity of TLTROs is set for September 2018 for those banks that will have increased their lending in the period following April 2014, relative to the reference period (May 2013-April 2014).

In the fourth quarter of 2014, the Eurosystem also launched two purchase programmes for selected private assets, namely asset-backed securities (ABS) and covered bonds. In early 2015, the asset purchase programme was expanded to include bonds issued by euro area central governments, agencies and European institutions. Under this expanded asset purchase programme, the combined monthly purchases of public and private sector assets will amount to €60 billion and are intended to be carried out until the path of inflation becomes consistent with the aim of achieving inflation rates of below, but close to, 2% over the medium term.

The liquidity injections via these new, non-standard monetary policy measures will continue to exert strong downward pressure on interbank interest rates. Indeed, after August 2014, the overnight interest rate (EONIA) remained negative for extensive periods of time, while the Euribor fell to historically low levels.

With specific regard to the asset purchase programmes, the liquidity to be generated is expected to be channelled to investment in securities, including those denominated in foreign currencies. This should bring about a decline across a broad range of asset returns and push up stock prices, paving the way to a broadly-based easing of financing conditions in the monetary union, as well as a weakening of the exchange rate of the euro. Some investors are likely to be interested in acquiring securities similar to the ones they sold to the Eurosystem, giving banks an incentive to

grant new loans that can be used as underlying assets for securitisation or covered bond issuance.

These developments will have a beneficial effect on economic activity and help bring back euro area inflation closer to 2%. In fact, the rate of decline in bank lending to the private sector is already moderating and bank lending rates are trending downwards.

A positive impact can also be expected for Greece, subject, of course, to the conditionality of ECB decisions, most importantly the condition that Greece should follow a programme agreed with its partners.

## 5 GLOBAL FINANCIAL MARKETS

Global financial market conditions continued to improve in the first half of 2014. Gradually, however, from the third quarter onwards, increasing investor uncertainty about the banking sector of euro area countries, signs of economic recovery losing momentum in the euro area and slackening growth in the global economy led to increased volatility in European capital markets.

Against this background and given country-specific factors weighing on the rating of Greek government bonds (mainly associated with uncertainty about political developments), Greek government bond yields once again spiked, returning to levels not seen since the third quarter of 2013.

Developments in the Greek corporate bond market were also negative in 2014. During most of the year, the yields on Greek corporate bonds moved broadly in line with the yields on bonds issued by European non-financial corporations, which have higher credit ratings. From the end of October, however, Greek corporate bond yield developments decoupled from those in European corporate bonds and followed the same sharp upward course as Greek government bond yields.

Developments in the Greek stock market were also negative in 2014, albeit not throughout the entire year. The prices of shares on the Athens Exchange dropped significantly, especially bank shares, although the results of the ECB's recent Comprehensive Assessment showed that Greece's systemic banks were adequately capitalised.

## 6 THE GREEK BANKING SYSTEM

The strengthening of banks' capital bases and operating profits before provisions, the first steps towards addressing the issue of non-performing loans and the activation, as of 4 November 2014, of the Single Supervisory Mechanism (SSM) were the main developments for the Greek banking system in 2014.

First, in early 2014, the Bank of Greece released the findings of its stress test of Greek banks. This, together with the downward trend of Greek government bond yields at the time, gave banks easier access to capital market funding. Towards the end of the year, the ECB completed its Comprehensive Assessment, which reconfirmed the capital adequacy of Greek systemic banks.

Banks' operating profits (operating revenue minus operating expenses) have been improving steadily, owing to higher net interest income and to operating cost cuts under the banks' restructuring plans.

During most of 2014, Greek banks had easy access to interbank funding and also issued bank bonds on the international markets. They were, in addition, able to obtain medium-term liquidity at favourable terms through the Targeted Longer-Term Refinancing Operations (TLTROs).

Despite these favourable developments, the banking system continues to face serious challenges, first and foremost the need to address non-performing loans (NPLs). The ratio of NPLs to total loans remained particularly high

(September 2014: 34.2%, December 2013: 31.9%). On the upside, however, the pace of new NPL formation has slowed down markedly and the NPL coverage ratio from accumulated provisions has risen significantly.

Finally, the Single Supervisory Mechanism (SSM), which is the new banking supervision system composed of a supranational authority (the ECB) and the national competent authorities of the participating member countries, was activated on 4 November 2014. In order to ensure consistent supervisory practices and approaches, the ECB and the national authorities use a single rulebook, and a Joint Supervisory Team, formed of staff of the ECB and the national supervisors, is established for each significant bank. The ECB directly supervises some 120 significant banks, including Greece's four systemic banks. This direct supervision will involve examining banks' lending, borrowing and investment activities and overall compliance with European and national prudential regulation.

The decision by the ECB's Governing Council on 4 February 2015 (lifting the waiver of minimum credit rating requirements for marketable debt instruments issued or fully guaranteed by the Hellenic Republic) does not create liquidity problems for the Greek banking system: the banking system, now standing on sounder foundations after its recent consolidation, is well-capitalised and has access to liquidity, albeit at a much higher cost, from the Bank of Greece through the Emergency Liquidity Assistance (ELA) mechanism. Furthermore, if an agreement with our partners is reached soon, this decision by the ECB's Governing Council will be immediately revoked, as in similar cases in the past.

## 7 POSITIVE OUTLOOK FOR 2015

Based on the latest available data, GDP growth is projected to be positive and to pick up in 2016. The main elements of uncertainty weighing on the prospects for economic activity in



the medium term refer to the duration and outcome of negotiations with our partners, the possibility of an associated deterioration in financing conditions and reform fatigue.

If these uncertainties can be contained, then the economy can and should continue to recover in 2015, driven by exports of goods and services and by private consumption and supported also by rising business investment.

Exports of goods and services are expected to remain one of the growth drivers in 2015, with the global economic environment projected to improve as growth rates pick up both in the EU and the other markets and world trade strengthens. A positive impact is also expected from the further improvement in structural competitiveness and possibly in cost competitiveness, combined with restored access to financing for Greek businesses and an improving business climate.

Developments in disposable income, the declining general level of prices and reduced uncertainty are expected to affect consumer spending positively in the course of 2015. Private consumption is therefore expected to increase in the year as a whole, supported by the fall in oil prices and the ensuing strengthening of Greek households' real disposable income.

The favourable outlook for investment should be supported by (a) the deployment by domestic credit institutions and businesses of resources from the National Strategic Reference Framework (NSRF) and the utilisation of co-financing and guarantee instruments available from the European Investment Bank (EIB) and the National Fund of Entrepreneurship and Development (ETEAN); (b) further progress in major infrastructure projects – especially Greece's four main highways – and the potential of public-private partnerships, which have an immediate growth impact and can leverage investment capacity in the building materials industry and supporting services; (c) the Investment Plan for Europe

jointly promoted by the European Commission and the EIB through the establishment a new European Fund for Strategic Investments; and (d) the very accommodative stance of the single monetary policy which is expected to help improve financing conditions for sound businesses. A favourable impact will also come from the execution of projects under the Public Investment Programme with an overall budget of €6.4 billion for 2015.

Another factor that could considerably boost the investment climate is the completion of major privatisations already at an advanced stage. As the Bank of Greece has mentioned in the past, insofar as privatisations involve productive foreign direct investment, they can deliver a number of benefits for the privatised businesses, in terms of know-how transfer, modernisation and efficiency, and for the economy as a whole by enhancing competitiveness and extroversion, as well as by helping to reduce the government's borrowing requirements and – ultimately – public debt in the medium term.

The possible continued decrease in unit labour costs, sluggish aggregate demand and falling international oil prices are expected to drive price developments in 2015, with inflation expected to remain negative.

## **8 THE RECOVERY IS STILL FRAGILE AND LEAVES NO ROOM FOR COMPLACENCY**

As mentioned above, the main uncertainties weighing on the prospects for economic activity in the medium term refer to the duration and outcome of the negotiations with our partners, the possible ensuing deterioration in financing conditions, as well as fiscal and structural reform fatigue. Signs of uncertainty are already visible in the economic sentiment indicators, which appear to have lost some of their upward momentum in late 2014 and early 2015, as well as in the budgetary slippages in December 2014 and January 2015. Lower-than-expected growth in the euro area

and geopolitical risks are additional potential factors of uncertainty. On the other hand, the further decline in oil prices, the very accommodative stance of the ECB's monetary policy conducive to improved financing conditions, the prospect of a rebound of private investment once economic uncertainty dissipates, as well as the depreciation of the euro are expected to impact favourably on domestic economic activity.

## **9 ADOPTION OF A NATIONAL GROWTH POLICY FOCUSED ON REFORMS, FOR A DEFINITIVE EXIT FROM THE CRISIS AND ATTAINMENT OF SUSTAINABLE GROWTH**

Greece's positive macroeconomic performance in 2014 and optimistic prospects reflect the significant changes made in recent years with tangible benefits, but also serious negative side-effects. Key achievements include restored fiscal balance and the virtual elimination of the current account deficit, the latter reflecting a sharp contraction in domestic consumer and investment demand, but also an improvement in competitiveness. Also, headway was made with a number of structural reforms in the functioning of the State, while steps were taken to modernise the tax system and tax collection mechanism and to broaden the tax base. On the downside however, these positive results have taken a heavy toll on the economy and society in terms of income, employment and human and physical capital.

These hard-won achievements must be preserved and consolidated, as they provide a cornerstone for the desired shift towards a new, export-led growth model. This is why it is imperative to quell uncertainties and ward off the risks that could cancel out the substantial progress made and undermine growth. The tremendous sacrifices made by the Greek people must not be in vain.

Among the crucial matters being debated at present are the negotiations with our partners and the securing of smooth financing condi-

tions for the Greek economy and unhindered bank funding. If we want these negotiations to have a rapid and favourable outcome, there needs to be a compromise of views and a mutually-beneficial agreement based on facts, realism and foremost the will, jointly expressed by Greece and its partners, that Greece remain in the euro area.

One key area that can provide common ground for striking an agreement is the advancement of the structural reforms still pending. These reforms are much smaller in scope and would entail a low cost compared with the huge changes made in recent years at a very high price for Greek society. Once these pending reforms are completed, there will be nothing but gains ahead for the economy. Needless to say, Greece would then have to implement its own programme of further reforms to solidify its basis for sustainable growth and social well-being.

Our partners, for their part, can be expected to reiterate their decision, as explicitly stated at the Eurogroup meeting of 27 November 2012 to consider further measures to alleviate Greece's debt burden. This could be achieved by the methods envisaged in that Eurogroup statement or by other methods and would boost Greece's growth prospects, provided that economic policy stays committed to fiscal adjustment, primary surpluses and reforms to re-launch the economy. This would also allow the required primary surpluses to be gradually reduced, freeing up more resources for the financing of the economy. Let us not forget that such further measures to ensure a reduction of Greek public debt were, back in November 2012, made conditional to, and meant as a reward for, fiscal adjustment. This adjustment is now a reality.

Reaching an agreement with our partners may be a necessary condition for the recovery to take root and gain traction. However, it is not an adequate condition for jump-starting the economy. At the present crucial juncture, what we need is a comprehensive and coherent



growth plan geared towards strengthening the productive capacity through investment and, more importantly, through structural reforms.

**The first practicable measures that would pave the way in this direction include:**

**(a) Completing the reforms already launched, pursuing structural reforms in the goods and services markets and developing a “smart economy”.** The further opening-up of closed professions, as well as of those goods and services markets that, according to OECD recommendations, still lack effective competition, must be speeded up. The privatisation strategy needs to give priority to accelerating the processes presently in course that, as mentioned previously, would help increase the efficiency of the companies being privatised, improve competitiveness, make the economy more outward-oriented and – in the end – reduce public debt. Meanwhile, the available EU funding resources (under e.g. the NSRF, the Investment Plan for Europe) must be harnessed towards supporting knowledge and innovation and for exploiting our comparative advantages in sectors of the “smart economy”, including culture and creative industries.

**(b) Consolidating fiscal achievements.** The fiscal achievements must be preserved and consolidated. Efforts must focus on structural measures to strengthen the independence and efficiency of tax administration, with the aim to tackle tax and contribution evasion. The application of modern, risk-based tax audit methods and the activation of a nationwide asset registry are fundamental in the fight against tax evasion.

**(c) Reviewing tax exemptions and other favourable tax treatment.** Tax exemptions and favourable tax treatment, including reduced VAT rates, need to be reviewed and streamlined. Actions that could start immediately include the scrutiny, cost

analysis and gradual abolition of various exemptions from the general tax rules, unless they concern: (a) social groups hard hit by the crisis or living in conditions of poverty or (b) growth incentives providing much-needed stimulus to economic activity.

**(d) Lowering tax rates and reviewing the efficiency of public spending.** To the extent that action under the preceding point is implemented, a lowering of the direct and indirect tax rates will become possible, with positive impact on growth without jeopardising fiscal sustainability. On the expenditure side, efforts to better target social benefits must continue, while the existing exemptions from the general pension system provisions must be re-examined. The strengthening of the financial framework for local governments needs to be completed, in order to curb the accumulation of arrears, while the newly established Independent Fiscal Council must assume an enhanced and effective role.

**(e) Increasing public sector efficiency.** The remaining reforms in the public sector, mainly geared towards greater operational efficiency, transparency and equitability, must be taken forward. The generalised application of automated online procedures is an important means for improving the interaction of citizens and businesses with the State and can further serve as a backstop against corruption. Completing the national cadastre and eliminating the chronic obstacles to the efficient and speedy delivery of justice are fundamental prerequisites for a well-functioning state, as are the efficient deployment of human resources and a transparent staff appraisal framework that rewards productivity and work ethic.

**(f) Strengthening active labour market policies and reducing the number of the unemployed.** The absorption of the unemployed is expected to be a gradual process that will take time, given the current slack in the

labour market. A de-escalation of unemployment – particularly among young and long-term unemployed – and a gradual recovery of the employment rate are expected to benefit, in addition to growth, from active employment policies, as programmes and actions financed by the NSRF 2014-2020 are phased in. Actions that promote employment, for instance through the development of local employment partnerships and vocational training programmes, will also be instrumental in tackling unemployment, especially its structural component. However, this strengthening of active policies needs to be combined with eligibility controls and results-based assessment of programmes and with a fight against undeclared and uninsured work.

**(g) Effective management of non-performing loans (NPLs).** The effective management of non-performing loans will have a positive knock-on effect on lending to sound businesses, given that banks' ability to extend new credit is closely linked with the smooth and timely repayment of existing loans. The NPL management model to be chosen must: (a) not give rise to moral hazard; and (b) enable the identification of the most appropriate workout solutions and, where possible, ease the burden on cooperating borrowers facing temporary difficulties in servicing their debt. Apart from effective NPL management, the consolidation of positive growth rates will obviously contribute significantly to improving the NPL recovery rate, by generating a self-reinforcing process of NPL reduction as the debt servicing capacity of households and businesses increases.

**(h) Securing the smooth financing of the Greek economy.** The capacity of the banking system to finance the real economy does not depend on capital adequacy alone, but also on its liquidity. Following the recent capi-

tal increases, Greek banks have a sufficient capital base, but their liquidity has come under considerable strain, especially in the past few months. The stock of outstanding deposits is significantly lower today than it was before the crisis, plus the banks still have no access to money markets, except for very small amounts and at high cost. After the recent decision by the ECB's Governing Council (4 February 2015) to exclude securities issued or guaranteed by the Hellenic Republic from the list of collateral acceptable for open market operations, the value of eligible securities held in Greek bank portfolios dropped significantly. Greek banks can still obtain liquidity from the Bank of Greece through the emergency liquidity assistance (ELA) mechanism, but, as entailed by the rules of the Eurosystem, at substantially higher cost. This is why striking an agreement with our partners is critical to re-launching growth.

\* \* \*

Over the past few years, we have covered some very rough ground at tremendous cost to the whole of Greek society. If we can address the relatively few issues still pending and complete the first phase of the effort launched in 2010, we will then be able to move on to the next phase, in which the growth potential of the economy will be considerably enhanced. Rapid growth will enable the implementation of more effective policies for restoring social cohesion, which has been eroded by the crisis. The priorities of these policies should be geared towards reducing unemployment and correcting inequality in the distribution of the burden from the adjustment effort caused by dysfunctions in the tax system and across-the-board income cuts. For this to happen, we must remain firmly committed to the country's European course and soon come to an agreement with our partners that will secure such a course.

### III THE GLOBAL AND EUROPEAN ECONOMIC ENVIRONMENT<sup>1</sup>

*It is estimated that the world economy grew by 3.3% in 2014, driven by emerging and developing Asia, though its contribution was smaller than in previous years, and by certain advanced economies such as the United States and the United Kingdom. After their downward revision, latest projections now point to a pick-up of global growth to 3.5% in 2015, in line with rising world trade volumes and against a background of sharp falls in world oil prices.*

*The euro area, after two years of recession, is expected to have recorded positive growth (0.8%) in 2014; for 2015, GDP growth in the euro area is expected to accelerate to 1.0% according to the latest Eurosystem staff projections (December 2014) and to 1.2%-1.3% according to more recent forecasts by the IMF (January 2015) and the European Commission (February 2015). Recovery in 2015 will be supported by stronger private consumption and investment, which should benefit from the highly accommodative monetary policy, improved financing conditions and milder fiscal adjustment, lower oil prices, and a gradual recovery of exports due to the depreciation of the euro since mid-2014. Inflation in 2014 stood well below the ECB's medium-term objective. The countries of South Eastern Europe continued to post positive growth rates, and average growth in the region as a whole is expected to pick up slightly in 2015.*

*This outlook is surrounded by considerable uncertainty, as geopolitical risks and public and private debt levels remain high.*

*However, the reduction of global external macroeconomic imbalances in the past few years (see Box III.3), which in many cases has been of a structural nature, makes the world economy less vulnerable to financial or other shocks.*

*At the EU level, alongside the strengthening of the institutional architecture of economic governance, particularly with the decisions for the completion of the banking union, there have also been decisions and initiatives (such*

*as the creation of the European Fund for Investment) aimed to bolster economic recovery, as well as standard and non-standard monetary policy measures on the part of the ECB aimed to address deflationary pressures in the euro area (see Box III.1). A positive institutional development was the enlargement of the euro area as of 1 January 2015, when Lithuania adopted the single currency.*

#### I DEVELOPMENTS AND PROSPECTS IN THE WORLD ECONOMY AND THE EURO AREA AND POLICY RESPONSES<sup>2</sup>

##### World economy

The **growth rate of world GDP** is estimated to have remained unchanged at moderate levels (3.3%) for a third consecutive year in 2014, while a small acceleration to 3.5% is expected in 2015. Despite a gradual further improvement of financial conditions in the first eight months of the year, particularly in the countries most troubled by the debt crisis, geopolitical risks to global growth increased in the course of the year, weighing on a recovery of fixed capital formation and world trade. Developments varied widely across major economies and regions: growth accelerated in all advanced economies, while it edged down slightly in developing countries. In advanced economies, monetary policies remained highly accommodative, while fiscal policies were also supportive to recovery, with a markedly weaker pace of structural deficit reduction.

**GDP growth in advanced economies** as a whole is estimated to have picked up in 2014, to 1.8% from 1.3% in 2013, although developments were uneven across countries. More specifically, growth accelerated considerably in the United Kingdom and picked up slightly

<sup>1</sup> Based on information and data available on 12 February 2015.

<sup>2</sup> Main sources of data: International Monetary Fund, *World Economic Outlook Update*, January 2015; OECD, *Economic Outlook*, Preliminary Version, November 2014; ECB, Eurosystem Staff Macroeconomic Projections, December 2014; and European Commission, *European Economic Forecast: Winter*, February 2015.

**Table III.1 Key macroeconomic aggregates of the world economy**

	Number of countries	Share in GDP <sup>1</sup> (%)	Output (annual percentage changes in real GDP)			Inflation <sup>2</sup> (annual percentage changes)			Fiscal balance <sup>3</sup> (% of GDP)			Gross government debt (% of GDP)			Current account balance (% of GDP)		
			2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015	2013	2014	2015
<b>World total</b>	<b>189</b>	<b>100.0</b>	<b>3.3</b>	<b>3.3</b>	<b>3.5</b>	<b>3.6</b>	<b>3.9</b>	<b>3.9</b>									
<i>1. Advanced economies</i>	36	43.6	1.3	1.8	2.4	1.4	1.4	1.0	-4.3	-3.9	-3.1	105.5	105.7	105.3	0.4	0.3	0.2
United States		16.4	2.2	2.4	3.6	1.5	2.0	2.1	-5.8	-5.5	-4.3	104.2	105.6	105.1	-2.4	-2.5	-2.6
Japan		4.6	1.6	0.1	0.6	0.4	2.7	2.0	-8.2	-7.1	-5.8	243.2	245.1	245.5	0.7	1.0	1.1
United Kingdom		2.3	1.7	2.6	2.6	2.6	1.5	1.0	-5.8	-5.4	-4.6	87.2	88.7	90.1	-4.5	-4.1	-3.8
Euro area	19	12.3	-0.5	0.8	1.3	1.4	0.4	-0.1	-2.9	-2.6	-2.2	93.1	94.3	94.4	2.4	2.8	3.2
<i>2. Emerging and developing economies</i>	153	56.4	4.7	4.4	4.3	5.9	5.4	5.7	-1.7	-2.1	-2.0	39.3	40.1	40.7	0.8	0.8	0.5
China		15.8	7.8	7.4	6.8	2.6	2.3	2.5	-0.9	-1.0	-0.8	39.4	40.7	41.8	1.9	1.8	2.0
Russia		3.4	1.3	0.6	-3.0	6.8	7.4	7.3	-1.3	-0.9	-1.1	13.9	15.7	16.5	1.6	2.7	3.1

Sources: IMF, *World Economic Outlook Update*, January 2015, *World Economic Outlook Database*, European Commission, *European Economic Forecast*, Winter 2015, February 2015.

Notes: Estimates for 2014 and forecasts for 2015.

1 Percentage share in world GDP in 2013, based on purchasing power parities.

2 HICP for the euro area and the UK, CPI for the other countries. Year averages.

3 Of general government.

in the United States. A significant slowdown was seen in Japan, largely reflecting the effect of higher consumption tax rates introduced in 2014. The euro area returned to positive but still weak growth rates (see Table III.1). Overall, strengthened domestic demand, mainly private consumption and fixed capital formation, has more than offset the subdued foreign demand, which was affected by geopolitical tensions and the associated uncertainties. The implementation of fiscal adjustment programmes (in all advanced economies except Japan) and private sector deleveraging continued, albeit at a more gradual pace, thereby allowing borrowing costs to decline further. To thwart the risk of a vicious circle of deflation and weak growth in the euro area, the ECB adopted a new set of standard and non-standard measures. The exchange rate of the euro, despite a weakening since mid-2014 vis-à-vis the US dollar and the pound sterling, appreciated in effective terms on an average annual basis (see Chart III.1).

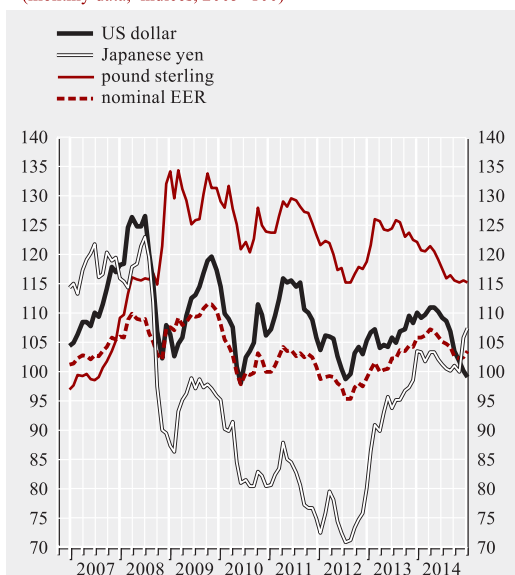
In **emerging and developing economies**, GDP growth is estimated to have declined further, to 4.4% in 2014 from 4.7% in 2013, mainly due to slower growth rates in China, Russia and Latin America.<sup>3</sup> The factors behind the deceleration in emerging economies varied across individual countries, but common features were subdued active demand globally, a slowdown of trade mainly between emerging economies and lower consumption demand.

**Inflation** in advanced economies as a whole remained low and unchanged at 1.4% in 2014, reflecting continued slack as well as the fast deescalation of world crude oil prices in the second half of 2014. Inflation rose in the United States to 2.0% (from 1.5% in 2013) and in Japan (to 2.7% from 0.4% in 2013). However it fell considerably in the euro area, to 0.4% from 1.4% in 2013, standing well below the ECB's medium-term target of 2.0%.

3 After a number of years, Argentina fell back into recession.

**Chart III.1 Bilateral exchange rates and the nominal effective exchange rate of the euro**

(monthly data,<sup>1</sup> indices, 2005=100)



Source: ECB.

<sup>1</sup> Latest observation: December 2014.

Note: an increase (decrease) in the indices implies an appreciation (depreciation) of the euro.

**Fiscal policies** in advanced economies remained restrictive, but consolidation was milder. Structural deficits narrowed for a fourth consecutive year, albeit at a more moderate pace, in an effort to eliminate the risks posed by the extremely high and rising public debt levels in several advanced economies.

**Monetary policies** in the advanced economies remained very accommodative in 2014, keeping policy rates at almost zero and thus supporting the private sector's recovery efforts and fiscal consolidation. In the United States, the Federal Reserve concluded its third quantitative easing programme (QE3) after the target of bringing the (monthly) unemployment rate below 6% was met. In Japan, the central bank decided to inject more liquidity to the Japanese economy, through its quantitative and qualitative easing (QQE2) programme. In the euro area, against the background of a persistently high unemployment rate, continued weakness in fixed investment and heightened risks of deflation and a new recession since

spring 2014, the ECB adopted new monetary policy measures, both standard and non-standard. More specifically, it lowered its key interest rate on two occasions, in June and September 2014, bringing it to 0.05%, and introduced further non-standard measures aimed to support credit to the real economy, namely (i) the Targeted Longer-Term Refinancing Operations (TLTROs), (ii) the Asset-Backed Securities Purchase Programme (ABSPP), and (iii) the Covered Bond Purchase Programme (CBPP3) (see Chart III.2). Also, on 22 January 2015, while also leaving open the possibility of taking further steps, the ECB announced an expanded asset purchase programme, bringing the combined monthly asset purchases to €60 billion per month.<sup>4</sup>

The rate of increase in the **volume of world trade in goods and services** is estimated to have edged down slightly in 2014 (to 3.1% from 3.4% in 2013), negatively affected by the trade sanctions against Russia and the latter's retaliation, heightened geopolitical uncertainties and the slowdown of international trade between emerging economies. World trade growth is projected to pick up to 3.8% in 2015, remaining however well below its long-term average (5.9% in the period 1990-2013).

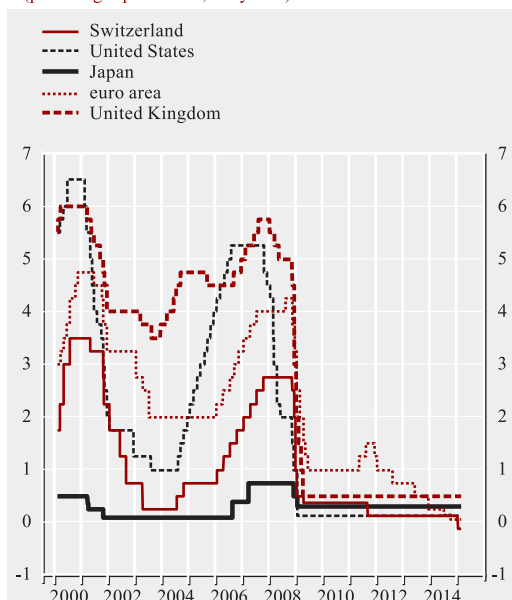
**World crude oil prices** remained high in the first half of the year, but then fell considerably, mainly due to excess global supply but also reduced demand (see Chart III.3). At average annual levels, oil prices are estimated to have declined by 7.5% in 2014 (compared with a decrease of 0.9% in 2013), despite the serious geopolitical tensions in the Middle East and Ukraine, as weak global demand coincided with higher total supply of crude oil. In view of the United States' growing shale oil extraction and decreasing energy dependency on energy imports, OPEC countries decided to keep their total oil production unchanged, in an effort to recover their global market shares by bringing world prices, closer to break-even levels for new US shale produc-

<sup>4</sup> For more information, see Chapter IV of the present Report.



**Chart III.2 Key central bank rates**  
(January 2000–1 February 2015)

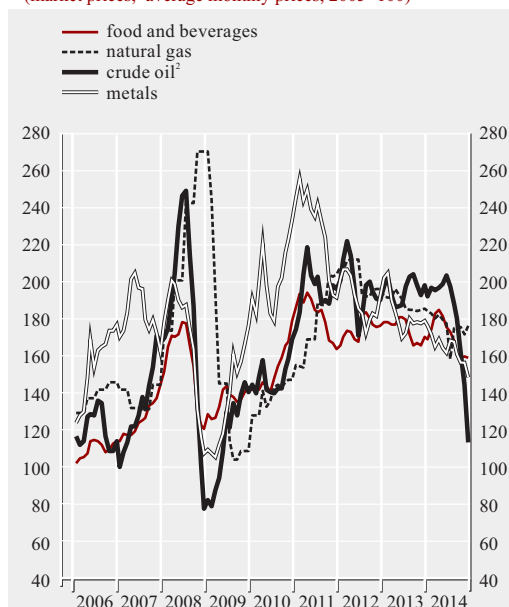
(percentages per annum; daily data)



Sources: Euro area: European Central Bank, interest rate on main refinancing operations; United States: Federal Reserve Bank, federal funds target rate; Japan: Bank of Japan, official discount rate; UK: Bank of England, repo rate; Switzerland: Swiss National Bank, average target range for three-month Libor.

**Chart III.3 Primary commodity prices**  
(January 2006–December 2014)

(market prices,<sup>1</sup> average monthly prices, 2005=100)



Source: IMF.

1 Latest observation: December 2014.

2 Average international price of three types of crude oil (UK Brent, West Texas Intermediate and Dubai).

ers.<sup>5</sup> Lower crude oil prices are expected to boost world economic activity in 2015, while the rise in risks to the global financial system stemming from reduced revenue and financial difficulties in some oil-exporting countries is estimated to be relatively limited.<sup>6</sup> In 2014, a considerable decline was also recorded in world natural gas prices, although this market is not as homogeneous as that of crude oil.

The **prices of non-fuel commodities** are estimated to have fallen less (4.0% in US dollar terms), with metals declining by 10.3% and food and beverages by 2.1% at average annual levels. The prices of precious metals fell in 2014, in anticipation of an increase in US policy rates in the course of 2015.

In the **United States**, GDP growth in 2014 is expected to be well above initial projections and stand at 2.4%, mainly reflecting the effect of a very strong third quarter (+5.0%).<sup>7</sup> The

worsening in net exports was fully offset by an acceleration in domestic demand. A milder fiscal retrenchment in a context of a very accommodative monetary policy stance and the improved financial condition of households, together with a further decline in the unemployment rate, bolstered consumption and investment expenditure. The external balance had a negative contribution to growth in 2014, as imports grew faster than exports (4.2% and 3.4%, respectively). The unemployment rate, which had shrunk to 4.6% before the crisis and then rose to 9.6% (in 2010), fell considerably again to 6.2% in 2014.

5 The level of crude oil prices at which US shale drilling companies would remain sustainable is estimated at 60 to 80 US dollars/barrel – see Rystad Energy (<http://www.rystadenergy.com/AboutUs/NewsCenter/PressReleases/shale-remains-economical-with-lower-prices>) and Bloomberg New Energy Finance (<http://www.bloomberg.com/news/2014-10-17/oil-is-cheap-but-not-so-cheap-that-americans-won-t-profit-from-it.html>).

6 See IMF, “Seven questions about the recent oil price slump”, R. Arezki and O. Blanchard, 2 December 2014.

7 An 11-year high in the United States.

For 2015, GDP growth is expected to pick up to 3.6% and the unemployment rate to decline further to 5.6%, owing mainly to robust domestic demand.

In **Japan**, GDP growth is estimated to decline sharply to 0.1% from 1.6% in 2013, as the pre-announced increase in the consumption tax rate from 5% to 8% in the second quarter of the year led to a contraction of private consumption. Against a background of subdued foreign demand, despite the large depreciation of the yen (estimated at 18.5% in 2013 and 5.5% in 2014 in nominal effective terms), the Japanese trade deficit widened to 2.1% of GDP from 1.9% in 2013. The consumption tax hike, on the other hand, led – as planned – to a much higher inflation (2.7%, up from 0.4% in 2013), but also to an improvement in government revenue, helping to reduce the high fiscal deficit. For 2015, GDP growth is projected to accelerate only slightly to 0.6%.

In the **United Kingdom**, growth is expected to have been higher than expected, at 2.6% from 1.7% in 2013, mainly as a result of a strong rebound in consumption and private investment, while efforts for fiscal consolidation and a reduction of the high fiscal deficit (-5.4% of GDP in 2014) were more relaxed and the unemployment rate fell significantly. The strong appreciation of the pound sterling (approximately 7% in 2014 in nominal effective terms) contributed to the persistence of a high current account deficit (4.1% of GDP) and led to a drop in inflation to 1.5% from 2.6% in the previous year.

In **China**, there are signs of a more permanent and not cyclical slowdown of growth compared with the strong performance of past years, which should have significant and broader repercussions for world trade and international commodity prices. Though remaining high, GDP growth is estimated to have decelerated further to 7.4% in 2014 from 7.8% in 2013. Export growth, which averaged 16% in the period 1994-2009, slowed down further to 4.1% from 8.7% in 2013 and the current account sur-

plus is estimated to have remained unchanged at 2013 levels. For 2015, GDP growth is projected to decline to 6.8%, the lowest level in more than two decades, while the Chinese authorities are expected to take further measures to enhance growth, given that inflation remains low.

In **Russia**, economic activity is estimated to have decelerated further in 2014 (to 0.6% from 1.3% in 2013), affected by US/EU sanctions over the Ukrainian conflict, as well as by lower world oil prices. In 2015, GDP is projected to contract by 3.0%, as the negative macroeconomic conditions, falling oil prices and geopolitical uncertainties will continue to weigh heavily on the economy.

#### **Euro area**

After two consecutive years of recession, the **euro area** economy is estimated to have recovered in 2014, posting a GDP growth rate of 0.8%, from -0.5% in 2013. The combined contribution of private consumption and investment to the recovery was greater than that of net exports, due to weak foreign demand. Among the factors that have supported domestic demand, and thereby recovery efforts in the euro area, are the measures adopted by the Eurosystem, which ensure a monetary policy stance that will remain extremely accommodative, the observed improvement in financing conditions in the euro area gradually feeding into the real economy, the progress with fiscal consolidation and structural reforms in Member States and the fall in energy prices, supporting real disposable income. However, recovery from the recession of 2012-2013 has been weaker than anticipated and remains fragile and uneven across individual economies. Growth is shadowed by the weaknesses, as a legacy of the crisis, in the private (financial and non-financial) and the public sector – particularly in terms of high indebtedness and market fragmentation – as well as by sanctions against Russia, heightened uncertainty and the possibility of persisting very low inflation levels.

**Developments vary considerably across euro area countries.** According to estimates, two of the 19 euro area countries (after the entry of Lithuania on 1 January 2015) were in recession in 2014, compared with eight in 2013. Among the countries that faced serious macroeconomic imbalances during the crisis, Greece, Spain and Portugal recovered from the recession, while Cyprus and Italy are estimated to have recorded a contraction in GDP for a third consecutive year.

To a large extent, economic recovery has not been accompanied by significant job creation. The **rate of unemployment** in the euro area, although estimated to have dropped slightly to 11.6% in 2014 from its historical high 12.0% in 2013, has remained very high and is only expected to record a small decrease in 2015. Divergences in unemployment rates across the euro area countries are expected to remain large in 2015 as well. Lower but still very high unemployment rates are projected for 2015 in those euro area countries that had the most serious internal and external imbalances and structural weaknesses prior to the crisis, such as Greece, Spain, Cyprus and Portugal, while Germany, the Netherlands and Austria keep recording the lowest unemployment rates in the euro area.

Since December 2014 **inflation** has been in negative territory (-0.2%), despite the new monetary policy measures adopted by the ECB in the course of the year. Deflationary pressures are generated by a persistently large output gap (2.8% of potential GDP in 2014), the appreciation of the euro in 2013 and 2014 (at average annual levels) and the sharp fall in energy commodity prices in the second half of the year (see Chart III.3). On the other hand, the weakening of the euro since mid-2014 is exerting a dampening effect on deflationary pressures.

Almost all **euro area economies** continued to pursue policies to reduce fiscal deficit, though at a slower pace than in previous years, in order to stave off debt crisis risks and ensure

a decline in government bond yields and a return to markets for the economies that had been excluded in 2010-2012. The efforts of all euro area countries on the fiscal front in the past five years have indeed succeeded in stabilising the high public debt-to-GDP ratios, while the distressed economies saw the yields on their government bonds fall considerably, on average, in 2014 relative to 2013. Efforts should now focus on bringing public debt down to sustainable levels and, more generally, on complying with the Stability and Growth Pact, which allows sufficient flexibility for growth-friendly fiscal consolidation.<sup>8</sup> At the same time, the completion of structural reforms would enhance the economy's productive capacity and long-term fiscal sustainability.

The **structural fiscal deficit** in the euro area as a whole is estimated to have declined further in 2014, to 1.0% of GDP from 1.2% in the previous year, and is projected to remain unchanged in 2015. The general government primary balance, negative in the previous years, is estimated to have turned positive in 2014 (+0.1% of GDP from -0.1% in 2013) and is projected to improve further in 2015. Greece, along with ten other countries of the euro area-19, achieved a primary surplus in 2014. The total general government deficit in the euro area is estimated to have narrowed further to 2.6% of GDP in 2014 from 2.9% in 2013 (and 3.6% in 2012), while a further small decline to 2.2% is projected for 2015. Gross government debt as a percentage of GDP rose slightly in 2014, to 94.3% from 93.1% in 2013, but is projected to start decelerating in 2016. The **gross government debt** to GDP ratios decreased slightly in 2014 in Ireland and Portugal but increased in Italy, Spain and Greece.

For **2015**, GDP growth is expected to pick up slightly to 1.0%, according to the latest Eurosystem staff projections (December 2014), and

<sup>8</sup> See the recent guidance provided by the European Commission in its Communication entitled "Making the best use of the flexibility within the existing rules of the Stability and Growth Pact", 13 January 2015), which does not imply a change in the SGP rules but allows for more flexible implementation.



between 1.2% and 1.3% according to more recent forecasts by the IMF (January 2015) and the European Commission (February 2015). However, growth will remain slow and fragile, and to a large extent without significant job creation. All the distressed economies that are subject to an adjustment programme are expected to achieve positive and quite robust growth rates, while growth in France and Italy should remain modest. The **uneven and asymmetric**

adjustment of external imbalances observed across the euro area economies (all those with external deficits posted surpluses, but those in surplus did not reduce their excessive surpluses) and the unwillingness of almost all euro area countries towards fiscal consolidation and structural reforms, as well as the very high unemployment rates in some countries, along with the fall in inflation, constitute the major obstacles to a more robust recovery.

### Box III.1

#### DECISIONS BY THE EU INSTITUTIONS AND DEVELOPMENTS IN THE ECONOMIC PROGRAMMES OF EURO AREA COUNTRIES

##### Decisions for the completion of the Banking Union

The year 2014 saw considerable progress towards the completion of the Banking Union. Following its establishment in 2013, the **Single Supervisory Mechanism (SSM)** commenced operations on 4.11.2014. As of that date, the European Central Bank (ECB) is responsible for the effective functioning of the SSM and assumes direct supervision of the 120 most significant banking groups of the euro area countries and of the non-euro area EU Member States participating in the mechanism. In preparation for the SSM, the ECB completed a comprehensive assessment of the euro area's largest banks in October, in an aim to foster transparency and strengthen confidence in European banks.

In addition, the **Single Resolution Mechanism (SRM)** was established in April 2014, after a favourable vote of the European Parliament, and is expected to be fully operational by 1.1.2016. The SRM will ensure uniform application of common rules for the recovery and resolution of banking institutions in accordance with the relevant EU Directive adopted in April 2014 (Bank Recovery and Resolution Directive),<sup>1</sup> and will be supported by the **Single Resolution Fund (SRF)**, which will finance the resolutions. Finally, April 2014 also saw the conclusion of an agreement on the recasting of the Directive on the harmonisation of national deposit guarantee schemes.<sup>2</sup>

##### Euro area enlargement

On 1.1.2015 **Lithuania** became the 19th country to join the euro area, after taking exceptional measures to recover from the crisis and meet the convergence criteria and achieving a sound fiscal performance and significant reforms. Lithuania automatically also joined the SSM, with three of its banks coming under the direct supervision of the ECB.

##### Initiatives of the new European Commission – The Investment Plan for Europe

The **new European Commission**, headed by Jean-Claude Juncker, took office on 1.11.2014. The new Commission's work programme will be centred on boosting investment, accelerating structural reforms and pursuing fiscal consolidation.

<sup>1</sup> Directive 2014/59/EU, 15.5.2014, Official Journal L 173/190, 12.6.2014.

<sup>2</sup> Directive 2014/49/EU, 16.4.2014, Official Journal L 173/149, 12.6.2014.

Drawing on Jean Claude Juncker's ten political guidelines, the Commission's work programme for 2015 will focus on 23 initiatives.<sup>3</sup> Among them, the **Investment Plan for Europe (IPE)**, a joint effort between the Commission and the European Investment Bank (EIB) designed to mobilise €315 billion of investment in the real economy over the next three years, thereby enhancing Europe's competitiveness and boosting job creation. At the core of the IPE is the setting up of a **European Fund for Strategic Investments (EFSI)**, which should be operational by June 2015. The EFSI will be backed by a guarantee of €16 billion created under the EU budget and an additional €5 billion from the EIB's own resources. The EFSI will also be open to capital contributions from the Member States. It is estimated that the EFSI will be able to achieve an overall multiplier effect of 1:15 in real investment, by attracting and crowding in private investors.<sup>4</sup> The final multiplier effect will depend on the mix of activities and the specific features of each project.

The EFSI will finance strategic investments of European significance in broadband and energy networks, transport infrastructure, education, research and innovation, renewable energy and energy efficiency (leading to investments of around €240 billion), but it will also support risk finance for SMEs and middle capitalisation (mid-cap) companies (leading to investments of around €75 billion).

According to European Commission estimates, the IPE has the potential to add €330-€440 billion to the EU's GDP and to create 1 to 1.3 million new jobs over the next three years.

Finally, as stressed by the European Commission, the realisation of the IPE target for extra investment in the real economy will also require **support from policies at the national level**. Member States with fiscal room for manoeuvre should increase public investment, while those with more limited fiscal space should prioritise investment- and growth-related public expenditure. Barriers to investment must also be removed and the regulatory framework improved, so as to create better conditions for investment and growth.

On 19.12.2014 the European Council endorsed the Commission's proposal for the IPE. The proposal for a **Regulation on the EFSI**, submitted on 13.1.2015, will be discussed by the European Parliament and the Council so as to swiftly arrive at an agreement on the launch of the EFSI by June 2015 at the latest (see also footnote 8 in the main text).

#### **Developments in the economic adjustment programmes of euro area countries**

The completion of the fourth review of the second economic adjustment programme for Greece paved the way to the approval in April 2014 of disbursements of €8.3 billion from the European Financial Stability Facility (EFSF) and of €4.6 billion from the IMF. As the next (i.e. fifth) review of the programme, which started in September 2014, could not be completed by the end of the year, the EFSF approved the Greek authorities' request for a technical two-month extension of

<sup>3</sup> Jean-Claude Juncker's 10 political guidelines focus on the following areas: (1) jobs, growth and investment; (2) a digital single market; (3) energy and climate change; (4) the internal market; (5) economic and monetary union; (6) a free trade agreement with the US; (7) justice and fundamental rights; (8) migration; (9) foreign policy; and (10) democracy and representation (Jean-Claude Juncker, "A new start for Europe: My agenda for jobs, growth, fairness and democratic change – Political guidelines for the next European Commission, Opening Statement in the European Parliament Plenary Session", Strasbourg, 15.7.2014). For the 23 initiatives of the new Commission, see European Commission, Communication from the Commission "Commission Work Programme 2015: A new start", Annex I, 16.12.2014.

<sup>4</sup> It is estimated that the total initial endowment of €21 billion will help reach an initial multiplier effect of 1:3, meaning that every €1 of risk protection by the Fund would generate an extra €3 of financing in subordinated debt in a certain project by the institutions involved (the EIB and the European Investment Fund-EIF). According to calculations, this would allow private investors to invest €5 in the safer, senior tranches of that same project, bringing the multiplier effect up to 1:5. The overall multiplier effect of 1:15, estimated based on historical experience from EU and EIB programmes, would yield €315 billion of additional finance for investment over the years 2015-2017 (European Commission, Communication from the Commission "An investment plan for Europe", Brussels, 26.11.2014).

the economic adjustment programme on 19.12.2014. The decision on the extension provides for the disbursement of the last loan tranche of €1.8 billion in late February 2015 and for the transfer of Securities Markets Programme (SMP) income amounting to €1.9 billion, subject to prior successful completion of the fifth review. Meanwhile, on 8.12.2014 the Eurogroup reiterated its support for granting Greece an ESM Enhanced Conditions Credit Line (ECCL)<sup>5</sup> after the expiry of the current programme. On 11.2.2015 the Eurogroup had a first briefing from Greek officials on the newly elected government's plans regarding the economic programme and decided to continue discussions at the regular Eurogroup meeting of 16.2.2015.

The year 2014 also saw the conclusion of the financial assistance programmes for **Spain**<sup>6</sup> and Portugal. Just like Ireland after the conclusion of its programme at the end of 2013, Spain and **Portugal** are now both subject to “post-programme surveillance (PPS)” – i.e. a regular monitoring of their repayment capacity until at least 75% of the financial assistance they have received has been repaid.

The fifth review of the economic adjustment programme for **Cyprus** was discussed at the Eurogroup meeting of 6.11.2014, following the review mission completed by the troika staff teams in July 2014 and the progress achieved by Cyprus towards implementing an effective foreclosure framework, paving the way to the disbursement of €350 million from the ESM in December. However, the IMF postponed the conclusion of the review procedures necessary for the disbursement of €86 million, on account of a law passed by the Cyprus House of Representatives in late December 2014 suspending the implementation of the foreclosure bill. As mentioned in a joint statement from the IMF, the Commission and the ECB on 6.2.2015, the application of the foreclosure framework and the adoption of modern insolvency legislation are key programme commitments. As a result of their suspension, reaching a staff-level agreement on the completion of the review was not possible.

<sup>5</sup> Eurogroup Statement on Greece, Brussels, 8.12.2014.

<sup>6</sup> Since July 2012 Spain has received a total of around €41.4 billion to recapitalise its banking system.

## 2 THE ECONOMIES OF SOUTH-EASTERN EUROPE<sup>9</sup>

It is estimated that most countries of the South-Eastern Europe have continued recording **positive growth rates** in 2014. Yet, despite their quite satisfactory economic performance at least in terms of domestic activity, these economies face significant challenges associated with the slowdown in private investment, exports and employment, but also with geopolitical risks, including the Ukrainian conflict.

Though remaining positive, growth rates seem to be weakening in most countries, in line with projections by international organisations<sup>10</sup> expecting some slowdown of economic activity in the second half of the year (see Table III.2).

The weaker growth rates in the region reflect country-specific factors. In more detail, factors such as declines in industrial production and investment and the adverse impact of the floods in May have dragged down growth in several countries, mainly in the Western Balkans. The marked deceleration of growth in Turkey was mostly associated with subdued domestic active demand as a result of declines in private spending, in particular investment, as well as reduced public expenditure. By contrast, the strong growth performance of FYROM and, to a lesser extent,

<sup>9</sup> Albania, Bosnia-Herzegovina, Bulgaria, Montenegro, Former Yugoslav Republic of Macedonia (FYROM), Romania, Serbia and Turkey.

<sup>10</sup> European Commission (EC), International Monetary Fund (IMF) and European Bank for Reconstruction and Development (EBRD).

## Box III.2

### COOPERATION BETWEEN CENTRAL BANKS OF SOUTHEAST EUROPEAN COUNTRIES – JOINT PUBLICATION OF HARMONISED LONG-RUN TIME SERIES ON MONETARY, FINANCIAL AND OTHER MACROECONOMIC VARIABLES

In the context of close cooperation between the central banks of SE European countries, the Bank of Greece, together with the central banks of five other countries of the region (Albania, Bulgaria, Romania, Serbia and Turkey) and the central bank of Austria, agreed to contribute to a joint publication of harmonised long-run time series on monetary, financial and other macroeconomic variables of the SE European countries. The first fruits of what is expected to be a long-term cooperation was the statistical database entitled “*South-Eastern European Monetary and Economic Statistics from the Nineteenth Century to World War II*” and the publication of a volume by the same name in December 2014.<sup>1</sup>

The monetary and financial history of the European periphery countries and especially of SE Europe remains largely unexplored, as the lack of reliable statistical data on crucial variables has long been a handicap.

The above-mentioned publication constitutes a long-overdue tool for the systematic research and study of particular problems faced by peripheral countries at times of international crisis, such as credit shortages, capital flight and external imbalances. Such problems, when combined with fiscal imbalances, can lead to deep recession, solvency crisis and even total economic collapse.

<sup>1</sup> Both the statistical database and the publication are freely accessible through the websites of the participating national central banks. For access through the Bank of Greece, visit <http://www.bankofgreece.gr/Pages/el/Publications/Studies/seemhn.aspx>.

of Bulgaria and the recovery of the Romanian economy were driven by a rebound of private consumption. The increased geopolitical risks do not seem so far to have had a significant impact on the countries of the region, while Turkey is more likely affected by the crisis in its neighbouring countries (Syria and Iraq).<sup>11</sup>

For 2015, economic activity in the countries of the region should continue to be supported by a gradual recovery in domestic demand, whereas export activity is expected to remain moderate, reflecting relatively low demand from the region's major (European) trade partners. The average growth rate in the region (excluding Turkey) is estimated to be close to 2.1% in 2014 (down from around 2.4% in 2013) and then pick up slightly in 2015. In Turkey, the rate of increase in GDP is estimated to have slowed down considerably to 2.8% in 2014, while a slight acceleration to

3.3% is expected for 2015 due to the lagged effect of the expansionary monetary policy.

**Inflation rates** in most countries of the region, with the exception of Turkey, remain very low. This reflects the relatively slow pace of closing of the output gap in these economies, as well as the sharp fall in energy and food commodity prices. At the same time, low imported inflation from the euro area is another factor behind low inflation, in particular for countries with national currencies pegged to the euro. This downward trend of inflation is expected to halt towards the end of 2014 and in 2015, as a result of strengthening domestic demand. In Turkey, inflation was 8.2% in December, well above the annual target of 5%, reflecting a marked increase in domestic food prices, the relaxed monetary policy, as well as the effect

<sup>11</sup> In relation to the Ukrainian conflict, as also noted in the *Monetary Policy – Interim Report 2014*, the region's energy dependency on Russia is limited.

**Table III.2 Key macroeconomic and banking indicators in South-Eastern European countries**

	GDP (annual percentage changes)									
Country	2012	2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	2014	2015 (for.)	
Albania	1.6	1.4	-2.5	2.2	1.7	-0.6	3.3	1.8	3.3	
Bosnia-Herzegovina	-1.2	2.5	1.7	2.0	2.7	-0.5	0.6	0.7	3.5	
Bulgaria	0.6	1.1	1.1	1.6	1.4	2.1	1.9	1.4	0.8	
FYROM	-0.4	2.7	3.0	3.1	3.5	4.4	4.1	3.9	3.7	
Montenegro	-2.5	3.3	4.0	4.7	1.5	0.3	1.3	2.0	3.0	
Romania	0.6	3.4	4.2	5.4	3.9	1.2	3.2	3.0	2.7	
Serbia	-1.0	2.6	3.8	3.0	0.1	-1.3	-3.6	-2.0	0.0	
Turkey	2.1	4.1	4.3	4.4	4.7	2.2	1.7	2.8	3.3	
	Inflation (averages, annual percentage changes)									
Country	2012	2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	Nov. 2014	2014	2015 (for.)
Albania	2.0	1.9	1.5	1.5	1.9	1.6	1.7	1.7	1.9	2.5
Bosnia-Herzegovina	2.0	-0.1	-0.3	-1.3	-1.7	-1.4	-0.5	0.0	1.1	1.5
Bulgaria	2.4	0.4	-1.6	-1.5	-2.4	-1.8	-0.8	-0.6	-1.6	-0.5
FYROM	3.3	2.8	2.8	1.3	0.6	-0.9	-0.3	-0.3	0.7	1.2
Montenegro	4.1	2.2	2.2	0.3	-0.6	-0.9	-1.0	0.0	1.8	0.0
Romania	3.4	3.2	3.3	1.8	1.1	0.9	1.5	1.3	1.4	1.2
Serbia	12.2	2.2	4.9	2.2	2.3	1.3	2.1	2.4	2.2	3.5
Turkey	8.9	7.5	8.3	7.5	8.0	9.4	9.2	9.2	8.9	7.5
	Balance of payments (% of GDP)									
Country	2012	2013	Q3 2013	Q4 2013	Q1 2014	Q2 2014	Q3 2014	2014	2015 (for.)	
Albania	-10.2	-10.6	-9.9	-10.6	-11.1	-11.2	-12.4	-11.1	-11.8	
Bosnia-Herzegovina	-9.2	-5.9	-5.9	-5.5	-5.8	-6.9	-7.7	-11.0	-9.1	
Bulgaria	-0.7	2.2	3.4	2.1	-0.8	-0.2	-	1.7	2.1	
FYROM	-2.9	-1.8	-2.8	-1.9	-1.8	-1.7	-1.9	-3.3	-4.0	
Montenegro	-18.7	-14.6	-15.0	-14.6	-14.3	-15.2	-15.5	-14.2	-13.8	
Romania	-4.7	-1.2	-	-	-	-	-	-0.9	-1.1	
Serbia	-11.5	-6.1	-5.5	-4.9	-5.9	-6.1	-6.5	-5.4	-4.8	
Turkey	-6.1	-7.9	-7.2	-7.9	-7.5	-6.5	-5.9	-6.1	-5.3	
	CAR (%)				Loans/Deposits (%)		NPLs (%)			
Country	2012	2013	Q2 2014	Q3 2014	2013	Oct. 2014	2012	2013	Q2 2014	Q3 2014
Albania	16.2	18.0	17.5	17.6	55.3	55.1	21.7	24.0	24.1	24.9
Bosnia-Herzegovina	14.1	15.2	-	-	115.2	116.1*	12.7	14.5	15.5	16.1
Bulgaria	16.6	16.9	21.2	22.2	87.7	84.7	16.6	17.2	17.2	17.2
FYROM	17.1	16.8	16.9	16.9	89.7	95.2	10.1	10.9	11.3	11.7
Montenegro	12.4	14.4	-	-	115.1	108.8**	17.6	18.4	17.5	17.3
Romania	14.6	15.0	17.0	14.6	101.3	98.1	18.2	21.9	19.2	15.3
Serbia	19.9	20.2	19.9	19.9	119.0	113.8	18.6	21.4	23.0	23.0
Turkey	17.9	15.3	14.1	13.6	110.8	116.8	3.0	3.0	3.0	3.0

Sources: European Commission, *European Economic Forecast, February 2015*, *EU Candidate & Pre-accession Countries Economic Quarterly*, CCEQ, January 2015 and national central banks.

\* Values for June. \*\*Values for August.

of the weakened Turkish lira. It should be noted that in the third quarter of the year the Turkish currency depreciated by 6.8% vis-à-vis the US dollar.<sup>12</sup>

In several countries of the region, the process of reducing **current account** deficits is estimated to have halted in 2014, mainly due to a gradual recovery in domestic demand, as well as to declining foreign demand mainly from euro area countries. A relative recovery in domestic demand was the main factor behind the marginally deteriorated external balances of Bulgaria and Romania and the more marked deterioration in FYROM. The remaining Western Balkan countries, i.e. Albania, Montenegro, Bosnia-Herzegovina and Serbia, continue to run high current account deficits. In Turkey, the upward trend recorded in the past few years seems to be reversing, as the external deficit entered a declining path in the first nine months of 2014. This development was attributed to a weakening of the rate of increase in domestic demand and a subsequent decrease in imports combined with a relative increase in exports.

Turning to **public finances**, the outcomes are mixed across the countries in the region. Developments in Albania and Montenegro in the first eight months of the year seem to have been positive, with government expenditure in both countries turning out lower than targeted and significant improvements in revenues. In contrast, in the countries struck by the floods in May, i.e. Serbia and Bosnia-Herzegovina, public revenue in the same eight months could not stay on track, resulting in a higher deficit. In FYROM, the fiscal deficit in the first eleven months of the year was 3.6% of GDP, compared with a revised target of 3.9% for the year as a whole. The deficit target of Bulgaria was missed by a significant margin, and the annual target for 2014 was revised from 1.8% to 4% of GDP. In contrast, the fiscal deficit of Roma-

nia improved considerably, standing at 0.25% of GDP in the first eight months of 2014, from 1.3% one year earlier. In Turkey, the deficit ratio rose cumulatively to 1.6% of GDP in the three months to end-November (up from 1.3% in the corresponding period of 2013), overshooting the annual target of 1.4%.

Equally diverse is the situation in the **credit sector** of the economies in the region. In Serbia and Albania, following considerable interventions by the monetary authorities, conditions seem to start changing, as the latest data (for October and November) suggest that the downward trend<sup>13</sup> in credit expansion is reversing. In Turkey, Bulgaria, FYROM and Bosnia-Herzegovina, positive credit expansion rates continued in the third quarter of 2014. Particularly in Turkey, credit expansion remained very strong in the second half of 2014 (average for the third and fourth quarters: 19.6%) though clearly weaker than in the first half of the year (25%). The tendency of powerful European banking groups to withdraw part of their funds since 2008 has tested the banking systems of the region (excluding Turkey's). However, capital outflows since 2013 have been recording low and decreasing rates. Liquidity losses in these economies are gradually substituted with domestic sources of funding, mainly domestic deposits. Overall, the banking systems of the countries of the region are stable,<sup>14</sup> maintaining relatively high capital adequacy ratios (above 14.5%).

<sup>12</sup> During the third quarter of 2014, international capital markets were marked by strong portfolio flows out of emerging markets towards US dollar markets. These flows, among other factors, increased the risk premia on Turkish assets, thus explaining much of the pressure exerted on the Turkish lira that led to its depreciation against the US dollar by 6.8% in that quarter.

<sup>13</sup> This development is attributable to the subdued dynamics of domestic demand and the increasing volume of non-performing loans. It should be noted that in both countries non-performing loans as a percentage of total loans have risen at particularly high levels, between 23% and 24.9%.

<sup>14</sup> An exception was recently seen in Bulgaria, where the bankruptcy of a major domestic bank has tested to some extent the country's financial stability.



## THE UNWINDING OF GLOBAL EXTERNAL MACROECONOMIC IMBALANCES

External macroeconomic imbalances have been a feature of the world economy since the 1990s. The phenomenon peaked in 2006 and started to unwind or, in certain cases, to reverse during the global financial and economic crisis. This trend has helped the world economy to stabilise, particularly to the extent that the narrowing of external deficits is achieved through the restructuring of individual economies and the improvement of their competitiveness.

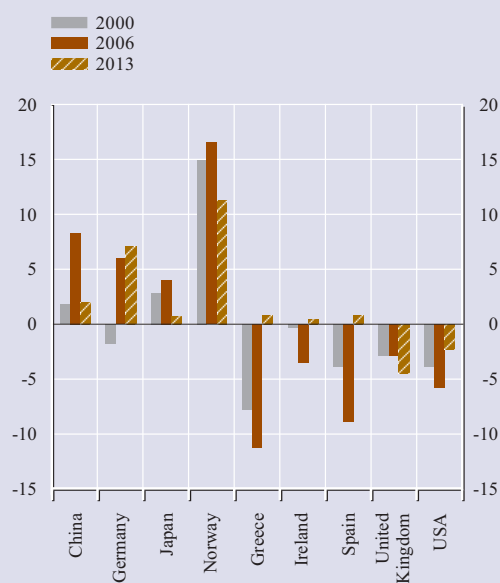
The magnitude of global macroeconomic imbalances in the run-up to the crisis and the size of the economies with persisting current account deficits or surpluses were major concerns, as an abrupt adjustment of imbalances could cause turbulence in exchange rates and capital movements worldwide, with adverse implications for world trade. High and lasting surpluses were observed until 2006 mainly in China, in oil exporting countries (e.g. Norway), Japan, Germany and emerging Asia, while large deficits were recorded in the United States and some European countries (see Chart A).<sup>1</sup>

Prior to the crisis, the main source of concern surrounding the implications of external imbalances was the large US current account deficit – both as a percentage of GDP and in absolute terms – which was being financed by a saving surplus in the rest of the world, since a decline in investor confidence could possibly hamper the financing of the US deficit (IMF, 2006).<sup>2</sup> The consequences for the global economy would be extremely negative in the event of a disorderly and abrupt adjustment of domestic demand in China. At the same time, the current account surplus in China, which was the main contributor to the financing of the United States, was sustained by policies supporting excessive private saving and boosting net exports through an artificial depreciation of the currency.

## Reducing external macroeconomic imbalances amidst the crisis

Global external macroeconomic imbalances have narrowed significantly. In 2013, global imbalances (i.e. the average of current account deficits and surpluses in absolute terms) were estimated at 3.6% of world GDP, compared with 5.6% in 2006 when global imbalances reached a peak. The bulk of the adjustment has occurred in countries with lasting deficits. The United States brought down their deficit from 5.8% to 2.4% of GDP, while the EU peripheral economies that ran high

**Chart A** Current account balance as a percentage of GDP



Source: International Monetary Fund, World Economic Outlook Database.

<sup>1</sup> The countries featured in the chart were selected only by way of illustration, on the basis of their relevance for the evolution of global external imbalances over time, owing to the size of each economy and the level of respective imbalances.

<sup>2</sup> IMF, *World Economic Outlook*, September 2006.

current account deficits, such as Greece, Portugal and Spain, achieved small surpluses. Moreover, China gradually reduced its sizeable surplus from 8.3% to 1.9% of GDP. However, surpluses in certain euro area countries, such as Germany and the Netherlands, and in oil exporters remained large (IMF, 2014).<sup>3</sup>

The narrowing of current account deficits, which was the largest correction of external imbalances as a result of the recent crisis, mostly reflects a decline in domestic demand and hence in the import bill. Respectively, surplus economies witnessed relatively lower export growth rates and a contraction in their surpluses, against a backdrop of weak global demand and world trade growth. Fiscal consolidation and the overall deleveraging of the public and private sectors also contributed to the reduction of current account deficits.

Meanwhile, the movements in the exchange rate of the US dollar (depreciation) and the Chinese yuan (appreciation) helped reduce the imbalances. Nevertheless, it is estimated that the largest part of global rebalancing was driven by expenditure reduction rather than expenditure switching (IMF, 2014). How the mechanics of the external adjustment has affected the durability of rebalancing in the long run is discussed further below.

Expenditure switching, through improvements in price and cost competitiveness or in structural competitiveness, is key to reducing the current account deficit. In addition to a shift in domestic demand towards domestically produced goods, which has a positive effect on the current account balance, the drop in relative prices favours a rise in exports, particularly when it is accompanied by a reallocation of resources from non-tradables to tradables.

Still, expenditure switching is more difficult for countries that participate in a monetary union and may not resort to nominal depreciation. As a result, in euro area deficit countries, cost competitiveness losses were recouped mostly through cuts in wage costs or major structural reforms in labour and product markets, with a view to achieving internal devaluation.<sup>4</sup> Subsequently, the correction of deficits in these countries was mainly a result of lower imports due to expenditure reduction, whereas export growth was more subdued.<sup>5</sup> Although competitiveness losses, in labour cost terms, of the 2000-2008 period have already been recovered in most periphery countries, this has not yet translated into a corresponding rise in exports relative to GDP in all countries.<sup>6</sup>

Some positive signs have emerged, pointing to shifts of resources towards the tradable sectors of the peripheral economies (European Commission, 2011 and Tressel et al., 2014).<sup>7</sup> Conditions in labour, product and capital markets play a crucial role in the reallocation of resources towards more productive export-oriented activities. Nevertheless, at the present juncture, capital constraints across euro area countries remain an obstacle to sectoral reallocations.<sup>8</sup> Meanwhile, domestic demand in EU surplus countries has not increased significantly and, thus, aggregate demand at the EU level remains low. Strengthening demand in surplus economies is considered to be a key

<sup>3</sup> IMF, *World Economic Outlook*, Chapter 4, October 2014.

<sup>4</sup> See also Box V.3 in this report.

<sup>5</sup> See also Box II.1 in Bank of Greece, *Monetary Policy 2013-2014*, June 2014.

<sup>6</sup> Improved competitiveness is only partially mirrored in the export performance of Greece as a result of heightened uncertainty and financing constraints, as well as weak international demand. See also Special feature III.3 in Bank of Greece, *Monetary Policy 2013-2014*, June 2014.

<sup>7</sup> European Commission, *Quarterly Report on the Euro Area*, Vol. 10 (2011), No 3 and Tressel Thierry, Shengzu Wang, Joong Shik Kang, Jay C. Shambaugh, Jörg Decressin and Petya Koeva Brooks, "Adjustment in Euro Area Deficit Countries: Progress, Challenges, and Policies", *IMF Staff Discussion Notes*, 14/7 (2014). See also Bank of Greece, *Annual Report 2013*, February 2014, Box V.1.

<sup>8</sup> See also Bank of Greece, *Monetary Policy 2013-2014*, June 2014, Box III.3.



determinant for deficit economies' efforts to regain their competitiveness (European Commission, 2014).<sup>9</sup> Consequently, in the latest round of the in-depth reviews under the Macroeconomic Imbalance Procedure, which identify the EU economies that need to take effective action to address their external imbalances, the European Commission assessed that both Germany and the Netherlands are running surpluses which require monitoring and policy action (European Commission, March 2014).<sup>10</sup>

In conclusion, it is evident that the internal depreciation that took place in euro area countries with high current account deficits had a limited effect on expenditure switching, while the sizeable reduction of total expenditure had a strong negative impact on growth and employment, thus contributing to a more painful adjustment in those countries (Tressel et al., 2014).<sup>11</sup> At the same time, recession, weak investment demand and tight credit conditions do not encourage a swifter shift of domestic output towards tradable sectors and therefore export growth, which is necessary for a lasting sustainability of rebalancing, remains sluggish.

#### **The durability of rebalancing and future risks**

According to the International Monetary Fund (IMF, 2014),<sup>12</sup> half or more of the adjustment of global external imbalances between 2006 and 2013 was driven by structural factors and hence external adjustment is expected to prove sustainable in the long run. As regards the euro area periphery in particular, according to the European Commission's latest estimates, the improvement of the current account balance during the 2007-2013 period was mainly structural in Spain (by 74%), in Ireland (by 75%) and in Portugal (by 86%), while in Greece the improvement was equally underpinned by cyclical changes (by 46%) (European Commission, 2015).<sup>13</sup>

Breaking with policy distortions in systemic economies, which in the past had been a major source of imbalances, also implies that risks arising from global imbalances become smaller, but they do not disappear (IMF, 2014).<sup>14</sup>

An important risk that remains at the international level is the build-up of imbalances in international investment positions during the crisis (see Chart B). Economies with large net liability positions are vulnerable to a potential reversal in financial market conditions, including the drying up of external financing (sudden stops).<sup>15</sup>

The narrowing of current account imbalances is not enough for a decrease in net foreign liabilities, which would require a steady and sustained reversal of balances (from deficit to surplus or vice versa). Furthermore, the deep recession in some economies, mainly in deficit euro area countries, has exacerbated the deterioration of their net international investment position-to-GDP ratio, as a result of the considerable deceleration of the rate of growth or decline in total output. For the periphery countries, even keeping their net iip levels unchanged requires a great deal of effort

<sup>9</sup> European Commission, *Quarterly Report on the Euro Area*, Vol. 13 (2014), No 4 and IMF, *World Economic Outlook*, Chapter 4, October 2014.

<sup>10</sup> European Commission, Communication to the European Parliament, the Council and the Eurogroup, Results of in-depth reviews under Regulation (EU) No 1176/2011 on the prevention and correction of macroeconomic imbalances, March 2014.

<sup>11</sup> Tressel Thierry, Shengzu Wang, Joong Shik Kang, Jay C. Shambaugh, Jörg Decressin and Petya Koeva Brooks, "Adjustment in Euro Area Deficit Countries: Progress, Challenges, and Policies", *IMF Staff Discussion Notes*, 14/7 (2014).

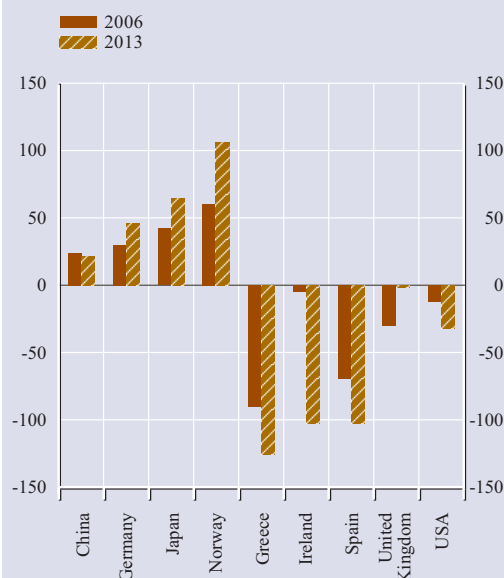
<sup>12</sup> IMF, *World Economic Outlook*, Chapter 4, October 2014.

<sup>13</sup> European Commission (EC), *European Economy*, 1/2015, European Economic Forecast, Winter 2015.

<sup>14</sup> IMF, *World Economic Outlook*, Chapter 4, October 2014.

<sup>15</sup> For a detailed analysis of Greece's international investment position, as well as the reasons for which large net liability positions constitute destabilising factors, see Box V.6.

**Chart B Net international investment position as a percentage of GDP**



Source: International Monetary Fund, World Economic Outlook Database.

in terms of reducing their current account deficits in the present juncture (European Commission, 2014).<sup>16</sup>

It is not possible to accurately determine the level above which the ratio of net external liabilities to GDP becomes a destabilising factor.<sup>17</sup> Besides, apart from their size, the composition of liabilities could also act as a significant factor of destabilisation. It is estimated that higher crisis risk is entailed in external debt liabilities than in portfolio equity liabilities (Catão and Milesi-Ferretti, 2013).<sup>18</sup> Moreover, in contrast with other liabilities, foreign direct investment liabilities tend to be associated with lower crisis risk.

In conclusion, during the recent crisis, global external imbalances shrank significantly, at least in terms of current account balances. The largest correction was achieved by countries with high current account deficits, in most of which (in particular in the euro area), the narrowing of current account deficits is also associated with major adverse developments in out-

put and employment. Although some countries are still vulnerable, global risks are lower as a result of the adjustment that takes place in the largest (systemic) economies, while the rebalancing appears to be largely due to structural factors.

However, large iip imbalances continue to exist, and further measures are required with a view to supporting deficit countries' export performance and ensuring shifting expenditure in the long run. Deficit countries' policy actions should focus on measures aimed at improving productivity and competitiveness, as well as on reforms that facilitate, through fixed capital investment, the reallocation of resources from non-tradables to tradables. On the other hand, surplus economies could contribute to expenditure shifting by taking measures to boost domestic demand and/or increase foreign direct investment in the remaining economies. The improvement of the overall international environment and actual global demand is a prerequisite for enhancing both cost competitiveness and structural competitiveness.

<sup>16</sup> European Commission, *Quarterly Report on the Euro Area*, Vol. 13 (2014), No 4.

<sup>17</sup> For instance, Catão and Milesi-Ferretti ("External Liabilities and Crises", IMF Working Paper 13/113, 2013) estimate that a country is more vulnerable to crises when the ratio of net foreign liabilities to GDP exceeds 50% in absolute terms and when it rises some 20 percentage points above the country-specific historical average.

<sup>18</sup> Catão and Milesi-Ferretti, *ibid.*

## IV THE SINGLE MONETARY POLICY AND EUROSISTEM MEASURES IN 2014 AND EARLY 2015<sup>1</sup>

*In order to fulfil its primary objective, i.e. to maintain price stability in the euro area, the Eurosystem seeks to prevent the creation of a deflationary environment. To this end, key ECB interest rates were lowered in 2014, while new, non-standard monetary policy measures were adopted, namely a series of targeted longer-term refinancing operations (TLTROs) and two purchase programmes for asset-backed securities and covered bonds. In parallel, the liquidity-absorbing fine-tuning operations carried out to sterilise liquidity provided through the SMP over the 2010-2012 period were suspended. Furthermore, in early 2015 an expanded asset purchase programme was announced, under which the Eurosystem's combined monthly asset purchases will amount to €60 billion.*

### I OVERVIEW OF DEVELOPMENTS AND PROSPECTS

The main challenge facing the Eurosystem throughout 2014 was the aversion of a deflationary environment in the euro area. Lower energy and food prices, the recent appreciation of the euro exchange rate, the persistently low growth rate of the euro area economy, and weak monetary and credit expansion contributed to a considerable slowdown in inflation, which turned negative in late 2014 and early 2015.

The Eurosystem lowered its policy rates in June and September 2014: the interest rate on the main refinancing operations and the deposit facility rate decreased by one-fifth of a percentage point, on a cumulative basis, to 5 and -20 basis points, respectively.

Furthermore, the Eurosystem launched the targeted longer-term refinancing operations (TLTROs). It is a series of eight open market operations (September 2014-June 2016), under which euro area banks will have the opportunity to borrow at a low fixed interest rate, but will be subject to borrowing limits calculated on the basis of the total amount of their

loans to the real economy. The programme will be extended to September 2018 for banks that exhibited negative average monthly net lending to non-financial corporations and households (excluding loans to households for house purchase) in the reporting period (May 2013-April 2014), provided that they increase their lending activities in the period after April 2014, compared with the reporting period.

Moreover, the Eurosystem introduced (in the fourth quarter of 2014) the asset-backed securities and covered bond purchase programmes. In January 2015 the Eurosystem decided that it intends at least until September 2016 to carry out regular sizeable purchases of securities issued by euro area central governments, certain agencies and European supranational institutions. Combined, the total purchases of private and public debt securities by the Eurosystem are expected to exceed the amount of €1 trillion (which is well above the market expectations that prevailed prior to the ECB's Governing Council meeting in late January). In any event, purchases will be carried out until inflation rates come close to 2% over the medium term.

Liquidity support through the aforementioned new non-standard monetary policy measures will continue to exert strong downward pressures on interbank interest rates. Indeed, after August 2014 the EONIA hovered in negative territory for protracted periods of time, while Euribor rates reached new historic lows.

Turning to the asset purchase programmes, the ensuing liquidity is expected to be channelled into other investments, including foreign-currency-denominated bonds. As a result, spreads for a wide range of bonds are expected to decline, thereby leading to an overall improvement in financing conditions across the Monetary Union as well as to a weakening of the euro exchange rate. Several investors will most probably seek to repurchase debt instruments

<sup>1</sup> This chapter takes into account data and information available up to 16.2.2015.

similar to the ones they sold to the Eurosystem. This will urge banks to grant new loans that could constitute the basis of securitisations or the issuance of covered bonds.

All these developments are set to have a beneficial effect on economic activity (see Box IV.2) and help inflation rates return closer to 2% in the euro area. At the same time, the rate of decline in bank loans to the private sector has already moderated and bank lending rates are following a downward trend.

## 2 THE REGULAR ECONOMIC AND MONETARY ANALYSIS OF THE ECB GOVERNING COUNCIL

In the context of its economic analysis, the Governing Council of the ECB noted that GDP growth rates in the euro area were subdued in the first three quarters of 2014. Moreover, the Governing Council (see Box IV.1) assessed that economic activity growth also remained weak in the fourth quarter of the year.<sup>2</sup>

With regard to future developments in euro area GDP growth, the outlook for a modest economic recovery remains in place. According to the December 2014 Eurosystem staff macroeconomic projections, the annual rate of increase in euro area real GDP will be 1.0% in 2015 and 1.5% in 2016; for 2014, the GDP growth rate is estimated at 0.9%.

Euro area inflation continued to decline throughout 2014, reaching very low levels (December 2013: 0.8%, December 2014: -0.2%). Based on its economic analysis, the Governing Council of the ECB attributed this development, among other things, to the downward trend of international energy and food prices in recent years, as well as to the appreciation of the effective exchange rate of the euro, which continued through the beginning of 2014.

Commodity prices are characterised by high volatility, thus affecting only temporarily the

rate of change in the general price level. Therefore, in principle, it would be appropriate if the primary objective of the monetary policy was not to contain inflation movements which are due to changes in the energy or the food component. However, core inflation<sup>3</sup> in the euro area has remained exceptionally low for almost a year. This shows that declining inflation is not only due to the lower prices of some commodities, but also to subdued aggregate demand. Indeed, according to survey-based evidence, firms believe that they are actually in no position to set higher prices, while the persistently high unemployment implies that workers' bargaining power for wage increases is very limited.

According to the latest Eurosystem staff macroeconomic projections, annual inflation in euro area countries is expected to average 0.7% in 2015 and 1.3% in 2016.<sup>4</sup> Given the time-schedule for the production of the projections, no account was taken of the falls in crude oil prices after the first half of November 2014. As a result, projections are likely to overestimate inflation levels in the near term. Indeed, in January 2015 the Governing Council of the ECB projected that in the coming months inflation will remain negative, as registered already in December 2014,<sup>5</sup> or in any case exceptionally low. Inflation rates are expected to accelerate progressively towards the end of 2015 and in 2016, given that it is reasonable to assume that crude oil prices will gradually increase, while monetary policy eas-

<sup>2</sup> Quarter on quarter, real GDP in 2014 rose by 0.3% in the first quarter, 0.1% in the second and 0.2% in the third, while according to the preliminary estimate released in mid-February 2015, real GDP rose by 0.3% in the last quarter of 2014. In the context of its economic analysis, the Governing Council of the ECB monitors various indicators and survey data. Based on data available up to December 2014, it concluded that economic activity growth remained weak also in the fourth quarter of the year.

<sup>3</sup> Measured on the basis of the Harmonised Index of Consumer Prices excluding food and energy prices.

<sup>4</sup> It should be noted that the macroeconomic projections for inflation, which are submitted to the Governing Council of the ECB, were significantly revised downwards in the course of 2014. In fact, in December 2013 inflation was projected to stand at 1.1% in 2014 (inflation outcome: 0.4%) and 1.3% in 2015, whereas a projection for the 2016 inflation was first released in March 2014 (1.5%).

<sup>5</sup> According to preliminary estimates inflation was -0.6% in January 2015.

ing will contribute to a recovery of private investment and private consumption in the euro area.

On several occasions throughout 2014, the Governing Council of the ECB expressed its commitment to act, among other things by implementing, if required, further measures, to ensure that (a) medium-to long-term inflation expectations remain firmly anchored at levels consistent with the primary objective of the Eurosystem, i.e. to maintain price stability (with inflation rates of below, but close to, 2%) in the euro area over the medium term; and (b) that inflation rates return to levels closer to 2%.

In late 2014, the Governing Council of the ECB specifically stressed that the fall in crude oil prices over the last months of 2014 must not get embedded in inflation expectations, in order not to exercise a downward effect on wage bargaining procedures. But overall, there is the risk that a too prolonged period of low inflation becomes embedded in inflation expectations.

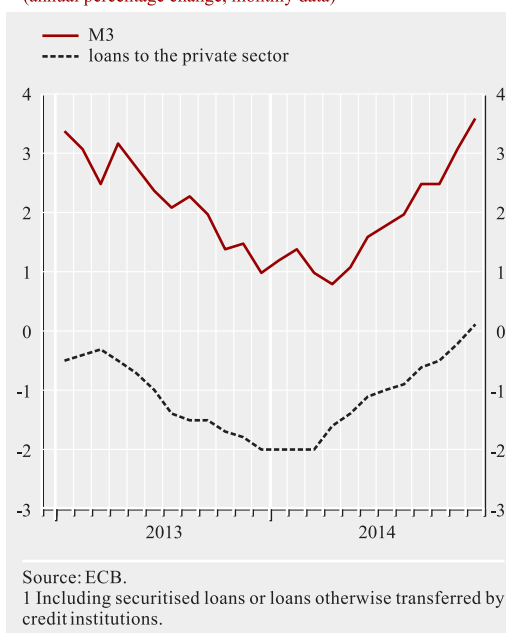
As nominal interest rates have reached their effective lower bound, should expected inflation decline, this would be tantamount to an increase in the real interest rate. Such a development would counter monetary policy accommodation and would adversely affect total spending in the euro area, thereby triggering a further decline in inflation.

In the course of 2014 inflation expectations dropped, in particular as suggested by market-based measures or survey-based indicators of inflation expectations (e.g. the results of the ECB Survey of Professional Forecasters). Long-term expectations continued to be in line with the primary objective of the Eurosystem until the end of 2014. Nevertheless, short-term expectations (e.g. for the year ahead) stood at exceptionally low levels.

In parallel to the economic analysis, the Governing Council of the ECB conducts an analy-

**Chart IV.1 Loans to the private sector<sup>1</sup> and M3 in the euro area  
(January 2013-December 2014)**

(annual percentage change, monthly data)



sis of euro area monetary and credit aggregates, the outcomes of which are cross-checked with the outcome of the monetary analysis. In 2014 (and early 2015) the monetary analysis also pointed to very weak inflationary pressures in the euro area over the medium term.

A first indication towards this direction is that M3 growth remained subdued, although it picked up in 2014 (December 2013: 1.0%; December 2014: 3.6%, see Chart IV.1). During most of the year, cross-border capital inflows from non-euro area countries were recorded, reflecting a higher attractiveness of the euro area for foreign investors than in the past. These capital inflows were the main driver of broad money creation. Conversely, developments in bank credit growth to the private sector contributed to money destruction.

Towards the end of the year, the positive effect of the external sector to monetary expansion in the euro area declined, while the contribution of bank credit turned less negative.

Besides, M3 growth was also supported by the continued decrease in the stock of long-term securities issued by euro area banks.

The outstanding amount of bank loans to non-financial corporations maintained its downward course. This development is consistent with the time lag between the recovery of economic activity and the pick-up in demand for business loans, which has repeatedly been observed in the past. Besides, at the current juncture many firms are reluctant to take up new loans, due to their already high indebtedness. Against this backdrop, as mentioned above, they seek to deleverage. Furthermore, banks' perception that at the present juncture uncertainty is heightened and credit risk remains relatively elevated weighs on their lending activity. Deleveraging efforts on behalf of several banks and high NPL ratios in a number of Member States also contribute to a weakening in bank loan supply.

However, it should be noted that the annual rate of decline in loans to non-financial corporations in the euro area peaked at the beginning of 2014 and started to moderate thereafter (loans to non-financial corporations: December 2013: -2.8%; March 2014: -3.1%; December 2014: -1.0%). Moreover, the annual growth rate of household financing by banks picked up from 0.3% in December 2013 to 0.8% in December 2014. Of course, these figures are considered to be very low. The weak increase in bank lending to the household sector reflects subdued demand for loans due to: (i) households' deleveraging efforts (in some Member States); (ii) the muted evolution of the disposable income of the private sector in the euro area; (iii) high unemployment; and (iv) the adverse conditions prevailing in real estate markets in a number of Member States, which discourage property investment. In any event, it should be noted that the slower decline in total bank loans to the private sector, which was recorded in 2014<sup>6</sup> (total loans to the private sector: December 2013: -2.0%; December 2014: 0.1%, see Chart IV.1), generally reflects

reduced amortisation payments on existing loans rather than new bank loans.

According to the quarterly Bank Lending Survey for the euro area, credit standards for housing loans and consumer credit eased gradually in 2014. Credit standards for loans to enterprises started to untighten after the first quarter of the year. This easing was largely driven by the ongoing normalisation in banks' funding conditions, through the attraction of retail and interbank deposits or through debt issuance. The easing was also supported by the fact that banks were adequately capitalised and thus their lending programmes remained unaffected. As banks realised in the third quarter of 2014 that euro area GDP growth had slowed, their risk perception (in contrast with other factors affecting credit standards) supported a renewed tightening of credit standards for certain loan categories. Despite the aforementioned easing, banks' credit standards continue to be tight relative to their average in previous years.

In 2014 banks reported a stronger demand for both housing and corporate loans. Household demand for consumer credit also followed an upward path for most of the year. Lastly, the bank lending survey showed that changes in credit standards became less divergent across euro area countries, which suggests receding fragmentation in credit markets along national borders.

Indeed, until end-May 2014, the Governing Council of the ECB kept stressing that compared with the period prior to summer 2012 (when international financial markets were reassured by the introduction of the Outright Monetary Transactions (OMTs) by the Eurosystem), banks' opportunities to raise funds to be channeled into the real economy had improved considerably. The Governing Council also stressed the importance of further reducing financial fragmentation in the euro area. Specifically, it noted that this was war-

<sup>6</sup> Up to December 2014, when an annual increase was registered.



ranted to avert any adverse effects on euro area funding conditions from the impulses of the single monetary policy. The Governing Council of the ECB also highlighted in the beginning of 2014 the need of establishing a banking union in Europe, with a view to averting further financial fragmentation in the future.

The assignment of macro-prudential supervisory tasks to the ECB and the creation of a Single Supervisory Mechanism constitute a key building block of the banking union. Part of the preparations for this fundamental reform was the comprehensive assessment of the balance sheets of significant euro area banks, which was conducted by the ECB in 2014. Several necessary adjustments were identified, with a view to enhancing the stability of credit institutions and, more importantly, market trust in them. Bolstering financial stability is expected to increase banks' lending capacity and thus their ability to underpin economic recovery. But even before the completion of the comprehensive assessment, many banks were proactive and strengthened their capital base by raising additional equity capital.

A robust banking system in the euro area is a prerequisite for the effectiveness of monetary policy measures adopted by the Eurosystem. The more transparent banks' balance sheets, the higher their capital adequacy ratios and the more limited their exposure to troubled assets, the more likely it is for the accommodative stance of monetary policy to have the desirable expansionary effect on real economy. Therefore and in this sense, the conclusion of the comprehensive assessment and the activation of the Single Supervisory Mechanism create a suitable environment for stimulating credit expansion in the euro area.

Towards the end of 2014 the Governing Council of the ECB noted that, apart from the inflation forecast, the Eurosystem staff macroeco-

nomic projections for the future path of economic activity were also revised downwards. Besides, the low rates of monetary and credit growth were expected to continue. As a result, in early 2015 the Governing Council deemed it necessary to reexamine the situation thoroughly, considering the need to take new measures. Specifically, an assessment was made of the extent to which further monetary policy accommodation was actually achieved and the change in the level of the Eurosystem's total assets was analysed. Furthermore, the Governing Council reassessed the outlook for prices and in particular the medium-term impact of the recent falls in crude oil prices.

In this context, two adverse developments were observed towards the end of January 2015, which called for the introduction of an expanded asset purchase programme, as outlined further below. More specifically, the Governing Council of the ECB assessed that, first, the potential for second-round effects on wage and price setting had increased on account of the recent sharp decline in crude oil prices. Should such second-round effects materialise, the medium-term price outlook for the euro area would worsen. In fact, market-based measures of both short-term and long-term inflation expectations deteriorated further and reached historic lows. Of course, the same holds for inflation outcomes. Second, the Governing Council of the ECB concluded that significant positive effects from the package of measures taken in 2014 could already be seen, namely a decline in interest rates and bond yields across financial markets, but bank credit flows to the real economy had failed to increase to a satisfactory level.

As a result, the stance of the single monetary policy was not deemed accommodative enough to effectively address the heightened risk of too prolonged a period of exceptionally low inflation rates. Additional monetary policy measures were therefore warranted.



## CREDIT CONTRACTION: A GREEK AND EURO-AREA-WIDE PROBLEM

The global financial crisis began in the summer of 2007 and peaked with the collapse of Lehman Brothers in autumn 2008. **The crisis generated forces that led to reduced credit expansion to the euro area private sector.** Leading among such forces was the emergence of dysfunctions in international interbank markets.<sup>1</sup> Moreover, banks' lending capacity was reduced because of the fall in the prices of securities globally, as well as the fact that many borrowers had difficulties in servicing their debts due to the drastic decline in global trade and the generalized and marked financial recession that followed the collapse of Lehman Brothers. In the euro area, banks first limited interbank transactions and foreign claims in general, and only later did they cut back credit to the real economy. In any event, credit expansion to the private sector decelerated.

This was followed by the debt crisis that emerged in the euro area towards the end of 2009 and amplified the forces that caused credit contraction. **The divergence in credit expansion became clearer between Member States directly hit by debt problems on the one hand and countries in the core of the Monetary Union on the other.** Thus, between 2007 and 2014 credit expansion to the private sector (on an annual basis) fell by 32 percentage points to -11.5% in Ireland, by 29 p.p. to -7.3% in Spain, by 21 p.p. to -3.0% in Greece and by 15 p.p. to -3.2% and -4.7% in Italy and Portugal, respectively. On comparison, it fell much less in Germany (by 2 p.p. to 1%), while it recorded a substantial decline by 15 percentage points to -0.6% in France. However, in 2014 even those rates were significantly below the average recorded in the period from the launch of the Monetary Union until 2006 (3.7% in Germany, 7.6% in France).

Among the main mechanisms that caused credit contraction in the context of the debt crisis was that credit institutions exposed to sovereign paper of Member States with significant fiscal problems were shut out of the single money and bond markets and that there were massive withdrawals of retail deposits from banks in these Member States.

It should however be stressed that, in the context of these two consecutive crises, weaker credit expansion in Monetary Union countries can also be attributed to reduced demand for credit. This was due to the effects on economic activity of banks' initial dysfunctions as well as other factors, such as tightened fiscal policy and heightened economic uncertainty caused by the crises. In some Member States (e.g. Spain, Ireland) that were particularly affected by the crises, strong credit expansion preceded, partly because of interest rate convergence in the context of the introduction of the euro, which led to substantial decreases in bank borrowing costs. It was therefore necessary, given the worsened economic conditions, to reduce bank debt in these countries through deleveraging. In addition, government bond yields increased in Member States hit by the debt crisis, a development that exerted upward pressures on bank lending rates, thereby limiting demand for credit (the opposite occurred in core countries).

As mentioned in previous Bank of Greece reports, since August 2007, **the Eurosystem has adopted many measures to address the adverse effects of the crises, including credit contraction.** Moreover, the establishment of a Banking Union was initiated in 2012 and has come a long way since. This contributes to boosting confidence in banking institutions, mainly in euro area periphery countries,

<sup>1</sup> Interbank loans were not concluded with counterparties that could have significant exposures to housing loans securitization products to low-solvency borrowers in the United States. Such products had been widely distributed in the global financial system.

since it strengthens transparency requirements for banks, especially as regards troubled assets, and makes strict prudential supervision more uniform. Therefore, **the Banking Union helps rebalance divergences between Member States as regards banks' funding costs**, which also helps ease differences in the rates of bank lending to the real economy. It also contributes to drastically limiting obstacles to the development of EU-wide banking groups. The operation of such groups should contain the effects of the possibility of local banks being shut out of international markets, since money and capital market funding would be substituted by intra-group capital transfers.

These institutional and structural reforms, as well as the restructuring and recapitalisation of the banking sector that took place in various Member States facing more acute problems, would lead to – at least – more relaxed credit supply conditions.

### 3 MONETARY POLICY MEASURES OF THE EUROSISTEM

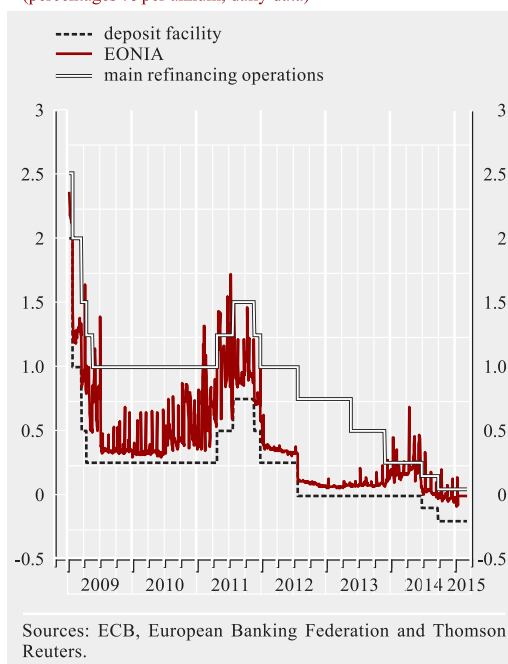
In order to avert the risk of a deflationary environment, with possible harmful repercussions for the euro area economies, the Governing Council of the ECB adopted a series of monetary policy measures in 2014 and early 2015. This contributed to significant and increasing differences in the monetary policy cycle between the euro area and other advanced economies.

In June 2014 policy rates were subject to a downward adjustment (see Chart IV.2) – a negative deposit facility rate was introduced for the first time. In September policy rates were lowered again and reached their effective lower bound. On a cumulative basis, the interest rate on the main refinancing operations and the deposit facility rate were reduced by one-fifth percentage point to 5 and -20 basis points, respectively, while the interest rate on the marginal lending facility was decreased by 0.45 percentage point to 30 basis points.

Furthermore, the Governing Council of the ECB affirmed that, in view of the outlook for inflation, the single monetary policy would continue to be highly accommodative and key ECB interest rates would remain at present levels for several months. This affirmation is in line with the forward guidance that the Eurosystem has been providing since mid-2013, with the aim to directly steering expecta-

**Chart IV.2 Changes in key Eurosystem rates and the EONIA rate (1 January 2009-13 February 2015)**

(percentages % per annum, daily data)



tations of future very short-term interest rates and – through that channel – keeping longer-term interest rates at the lowest possible levels. In effect, forward money market rates in the euro area have reached historical lows.

Another tangible proof that short-term interest rates will remain at very low levels is provided by the decision that (i) main refinancing operations (MROs) and (ii) three-month

longer-term refinancing operations (LTROs) will continue to be conducted, at least until the end of 2016, as fixed rate tender procedures with full allotment. In other words, the amount of liquidity that is provided to banks will continue to be unlimited, provided that banks' exposures are adequately collateralised. It was also announced that (iii) a series of targeted longer-term refinancing operations (TLTROs) will be conducted, through which liquidity will be provided to credit institutions (against eligible collateral) at a fixed rate over a window of four years (see further below).

Furthermore, the Governing Council of the ECB announced that, should it become necessary, it stands ready to use further non-standard instruments (additional to the measures already adopted) within its mandate, on the condition such instruments are in accordance with the Statute of the ESCB. Specifically, if the monetary policy measures implemented were not effective enough to raise inflation as fast as possible or to prevent inflation expectations from declining to levels not consistent with price stability, the Eurosystem stated that in early 2015 it could potentially broaden the channels through which it intervened, by altering accordingly the size and composition of its asset purchases.

At the beginning of 2014 it was observed that the past key interest rate cuts (in 2013 the interest rate on the main refinancing operations was lowered by 0.5 percentage point) had not passed through to the private sector's borrowing costs, but on the contrary bank lending rates remained comparatively high in several Member States. Banks' funding costs, e.g. through the issuance of bonds, albeit lower, still remained elevated in a number of Member States. Besides, reductions in funding costs had not been fully transmitted to bank lending rates to the real economy.

As a result, new lending continued to be very subdued, while financing constraints contributed to a weakening of several components of aggregate demand in some Member States.

Then, via international trade, weaker aggregate demand spilled over into the remaining Member States. Thus, in addition to key interest rate cuts and the steering of expectations about the future path of short-term interest rates as mentioned above, in June and September 2014 the Eurosystem adopted measures aimed at bringing firms' and households' borrowing costs further in line with the highly accommodative stance of its monetary policy.

Therefore, in June 2014 it was announced that, starting from September, the Eurosystem would conduct targeted longer-term refinancing operations (TLTROs). Participation in TLTROs enables banks to raise medium to long-term financing at an exceptionally low fixed rate. This rate was initially determined at the interest rate on the main refinancing operations (MROs) prevailing at the time of take-up, plus a fixed margin of 10 basis points. In January 2015 it was announced that the aforementioned 10 basis point margin over the rate on the MROs would be eliminated for the TLTRO auctions to be conducted in 2015 and 2016.

Credit institutions will not be required to pay back borrowings after 24 months (i.e. in September 2016) but will be entitled to continue making use of the funds raised through the Eurosystem for a longer period of time (for a maximum of four years, i.e. up to September 2018), provided that their net lending to euro area non-financial corporations and households, excluding loans for house purchase, ("lending to the real economy") is above the applicable benchmarks.

These benchmarks are set according to the following criteria: for banks that exhibited positive **average monthly** net lending<sup>7</sup> to the real economy in the period from May 2013 to April 2014 ("reporting period"), the positive eligible net lending (i.e. to the real economy) must continue for the period from May 2014 to April

<sup>7</sup> Net lending equals the disbursement of new loans and other credit facilities less amortisation payments made by borrowers on outstanding loans or other types of credit.

2016. Conversely, banks that exhibited negative **average monthly** net lending to the real economy over the reporting period will have to increase their lending activities (in terms of financing of the real economy). More specifically, banks must reduce to a certain extent their negative monthly net lending (in **absolute** terms) for the period from May 2014 to April 2016, compared with the previous twelve months (i.e. the period from May 2013 to April 2014).

As banks must extend new loans to firms and households, which will most probably require a reduction in bank lending rates, and to allow banks to secure medium to long-term funding from the Eurosystem at very low cost, the TLTRO regulatory framework provides the suitable incentives to support credit growth in the euro area.

The first two TLTROs were settled in September and December 2014. Under the scheme, credit institutions were able to borrow from the Eurosystem an amount equivalent to up to 7% of their outstanding loans to the real economy as at end-April 2014. Out of the total €400 billion offered for the euro area as a whole, the actual take-up was €212 billion. Six more TLTROs will be carried out, on a quarterly basis, between March 2015 and June 2016. Through these operations banks will be entitled to additional borrowing allowances from the Eurosystem, depending on the evolution of their lending activities, as mentioned above.<sup>8</sup>

As evidenced by the first TLTROs, the possibility to obtain cheap medium-term funding from the Eurosystem urges banks to limit to some extent the issuance of bank bonds. Reduced supply of bank bonds should exert downward pressure to yields, thereby leading to an improvement in funding conditions for those banks that continue to resort to bond issuance. Investors are set to shift towards alternative investments other than bank bonds (e.g. corporate bonds). Thus, signs of improvements in funding conditions are expected to

emerge directly from the capital market, which can be accessed mainly by large corporations.

In September it was announced that, commencing in the last quarter of 2014 and over a window of at least two years, the Eurosystem will conduct asset purchase programmes, namely (i) an asset-backed securities (ABS)<sup>9</sup> and (ii) a covered bond<sup>10</sup> purchase programme.

The covered bond market, unlike the market for asset-backed securities, is characterised by high volatility. The volume of debt instruments under this programme is substantially higher than the value of asset-backed securities that would in principle be eligible for purchase under the respective programme of the Eurosystem.

On 22 January 2015 the Governing Council of the ECB introduced an expanded asset purchase programme. In addition to the asset purchase programmes that were launched in 2014, the Eurosystem will start in March 2015 to purchase on the secondary market securities with

<sup>8</sup> In more detail, banks that in the twelve months from May 2013 to April 2014 achieved positive *average monthly* net lending to the real economy are entitled to borrow from the Eurosystem an amount equal to up to three times their *cumulative* net lending from May 2014 until two months before the TLTRO. For banks that exhibited negative *average monthly* net lending to the real economy, the calculation of the amount of liquidity they are entitled to raise is more complicated: With regard to the TLTROs to be conducted from June 2015 onwards, the borrowing allowance from the Eurosystem may amount to *three times the difference* between (i) *cumulative* net lending to the real economy in the period from May 2014 to *two months prior* to the TLTRO and (ii) *cumulative* net lending to the real economy achieved in the period from May 2013 to April 2014. As a result, the more new loans a bank grants from May 2014 onwards, even if it fails to achieve positive cumulative net lending, the higher the amount of funding it is entitled to raise from the Eurosystem, as long as the cumulative net lending in the period (which may be longer than twelve months) after May 2014 is less strongly negative than the cumulative net lending achieved in the twelve months to May 2014.

<sup>9</sup> Asset-backed securities are created from the pooling of a group of loans, usually by the originating credit institution. This pool is then transferred to a specially created investment vehicle as part of its assets. Asset-backed securities, i.e. debt securities sold to investors, are disclosed as liabilities of the vehicle. For investors, the income from holdings of asset-backed securities is generated from the smooth debt servicing (on behalf of borrowers) of the pool of loans in the assets of the specially created investment vehicle.

<sup>10</sup> Covered bonds have a fixed rate and a medium or long-term maturity. They are backed by a pool of loans (the “cover”) which are granted by the issuer credit institution and remain on the issuer’s balance sheet. They are “dual-recourse” instruments, as bond holders are, on the one hand, seen as creditors of the issuer bank and, on the other, have a preferential claim – i.e. seniority to other creditors – on the assets of the cover pool in the event of the bank’s default.

a remaining maturity of 2-30 years, issued by euro area central governments or other agencies, as well as by European supranational institutions.

The maximum amount of purchasable debt securities issued by the central government or other agencies of a euro area country is determined on the basis of its NCB's share in the ECB's capital key. Nevertheless, apart from this general restriction, securities purchased by the Eurosystem are subject to both an issuer limit (33%) and an issue limit (25%), with the aim of preserving market functioning despite the Eurosystem interventions. The limits also ensure that the application of collective action clauses (CACs), which are typically incorporated in government bonds, is not obstructed in the event of a public debt restructuring. Regarding creditor treatment, it was confirmed that the Eurosystem accepts the same (*pari passu*) treatment as private investors in the event of debt restructuring.

Combined monthly purchases of assets (asset-backed securities, covered bonds as well as government or similar bonds) under the expanded asset purchase programme will amount to €60 billion. Purchases are intended to be carried out until a sustained adjustment is seen in the path of inflation that is consistent with the Eurosystem's primary objective of achieving inflation rates below, but close to, 2%. This implies that purchases will be carried out at least until September 2016.

In order to be included in the expanded asset purchase programme, sovereign bonds must meet the existing eligibility criteria for use in Eurosystem credit operations. Among other things, they must be rated at least investment-grade, while additional eligibility criteria will apply in the case of countries under an EU/IMF adjustment programme.

The Governing Council of the ECB stressed that it retains control over all the design features of the programme, as well as that the ECB will coordinate the purchases of securi-

ties issued by central governments, agencies and European institutions, thereby safeguarding the singleness of the Eurosystem's monetary policy. In practice though, assets will be purchased by NCBs on a decentralised basis.

With regard to the sharing of hypothetical losses from the implementation of the expanded asset purchase programme, any losses from securities issued by euro area governments will be in principle borne by the NCB that has purchased them. However, as the ECB will also participate in such asset purchases, these will be subject to a regime of loss sharing across all Eurosystem members. Purchases of securities of European institutions will be entirely subject to loss sharing among euro area NCBs.

The proceeds of the sale to the Eurosystem under the expanded asset purchase programme will be used by the institutions that sold the securities to buy other financial instruments. This portfolio shift is expected to bring about yield compression for a wide range of securities as well as a rise in share prices, which among other things will facilitate firms' access to equity market financing. A downward pressure will also be exerted on the exchange rate of the euro, to the extent that the proceeds of the sale of securities to the Eurosystem is invested in foreign-currency-denominated assets, with higher *ex ante* yields than euro-denominated assets.

Thus, it is estimated that an overall easing of financial conditions in the economy will be achieved, while the accommodative monetary policy stance of the Eurosystem will have a favourable effect on a much larger number of economic agents than banks' debtors and will contribute to improving funding conditions for firms and households. Furthermore, the implementation of the expanded asset purchase programme (as well as the aforementioned TLTROs) is expected to influence the single money market towards higher levels of excess liquidity, thereby resulting in further



downward pressures on interbank interest rates. Against this background, there will be a broader scope for improvements in financing conditions for both households and non-financial corporations. This development will mostly benefit small and medium-sized enterprises, which have a comparatively higher reliance on bank credit than on financing through open capital markets. In general, the growth process is set to pick up on the back of increased demand and productive capacity, while subdued credit expansion will gather pace.

The bigger the size of Eurosystem asset purchases (or equally the higher the level of liquidity provision against eligible collateral through the targeted LTROs), the larger the extent of the portfolio shift and its beneficial effects, as mentioned above. Under this perspective, the Governing Council of the ECB has announced that, taken together, its latest package of measures will have a sizeable impact on the Eurosystem balance sheet, which is intended to move towards its early 2012 size. It is believed that only the expansion of the balance sheet is capable of contributing to the desirable rise in euro area inflation.

Apart from the portfolio shift, there exist other mechanisms that ensure the pass-through of non-standard monetary policy measures: First, the acquisition of debt securities by the Eurosystem will contribute to an upward pressure on their prices. The issuance of covered bonds and asset-backed securities will become more advantageous to banks. Furthermore, given that the Eurosystem will have absorbed a big volume of debt securities, some investors will seek ways to replace them with similar securities in their portfolios, thereby boosting demand for new issues on behalf of banks. However, in order to issue new asset-backed securities or covered bonds, banks will be urged to lower their lending rates, so as to be able to increase the volume of new loans that can be either securitised or used as a cover for covered bonds. This mechanism will also help to support banks' credit expansion.

Second, the transfer of asset-backed securities from banks to the Eurosystem helps unlock part of their capital, held as a buffer for non-performing loans which from now on will be securitised. This part of banks' capital base becomes available to underpin the granting of new loans.

Third, banks' capital base is likely to strengthen also as a result of an overall increase in the value of assets ensuing from the implementation of the programmes. The higher asset value will also enhance borrowers' creditworthiness pushing upwards the valuation of the collateral they put forward to receive bank loans and, to this extent, it will create the necessary conditions for an improvement in credit growth.

Fourth, in general the Eurosystem deems reasonable that the asset-backed securities purchase programme will lead to a reversal in the structural trend of credit contraction that has affected (irrespective of the quality of underlying assets) the asset-backed securities market since 2007. With the revival of the market, banks' ability to refinance their loan portfolios is expected to increase considerably and permanently, with expansionary effects on bank credit supply.

The aforementioned non-standard measures are aimed at improving the functioning of the monetary policy transmission mechanism by supporting bank lending to the real economy. The enhanced functioning of this mechanism and particularly the stimulation of credit expansion to the private sector are necessary for policy rate cuts to translate into gains for final borrowers. Besides, non-standard measures contribute to further monetary policy accommodation, which at the current juncture cannot be achieved through an adjustment of policy rates, given that these have reached their lower bound.

Apparently, the announcement alone of the Eurosystem measures coincided with a faster decline in lending rates and some increase in

monthly net lending to the private sector in the euro area, thereby leading to a moderation in the respective annual rate of decline, as mentioned above. Spreads between asset-backed securities or covered bonds and bonds with negligible credit risk (AAA-rated) started to narrow. Government bond yields declined, mainly amid expectations about the inclusion of such debt securities in a large-scale expanded asset purchase programme of the Eurosystem. Finally, the exchange rate of the euro started to weaken.

With its asset purchase programmes, the Eurosystem has now shifted towards an active management of its balance sheet relative to its practice so far to provide demand-based liquidity to banks. This means that the monetary policy stance of the Eurosystem will reflect changes in the size and the composition of its balance sheet or, more precisely, the type and the maximum total amount of assets purchased by the Eurosystem.

The inclusion of government and other similar bonds in the purchasable securities under the programme allows for a full exploitation of the benefits ensuing from the scale of government bond purchases. The relatively large size of such purchases substantially enhances the credibility of efforts to create an environment of rising inflation. The acquisition of sovereign bonds by the Eurosystem is set to bring about a large-scale portfolio shift. Declining gov-

ernment bond yields provide incentives for banks that sell debt securities to the Eurosystem to channel the obtained liquidity into the real economy in the form of loans. In fact, given the latest package of Eurosystem measures, a large number of these loans could be securitised or used to back covered bonds, which in turn could be refinanced by the Eurosystem through the asset purchase programmes.

Lastly, in June 2014 the liquidity-absorbing operations carried out by the Eurosystem to sterilise liquidity provided through the Securities Markets Programme (SMP) were suspended. Since the launch of the SMP in May 2010, excess liquidity in the euro area banking system resulting from the acquisition of debt securities by the Eurosystem had been neutralized through weekly operations (corresponding to the total amount of such purchases). Banks were called upon to deposit liquid assets with the Eurosystem in the context of tenders with a maximum bid rate which was higher than the deposit facility rate. Despite the termination of the SMP in September 2012, the collection of deposits continued on a weekly basis, with a view to sterilising the liquidity that had been injected under the Eurosystem asset purchases. However, in June 2014 commercial banks' deposits held with NCBs were no longer renewed, thereby resulting in an immediate support of liquidity in the euro area banking system.

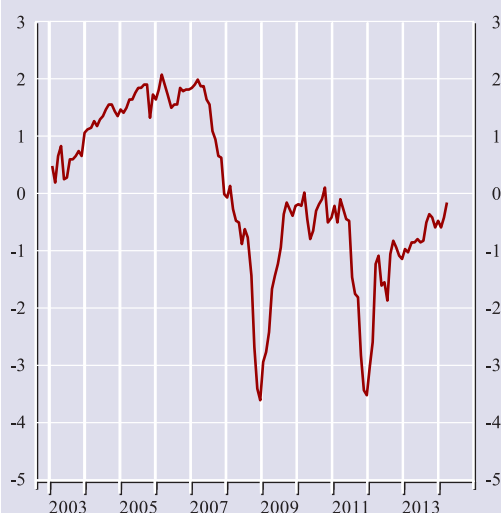
#### Box IV.2

##### THE IMPACT OF THE FINANCIAL ENVIRONMENT ON ECONOMIC GROWTH AND THE ROLE OF TARGETED LONGER-TERM REFINANCING OPERATIONS (TLTROs)

The single monetary policy rests upon the assumption that similar financial conditions prevail throughout the euro area and that these conditions facilitate the transmission of monetary policy to the real economy. However, despite the decline in the ECB's main refinancing rate, the global financial crisis and the ensuing debt crisis led to a **protracted deterioration in financial conditions** both in the euro area as a whole and individual countries (albeit to a different extent across countries). Tight financial conditions and, most of all, insufficient bank credit lie behind the weak or negative economic growth rates that are recorded in most euro area countries.

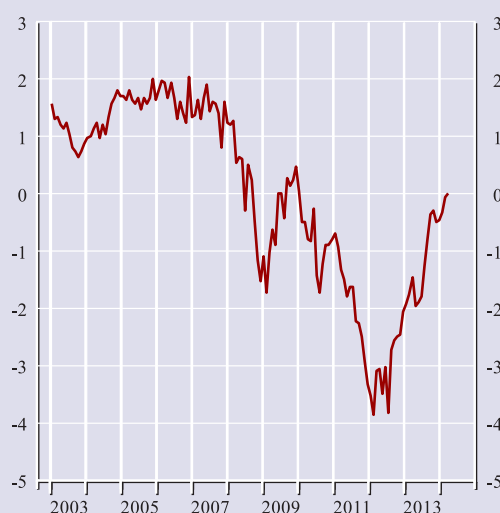


Chart A Euro area: Financial conditions index



Source: Bank of Greece calculations.

Chart B Greece: Financial conditions index



Source: Bank of Greece calculations.

Specifically, as a result of the debt crisis in Greece, the government practically lost access to international money and capital markets and the domestic banking system was faced with major capital constraints. Against this backdrop, the steady and considerable increase in domestic MFI credit to the private sector, which had largely financed the country's fast economic growth in the first years of its EMU membership, was reversed and has now turned into a contraction of credit, in real terms. Besides, it is estimated that credit contraction largely contributed to a dramatic GDP contraction and continues to **weigh heavily on the economy's return** to fast growth rates.

Acknowledging the relationship between credit expansion and economic growth, in June 2014 the Eurosystem introduced the Targeted Longer-Term Refinancing Operations (TLTROs) to provide financing to banks at a low fixed interest rate, under a scheme that creates **incentives for bank lending** to non-financial corporations and households, i.e. to the "real economy".<sup>1</sup> By adopting this policy, the Eurosystem aims to enhance the functioning of the monetary policy transmission mechanism by supporting economic activity, so that inflation returns to levels close to 2%.

Therefore, exploring the potential effects of this refinancing programme on the real economic aggregates of the euro area is of great relevance. This is a highly topical issue for Greece, given the deep and protracted recession that hit the Greek economy over the past six years and also the current weak growth rates.

To this end, we estimated, for both Greece and the euro area, rolling linear models using the OLS method, as well as multivariate (VAR) models which incorporate real economic aggregates such as the industrial output index, the retail sales index and the Purchasing Managers' Index (PMI),

<sup>1</sup> Excluding loans to households for house purchase (for further details, see Box III.1 in *Monetary Policy – Interim Report 2014*).

along with an indicator that captures financial conditions (see Charts A and B).<sup>2,3</sup> Estimations are based on the assumption that the full amount of liquidity which was available for credit institutions during the first two open market operations under the TLTRO programme and which accounts for about 7% of total bank lending to non-financial corporations and households (excluding loans for house purchase) will be raised by credit institutions and channeled into the real economy in the form of new lending.<sup>4</sup> First, we calculate the impact of such an increase on the financial conditions index and then we estimate the impact of index changes on real economic aggregates.

It should be stressed that the estimated relationship between the financial conditions index and the economic activity indicators under review is positive and statistically significant both for Greece and the euro area. Moreover, a Granger causality is determined in the direction from the financial conditions index to the real variables (but not in the opposite), particularly from 2006 onwards. This finding implies that **financial conditions in general and credit expansion in particular are expected to continue to influence the path of economic activity** in the period ahead. It follows that, for the euro area, the improvement of the financial conditions index which results from the full utilisation of the first two open market operations of the TLTRO programme seems to lead to a direct rise in the economic activity indicators. Furthermore, via the feedback mechanisms, this impact remains statistically significant over the medium term, i.e. it leads to an improvement in those indicators that remains statistically significant over a time horizon of four years.<sup>5</sup> It should be noted that, in the case of Greece, the estimated impact on the industrial output index forms an exception, since it is positive but not statistically significant at conventional levels of significance. This finding most probably reflects the comparatively limited contribution of industrial output to Greece's GDP relative to other European economies. Conversely, the estimated impact of credit expansion on retail sales volume is markedly stronger in Greece than in the euro area, reflecting the high propensity to consume in the Greek economy.

However, the impact of credit expansion through the TLTROs on the PMI, which is known to be a leading indicator of the economic growth rate, is deemed a more useful explanatory tool. Assuming that the total amount of liquidity that Greek credit institutions may raise through the two first TLTROs is channeled into the real economy in the form of credit expansion (a development which is equivalent to a credit expansion of about 7% to the private sector), the PMI for Greece is expected to rise on a cumulative basis, over a four-year horizon, by approximately 3.2%, compared with an estimated 6.4% for the euro area (see Charts C and D).

Although the PMI exhibits high correlation with the growth rate, it is known that, in relative terms, it tends to overreact. This means that the abovementioned estimated impact might be marginally higher than what would be expected in terms of GDP growth. On the other hand, **an improvement in financial conditions through credit expansion would lead to improvements in a number of other aggregates** (e.g. a decline in interbank interest rates, bank lending rates and bond yields,

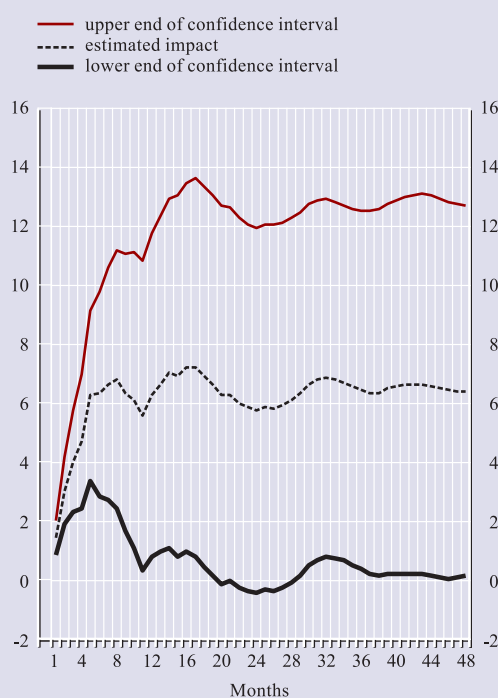
<sup>2</sup> See *Monetary Policy – Interim Report 2012*, Box II.4, “Financial conditions in Greece and the euro area”.

<sup>3</sup> Including, for completeness, covariates, such as inflation and a “measure of fiscal news” which captures revisions to the official forecasts by the Greek Finance Ministry of the fiscal deficit-to-GDP ratio of the respective year (see H. Gibson, S. Hall and G. Tavlás, “The Greek financial crisis: Growing imbalances and sovereign spreads”, *Journal of International Money and Finance*, 31 (2012), 498-516).

<sup>4</sup> Although this is a rather optimistic assumption, it can be a useful tool for the examination of the potential impact of TLTROs on the real economy. Nevertheless, the participation of domestic credit institutions in these operations was very promising. In any event, the results show the impact of each additional unit of borrowing on real activity.

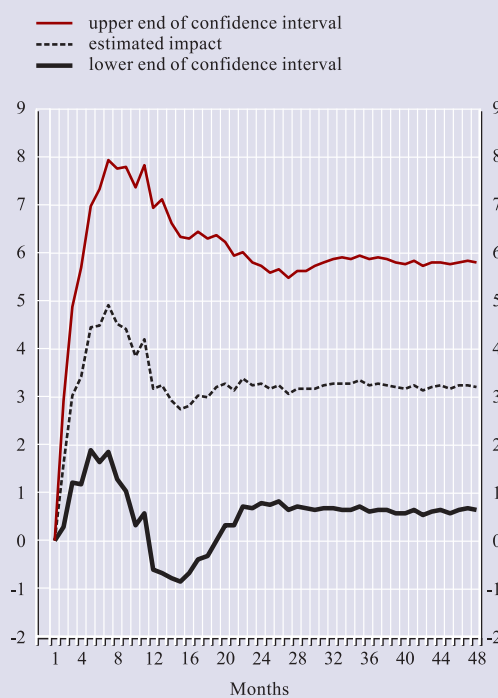
<sup>5</sup> More specifically, one percentage point of credit growth leads to a cumulative increase of 1% in the euro area industrial output index, 0.5% in the retail sales index and 0.9% in the PMI, over a time horizon of four years. For Greece, each percentage point of credit expansion, through its impact on the financial conditions index, leads to cumulative increases of 0.3%, 0.7% and 0.5%, respectively, over a period of four years.

**Chart C Euro area: Estimated total impact of the TLTROs on the PMI**



Source: Bank of Greece estimates.

**Chart D Greece: Estimated total impact of the TLTROs on the PMI**



Source: Bank of Greece estimates.

as well as a rise in share prices, an improvement in the economic sentiment, smoothing boom-bust cycles in the capital market, a weakening of the euro exchange rate, etc.), which in turn **could potentially amplify the favourable effects of credit expansion on the real economy**. Besides, it is highly encouraging that domestic credit institutions (in contrast with the euro area total) participated in the two first operations programme, by raising almost the entire amount they were entitled to, while to some extent they signaled their intention (as evidenced by their replies to a relevant question in the Bank Lending Survey for the third and fourth quarter of 2014) to **ease** somewhat credit standards for households and non-financial corporations.

In sum, the aforementioned empirical analysis concludes that, provided that the TLTRO programme translates into credit expansion or into a relative slowdown in credit contraction, it **could help foster economic growth in Greece** in the forthcoming years.

#### 4 THE EURO AREA MONEY MARKET

Over the first four months of 2014, the single money market saw a gradual decline in excess liquidity. This was a result of the early repayment, on behalf of banks, of a sizeable part of the liquidity injected by the Eurosystem through three-year LTROs. Consistent with

decreasing levels of excess liquidity, the EONIA (for overnight deposits in the inter-bank market) followed an upward path and its volatility rose (see Chart IV.2). In the first four months of 2015 the interbank Euribor rates also rose (see Chart IV.3). Until April 2014, the Governing Council of the ECB had repeatedly stressed that it monitored closely whether

**Chart IV.3 Euro area money market rates  
(1 January 2013–13 February 2015)**

(percentages % per annum; daily data)



upward pressures on euro area money market rates blurred its monetary policy stance, which should remain accommodative.

In any event, since May 2014 the markets, steered by the Governing Council of the ECB, have started to anticipate an easing of the single monetary policy and, as a result, interbank rates have embarked on a downward path. Downward pressures on the interest rates of the single money market continued through the following months in line with a reversal of the gradual decline in excess liquidity. This reversal was achieved —despite the fact that

the early repayment of past three-year LTROs was sustained after May 2014 — on the back of the aforementioned suspension of the weekly collection of deposits by the Eurosystem and subsequently the settlement of the first TLTRO in September. Nevertheless, it appears that this operation had only a temporary effect on the banking system. Soon afterwards, excess liquidity declined once more, as the repayment of three-year LTROs continued.

Against a backdrop of ample liquidity, it is only reasonable that the EONIA would move close to the deposit facility rate. Indeed, for the largest part of the last four months of 2014 and the first months of 2015 the EONIA and the overnight index swap (OIS) rate, which incorporates the expectations of the future path of the EONIA, hovered in negative territory, while the Euribor rates reached a historic low.

However, the EONIA continued to rise at the end of each month. Banks' demand for liquid assets tends to increase at that time as banks seek to reflect in their financial statements, which refer to the last day of the month, a satisfactory stock of liquidity. This phenomenon is all the more pronounced at the end of the year and therefore the Eurosystem suspended the possibility of repayment of three-year LTROs over the last week of December 2014 and the first week of 2015. This suspension, coupled with the settlement of the second TLTRO in mid-December, contributed to a substantial increase in excess liquidity in the euro area banking system, which was subsequently reversed in part.

#### Box IV.3

##### CHANGES IN THE OPERATION OF THE ECB GOVERNING COUNCIL: ROTATION OF VOTING RIGHTS, CHANGES IN THE FREQUENCY OF MONETARY POLICY MEETINGS AND PUBLICATION OF ACCOUNTS

As of January 2015, significant changes have been implemented in the operation of the Governing Council of the European Central Bank (ECB), the supreme decision-making body of the

Eurosystem.<sup>1</sup> The ECB Governing Council comprises the governors of the national central banks (NCBs) of the euro area countries and the six members of the ECB Executive Board.

In January 2015, with the entry of Lithuania into the euro area, the number of NCB governors participating in the ECB Governing Council reached 19. According to European Union treaties, as soon as the number of governors exceeded 18, the system of **rotation of voting rights** in the Governing Council had to be implemented.

The rotation of voting rights implies that every month some governors relinquish their voting rights (the members of the Executive Board hold permanent voting rights). This system was established to enable the ECB to continue to take decisions in an efficient manner even as the number of euro area countries gradually increases and, with them, the number of members of the Governing Council. It was designed to ensure that the NCB governors holding voting rights come from Member States which, taken together, are representative of the entire euro area economy. The principle of “one member, one vote” continues to apply to those Governing Council members holding a voting right at that time.

Once the voting rotation system has come into effect, NCB governors share 15 voting rights in total. This number corresponds to the initial allocation of voting rights within the ECB Governing Council under the Maastricht Treaty and has been maintained to avoid disturbing the balance between the members of the Executive Board and the NCB governors.<sup>2</sup>

The rotation scheme implies that countries are divided into groups according to the size of their economies and financial sectors.<sup>3</sup> Governors in each group take turns using the voting rights on a monthly rotation. For as long as euro area numbers 19 to 21 member countries, governors will be allocated to two groups:<sup>4</sup>

- The first group comprises the governors from countries ranked first to fifth – currently Germany, France, Italy, Spain and the Netherlands – who share four voting rights.
- The second group comprises the remaining governors (including the Governor of the Bank of Greece), who share 11 voting rights.

The governors in the second group hold voting rights for eleven months and subsequently relinquish their voting rights for three months. In late 2014, the Governing Council decided, by means of a draw, which NCB Governors would be the first to relinquish their voting rights in January 2015. As a result of the draw, the Estonian central bank governor and the next two ranking governors in the second group, namely the Irish and the Greek governors, relinquished their voting

<sup>1</sup> See “Frequently Asked Questions on the rotation of voting rights in the Governing Council” (<http://www.ecb.europa.eu/ecb/orga/decisions/govc/html/faqvotingrights.en.html>), “Rotation of voting rights in the Governing Council of the ECB”, *Monthly Bulletin*, ECB, July 2009 ([https://www.ecb.europa.eu/pub/pdf/other/mb200907\\_pp91-99en.pdf](https://www.ecb.europa.eu/pub/pdf/other/mb200907_pp91-99en.pdf)), the ECB press release of 18.9.2014 on the first list of governors subject to voting rotation (<http://www.ecb.europa.eu/press/pr/date/2014/html/pr140918.en.html>) and the ECB press release of 18.12.2014 on the publication of accounts of monetary policy discussions from January 2015 (<http://www.ecb.europa.eu/press/pr/date/2014/html/pr141218.en.html>).

<sup>2</sup> See the article entitled “The adjustment of voting modalities in the Governing Council”, *Monthly Bulletin*, ECB, May 2003 ([https://www.ecb.europa.eu/pub/pdf/other/pp73\\_83\\_mb200305en.pdf](https://www.ecb.europa.eu/pub/pdf/other/pp73_83_mb200305en.pdf)).

<sup>3</sup> It should be noted that, as shown in the table, following allocation to groups on the basis of this indicator, the final ranking of governors in each group is based on the alphabetical order of the official names of their countries.

<sup>4</sup> Once the number of euro area member countries exceeds 21, three groups will be formed. As is the case now, the first group will be composed of the five largest countries and will share four voting rights, while the second group of medium-sized countries will comprise half of the governors and will share eight voting rights. The third group will comprise the governors of the remaining smaller countries, who will share three voting rights. Thus, the total number of governors with voting rights will not exceed 15.

# Rotation of voting rights in the Governing Council of the ECB in 2015

	2015													
	January		February		March		April		May		June		July	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
ECB Executive Board														
President														
Vice-President														
Member														
Member														
Member														
Group 1: NCB Governor														
Germany														
Spain														
France														
Italy														
The Netherlands														
Group 2: NCB Governor														
Belgium														
Estonia														
Ireland														
Greece														
Cyprus														
Lithuania														
Latvia														
Luxembourg														
Malta														
Austria														
Portugal														
Slovenia														
Slovakia														
Finland														

Notes: The Governing Council meets twice per month, except for August (when it meets once).

Meetings where monetary policy decisions are taken are marked in dots.

Meetings where a member of the Governing Council does not have the right to vote are marked in dark.

rights. In the first group, the draw resulted in the governor of the central bank of Spain relinquishing his voting right. Thus, the Bank of Greece Governor has relinquished his voting right for the period from January through March 2015 and will regain such right for the period from April 2015 through February 2016 (see also the table).

All governors continue to attend all meetings and have the right to speak; therefore, discussion modalities have not changed. Given that most decisions in the Governing Council are taken on a consensual basis and in a spirit of cooperation, the system of voting rotation does not imply any changes in the decision-making process.

Another change in the functioning of the ECB Governing Council concerns the **frequency of meetings in which monetary policy decisions are taken**, which has been set at six weeks as of January 2015 (instead of four up to then). Thus, of the six Governing Council meetings to be held in the first quarter of 2015, only two, compared with three one year earlier, will be dedicated to monetary policy decisions.

Finally, the ECB Governing Council decided to publish regular **accounts of monetary policy discussions**, starting with the meeting of 22 January 2015. The accounts will contain an overview of financial, economic and monetary developments, as well as an overview of discussions, in an unattributed form, on the economic and monetary analyses and on the monetary policy stance. The aim is to provide the rationale behind monetary policy decisions and enable members of the public to improve their understanding of the Governing Council's assessment of the economy and its policy responses in the light of evolving conditions. The accounts will be released four weeks after the related monetary policy meeting.





## V MACROECONOMIC DEVELOPMENTS AND PROSPECTS IN GREECE<sup>1</sup>

The year 2014 marked the return of economic activity to positive growth rates, after six years of deep economic recession which translated into a cumulative decline in GDP of more than 25%. The drivers behind this development were higher exports, mainly as a result of an increase in export services (tourism and shipping) due to improved competitiveness, as well as an increase in private consumption. The rise in GDP is also reflected in the labour market, which registered a marginal increase in employment and a slight decline in the unemployment rate, although it still remains high. On the other hand, unit labour cost and prices kept falling, partly reflecting weak demand conditions in the economy. Positive developments in economic activity and employment evolved in an environment of relatively low external demand, characterised by weak growth in the euro zone.

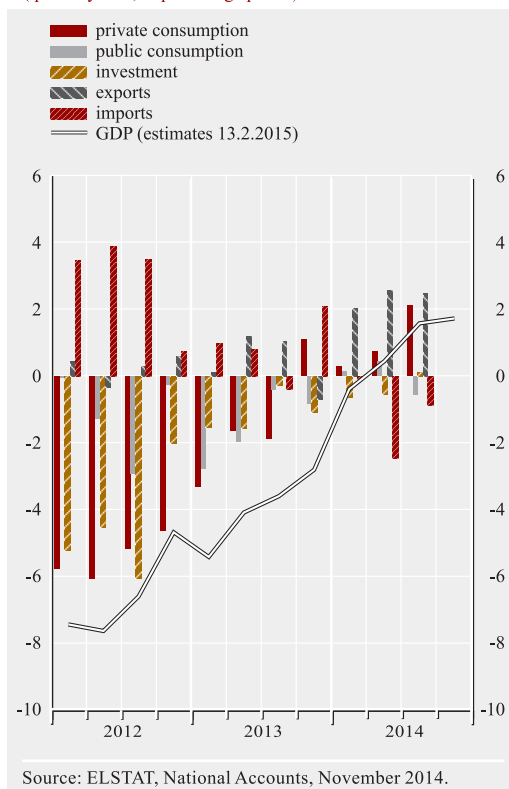
For 2015 a positive growth rate is expected, which should also be based on higher private consumption and exports. Positive developments in the labour market are expected to continue, following developments in economic activity, and supported by the ongoing implementation of active employment policies. Prices are estimated to continue their downward course, which is also likely for unit labour costs. However, it should be noted that significant uncertainties associated with domestic political developments around the turn of the year, as well as geopolitical and international risks, might slow down economic growth in 2015. By contrast, a further decline in oil prices, an accommodative monetary policy which is expected to improve financing conditions, progress towards fiscal adjustment and structural reforms, as well as the depreciation of the euro, are expected to have a positive effect on economic activity.

### I OVERVIEW OF DEVELOPMENTS AND PROSPECTS

Quarterly GDP data releases show a **clear deceleration of recession**, as 2014 saw a positive growth rate (0.8%), for the first time since 2007. Based on data releases, the increase in

**Chart V.1 Contributions to annual changes in GDP (2012-2014)**

(quarterly data, in percentage points)



private consumption offset the decline in investment, while rising exports made a positive contribution to the stabilisation of the economy (see Chart V.1).

Developments in nominal disposable income, the decline in the general level of prices, as well as falling uncertainty throughout 2014 (with the exception of the last month, in anticipation of the outcome of the Greek presidential election), had a positive effect on consumer behaviour. **Private consumption is estimated to increase for the year as a whole**, in line with the improvement in available indicators in the course of 2014 (e.g. volume of retail sales, new passenger car registrations), as lower prices of oil and other fuel support disposable income of Greek households.

<sup>1</sup> On the basis of data and information available on 16.2.2015.

However, **total investment**, despite the increase in public investment, **remains particularly low**, reflecting a decline in private investment – mainly as a result of reduced bank credit and high borrowing costs. The drop in private investment mainly concerns residential investment, whereas investment in machinery and transport equipment started showing signs of recovery and their share as a percentage of GDP has increased. Therefore, the weak (1%) rise in investment in the third quarter of 2014, for the first time after 2008, marks a possible recovery in investment which may continue in the years ahead.

**Exports increased**, largely due to improved competitiveness of exported goods and services, despite the fact that external demand for goods (mainly from EU markets, which constitute Greece's major trading partners) did not grow as expected. Tourism and shipping demonstrated the strongest export dynamics, with demand also coming from non-EU countries.

**The impressive recovery of tourism** was mainly due to higher price competitiveness and an improved economic climate. Data on arrivals show a shift towards new tourist destinations and an extension of the tourist period. The significant increase in tourism is attributable to: (i) a shift towards alternative forms of tourism; (ii) the renewed promotion of Greece's culture and tourism abroad (see Box V.1); (iii) measures taken in order to improve the number of visitors to tourist attractions (e.g. visiting hours in archaeological sites were extended, museums are open on holidays); and (iv) the depreciation of the euro against the currencies of competitor destinations in the Mediterranean. Indeed, Greek tourism also benefited from political instability in competitor destinations (East Mediterranean).

There has also been a significant increase in receipts from transport services (ocean-going shipping), mainly due to the about 14% rise in freight rates in international markets.

**Exports and private consumption are expected to spur the economy also in 2015**, if oil prices remain low and the depreciation of the euro continues.

**2014 was characterised by a small increase in employment and a decline in the number of the unemployed for the first time since 2008**. Positive developments in employment could be associated with the gradual return to positive growth rates, the improved economic climate, the decline in labour costs for businesses (which was supported by reforms in the labour market), and the restructuring towards more flexible forms of employment after institutional restrictions on the labour market were lifted. Some of the above are estimated to continue contributing to lower unemployment in 2015.

However, the **rate of unemployment remains high** (26.6% in January-September, which is the highest rate in the EU). In addition, the share of long-term unemployment increases (in the third quarter of 2014, 75.4% of the unemployed were long-term unemployed), risking a skill depreciation of the labour force. The gradual return to positive growth rates combined with the ongoing implementation of active employment policies, which may be funded under the National Strategic Reference Framework, should gradually help reduce unemployment.

During the first years of the crisis, the increase in the number of the unemployed and the duration of unemployment, together with serious defects in the public safety net in Greece, led to a **rise in poverty and income inequality**. Nevertheless, in 2012-2013, the main indicators (at-risk-of-poverty rate and Gini coefficient) suggest a stabilising trend in inequality. In any case, certain measures to support income (for instance, the procedures for the pilot implementation of the minimum guaranteed income in 13 municipalities of the country started in November 2014) are necessary in order to maintain social cohesion, which is crucial for stability and growth.

**Unit labour costs declined further in 2014.** It is estimated that, if labour market policy remains unchanged and with only minor nominal wage increases, unit labour costs would keep on decreasing, at a decelerating rate, also in 2015. This would be attributable on the one hand to higher productivity and, on the other hand, to the carry-over effect from the decrease in employers' contributions in mid-2014, thereby improving overall competitiveness. The labour market policy changes announced by the new government imply changes in the above estimates, the extent of which cannot yet be estimated.

**2014 was marked by negative inflation,** as a result of lower unit labour costs, weaker total demand, negative effects from indirect taxes on prices and, particularly in the last months of the year, lower oil prices in the world market. Structural reforms in product and labour markets are estimated to have also contributed to this deflationary course. Some of these factors

are expected to affect prices **also in 2015**, and **inflation is expected to remain negative** during this year.

The main sources of uncertainty surrounding economic developments over the medium term are associated with the duration and the outcome of the new government's bargaining with Greece's partners, insufficient improvement in financing conditions, and the pace of structural reforms. Quite indicatively, economic sentiment indicators appear to have lost momentum in the last months of 2014, mainly due to increased political uncertainty at that time. The lower than expected growth rate of the euro area economy and geopolitical risks are additional potential risk factors. By contrast, the further decline in oil prices, the accommodative monetary policy pursued by the ECB, which is expected to improve financing conditions, as well as the weakening of the euro exchange rate are expected to have positive effects on domestic economic activity.

#### Box V.1

##### THE SMART ECONOMY: "CULTURAL" AND "CREATIVE" INDUSTRIES. A NEW ENGINE OF GROWTH IN GREECE

Over the past decade, the cultural and creative economy has been attracting increasing attention and has been at the heart of discussions on the design of a growth strategy, in both advanced (post-industrial) and emerging economies.<sup>1</sup> The cultural and creative industries have emerged as one of the most dynamic sectors of the European economy. They play a prominent role in the "Europe 2020" strategy, as they contribute to a new type of growth, strengthening international competitiveness of the EU and promoting diversity. They are closely linked to education and training, and their dynamic evolution is reflected not only in economic growth, but also in social development.

The European cultural and creative industry is currently emerging as a global leader, with a world market share of 70%. Based on the latest available statistical data, it accounted for 3% and 4% of the EU-27 GDP in 2010 and 2013 respectively – the financial sector excluded – and for more than 7 million jobs.<sup>2</sup> In fact, this sector has shown remarkable resilience to the current conjuncture of debt crisis and recession. While it was moving steadily on a path of growth in 2000-2009,

<sup>1</sup> For more information, see Lazaretou Sophia (2014), "The Smart economy: cultural and creative industries in Greece. Can they be a way out of the crisis?" Bank of Greece, Working Paper no 175, February.

<sup>2</sup> European Commission, "Commission staff working document on competitiveness of the European high-end industries", SWD(2012) 286 final, 26 September.

it exceeded 10% per annum in 2010-2012.<sup>3</sup> Between 2010 and 2013, the value of the sales of this sector's products and services rose by 28%, generating 200,000 new jobs, and its share in total EU exports reached 17%.<sup>4</sup>

In line with the new international growth model whereby the economy knowledge and technology intertwines with the economy of culture and creativity, Greek policymakers cannot afford to disregard the visible benefits of the smart economy in their quest for a new sustainable growth paradigm. The challenge is therefore to ensure a shift of cultural management policy from its current static approach (that focuses on the preservation of heritage) to a dynamic one that would encourage the creation of new ideas and forms that will probably become tomorrow's heritage.

The development of this new sector is of great importance for the Greek economy. The structure of the Greek economy and society exhibits a number of **specific features**, such as: a) predominance of medium-sized or small businesses, b) high labour intensity, c) distinctive personal character, d) productive or "creative" imagination, seen as the ability to process new useful images and concepts, e) free thinking and critical spirit, f) adaptability to an ever-changing environment, g) high aesthetics and quality of expression, h) the country's advantageous geographic location and mild weather conditions, i) the uniqueness of the Greek language, and j) a large inventory of know-how and skills. The above features offer a unique comparative advantage to Greek businesses operating in the sector.

In the beginning of the 21st century, Greece – as an integral part of the globalised economy and society – is faced with complex challenges stemming from a protracted global recession, the fragmentation of the single financial market in the euro area, the revival of nationalism and growing inequalities both across social groups at the domestic level and across countries. Following the economic adjustment that took place in recent years and resulted in a contraction in real GDP by around 25%, the country is now called upon to take the initiative for reconstructing its national economy within the new global economic environment that is emerging after the crisis.

In the context of this new national growth prospect, the cultural and creative industries link culture, economy and technology into what has been termed "a creative nexus". The modern world is full of images, sounds, colours, symbols and ideas that generate employment, income and wealth, but also new, marketable forms of culture. Therefore, there are three **necessary conditions** for successfully and reliably designing a national growth strategy for these industries: **first**, an identification of the institutional, structural and organisational features, **second**, a systematic analysis of how the industries function and how they influence key economic and social aggregates at the national level and, **third**, compilation and processing of comprehensive statistics for quantifying the industries' impact on output, employment and trade.

Today, in crisis-stricken Greece, we have little information about this sector: its boundaries, size, forms of employment, contribution to national output and export trade. Therefore, the **first step** in the mapping process should be to certify the relevant professions and clearly classify them separately from other categories characterised by lower intensity of cultural and creative expression

<sup>3</sup> Altgamma Monitor Update (2012), May. Frontier Economics (2012), *The value of the cultural and creative industries to the European Economy*, June. European Commission (2010), Green Bible. Unlocking the potential of cultural and creative industries, COM(2010) 183 final, 27 April.

<sup>4</sup> Frontier Economics (2014), *The contribution of the high-end cultural and creative industries to the European economy*, ECCIA, November.

(creative intensive). According to the proposed revised European statistical framework (ESSnet-Culture 2012), the cultural and creative sector covers ten domains of economic activity (heritage, archives, libraries, books and press, visual arts, performing arts, audiovisual and multimedia, architecture, advertising, art crafts). It is based on six sequenced economic functions, such as content, conception and elaboration of original ideas, production, reproduction and publishing, dissemination, broadcasting, trade and communication, preservation, education, administrative and technical support, and the regulatory framework, which make up the sector's value chain. In a first attempt of quantification, it includes four economic and social statistics (employment, financing, consumption, social participation) and four general categories of indicators of economic performance and spillover to the economy as a whole (entrepreneurship, employment, import-export, e-commerce). The **second step** should be to prepare a periodic mapping report that will help to draw a safe and accurate picture of the size and turnover in measureable terms. The **third step** should be to prepare a periodic report in the context of the evidence-based policy.

Historically and traditionally, the cultural sector in Greece has never been monitored, assessed or quantified. Projects were rarely selected on the basis of a cost-benefit approach and performance has almost never been evaluated. Culture was considered to be a social value that a welfare state must finance and promote. Thus, the effort to take stock of the Greek experience is surrounded by a number of problems, such as the lack of a commonly acceptable definition, the lack of a statistical database, the non-implementation of the 4-digit classification of occupations and activities and the fact that, at least in the pre-crisis period, culture was almost exclusively at central, regional and local level financed with taxpayer money.<sup>5</sup>

Although available statistics are extremely limited and incomplete, international trade statistics (which are virtually the only ones to provide complete and comparable data, UNCTAD database) reveal that between 2002 and 2011 Greece's international trade value in cultural and creative products and services increased sharply (almost doubled). However, the balance in nominal terms remained negative, since the small, yet growing, surplus on the services side was not enough to reverse the large trade deficit.<sup>6</sup> Design (fashion and furniture, 76.8% of total exports of cultural and creative products), book publishing, computer games, market research and advertising were the most extrovert branches, while audiovisual media, visual arts and research and technology services were among the least extrovert.

Nevertheless, in spite of their large increase, **Greek exports** represent a mere 0.2% of the total value of global exports of cultural and creative products and 0.4% of EU-27 exports. If population weights are applied, the per capita value of exports is four times lower than the per capita value of total exports in the EU-27. Greece thus records the fourth worst performance, after Romania, Bulgaria and Cyprus, and is ranked four positions below Portugal.

As regards **employment**, the percentage of employed persons in five comparable professional categories in 2009 stood at 1.2% of total employment, against 1.7% in EU-27.<sup>7</sup> Women represent

<sup>5</sup> The successful completion in December 2014 of the public consultation on the legislative initiative of the Ministry of Culture and Sports regarding the archive for safeguarding film heritage and the regulation of museum-related issues is considered to be a first step in designing a cultural policy. The draft law to be adopted designates the "Greek Film Archive" Foundation as the official body responsible for safeguarding the film heritage, describes the legal framework for its operation, as well as for the operation of museums and resolves pending tax issues, such as tax remittance to support film art.

<sup>6</sup> However, as a percentage of GDP, the total deficit declined between 2002 and 2011 on account of both the nominal GDP growth and the fact that, at the same time, the deficit's nominal value remained almost unchanged.

<sup>7</sup> Eurostat, Cultural Statistics, NACE Rev. 2 (58, 59, 60, 90, 91) and ISCO-88 (243, 245), latest available data.

more than one third of employed persons, while almost half of the employed persons are tertiary education graduates.

In the pre-crisis years, “cultural policy” in Greece had been limited to matters such as grants, tax exemptions or rebates and education in the fields of performing and fine arts. This resulted in the strategy’s unavoidable fragmentation and the piecemeal implementation of measures favouring this new economy that brought about a visible danger of frequently self-defeating policy measures, hesitation and unjustified delays.

Therefore, it would be useful to adopt a holistic approach at central level and design a single, comprehensive development policy. Indicatively, such a strategy could include a minimum of **eleven policy actions** that would foster the emergence of a new virtuous circle linking culture, creativity and the economy: 1. reviewing the tax treatment framework; 2. redefining education both in terms of life-long learning and training and in terms of curricular education; 3. launching a “structured” dialogue among stakeholders; 4. drawing up a register of creators and adopting the appropriate legislation regulating the relationships between employers and employees; 5. improving, strengthening and modernising the current legislation for a realistic protection of creative activities in the form of patents, industrial design, appellation of origin and trademark; 6. lifting restrictions to the development of international partnerships/co-productions; 7. adopting measures to strengthen competition; 8. creating physical locations for production and exhibition; 9. encouraging the use of new forms and sources of financing (NSRF 2014-2020, “Culture” and “Media” in the “Creative Europe 2014-2020” programme, crowdfunding, peer-to-peer lending); 10. redefining export policy, and 11. linking culture and creativity to tourism.

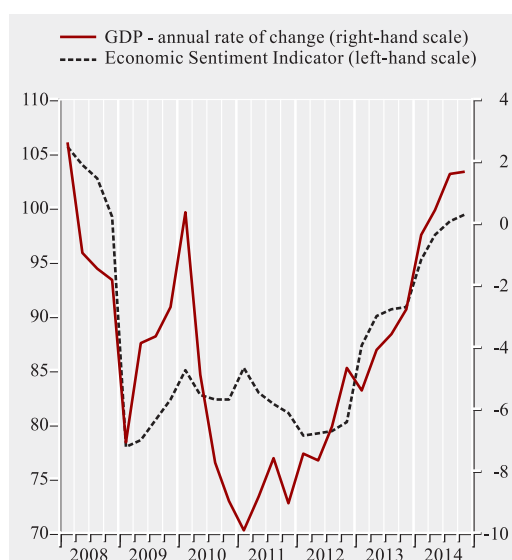
## 2 ECONOMIC ACTIVITY: DEVELOPMENTS AND PROSPECTS

### Developments in demand

As estimated under the ESA 2010 methodology (see Box V.2) and on the basis of seasonally adjusted data, GDP rose by 0.6% in January-September 2014 from -4% in 2013 as a whole (at constant 2010 prices, ELSTAT, National Accounts, November 2014). Specifically, **for the first time since the first quarter of 2010, the annual rate of change in GDP turned positive in the second and the third quarter of 2014**. This was mainly due to the recovery in private consumption and the accelerated growth of exports, mainly services (see Chart V.2 and Table V.1).

The **recovery in private consumption** (1.5% in January-September 2014, against -2.1% in 2013 as a whole), after six consecutive years of decline, contributed to the return of economic activity to positive rates of growth (private con-

**Chart V.2 GDP and the Economic Sentiment Indicator (2008-2014)**



Sources: ELSTAT, National Accounts (GDP); IOBE-European Commission (Economic Sentiment Indicator).



sumption is the most significant component of total demand, with a share of 69.3%). This increase is for the most part attributable to developments in the disposable income of households and non-profit institutions serving households (NPISHs)<sup>2</sup> (see Chart V.3), as a result of a stabilisation of employment, a decline in the number of the unemployed, positive annual rates of change recorded for dependent labour wages in the third quarter of 2014, lower prices of goods and services, and a significant decline in oil and other fuel prices. At the same time, declining uncertainty as regards future household incomes and the general economic situation in the country, as illustrated by the economic sentiment indicators in January-September 2014, had a positive effect on consumer spending. Taking into account evidence from available short-term indicators (e.g. retail sales indices) and economic sentiment indicators, developments in private consumption are estimated to be positive also in the fourth quarter of 2014 (see Table V.2 and Chart V.4).

However, the decrease in private consumption compared with its pre-crisis levels is remarkable and expresses deteriorating living standards of average consumers. In January-September 2014 private consumption was about 24% lower than in January-September 2009 (at constant prices, seasonally adjusted data). This is attributable to fiscal consolidation, i.e. wage and pension cuts in the public sector and tax hikes, the decline in the number of persons employed, lower wages in the private sector, and lower income from other sources.

Falling private consumption during the crisis is also illustrated in the results of the Household Budget Survey. A comparison of the results of the 2013 Household Budget Survey with those of previous surveys shows a considerable decline in the average monthly spending of households (by €556 or 26.9% in 2013 against 2009).

<sup>2</sup> This income, on the basis of the quarterly non-financial accounts of institutional sectors published by ELSTAT, rose marginally by 0.03% in the third quarter of 2014 (at current prices) for the first time since the fourth quarter of 2009.

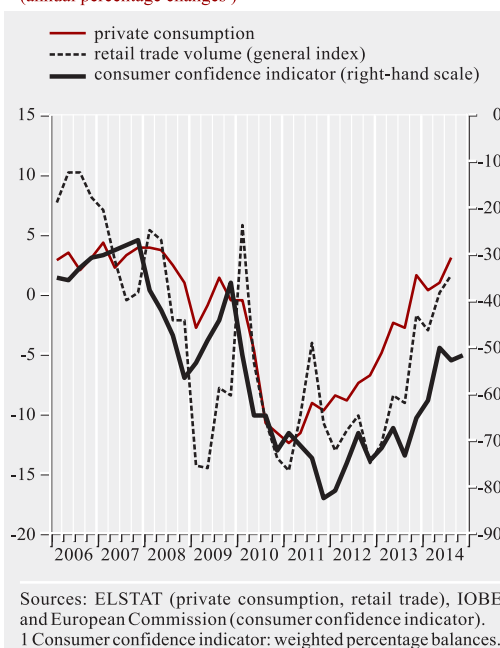
**Chart V.3 Private consumption and disposable income of households (Q1 2008 - Q3 2014)**

(annual percentage changes)



**Chart V.4 Private consumption and consumer demand indicators (Q1 2006 - Q4 2014)**

(annual percentage changes<sup>1</sup>)



**Table V.1 Demand and GDP**

(annual percentage changes and percentage point contributions, at 2010 prices)

	2010	2011	2012	2013	2014 Jan.-Sept.
Private consumption	-6.9 (-4.9)	-10.7 (-7.5)	-7.9 (-5.4)	-2.1 (-1.4)	1.5 (1.0)
Public consumption	-4.4 (-0.9)	-6.4 (-1.4)	-5.1 (-1.1)	-6.7 (-1.5)	0.1 (0.0)
Gross fixed capital formation	-20.8 (-4.3)	-17.0 (-2.9)	-28.5 (-4.4)	-9.4 (-1.1)	-3.3 (-0.4)
<i>Residential investment</i>	-26.5 (-1.7)	-14.7 (-0.7)	-33.3 (-1.6)	-27.7 (-0.9)	-51.0 (-1.3)
<b>Domestic final demand<sup>1</sup></b>	-9.0 (-10.2)	-10.9 (-11.8)	-10.4 (-11.0)	-3.8 (-3.9)	0.7 (0.7)
Change in inventories and statistical discrepancy (% of GDP)	-0.3	-0.1	1.2	0.1	-0.5
<b>Domestic demand</b>	-7.1 (-7.8)	-10.6 (-11.4)	-9.2 (-9.7)	-5.1 (-5.2)	-0.6 (-0.6)
Exports of goods and services	4.3 (0.8)	1.0 (0.2)	1.0 (0.2)	1.5 (0.4)	8.4 (2.3)
Imports of goods and services	-5.5 (1.7)	-7.8 (2.4)	-9.4 (2.9)	-2.9 (0.9)	3.8 (-1.1)
<b>Foreign demand</b>	... (2.5)	... (2.6)	... (3.1)	... (1.3)	... (1.2)
<b>Gross domestic product at market prices</b>	-5.3	-8.9	-6.6	-4.0	0.6

Source: ELSTAT, Quarterly National Accounts, November 2014.

Note: Within parentheses, contributions to GDP in percentage points.

1 Excluding inventories and statistical discrepancy.

**Table V.2 Indicators of consumer demand (2009-2015)**(annual percentage changes)<sup>1</sup>

	2009	2010	2011	2012	2013	2014-2015 (available period)
Volume of retail trade (overall index)	-11.4	-6.2	-10.2	-12.2	-8.1	-0.3 (Jan.-Nov.)
Volume of retail trade (excluding fuel and lubricants)	-9.3	-6.9	-8.7	-11.8	-8.4	-0.8 ( » » )
Food-beverages-tobacco <sup>2</sup>	-6.1	-5.5	-6.0	-9.0	-9.1	0.4 ( » » )
Clothing-footwear	1.4	-11.4	-18.8	-20.6	-2.2	6.0 ( » » )
Furniture-electrical appliances-household equipment	-15.3	-12.7	-15.7	-16.3	-6.2	-1.4 ( » » )
Books-stationery-other	-24.0	-4.3	-5.2	-12.1	-0.1	8.0 ( » » )
Revenue from VAT (at constant prices)	-10.2	0.1	-5.9	-12.8	-6.6	-0.3 (Jan.-Dec.)
Retail trade confidence indicator	-21.4	-26.4	-0.5	-3.1	22.9	10.2 (Jan. 2015)
Consumer confidence indicator	-46	-63	-74	-75	-69	-49 (Jan. 2015)
New private passenger car registrations	-17.4	-37.2	-29.8	-41.7	3.1	10.3 (Jan. 2015)
Tax revenue from mobile telephony <sup>3</sup>	13.2	37.1	-16.8	-7.9	-12.8	-10.4 (Jan.-Dec.)
Outstanding balance of consumer credit <sup>4</sup>	1.8 (Dec.)	-4.2 (Dec.)	-6.4 (Dec.)	-5.1 (Dec.)	-3.9 (Dec.)	-2.8 (December)

Sources: ELSTAT (retail trade, cars), Ministry of Finance (VAT revenue, tax revenue from mobile telephony), IOBE (retail confidence), IOBE and European Commission (consumer confidence), Bank of Greece (consumer credit).

1 Excluding the consumer confidence indicator (weighted percentage balances of positive and negative answers).

2 Comprising big food stores and specialised food-beverage-tobacco stores.

3 Until July 2009, fixed monthly levy per subscription. Since August 2009, new scaled levy on mobile telephony subscriptions and a levy on pre-paid mobile telephony.

4 Comprising bank loans and securitised loans. The rates of change are adjusted for loan reclassifications, loan write-offs/write-downs, foreign exchange valuation differences and, in 2009, the transfer of loans by one credit institution to a domestic subsidiary.

## REVISION OF NATIONAL ACCOUNTS FOLLOWING THE TRANSITION TO ESA 2010

The comprehensive framework for the systematic analysis and evaluation of total economy is provided by an internationally agreed and comparable system of accounts, known as the System of National Accounts (SNA). The first SNA, developed from concepts pioneered by economists Simon Kuznets, Richard Stone and others, was published in 1953 by the Organisation for European Economic Cooperation (OEEC – the precursor to the OECD), making it possible to better monitor the reconstruction of post-war Europe under the Marshall Plan. Moving in the same direction, the European Communities (EC) published the first European System of Accounts in 1970 (ESA 1970), in order to provide their members with a harmonised national accounts system. Since then, both the SNA and the ESA have undergone revisions and updates in order to incorporate economic developments and to take account of the impact on GDP of new activities.

In compliance with Regulation (EU) No 549/2013 of the European Parliament and the Council, the EU Member States in 2014 adopted the new System of National Accounts ESA 2010.<sup>1</sup> The most significant changes are that expenditure on weapon systems and on research and development (R&D) are now treated as investment. The new standards also provide a more detailed analysis of the pension system, as well as a new method for the recording of goods sent abroad for processing.

The implementation of the new framework had virtually no impact on the rate of change of real Gross Domestic Product (GDP) at both euro area and EU levels of 2013, given that the revision led to higher rates of real GDP growth in certain countries and to lower ones in others. More specifically, eight Member States saw their real GDP growth rate improve, led by Ireland and Slovakia (by 0.5%) and Finland (by 0.2%). In contrast, five Member States saw their real GDP growth rate worsen following the revision: Estonia (by 0.6%), Malta (by 0.4%) and Germany (by 0.3%). For Greece and the remaining euro area countries, the impact for the year 2013 was negligible.

The main conclusions drawn from a comparison of the new national account series with the older ones can be summarised as follows:

- As regards the components of aggregate demand, private consumption (at constant prices) as a percentage of GDP decreased on average from 70.0% to 68.1% in the period 2000-2013. This was to the advantage of public consumption, which increased from 18.7% to 20.7% during the same period, and of the external balance, which benefited from the greater negative impact of the revision on imports than on exports. Total investment as a percentage of GDP edged downward from 20.3% to 19.4%. On the supply side, there were no major changes in the shares of the sub-sectors.
- During the crisis years 2008-2013, the total decline in GDP (at constant prices and based on seasonally adjusted data) came to 26.0% based on revised data under ESA 2010 (compared with

<sup>1</sup> In implementation of the above EU Regulation, the Hellenic Statistical Authority (ELSTAT) in October 2014 released new revised annual and quarterly national accounts time series, drawn up in accordance with ESA 2010 and including other methodological and statistical changes mainly concerning the revision of external trade data on oil products. More specifically, a continuous time series was compiled for the period 1995-2013 (compared with a time series 2000-2013 under ESA 95), while the data for the period 2000-2013 and the reference year (2010 instead of 2005) were revised. The completion of the time series for the years 1995-1999 led to an upward revision of GDP at current prices, given the incorporation of (i) the GDP revision of 2007 leading to a cumulative increase of 9.6%, and (ii) the revision of investment in housing and in the stock of dwellings under ESA 2010.

23.5% based on ESA 95). Private consumption declined by a cumulative 25.7% (compared with a decline of 27.4% based on ESA 95), whereas public consumption decreased by 19.3% (compared with a decrease of 18.8% based on ESA 95).

- Also worth noting is the sharp drop in gross fixed capital formation. According to the revised data under ESA 2010, the decline in the years 2008 to 2013 came to 63.1% (compared with a decline of 58.4% based on ESA 95). Indicatively, the level of gross fixed capital formation at constant prices came to €20,973 million in 2013, which was lower than the level of 1995 (€27,307 million).
- Finally, the total decline in exports in the years 2008-2013 based on the revised data came to 11.6% (compared with a decline of 14.9% under the 95), while far greater was the decline in imports at 38.0% (compared with a decline of 43.4% under ESA 95).

In conclusion, the revised national accounts data for the Greek economy confirm the magnitude of the crisis, with economic activity having contracted by 26% within a span of six years. The sharp decline in investment by 63.1% over the same period has a negative impact on the potential output of the economy. This picture could be reversed if investment demand recovers rapidly in the next few years.

Moreover, according to data on the percentage breakdown of spending on goods and services (see Chart V.5), a change in the structure of consumer spending is observed between 2009 and 2013. Specifically, a shift in spending is witnessed, from consumer durables (clothing, furniture) and recreation (hotels, entertainment, transportation-travel) to the satisfaction of basic needs (food, housing-water supply-electricity) and healthcare. Thus, the share of consumer spending allocated to cover basic needs rose to 41% in 2013, from 35% in 2009.

**The rate of decrease of gross capital formation in the January-September 2014 period** (-3.3% against the corresponding period of 2013), according to ELSTAT data, **decelerated substantially** compared with the average annual rate for 2013 (-9.4%). However, the increase in investment in machinery and transport equipment and weapon systems<sup>3</sup> (8.4% in January-September 2014, from -4.0% for 2013 as a whole), despite being offset by a further deterioration in residential investment (-51.0% in the same period, from -27.7% for 2013 as a whole), may signal the end of a long period of low investment. At the same time, other construction investment recovered strongly

(+14.1% in January-September, against -3.3% for 2013 as a whole), mainly reflecting the resumption of construction projects on four major motorways. The share of non-residential business investment in total GDP increased marginally, while the relative contribution of residential investment fell below 2% in 2014 (see Chart V.6).

Improved business sentiment in 2014, as reflected in relevant indicators,<sup>4</sup> and clear signs of an exit from the crisis contributed significantly in the above developments. However, political uncertainty at end-2014 and January 2015 had a negative effect mainly on business confidence. Nevertheless, businesses continued to cover increased demand also through more intensive use of current equipment,<sup>5</sup> thus probably postponing the implementation of part of their investment projects to a more opportune time in the near future (see Table V.3).

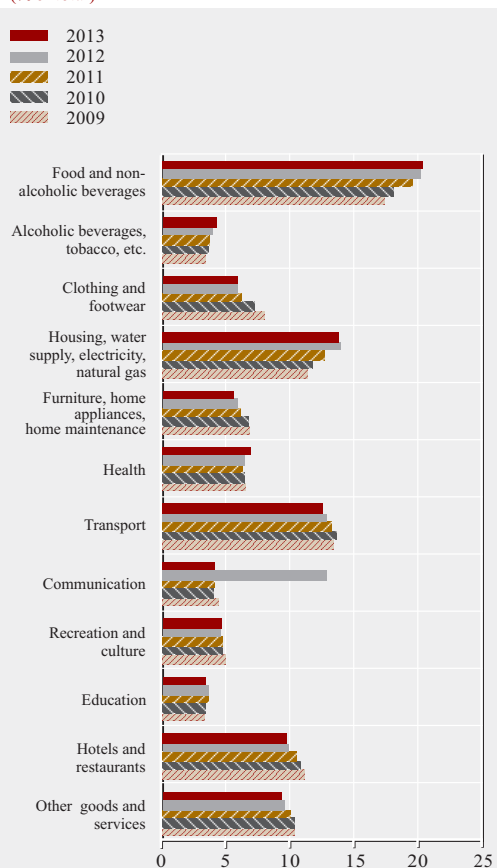
<sup>3</sup> For the integration of spending on weapon systems into investment, according to the new ESA 2010, see Box V.2.

<sup>4</sup> The economic sentiment indicator for Greece, compiled by the European Commission, rose in the course of 2014 (it peaked in June: 104.2), and is on average around 10 points above its 2013 level.

<sup>5</sup> Industrial capacity utilisation (as recorded in the relevant IOBE survey) increased, on average, by 2.3 percentage points against 2013, thus registering the highest level in the past four years (68.2).

Chart V.5 Consumer spending

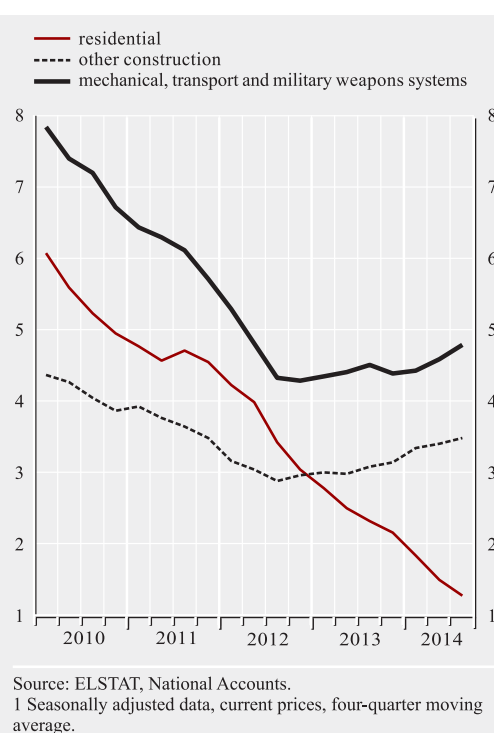
(% of total)



Source: ELSTAT, Household Budget Surveys.

The positive outlook for business investment in 2015 is expected to be supported by (a) the utilisation of National Strategic Reference Framework and European Investment Bank (EIB) funds by domestic credit institutions and enterprises, which are expected to reach €5.2 billion by end-2015, including the necessary bank financing (not taking into account the funds from the newly established Hellenic Investment Fund and the Development Fund); (b) further progress of infrastructure projects, mostly regarding the four large motorways; and (c) the dynamics of Public-Private Partnerships (PPPs),<sup>6</sup> which directly enhance growth and encourage the investment

Chart V.6 Types of investment as percentages of GDP (Q1 2010 - Q3 2014)<sup>1</sup>



Source: ELSTAT, National Accounts.

<sup>1</sup> Seasonally adjusted data, current prices, four-quarter moving average.

of further resources in building materials and supporting services.

Developments in the Public Investment Programme in 2014 demonstrate a smooth project funding (year-on-year change of -0.9% in 2014); for 2015, if the targeted €6.4 billion of the Public Investment Programme is reached, it should contribute to sustained growth rates. However, the degree of implementation of business investment is expected to be influenced by developments in domestic economic sentiment, fluctuations in international and, mainly, European total demand, the continuing structural reforms (see Box V.3) and the course of the privatisation programme.

<sup>6</sup> Twenty-three projects amounting to €2.8 billion are under way and nine new contracts worth €650 million are to be signed in the first half of 2015.

### THE ROLE OF STRUCTURAL REFORMS IN ECONOMIC GROWTH

For about two decades, the Greek economy had been experiencing high growth rates. The global financial crisis that broke out in 2008 and evolved into a debt crisis also affected the domestic economy, bringing into the fore its weaknesses, namely the chronic build-up of fiscal and current account deficits, and highlighted the need to address Greece's structural problems.

In this respect, the Economic Adjustment Programme included a series of structural reforms covering a wide range of economic activities and aiming at enhancing competitiveness, improving entrepreneurship, boosting the labour market, upgrading the operation of the state and, in the long term, raising the potential output of the Greek economy.

In particular, **the structural reforms implemented in the last four years concerned, inter alia, the labour market** (e.g. decentralisation of collective bargaining, promotion of flexibility in the labour market, reduction of minimum wage, active policies to address youth unemployment), the product market (e.g. reinforcing competition in various sectors, including telecommunications, opening-up closed professions, simplifying legislation in strategic sectors), **the privatisation programme, the tax and pension systems, the operation of public administration and the banking system.**

The quantification of this impact is challenging, particularly in an environment of deep and protracted recession, as it is difficult to distinguish the impact of structural reforms from the consequences of the crisis. Moreover, the simultaneous implementation of a large number of reforms makes it more difficult to assess the contribution of individual structural changes.

International literature has placed particular emphasis on reforms in the product and labour markets. The majority of these studies conclude that structural changes have, in the long term, a positive impact on GDP and employment, while evidence is mixed concerning the short-term effect of reforms. The prevailing view is that, in the short term, reforms usually have a negative effect on the respective aggregates, although under certain conditions the short-term costs can be mitigated and the effect of reforms can even be positive. Factors influencing the effectiveness of reform policies include: (a) whether reforms are carried out simultaneously in different fields, for example in labour and product markets; (b) the sequencing of reforms; and (c) the cyclical position of the economy.<sup>1</sup>

Available studies for Greece suggest that in the long run structural changes in the labour, goods and services markets are likely to make a positive contribution to economic activity.<sup>2</sup>

Taking into account the above parameters, as well as the fact that only a part of the reforms implemented so far can be quantified,<sup>3</sup> the effects of structural reforms on economic activity have been

1 See e.g. (a) Blanchard, O. and F. Giavazzi (2003), "Macroeconomic effects of regulation and deregulation in goods and labor markets", *Quarterly Journal of Economics*, Vol. 118: 3, 879-907; (b) Bouis R., O. Causa, L. Demmou, R. Duval and A. Zdzienicka (2012), "The short-term effects of structural reforms: An empirical analysis", OECD Economics Department Working Papers, No. 949; (c) Cacciatore, M., R. Duval and G. Fiori (2012), "Short-term gain or pain? A DSGE model-based analysis of the short-term effects of structural reforms in labour and product markets", OECD Economics Department Working Papers, No. 948; (d) Everaert, L. and W. Schule (2006), "Structural reforms in the Euro Area: Economic Impact and Role of Synchronization across Markets and Countries", IMF Working Paper No. 06/137, and (e) Gomes, S., P. Jaquinot, M. Mohr and M. Pisani (2011), "Structural reforms and macroeconomic performance in the Euro Area countries: A model-based assessment", ECB Working Paper, No. 1323.

2 See e.g. (a) Varga, J., W. Roeger and J. in't Veld (2013), "Growth effects of structural reforms in Southern Europe: The case of Greece, Italy, Spain and Portugal", *European Economy, Economic Papers* 511; and (b) Foundation for Economic and Industrial Research (FIER/IOBE) (2010), *The Greek economy, Quarterly Bulletin*, No. 60, July 2010.

3 It is not possible to quantify the impact of several reforms, such as the improvement in the operation of public administration, although they are of major importance.



assessed (a) in terms of unit labour costs, with respect to reforms in the labour market, and (b) in terms of prices, in the case of reforms in the product market.

It is estimated that structural reforms in the labour market will have a positive effect on both GDP and employment, by influencing: (a) productivity; (b) the responsiveness of employment to changes in output and demand; and (c) compensation per employee. This finding supports the view that the implementation of reforms can bring about positive results even in the short term. These are mainly achieved through a decline in prices that outweighs the reduction in nominal aggregates. In particular, the fall in the private consumption deflator leads to an increase in real disposable income. In addition, the lower export deflator results in improved competitiveness and a boost to exports.

Moreover, structural changes in the product market, translating into a decline in the private consumption deflator, are expected to support economic activity and employment, working through both supply and demand channels.

Therefore, it is argued that **the ongoing structural changes have already begun to bear fruit and are likely to continue to benefit the Greek economy in coming years.** This points to an urgent need to remain committed to and keep up the reform effort, which will contribute, among other things, to the achievement of permanent and sustainable growth.

By contrast, residential investment is estimated to turn negative again, although relevant indicators<sup>7</sup> show signs of gradually receding nega-

<sup>7</sup> The volume of permits issued fell by 7.2% in January-November, while a relative decline in negative pressures is also evident in the building works indicator compiled by ELSTAT (-8.2% in January-September, compared with -17.3% in 2013).

**Table V.3 Indicators of investment demand (2010-2015)**

(annual percentage changes)<sup>1</sup>

	2010	2011	2012	2013	2014 (available period)	2015 (available period)
Capital goods output	-22.1	-13.5	-19.2	-0.5	-1.3	...
Capacity utilisation in the capital goods industry	66.1	62.7	58.2	61.4	64.7	-60.5 (Jan.)
Bank credit to non-financial corporations <sup>2</sup>	1.1 (Dec.)	-2.0 (Dec.)	-4.4 (Dec.)	-4.9 (Dec.)	-3.7	...
Disbursements under the Public Investment Programme <sup>3</sup>	-11.3	...	-10.5	14.5	-0.9	...
Production index in construction (at constant prices)	-29.2	-41.3	-33.4	-8.2	28.0 (Jan.-Sept.)	...
Volume of private construction activity (on the basis of permits issued)	-23.3	-37.7	-30.6	-25.6	-7.2 (Jan.-Nov.)	...
Cement production	-14.3	-37.8	-12.8	3.4	-7.4	...
Construction confidence indicator	-27.4	-27.8	26.1	50.6	23.7	23.7 (Jan.)
Bank credit for house purchase <sup>4</sup>	-0.3 (Dec.)	-2.9 (Dec.)	-3.4 (Dec.)	-3.3 (Dec.)	-3.0	...

Sources: ELSTAT (capital goods output, volume of private construction activity, cement production, production in construction), IOBE (capacity utilisation, construction confidence), Bank of Greece (bank credit to domestic enterprises and housing, disbursements under the Public Investment Programme).

<sup>1</sup> Except for capacity utilisation in the capital goods industry, which is measured in percentages.

<sup>2</sup> Comprising loans and corporate bonds, securitised loans and securitised corporate bonds but excluding (as of June 2010) loans to sole proprietors. The rates of change are adjusted for loan reclassifications, loan write-offs/write-downs, foreign exchange valuation differences, as well as corporate bonds and loans transferred by credit institutions to foreign subsidiaries and, in 2009, the transfer of loans by one credit institution to a domestic subsidiary.

<sup>3</sup> As of January 2012 actual cash payments and not appropriations under the public investment budget.

<sup>4</sup> Comprising loans and securitised loans. The rates of change are adjusted for loan reclassifications, loan write-offs/write-downs, foreign exchange valuation differences and, in 2009, the transfer of loans by one credit institution to a domestic subsidiary.



**Table V.4 Gross value added at basic prices  
(2009-2013 and January-September 2014)**

(annual percentage changes and sectoral contributions to gross value added; in 2010 prices)

	Annual percentage changes					
	2009	2010	2011	2012	2013	2014 Jan.-Sept.
<b>1. Agriculture, forestry and fishing</b>	<b>8.4</b> (0.2)	<b>5.3</b> (0.2)	<b>-5.8</b> (-0.2)	<b>-2.2</b> (-0.1)	<b>-7.2</b> (-0.3)	<b>-1.4</b> (0.0)
<b>2. Secondary sector</b>	<b>-4.8</b> (-0.8)	<b>-15.5</b> (-2.6)	<b>-13.1</b> (-2)	<b>-13.4</b> (-1.9)	<b>-9.4</b> (-1.3)	<b>-4.1</b> (-0.5)
2.1 Industry including energy	1.5 (0.2)	-20.1 (-2.6)	-10.5 (-1.1)	-8.3 (-0.9)	-6.7 (-0.7)	-1.8 (-0.2)
2.2 Construction	-20.0 (-1.0)	-1.3 (-0.1)	-19.5 (-0.9)	-27.7 (-1.0)	-19.1 (-0.6)	-13.5 (-0.3)
<b>3. Tertiary sector</b>	<b>-3.5</b> (-2.8)	<b>-3.8</b> (-3.1)	<b>-8.3</b> (-6.7)	<b>-4.9</b> (-4.0)	<b>-2.7</b> (-2.2)	<b>1.3</b> (1.1)
3.1 Trade, hotels and restaurants, transport and storage	-8.9 (-2.3)	-6.5 (-1.6)	-13.7 (-3.3)	-5.5 (-1.3)	-2.5 (-0.6)	5.9 (1.4)
3.2 Information and communication	-1.4 (-0.1)	-14.0 (-0.6)	-9.6 (-0.4)	-7.3 (-0.3)	3.2 (0.1)	-2.2 (-0.1)
3.3 Financial and insurance activities	2.5 (0.1)	-11.5 (-0.6)	-12.9 (-0.6)	-7.1 (-0.3)	-6.2 (-0.3)	-5.9 (-0.3)
3.4 Real estate activities	0.2 (0.0)	16.4 (2.4)	-3.5 (-0.7)	-2.3 (-0.4)	0.8 (0.2)	0.3 (0.1)
3.5 Professional, scientific and technical activities	-4.0 (-0.3)	-21.1 (-1.4)	-11.2 (-0.6)	-9.1 (-0.5)	-8.9 (-0.5)	-8.0 (-0.4)
3.6 Public administration and defence	-3.2 (-0.6)	-1.4 (-0.3)	-2.9 (-0.6)	-6.4 (-1.4)	-5.3 (-1.2)	2.0 (0.4)
3.7 Arts, entertainment and recreation	8.5 (0.4)	-22.5 (-1.1)	-14.2 (-0.6)	5.2 (0.2)	0.2 (0)	-2.0 (-0.1)
<b>4. Gross value added at basic prices</b>	<b>-3.5</b>	<b>-5.6</b>	<b>-8.9</b>	<b>-5.8</b>	<b>-3.7</b>	<b>0.7</b>

Source: ELSTAT, Quarterly National Accounts, November 2014, seasonally adjusted data.

Note: Within parentheses, contributions in percentage points.

tive pressures (see Table V.3). In any event, business expectations in residential construction remain strongly negative, bringing the assured production indicator from 5.7 months in 2013 down to 1.9 months in 2014.

### Developments in supply

**In January-September 2014, the gross value added of the economy rose by 0.7% at constant prices against the corresponding 2013 period.** A positive contribution came from services associated with consumption and tourism, and a negative contribution from construction linked to investment (see Table V.4).

Value added in industry remained negative in 2014, though clearly at a decelerating rate com-

pared with 2013 (-1.8% in January-September 2014, against -6.7% for 2013 as a whole). In addition, a change was observed in the output of electricity production, which recorded a decline of 13.7% in the course of 2014, mostly due to smaller residential demand, and in manufacturing production, which increased slightly by 0.7% (see Table V.6). The relative improvement in manufacturing aggregates is illustrated in industrial confidence (IOBE) and the PMI. This improvement was also supported by a more than 2 percentage point increase in industrial capacity utilisation. Several manufacturing branches recorded growth, among which intermediate goods, which rose by 1.9% compared with 2013 (see Table V.5). However, the decline in manufacturing exports in 2013 continued with increasingly negative rates in

**Table V.5 Indicators of industrial activity (2010-2015)**(annual percentage changes)<sup>1</sup>

	2009	2010	2011	2012	2013	2014	2015 (available period)
<b>1. Industrial production index (general)</b>	<b>-9.4</b>	<b>-5.9</b>	<b>-5.7</b>	<b>-2.0</b>	<b>-3.2</b>	<b>-2.7</b>	...
Manufacturing	-11.2	-5.1	-9.1	-3.5	-1.1	0.7	...
Mining and quarrying	-11.8	-6.5	-2.0	-0.9	-11.5	-0.5	...
Electricity	-4.2	-9.2	4.0	1.8	-6.9	-13.7	...
<b>Main industrial groupings</b>							
Energy	-2.9	-4.9	-1.8	7.4	-4.2	-5.6	...
Intermediate goods	-18.4	-0.9	-9.5	-8.9	-3.8	1.9	...
Capital goods	-22.5	-22.1	-13.5	-19.2	-0.5	-1.3	...
Consumer durables	-20.7	-13.4	-15.8	-19.0	-12.8	-8.4	...
Consumer non-durables	-4.1	-7.2	-5.3	-5.0	-0.9	-1.8	...
<b>2. Industrial turnover index<sup>2</sup></b>	<b>-23.0</b>	<b>7.0</b>	<b>6.2</b>	<b>2.8</b>	<b>-5.9</b>	<b>-0.6 (Jan.-Nov.)</b>	...
Domestic market	-22.2	-0.7	-0.1	-6.2	-9.9	-0.3 (Jan.-Nov.)	...
External market	-25.4	29.2	20.4	19.6	-0.1	-1.1 (Jan.-Nov.)	...
<b>3. Industrial confidence indicator</b>	<b>-21.5</b>	<b>5.1</b>	<b>1.4</b>	<b>0.4</b>	<b>13.7</b>	<b>7.7</b>	<b>1.6 (Jan.)</b>
<b>4. Industrial capacity utilisation rate</b>	<b>70.5</b>	<b>68.5</b>	<b>67.6</b>	<b>64.4</b>	<b>65.9</b>	<b>68.2</b>	<b>69.1 (Jan.)</b>
<b>5. Purchasing Managers' Index (PMI)<sup>3</sup></b>	<b>45.3</b>	<b>43.8</b>	<b>43.6</b>	<b>41.2</b>	<b>46.0</b>	<b>49.9</b>	<b>48.3 (Jan.)</b>

Sources: ELSTAT (industrial production and industrial turnover), IOBE (industrial confidence, industrial capacity utilisation rate), Markit Economics and Hellenic Purchasing Institute (PMI).

1 Excluding capacity utilisation in industry and the PMI in manufacturing, for which index values are reported.

2 The index refers to the sales of industrial goods and services in value terms.

3 Seasonally adjusted index; values over 50 indicate expansion.

2014 (January-November: -1.1%). The slight recovery in manufacturing remains particularly fragile, due to limitations of domestic demand and the volatility of external demand, as illustrated by changes in the PMI in the course of 2014.

As regards construction output, the drop in construction activity continues to weigh on expectations and results of enterprises in this sector. Nevertheless, the substantial improvement in the construction output index for January-September demonstrates that there are business opportunities for construction firms in the domestic market, particularly concerning major infrastructure projects under way (motorways and PPP projects).

**The increase in value added in services** (with a share of 82% in total value added in 2013) by

an annual 1.3% in January-September 2014 contributed by 1.1 percentage point to the change in total gross value added in the same period. During those nine months, the increase primarily came from trade, hotel-restaurants and transport-communications, as well as activities associated with real estate. By contrast, declines were registered for professional, scientific and technical activities, information and communication, financial and insurance activities<sup>8</sup> as well as arts, entertainment and recreation.

Data on turnover at current prices (see Table V.7) show that in January-September branches associated with tourist activity, such as hotels

<sup>8</sup> According to the Hellenic Association of Insurance Companies, production in 2014 fell against 2013 by 0.6%, which is attributable to an 11.4% increase in life insurance and a 9.6% decrease in non-life insurance.

**Table V.6 Industrial production**

(2010=100)

	Weights 2010		Average annual percentage changes					2013 level (2010=100)
			2010	2011	2012	2013	2014	
<b>Industry</b>	<b>100.0</b>		<b>11.5</b>	<b>-5.7</b>	<b>-2.0</b>	<b>-3.2</b>	<b>-2.7</b>	<b>87.1</b>
<b>1. Mining and quarrying</b>	<b>6.1</b>	<b>100.0</b>	<b>22.7</b>	<b>-2.0</b>	<b>-0.9</b>	<b>-11.5</b>	<b>-0.5</b>	<b>85.5</b>
Mining of coal and lignite		56.6	7.7	3.8	6.7	-14.4	-6.7	88.4
Extraction of crude petroleum and natural gas		1.9	21.0	-24.3	-2.2	-7.9	-15.5	57.6
Mining of metal ores		9.1	56.4	11.2	-12.3	-15.3	4.0	85.9
Other mining and quarrying		32.4	50.2	-17.9	-16.1	0.8	17.6	81.7
<b>2. Manufacturing</b>	<b>69.5</b>	<b>100.0</b>	<b>13.3</b>	<b>-9.1</b>	<b>-3.5</b>	<b>-1.1</b>	<b>0.7</b>	<b>87.4</b>
Food		19.9	-0.7	-3.6	-2.0	-3.7	1.0	91.9
Beverages		8.0	-4.0	-6.5	-6.1	-1.7	-4.8	82.2
Tobacco		1.7	10.7	10.3	-8.9	2.7	-4.4	98.7
Textiles		1.5	89.3	-14.5	-11.9	-10.0	-13.3	58.7
Wearing apparel		1.7	59.1	-19.4	-11.2	-6.2	-7.6	62.1
Leather and footwear		0.3	26.3	-12.2	-29.0	-2.7	-15.5	51.3
Wood and cork		0.7	81.1	-16.5	-27.0	-23.2	-12.8	40.8
Paper and paper products		2.5	2.7	-5.0	-8.7	2.7	6.6	94.9
Printing and reproduction of recorded media		2.1	13.5	-22.9	-18.7	-5.9	-2.4	57.6
Coke and refined petroleum products		15.1	-4.6	-14.6	23.9	4.2	7.3	118.4
Chemicals and chemical products		6.3	19.8	-2.1	-9.4	2.2	0.9	91.4
Basic pharmaceuticals		4.9	-33.3	-1.2	-5.3	9.8	-4.4	98.3
Rubber and plastic products		4.4	8.9	-5.7	-6.0	-1.8	0.2	87.2
Non-metallic mineral products		7.9	44.4	-34.0	-15.8	-1.9	-0.2	54.4
Basic metals		7.0	21.0	7.2	-5.0	-4.9	5.5	102.1
Metal products		4.5	25.6	-7.1	-7.3	-8.2	-1.3	78.0
Computers, electronics and optical products		0.6	139.9	-25.1	3.6	15.3	10.7	99.1
Electrical equipment		2.7	21.3	-13.5	-5.4	-13.2	-11.1	63.2
Machinery and equipment n.e.c.		1.5	21.7	-5.2	-12.0	1.4	-3.3	81.8
Motor vehicles, trailers and semi-trailers		0.5	37.4	-40.4	4.9	2.2	0.6	64.3
Other transport equipment		1.0	18.5	-22.2	-40.0	26.9	-40.1	35.5
Furniture		1.3	28.9	-22.3	-28.1	-16.5	-2.1	45.7
Other manufacturing activities		0.4	38.9	-9.9	-15.0	1.5	6.8	83.0
Repair and installation of machinery and equipment		3.5	33.0	-6.1	-22.1	-3.1	3.7	73.5
<b>3. Electricity</b>	<b>20.6</b>	<b>100.0</b>	<b>5.6</b>	<b>4.0</b>	<b>1.8</b>	<b>-6.9</b>	<b>-13.7</b>	<b>85.0</b>
<b>4. Water supply</b>	<b>3.8</b>	<b>100.0</b>	<b>-2.9</b>	<b>-2.0</b>	<b>1.1</b>	<b>-2.5</b>	<b>-0.2</b>	<b>96.4</b>
<b>Industry</b>	<b>100.0</b>		<b>11.5</b>	<b>-5.7</b>	<b>-2.0</b>	<b>-3.2</b>	<b>-2.7</b>	<b>87.1</b>
<b>Main industrial groupings</b>								
Energy	38.7		2.6	-1.8	7.4	-4.2	-5.6	95.4
Intermediate goods	26.0		27.4	-9.5	-8.9	-3.8	1.9	80.8
Capital goods	6.1		39.9	-13.5	-19.2	-0.5	-1.3	68.6
Consumer durables	1.7		28.9	-15.8	-19.0	-12.8	-8.4	54.5
Consumer non-durables	28.0		1.6	-5.3	-5.0	-0.9	-1.8	87.6

Source: ELSTAT.

**Table V.7 Activity indicators in the services sector (2009-2014)**

(annual percentage changes)

	2009	2010	2011	2012	2013	2014 (available period)
<b>A. Services turnover indicators</b>						
<b>1. Trade</b>						
Wholesale trade	-8.9	-5.9	-13.5	-12.1	-12.1	0.6 (Jan.-Sept.)
Retail trade	-10.2	-1.2	-7.2	-11.0	-8.6	-0.8 (Jan.-Nov.)
Motor trade	-15.7	-36.5	-26.5	-29.3	-3.1	19.5 (Jan.-Sept.)
<b>2. Transport</b>						
Land transport	-31.5	-18.2	-1.7	-3.2	-4.1	-3.6 (Jan.-Sept.)
Sea transport	-22.8	-8.5	-2.6	-15.4	-7.4	-9.8 (Jan.-Sept.)
Air transport	-11.7	-7.0	-0.9	-1.1	14.3	3.2 (Jan.-Sept.)
Storage and supporting transport activities	-32.2	-10.8	-7.9	-4.8	-7.0	3.8 (Jan.-Sept.)
<b>3. Hotels and restaurants</b>						
Accommodation and food service activities	-9.1	-8.2	-7.4	-17.2	4.8	11.9 (Jan.-Sept.)
<b>4. Information and communication</b>						
Telecommunications	-8.9	-11.3	-8.9	-5.1	-11.7	-6.2 (Jan.-Sept.)
Film, video, and TV programme production, recordings and music products	1.4	-6.6	-28.4	-4.9	-5.0	9.5 (Jan.-Sept.)
Programming and broadcasting activities	-6.7	-2.0	-27.1	-16.4	-7.9	15.1 (Jan.-Sept.)
<b>5. Professional-scientific-technical activities</b>						
Legal, accounting and management consulting services	-12.4	-7.3	-0.3	4.5	0.9	0.1 (Jan.-Sept.)
Architectural and engineering services	-18.6	-20.4	-19.6	-12.3	-14.0	-24.4 (Jan.-Sept.)
Advertising and market research	-18.4	-23.8	-21.2	-16.7	-20.9	-11.4 (Jan.-Sept.)
Travel agencies and related activities	-9.9	-24.5	-35.2	-27.0	11.3	7.6 (Jan.-Sept.)
<b>B. Passenger traffic</b>						
Athens International Airport	-1.5	-5.0	-6.3	-10.4	-3.2	21.2 (Jan.-Dec.)
Aegean Airlines <sup>1</sup>	9.9	-5.1	4.2	-5.8	44.6	14.1 (Jan.-Sept.)
Piraeus port (OLP)	-3.8	-6.0	-0.8	-17.5	1.0	12.7 (Jan.-Dec.)
<b>C. Services confidence indicator</b>	<b>-28.3</b>	<b>-9.3</b>	<b>-2.9</b>	<b>-11.2</b>	<b>28.4</b>	<b>23.9 (Jan.-Dec.)</b>

Sources: ELSTAT (services turnover), Athens International Airport, Aegean Airlines, Piraeus Port Authority (OLP) and IOBE (services confidence).

<sup>1</sup> Including charter flights.

and restaurants, travel agencies and air transport, registered an upward course, while branches related to construction activity, such as architectural and engineering services, recorded a downward course.

Stronger growth in branches associated with tourist services is also illustrated by the substantial improvement (by 36.8%) in business

confidence in 2014 (according to the IOBE business survey). Business confidence in services as a whole also presents a positive picture, as illustrated by the 23.9% increase in the relevant IOBE indicator in the same period (see Table V.7).

Growth in tourist services in 2014 is also confirmed by developments in tourism receipts.

According to the Bank of Greece border survey, this rise approximated 15.6% at constant prices.

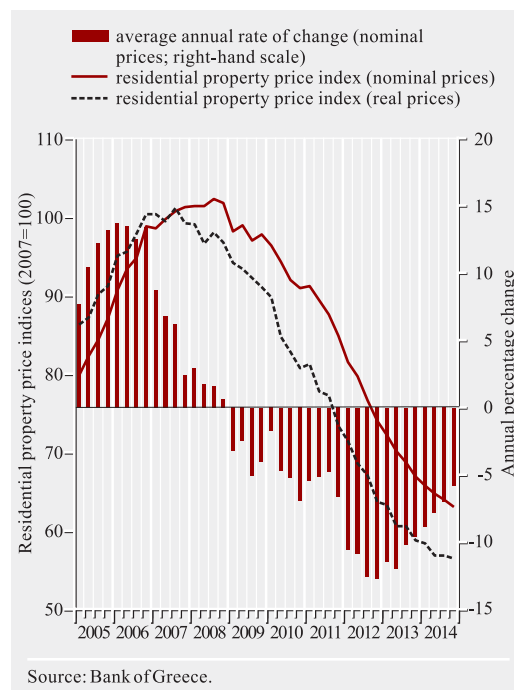
On the basis of data from the Association of Greek Tourism Enterprises (SETE), international arrivals at 17 main airports of the country rose by 15.4% in 2014, mainly due to competitive price-setting policies of tourism services. The rise in arrivals is also attributable to (i) the emergence of less popular – until recently – destinations (due to improved promotion of the cultural product – see Box V.1); and (ii) the extension of the tourist season.<sup>9</sup>

At the same time, negative pressures on retail trade subsided and the rate of decrease in the turnover of retail sales (including fuel) decelerated substantially, from -8.8% in January–November 2013 to -0.8% in the respective period of 2014. Price decreases in many categories of goods and the discount policy followed by enterprises supported a further increase in household consumption and helped improve retail business confidence since the second half of 2013. This development was also supported by structural reforms in this sector over the past few years.

### 3 DEVELOPMENTS AND PROSPECTS IN THE REAL ESTATE MARKET

2014 witnessed persisting – though less intense – pressures on market values, prices and rents of both residential and commercial properties. The factors behind the slow recovery of the market are, inter alia, high unemployment rates, tax hikes on real estate, financing constraints, lower residential construction investment, and problems arising from the continuously changing tax framework (implementation of the capital gains tax, reassessment of real estate administrative values, etc.). Moreover, some first signs of stabilisation in the real estate market observed since late 2013, as a result of improving economic climate and expectations, were withheld due to increased uncertainty towards the end of 2014 due to political developments.

Chart V.7 Residential property price index



In the **housing market**, the drop in prices and transactions continued throughout 2014, although at more moderate rates. Specifically, data collected from credit institutions show an average annual rate of decline of 7.5% in apartment prices in 2014, against 10.9% in 2013 and 11.7% in 2012 (see Chart V.7). The fall in the prices during the 2008–2014 period was, on aggregate, stronger in the two major urban centres, compared with other large cities and other regions, as well as older and larger properties in relatively higher-value areas in Greece. The shift of households' purchasing interest towards older, smaller and more affordable properties in medium-value

<sup>9</sup> Specifically, increased arrivals are recorded both in traditionally popular tourist destinations (Mykonos 39%, Santorini 27%), and in less popular – until recently – destinations (Athens 29.4%, Thessaloniki 16.6%, Kalamata 88.3%). Increased arrivals to less popular destinations is probably associated with a more competitive price-setting policy (e.g. lower overnight-stay prices in Athens), the promotion of the cultural product (e.g. the historical past of Thessaloniki) or new tourist investment (e.g. Costa Navarino in Messinia). As regards the monthly developments of arrivals, the highest growth rates are recorded during off-season months (April, October, November), which suggests an extension of the tourist period or even a shift towards alternative tourism.

areas, which has been observed since the onset of the current crisis, appeared even stronger throughout 2014.<sup>10</sup> Despite the fact that the stock of unsold housing properties remains high, the real estate agency survey conducted in 2014 recorded increased interest for small- and medium-value properties, which are considered a safe alternative to households' savings, and have now developed into an investment option. This is also attributable to the substantial decline in Property Transfers Tax (to 3% since 2014), which is expected to help boost the particularly low frequency of property transactions in the Greek market in the future.

The downward trend of house prices is likely to persist in the following quarters, but at relatively more moderate rates. Furthermore, it is estimated that recent arrangements concerning non-performing loans should help stabilise the housing market.

The commercial property market is characterised by excess supply, a significant drop in transactions and a downward trend in prices. Significant pressures to renegotiate and reduce rents were recorded, especially for secondary retail properties, warehouses and non-prime office buildings. The strong drop in rental values led to a relocation trend towards smaller prime properties, while some mobility is also evident in retail in prime areas, as rents stand now at very low levels. Both rental and market values of commercial properties shrunk further in 2014 (see Box V.4). The average annual decline in the prices of prime office buildings and retail properties in the first half of 2014 was 6.9% and 9.1%, respectively. The respective rental values recorded a decline in the order of 10.7% and 9.5% against the first half

of 2013. Yields on commercial properties stabilised in relative terms.

From the beginning of 2014 to the third quarter of the year, an improvement in investment climate and expectations was observed, with investment interest mainly focusing on income properties. However, as a result of financing constraints, and rising uncertainty in the economic environment in the past few months, investors remain rather cautious. Some signs of stabilisation were observed in the retail market, which has received the strongest pressures since the onset of the current crisis, while investment interest also focuses on prime office and large warehouses. Particularly positive expectations were recorded in tourist property-hotel units and holiday residences. Prime commercial property is expected to recover sooner, in contrast with non-prime commercial property prices, which are estimated to drop further.

The pick-up in demand and investment interest in the Greek real estate market was interrupted in the past few months, as the country entered the elections period. A further stabilisation and recovery in the market is now fully dependent on general political and economic stability, and also requires taking action to slash red tape and reduce complexity of procedures, as well as to introduce a well-defined urban planning system and a stable taxation framework.

<sup>10</sup> Yet, on a cumulative basis between 2008 (average level) and the last quarter of 2014, apartment prices fell by 38.1% on the basis of data collected from credit institutions (Athens: -40.4%, Thessaloniki: -42.4%), while data collected from real estate agencies register an even stronger decline. See the results of the quarterly survey of real estate agencies and property advisors, available on Bank of Greece's website (in Greek only): <http://www.bankofgreece.gr/Pages/en/Statistics/realestate/default.aspx>.

#### Box V.4

##### COMMERCIAL PROPERTY INDICES: A NEW INITIATIVE FROM THE BANK OF GREECE

The monitoring and analysis of developments and prospects in the Greek real estate market have been, in recent years, a focus of attention at the Bank of Greece. As numerous analyses and find-

ings so far suggest, the real estate market has an important bearing on financial stability and economic growth, which has become more evident than ever during the current crisis. The severe lack of information among property market professionals has also led to a pressing need for the systematic collection of data and the enhancement of transparency within the real estate market in Greece.

### 1. The new initiative from the Bank of Greece

Since 2013, as a follow up to the efforts that initiated in 2009 in the field of the housing market, the Bank of Greece has focused on the collection of reliable primary data for monitoring and analysing the commercial property market (office, retail, warehouse, industrial etc.).<sup>1</sup> The aim of this new initiative is to estimate and gradually release price and rent indices for commercial property in Greece, in order to enhance transparency and create a basis of reference for property market professionals (investors, portfolio managers, real estate agents, etc.) as well as for national and international bodies (ministries, the European Central Bank-ECB, the Bank for International Settlements-BIS, credit rating agencies, etc.).<sup>2</sup>

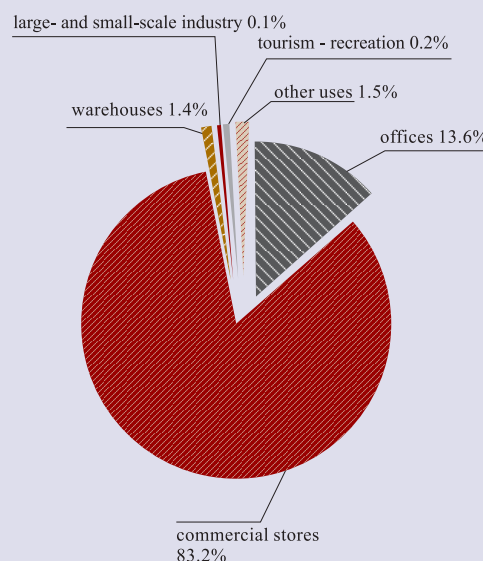
For the construction of the commercial property indices, reliable primary data were collected from Real Estate Investment Companies (REICs) and credit institutions operating in Greece, as well as from other sources, including private real estate consultants, portfolio managers, real estate developers, real estate brokers and the Body of Chartered Valuers (SOE).<sup>3</sup>

Chart A presents a breakdown of available commercial property data per main use that were used for the construction of the respective price and rent indices. Up to the first half of 2014, 83% of available data concerned retail and 14% office. Indices were not compiled for the remaining commercial property categories because of the respective small sample sizes.

### 2. Compilation methodology of commercial property indices

Working in collaboration with the data providers (credit institutions, REICs, etc.), the Bank of Greece was able, where necessary, to correct, complete and adjust the 61,000 commercial property data entries collected from the first half of 2006 up to the first half of 2014, thereby creating a single database. In order to estimate the indices and to determine the changes in property

Chart A Breakdown of sample by main use



Source: Bank of Greece.

<sup>1</sup> For details, visit the Bank of Greece website page dedicated to the real estate market: [www.bankofgreece.gr/Pages/en/Statistics/realestate/default.aspx](http://www.bankofgreece.gr/Pages/en/Statistics/realestate/default.aspx).

<sup>2</sup> In recent years, a priority has also been given by the ECB to the collection and release of commercial property prices and values, at both aggregate (euro area) and country level. See ECB (2014), *Monthly Bulletin*, February 2014, Box 7: "Experimental indicators of commercial property prices", pp. 54-58.

<sup>3</sup> Talks are currently in progress for the signing of Memoranda of Cooperation and the exchange of commercial property data with bodies from the public sector (including the General Secretariat for Public Revenue-GSPR, the Public Properties Company-PPCo and the National Cadastre and Mapping Agency).



prices and rent levels, the available data were analysed on the basis of “fixed baskets”. More specifically, for each main use of commercial property (i.e. office and retail), effective rent,<sup>4</sup> market value (valuation based) per square meter and yield were calculated. Adjustments were made, as appropriate, for special features (e.g. listed property), and statistical techniques were used to assign values to all variables that, for technical reasons, had previously remained blank. The price and rent indices were estimated based on the analysis of the evolution of values through time.

The available sample of commercial property was divided into the following geographical areas: greater Athens area, Thessaloniki and rest of Greece.<sup>5</sup> To obtain the aggregate indices for the country as a whole, the results for each of the regions were weighted as follows: office was weighted on the basis of GDP distribution and retail was weighted based on the total property value distribution among the geographical areas of reference.

### 3. Commercial property indices: results

To dissipate any possible confusion about the findings and indices presented below, it should be pointed out that both the indices per geographical area (Athens, Thessaloniki, rest of Greece) and the aggregate indices for Greece reflect respective average value developments for prime and upper secondary (in terms of location and quality) investment commercial property. These indices therefore concern the upper class of the Greek real estate market, which has so far shown the greatest resilience to downward pressure from the ongoing crisis. The indices may present a certain lag in the recorded actual rental changes during the period of the crisis, explained by the “inertia” of active leases in terms of adjustment (time needed for lease renegotiation, legal procedures, existence of a legal framework on rent control, etc.),<sup>6</sup> as well as in the recorded prices, given that the latter are valuation-based.<sup>7</sup> Notwithstanding these limitations, the new commercial property indices still have the advantage of (a) providing property market professionals with a new point of reference and (b) when coupled with other information and techniques (e.g. rent capitalisation with the application of proper yields), helping to draw broader conclusions about the course and prospects of the Greek commercial property market.

#### 3.1 Office price and rent indices

According to provisional data, the cumulative decrease (in nominal terms) in the prices of prime investment office in the country as a whole averaged 31.6% in the first half of 2014, compared to the first half of 2010. The respective decrease in each of the three areas (Athens, Thessaloniki, rest of Greece) was roughly the same. Recently, however, this trend has shown signs of easing, with the year-on-year decrease in the first half of 2014 slowing to 6.9%.

The cumulative drop in office rents, for the country as a whole, averaged 26.9% in the first half of 2014, compared with the first half of 2010, while the respective rate for the greater Athens area

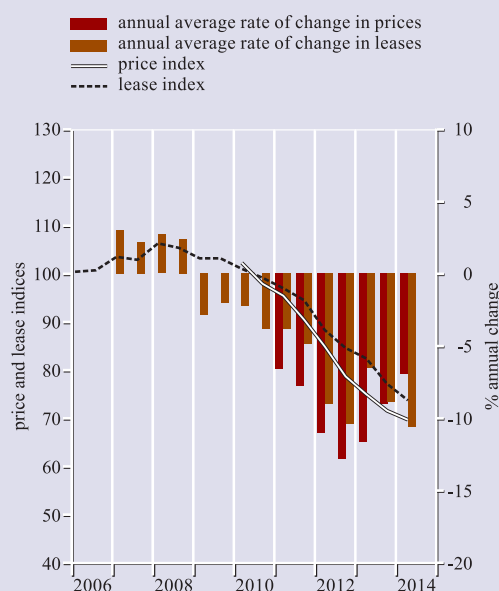
<sup>4</sup> The effective rent per square metre of property was calculated taking into account the income from leases, costs, possible rent free periods, vacancies, etc.

<sup>5</sup> For the construction of the price and rent indices, the greater Athens area was divided into seven sub-markets (central business district, Athens periphery, northern sector, southern sector, western sector, Mesogeia area and rest of Attica). The changes in average price and rent of the corresponding fixed baskets were then calculated for each of these sub-markets. For Thessaloniki and the rest of Greece, the calculations were made per property in each fixed basket without distinguishing between sub-markets. The prices per property were weighted on the basis of size (in square metres) and average market and rental price, respectively, so as to give greater weight to larger properties and to properties in prime locations.

<sup>6</sup> The trend of rent indices has been found to cumulatively follow the general market trend, albeit with a certain lag. However, the sharp correction over the past several half-year periods denotes a rapid shift in negotiating power from landlord to tenant, even in traditional prime markets.

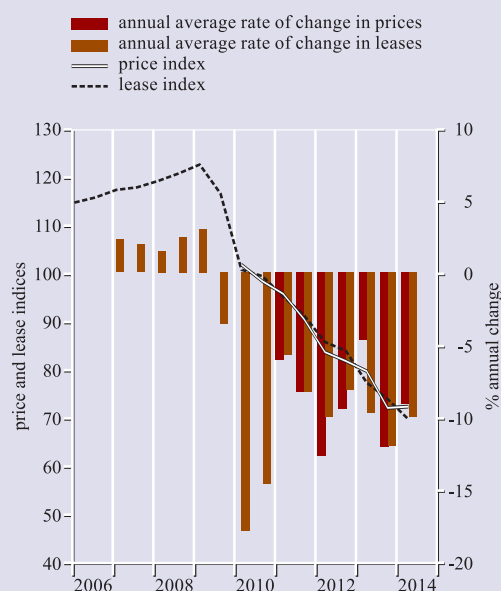
<sup>7</sup> The valuations (based on which the commercial property prices are estimated) appear to be more resilient, as they incorporate expectations of a rebound in the market in the medium term, together with anticipations of a pick-up in rental prices and a recovery of property prices. In addition, although property market professionals report a certain stabilisation of prices since early 2013, a small time lag should be allowed for before this trend is actually reflected in the indicator – assuming that it is not halted by other factors.

Chart B Office indices



Source: Bank of Greece.

Chart C Store indices



Source: Bank of Greece.

was 29.6%. Office rents continued to trend strongly downward in the first half of 2014 compared with the first half of 2013 (-10.7%), due to increasing lease renegotiations and a growing supply of office space (see Chart B). This trend is expected to continue in the short term, as there is still a considerable gap in rent levels between old and new lease contracts.

### 3.2 Retail price and rent indices

According to provisional data for the country as a whole, the cumulative drop in prime retail prices (in nominal terms) averaged 28.8% in the first half of 2014, in relation to the first half of 2010. The respective rate for the greater Athens area was 30.5%. Year-on-year, in the country as a whole, the decrease in the first half of 2014 is estimated at 9.1%.

The cumulative decrease in prime retail property rents over the period 2010-2014 averaged 31.0% in the country as a whole and 31.6% in the greater Athens area (see Chart C). Retail property rents in other Greek cities appear to have been slightly more resilient to the crisis than in Athens which can be attributed to the fact that retail property in the sample is mainly situated in prime locations with restricted supply. Relative, however, to the first half of 2013, the decrease in retail rents in the rest of Greece (i.e. excluding Athens and Thessaloniki) averaged roughly 13%, compared with 9.5% for the country as a whole.

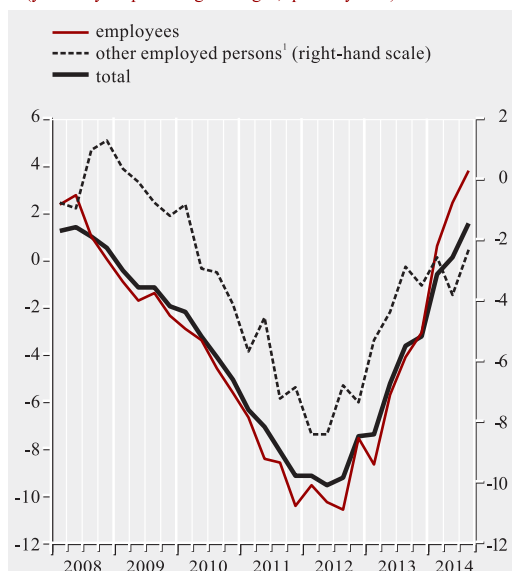
## 4 EMPLOYMENT AND UNEMPLOYMENT: DEVELOPMENTS AND PROSPECTS

**In the first nine months of 2014, employment was on a stabilising path, registering a marginally positive**

**rate of change** against the respective period of 2013 (+0.3%), after a dramatic decline in the previous years, mainly from 2011 to 2013. In the third quarter of the year, employment grew year-on-year by a significant 1.5%, compared

**Chart V.8 Employment  
(2008-Q3 2014)**

(year-on-year percentage changes; quarterly data)



Source: ELSTAT, Labour Force Surveys.

1 Other employed persons=self-employed with employees (employers) + self-employed without employees + contributing family workers.

with -0.6% and +0.1% in the first and the second quarters, respectively. Meanwhile, **head-count unemployment** fell by 3.3% in January-September 2014 relative to one year earlier. The **unemployment rate** declined in November 2014 by 1.9 percentage points year-on-year to 25.8%, from 27.7% in November 2013, on the basis of seasonally adjusted data, although it still remained at very high levels.

The gradual stabilisation of employment can be attributed to a number of factors, including the gradual return to positive rates of GDP growth, improved economic sentiment, restructuring of employment towards more flexible forms of employment after institutional restrictions on the labour market were lifted, as well as a decline in labour costs for businesses.

The favourable developments in employment were driven by dependent employment, which showed **a positive rate of change for the first time since 2008**. Specifically, according to

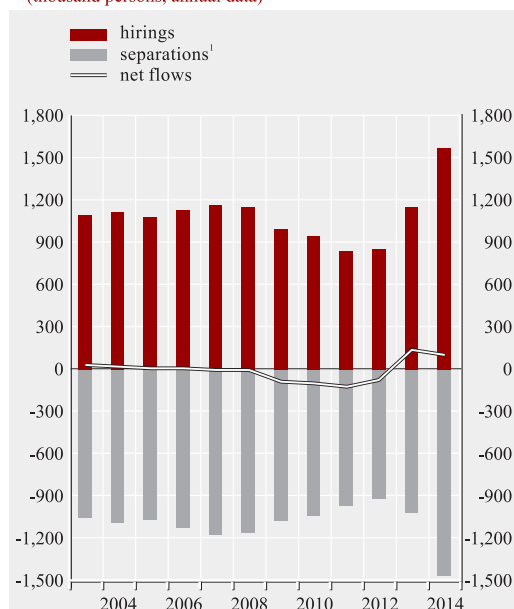
the Labour Force Survey (LFS) conducted by the Hellenic Statistical Authority (ELSTAT), the number of employees rose by 2.3% year-on-year in the period from January to September 2014, after having declined by 6.2% in 2013. Unlike the increase in employees, declines were seen in the number of other employed persons, particularly **self-employed with employees** (6.6%) and **assisting family members** (5.2%), mainly as a result of the closing of many small businesses. The number of **self-employed without employees**, representing a much larger share of employment compared with the self-employed with employees, fell at a more moderate pace (1.5%) (see Chart V.8).

Data from the ERGANI information system concerning **dependent employment flows** in the private sector supports the picture of rising employment. Specifically, after continued negative balances of hirings and separations in 2007-2012, the net dependent employment flow in 2014 was positive for the second consecutive year, as hirings exceeded total separations, although it was significantly below its 2013 level (99,000 people in 2014, down from 113,000 people in 2013) (see Chart V.9). However, in the last four months of 2014 the net dependent employment flow was negative.

From a sectoral perspective, the sector of **tourism** and related services (hotels and restaurants) showed positive employment growth in January-September 2014 (13%, compared with -5.2% in 2013), in the context of a buoyant tourist season. Employment also increased in **administrative and support services and education**. By contrast, **manufacturing, construction** and **wholesale-retail trade** continued to post negative employment performance in January-September 2014, although the year-on-year rates of decrease in employment weakened to 3.3%, 8.3% and 1.6%, respectively. A tentative sign of a turnaround in the labour market is the fact that, out of twenty one economic sectors, eleven showed positive employment growth year-on-year in the first nine months of 2014, compared with five in the respective period of 2013.

**Chart V.9 Dependent employment flows in the private sector**

(thousand persons, annual data)



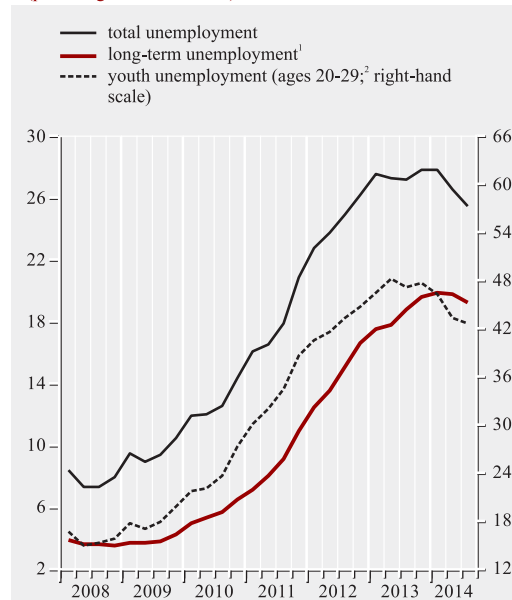
Sources: Manpower Employment Organisation (OAED) and ERGANI System.  
1 Including termination and expiration of contracts and voluntary quits.

The above developments have led to a **structural shift in the sectoral composition of employment** towards the tertiary sector (whose share in total employment grew to 71.4%) and away from the secondary sector – mainly due to declining employment in manufacturing and construction. On the other hand, the share of primary sector employment remained unchanged at 13.6%.

Looking at a breakdown by age, **the rate of employment for the 15-64 age group rose marginally** to 49.4% in January-September 2014, from 48.9% one year earlier, marking its first increase since 2008, although it still falls short of both the EU-28 average (2013: 64.1%) and its 2008 level for Greece (61.4%). The largest percentage point increase in the rate of employment was seen for the **20-24 age group** (+2 percentage points), followed by the **25-29 age group** (up by 1.8 percentage point, from 49% in January-September 2013 to 50.9% in the same period in 2014). Data from the

**Chart V.10 Unemployment rates (2008-Q3 2014)**

(percentage of labour force)



Source: ELSTAT, Labour Force Surveys.  
1 For twelve months or more.  
2 As a percentage of the labour force of this age group.

ERGANI information system also point to an increase in employment for workers aged 15 to 29: based on a breakdown of net employment flows by age, this group shows the highest net job creation for 2014. Net job creation was also positive for those aged between 30 and 44, but it was negative for the 45+ age group.

Across all age groups, **employment rates** rose more strongly for females than for males, implying a narrowing in the employment gender gap. Changes in employment rates vary widely depending on **education level** (those with a lower level of education levels are worse off).

Turning to a breakdown by type of employment, the **share of full time employment** continued to decline in January-September 2014, while the share of part-time employment increased (9.4% of total employment in January-September 2014, up from 6.1% in the same period of 2009). The growing share of part-time employment reflected the labour market reforms that

favoured more flexible forms of employment, as well as difficulties in finding a full-time job.<sup>11</sup>

The shift towards more flexible forms of employment is also supported by data from the ERGANI information system, providing a breakdown of new hirings by type of contract.<sup>12</sup> Furthermore, the share of **temporary employment** (in the total number of employees aged 15-64) increased to 11.7% in January-September 2014, after declining during the 2011-2013 period (2013: 10.1%, 2012: 10.3%).

As regards **labour participation for the 15-64 age group by gender**, in the first nine months of 2014, female labour participation rose slightly (59%, from 58.4% in the respective 2013 period), while male labour participation declined (76.2%, from 77% one year earlier).

According to LFS data, the stabilisation of employment was also accompanied by a decline in the number of the unemployed and a **drop in the rate of unemployment in the first nine months of 2014** which, however, still remains exceptionally high (see Chart V.10). The rate of unemployment averaged 26.6% in the first nine months of 2014 (down from 27.4% in the corresponding period of 2013), standing at 25.5% (1,229,400 unemployed persons) in the third quarter of 2014, i.e. 1.7 percentage points down from 27.2% in the third quarter of 2013. The unemployment rate in the third quarter of 2014 is the highest in EU-28.

Moreover, **the rate of unemployment of persons aged 20-29 years remains high**, although for the first time it moderated significantly by 3.2 percentage points, to 44.1% in January-September 2014, from 47.3% in the same period of 2013. This moderation in youth unemployment seems to be linked to, among other factors, the active employment policies implemented, as well as the legislative reforms introduced in the 2012-2014 period, which enabled firms to hire persons below 25 years of age at lower wages and with more flexible forms of employment. However, both the rate of youth unemployment and the NEET rate (the share of youth not in employ-

ment, education or training) remain extremely high compared with the situation before the crisis and with the respective figures in other EU countries. It should be noted that a large share of youth in the 20-29 age group remain economically active, with their participation rate standing at 69.1% in the third quarter of 2014 (compared with 69.9% one year earlier). In contrast with falling unemployment rates for younger age groups in January-September 2014, the unemployment rate for the 45-64 age group rose marginally by 0.4 percentage point.

In terms of **geographic breakdown**, unemployment rates continued to vary across regions during the first nine months of 2014, although less widely: the largest variation was 7.9 percentage points, between Central Macedonia (29%) and the South Aegean (21.1%), compared with 9.4 percentage points in 2013.<sup>13</sup>

The **rate of long-term unemployment** (defined as those out of job for 12 months or more as a percentage of the labour force) increased significantly to 19.6% in the first nine months of 2014, from 18.1% in the corresponding period of 2013. According to the latest available data (third quarter of 2014), out of total unemployed, 75.4% are long-term unemployed, while 24% are new unemployed, i.e. without employment in the past. As pointed out in a recent EU report, the strong increase in long-term unemployment at the EU level calls for further specific policy action.<sup>14</sup>

The absorption of the unemployed is expected to be a gradual process that will take time, given also the current slack in the labour market. The restoration of positive growth rates, coupled

<sup>11</sup> In the third quarter of 2014, 68.4% of part-time workers reported to have chosen this type of employment because they could not find a full-time job, compared with 46.5% in the third quarter of 2009.

<sup>12</sup> In 2014, 50.5% of new hirings concerned part-time and short-time employment contracts (Ministry of Labour monthly press releases on results from the ERGANI information system, December 2014).

<sup>13</sup> In January-September 2014, the highest unemployment rates were recorded in the regions of Central Macedonia (29%) and Western Greece (29%), and the lowest in the regions of Southern Aegean (21.1%) and Ionian Islands (21.5%).

<sup>14</sup> European Commission, EU Employment and Social Situation, Quarterly Review, December 2014. Furthermore, some policy considerations with a view to addressing unemployment are suggested in a special report of the ILO, entitled Productive jobs for Greece, 2014.

with active employment policies,<sup>15</sup> would help reducing unemployment — youth and long-term unemployment in particular — and to raise the employment rate. An important role in reducing unemployment should be played by actions to support jobs through the so-called public benefit programmes, vocational training schemes, etc. Moreover, employment and training programmes of the Manpower Employment Organisation (OAED), as well as the enhancement of the information content of the ERGANI system legislated in December 2014<sup>16</sup> with a view to ensuring more effective interventions in the labour market, can help, among other things, to tackle the structural dimension of unemployment.

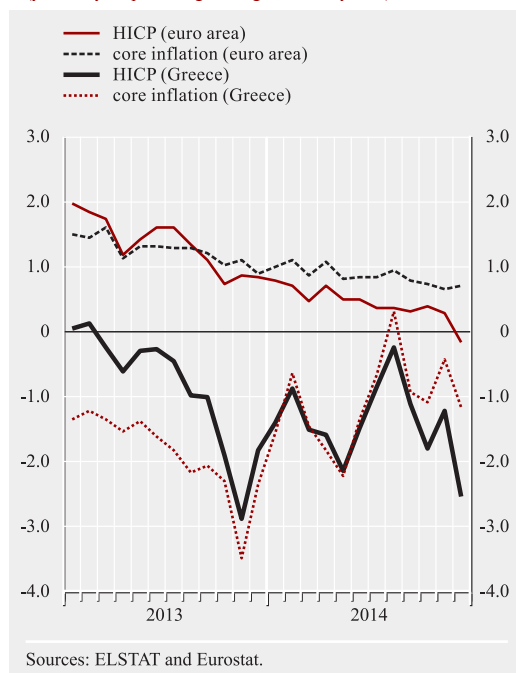
## 5 INFLATION, WAGES AND BUSINESS PROFITS: DEVELOPMENTS AND PROSPECTS – INCOME INEQUALITY AND POVERTY

### 5.1 INFLATION

Weak demand, compounded by negative effects from indirect taxation and the sharp drop in international oil prices, contributed to a further decline in HICP inflation to -1.4% in 2014, from -0.9% in 2013 (see Table V.8 and Chart V.11). Unit labour costs continued falling throughout 2014, albeit at a clearly declining rate. This is reflected in annual average core inflation (HICP inflation excluding energy and unprocessed food), which decelerated markedly in 2014 to -1.1%, from -1.9% in 2013, and is primarily attributable to services (-2.0% in 2014, from -2.9% in 2013), as well as non-energy industrial goods (-1.0%, from -1.7%).

**Chart V.11 Harmonised index of consumer prices (HICP) and core inflation in Greece and the euro area (January 2013–December 2014)**

(year-on-year percentage changes; monthly data)



<sup>15</sup> In its inaugural policy statement in Parliament on 8 February 2015, the newly elected government announced the launch of a programme for recovering job losses, by re-channelling funds of the Ministry of Labour and Social Solidarity towards the creation of new jobs over a four-year horizon. An acceleration and expansion of this programme could follow, subject to the conclusion of the agreement between Greece and its European partners, possibly allowing the use of resources from Juncker's investment plan, together with available NSRF funds for 2014–2020.

<sup>16</sup> On the basis of Law 4310/2014 ("Research, technological development and innovation and other provisions", Article 55, par. 5) a list of law-abiding employers (i.e. the "White Registry of Consistent Businesses" – PERSEUS) will be set up within the ERGANI information system, to identify businesses that have a consistent and proven record of compliance with labour and social security legislation and to reward them in the form of reduced administrative burden.

#### Box V.5

##### DEFLATION: CONSEQUENCES AND BENEFITS

Large and multiple increases in VAT and special consumption tax rates in 2010–2011 led to a deceleration of the anticipated — due to the economic crisis — decline in inflation. Inflation rose sharply in 2010 mainly because of higher indirect taxes, fell slightly but remained at high levels in 2011 and declined strongly in 2012. Thereafter, from March 2013 onwards, it followed a downward path, recording negative year-on-year rates. However, net of the effect of indirect taxation, inflation

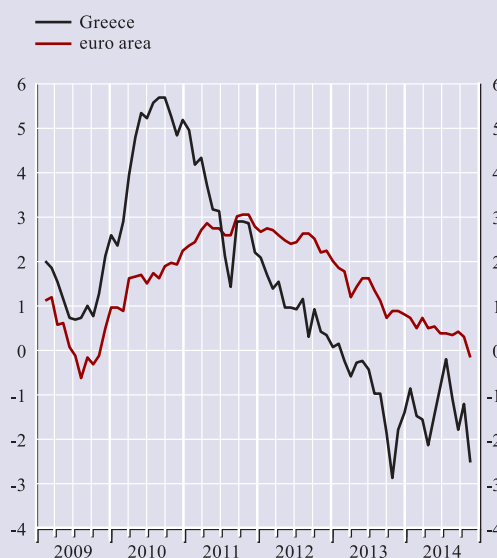


had already moved into negative territory since May 2012. According to empirical criteria used by the European Central Bank,<sup>1</sup> the Greek economy has been in deflation since early 2013.

The Greek economy is undergoing a prolonged period of negative annual rates of inflation, with the prices of most items in the consumer basket (goods and services) exhibiting negative rates of change. Furthermore, inflation has been far from the medium-term target of the ECB (inflation rates of below but close to 2%), which ensures price stability. After an initial period when domestic inflation de-escalated strongly to annual rates of below 2% as from February 2012, a year later, in March 2013, it entered negative territory, while it has also been lower than the respective euro area average (see the chart) since July 2011. The fall in the general level of prices in the Greek economy is mainly attributable to endogenous factors, such as subdued domestic demand and, on the supply side, lower unit labour costs, as well as to exogenous factors, most notably falling world energy (oil) prices.

#### Harmonised Index of Consumer Prices: Greece and the euro area

(year-on-year percentage changes, monthly data)



Sources: ELSTAT and Eurostat.

#### Risks and benefits of deflation

Deflation entails several risks, but also certain benefits:<sup>2</sup>

- A major risk refers to the possibility that the economy might be caught in a deflationary spiral, as continuously declining prices lead to increasingly lower unit profit margins, thereby creating disincentives to raise production. The low level of production and destocking in turn lead to lower wages, which reduce disposable income and active demand, which feeds back into new, larger reductions in prices and wages. Additionally, deflation worsens the public debt ratio, as it has a negative impact on the evolution of nominal GDP.<sup>3</sup>
- However, deflation can also have a positive impact, insofar as a ceteris paribus decrease in prices (in the absence of second-round effects on wages) leads to a rise in real incomes and supports the purchasing power of consumers. Furthermore, deflation can make exports more competitive, provided that the prices of exported goods and services decrease faster than those of major competitors.

February 2015 marks two years of uninterrupted negative annual rates of change in the general level of prices, and this pattern is expected to continue well into 2015. This situation makes it more

<sup>1</sup> These criteria are the following:

- (i) a negative annual rate of consumer price inflation over a prolonged period;
- (ii) a negative rate of change in the prices of a broad set of items in the basket of goods and services;
- (iii) longer-term inflation expectations becoming unanchored and falling clearly below levels consistent with the central bank's definition of price stability; and
- (iv) persistently very low or negative GDP growth rates and/or high and rising unemployment rates.

<sup>2</sup> See also ECB (2014) *Monthly Bulletin*, June 2014, Box 5, "Risk of deflation?", pp. 65-69.

<sup>3</sup> For a more detailed analysis, see Box VI.2.



difficult to effectively reduce public debt, but has made a positive contribution to the evolution of real income, thus to the evolution of private consumption. Moreover, Greek goods and services have become more competitive, gaining considerable shares in world markets. A case in point is tourism, which has posted remarkable growth over the past two years, being a major driver of economic recovery in 2014. The strong export performance of tourist services is largely attributable to the pricing policies followed by tourist businesses (lower accommodation rates), as well as to a decline in living costs in Greece, in particular the lower prices of tourism-related services (e.g. restaurants, cafés, etc.).

The deflation experienced by Greece over the past two years is not an exclusively Greek phenomenon; it is a Europe-wide one, as there are a number of euro area countries, e.g. Spain and Cyprus, that are facing strong deflationary pressures, while the euro area as a whole also registered negative annual rates of inflation in December 2014 and January 2015. The recently announced decision of the ECB to provide further monetary policy accommodation through a quantitative easing programme is aimed to tackle deflation by enhancing liquidity and supporting growth.

**Table V.8 Price developments in Greece and the euro area**

(annual percentage changes)

	2010	2011	2012	2013	2014
<b>A. Euro area</b>					
<i>Harmonised Index of Consumer Prices (HICP) and its components</i>					
<b>Overall index</b>	<b>1.6</b>	<b>2.7</b>	<b>2.5</b>	<b>1.4</b>	<b>0.4</b>
Goods	1.8	3.3	3.0	1.3	-0.2
Food	1.1	2.7	3.1	2.7	0.5
Processed food <sup>1</sup>	0.9	3.3	3.1	2.2	1.2
Unprocessed food	1.3	1.8	3.0	3.5	-0.8
Industrial goods	2.2	3.7	3.0	0.6	-0.5
Non-energy industrial goods	0.5	0.8	1.2	0.6	0.1
Energy	7.4	11.9	7.6	0.6	-1.9
Services	1.4	1.8	1.8	1.4	1.2
<i>Industrial producer prices</i>	<i>2.7</i>	<i>5.7</i>	<i>2.8</i>	<i>-0.2</i>	<i>-1.5</i>
<b>B. Greece</b>					
<i>Harmonised Index of Consumer Prices (HICP) and its components</i>					
<b>Overall index</b>	<b>4.7</b>	<b>3.1</b>	<b>1.0</b>	<b>-0.9</b>	<b>-1.4</b>
Goods	5.9	4.0	1.9	0.7	-1.0
Food	3.1	4.2	1.3	0.9	-1.0
Processed food <sup>1</sup>	5.0	4.7	1.2	0.7	0.6
Unprocessed food	0.2	3.4	1.4	1.3	-3.5
Industrial goods	7.7	3.9	2.3	0.4	-1.2
Non-energy industrial goods	1.9	-0.2	-0.6	-1.7	-1.0
Energy	30.4	16.7	12.6	6.3	-2.0
Services	3.1	1.9	-0.2	-2.9	-2.0
<i>Industrial producer prices</i>	<i>6.1</i>	<i>7.4</i>	<i>4.9</i>	<i>-0.7</i>	<i>-0.8</i>

Source: Calculations based on Eurostat and ELSTAT data.

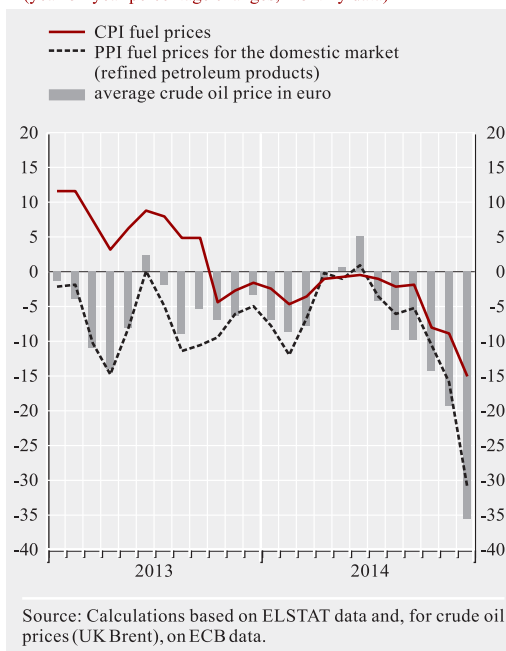
<sup>1</sup> Including alcoholic beverages and tobacco.

The first seven months of 2014 saw the continued effects of the reduction in the VAT rate on restaurant services, which came into effect in August 2013 and contributed to inflation remaining in negative territory during these months.

There were also significant effects from the large decline in international oil prices in the second half of 2014, particularly in the last three months of the year. International oil prices in dollar terms fell by more than 40%, and in euro terms by more than 35%, from June to December 2014 (see Chart V.12). The decline in international oil prices, combined with the 30% cut in the excise duty on heating oil in October 2014, added to the downward pressures on the general average price level, mainly in the last quarter of 2014. These pressures, as manifest in geopolitical developments, should be long-lasting and are expected to continue for most of 2015. Thus, at least in the first nine months of 2015, very low prices

**Chart V.12 Evolution of CPI/PPI fuel prices and of Brent crude oil prices in euro (January 2013-December 2014)**

(year-on-year percentage changes; monthly data)



**Table V.9 Price indices**

(annual percentage changes)

Year	Consumer Price Index							
	Overall index	Sub-indices						
		Goods	Services	CPI excluding fuel & fresh fruit and vegetables	CPI excluding food & fuel	Food and non-alcoholic beverages	Fresh fruit and vegetables	Fuel
2010	4.7	5.6	3.6	3.0	3.4	0.1	-4.3	36.2
2011	3.3	4.2	2.3	1.5	1.3	3.1	5.1	18.8
2012	1.5	2.2	0.5	0.3	0.1	1.5	1.5	12.0
2013	-0.9	0.1	-2.2	-1.7	-1.9	0.0	3.0	4.6
2014	-1.3	-1.3	-1.4	-0.7	-0.9	-1.7	-8.6	-4.1
Year	Industrial Producer Price Index						Import price index in industry	
	Domestic market				External market			
	Overall index	Sub-indices					Overall index	Overall index excl. energy
		Overall index excl. energy	Intermediate goods	Consumer goods				
2010	6.1	0.9	2.3	-0.3	8.8	4.0	6.6	1.4
2011	7.4	2.7	4.8	1.1	8.8	3.8	7.6	1.5
2012	4.9	0.8	0.6	1.1	4.1	1.3	4.5	0.6
2013	-0.7	0.0	-1.1	1.1	-1.7	-0.2	-2.7	-0.4
2014	-0.8	-0.5	-1.4	0.2	-2.6	-1.2	-3.7	-0.9

Source: ELSTAT and calculations based on ELSTAT data.

are anticipated for energy goods and, thus, low average headline inflation.

Furthermore, the mid-season sales introduced in May 2014 also contributed to the deflationary process. It should also be noted that throughout the past year several special offer sales took place, which in turn contributed to headline inflation remaining in negative territory. Lastly, a number of structural changes in the labour and product markets also contributed to the large decline in prices.

It should be noted that, currently, the international economy and, in particular, the euro area economy is going through a period of sluggish effective demand, slow growth and deflation (euro area: -0.2% in December 2014; -0.6% in January 2015). Domestic inflation, influenced mainly by the international environment, is expected to continue on its downward course.

## 5.2 LABOUR COSTS

In 2014, the rate of wage reductions decelerated markedly against the previous two years (see Tables V.10 and V.11), while the third quarter saw an acceleration in the annual growth rate of total compensation of employees for the first time since the onset of the crisis. In some private sector companies wage reductions continued, but in others the level of wages was either unchanged or slightly increased.<sup>17</sup> In particular, average gross earnings are estimated to have declined by 1.5% in total economy and by 2.0% in the business sector.<sup>18</sup> However, average labour costs per employee in the business sector fell by 3.0% (i.e. more than gross earnings), due to a 2.9 percentage points cut in employers' social security contributions in the business sector as from 1 July 2014 (Law 4254/2014). At the same time, average net (pre-tax) earnings of employees in the business sector only dropped by 1.4% in 2014, i.e. less than gross earnings, due to a cut in employees' social security contributions by one percentage point as from 1 July 2014 (also provided for in the above law). Since HICP

inflation was negative (-1.4%) in 2014, real average gross earnings in total economy decreased only slightly (by a mere 0.1%), while the combined decreases in consumer prices and in employees' social security contributions had similar effects on the business sector, where real average net earnings remained stable.

Unit labour costs are estimated to have declined by 2.7% in total economy and by 3.1% in the business sector in 2014, reflecting the rise in productivity and the fall in employers' social security contributions. The above estimates imply a substantial cumulative decline in unit labour costs in the business sector of 21.7% in 2012-2014, against a target of 15% set in the 2nd Economic Adjustment Programme in February 2012.

Moreover, electronic reporting data from the ERGANI information system for total employees on private-law contracts in the January-October 2014 period<sup>19</sup> show that 21.8% of these employees is paid for part-time or short-time employment, while 78.2% is paid for full employment, as follows: 9% earn the minimum or close to the minimum (€600 per month or

<sup>17</sup> According to 286 firm-level collective agreements uploaded on the website of the Ministry of Labour for the January-December 2014 period (409 firm-level collective agreements had been uploaded for 2013).

<sup>18</sup> According to ELSTAT (quarterly national accounts), the compensation of employees fell at an annual rate of only 1.1% in January-September 2014, as the annual rate of change turned positive (+2.1%) in the third quarter, from negative (-2.7%) in the first quarter of the year. Taking into account the change in salaried employment (national accounts data, ESA 2010), it appears that compensation per employee (which also includes employers' social security contributions) fell by 3.7% and 4.4% on an annual basis in the first and the second quarter, respectively, while in the third quarter the rate of decrease dropped sharply to 1.8%. Moreover, according to the non-financial accounts of institutional sectors published by ELSTAT, in January-September 2014 the annual growth rate of the compensation of employees rose by 0.7% in the business sector, and fell by 3.9% in general government – these rates take into account the decline in employment. The Wage Index in the total economy (excluding the primary sector and household activities – non-seasonally adjusted data; hourly wages) increased at an average annual rate of 0.8% in January-September 2014, as the decline at an annual rate of 1.2% in the first half of 2014 was followed by an increase of 4.8% in the third quarter of the year. Lastly, based on monthly data published by the Ministry of Finance, in January-December 2014 the general government wage bill fell by an annual 3.4%, while corresponding central government spending declined less (1.1%), reflecting mobility of staff and the concomitant transfer of funds from subsectors of general government (mostly local authorities and the National Organisation for Health Care (EOPYY)) to central government (see also *Introductory Report on the 2015 Budget*, p. 111; in Greek).

<sup>19</sup> Second annual report, published on 9.12.2014 (in Greek).

**Table V.10 Earnings and labour costs (2009-2015)**

(annual percentage changes, unless otherwise indicated)

	2009	2010	2011	2012	2013	2014 (estimate)	2015 (forecast) <sup>4</sup>
<b>Greece</b>							
<b>Average gross earnings (nominal):</b>							
– total economy	4.6	-4.6	-1.7	-6.6	-6.5	-1.5	0.1
– central government <sup>1</sup>	5.2	-7.7	-0.5	-3.8	-1.2	0.0	0.4
– public utilities	7.7	-5.5	-7.9	-9.5	-10.0	0.0	0.0
– banks	3.7	-1.8	0.1	-7.5	-10.0	-6.3	0.0
– non-bank private sector	2.8	-2.9	-1.7	-9.3	-8.0	-1.4	1.0
<b>Minimum earnings</b>	<b>5.7</b>	<b>1.7</b>	<b>0.9</b>	<b>-19.6<sup>3</sup></b>	<b>-2.9<sup>3</sup></b>	<b>0.0</b>	<b>0.0</b>
<b>Average gross earnings (real)</b>	<b>3.3</b>	<b>-8.9</b>	<b>-4.7</b>	<b>-7.6</b>	<b>-5.7</b>	<b>-0.1</b>	<b>1.5-2.0</b>
<b>Total compensation of employees</b>	<b>3.2</b>	<b>-6.9</b>	<b>-8.1</b>	<b>-14.0</b>	<b>-10.9</b>	<b>-1.9</b>	<b>0.2</b>
<b>Compensation per employee</b>	<b>4.9</b>	<b>-4.0</b>	<b>-0.7</b>	<b>-6.0</b>	<b>-6.7</b>	<b>-1.6</b>	<b>-0.1</b>
<b>Unit labour costs:</b>							
– total economy	7.8	-1.6	0.8	-7.9	-7.3	-2.7	-1.9
– business sector <sup>2</sup>	5.8	-0.6	-1.6	-12.1	-8.1	-3.1	-1.8

Source: Bank of Greece estimates/forecasts.

1 Outlays for wages and salaries per employee.

2 The business sector comprises private and public enterprises and banks.

3 Average annual change in 2012 and carryover effect for 2013, based on the cut in minimum earnings by 22% (for persons aged 25+) and 32% (for persons under 25) as of 15 February 2012.

4 Data for 2015 are indicative estimates/forecasts assuming unchanged labour market policies (see text).

**Table V.11 Average earnings and unit labour costs in total economy: Greece and the euro area (2001-2015)**

(annual percentage changes)

Year	Average earnings		Unit labour costs	
	Greece	Euro area	Greece	Euro area
2001	4.7	2.7	4.4	1.9
2002	6.6	2.7	5.7	2.6
2003	5.6	2.7	1.6	2.4
2004	7.2	2.3	3.7	0.9
2005	4.4	2.3	4.8	1.6
2006	5.7	2.5	1.9	1.0
2007	5.2	2.7	4.5	1.5
2008	6.2	3.5	8.9	3.8
2009	4.6	1.9	7.8	4.5
2010	-4.6	2.2	-1.6	-0.6
2011	-1.7	2.2	0.8	0.5
2012	-6.6	1.9	-7.9	1.8
2013	-6.5	1.8	-7.3	1.4
2014 (estimate)	-1.5	1.5	-2.7	1.1
2015 (forecast)	0.1	1.6	-1.9	0.9

Sources: For Greece: Bank of Greece estimates based on revised GDP figures (Oct. 2014); for the euro area: European Commission, *Economic Forecast, Autumn 2014* and *Statistical Annex of European Economy, Autumn 2014*.

lower), 17.4% earn between €600 and €800 per month, and 51.8% earn over €800 per month.

Without changes in the labour market policy pursued during the past few years (e.g. concerning the reduction in minimum wages and the reform of the institutional framework for collective bargaining), it has been estimated that the year 2015 is expected to see: a stabilisation of average gross earnings (+0.1%) in the total economy and the business sector, a decline of 0.8% in average labour costs per employee in the business sector, and a small increase (+0.6%) in average net earnings in the business sector (owing to the carry-over effect from the reduction in employers' and employees' social security contributions in mid-2014). As average inflation is expected to remain negative, under the circumstances real average gross earnings in the total economy should increase by 1.5-2.0%, while real average net earnings in the business sector should rise by 2.0-2.5%.

More specifically, according to the Introductory Report submitted on 26 November 2014, ordinary budget expenditure for wages and pensions is projected to increase by 1.0% in 2015; however, if projected (in the same report) wage expenditure for various general government agencies is taken into account, expenditure for general government as a whole should remain unchanged.

On the basis of the above technical assumption, it is estimated that unit labour costs should continue to decline in 2015, by 1.9% in total economy and 1.8% in the business sector, reflecting the accelerating growth rate of productivity and the carry-over effect from the reduction in employers' social security contributions as from mid-2014. Policy changes announced by the new government concerning the labour market, e.g. the gradual increase in minimum wages to pre-February 2012 levels, the abolition of lower minimum wages for the young aged below 25, and the restoration of the previously-applicable provisions on collective bargaining imply changes in the above estimates, the extent of which cannot be estimated as yet.<sup>20</sup> However,

an increase, instead of a further decrease, in unit labour costs in 2015 would only occur if the rise in average nominal wages in the economy ended up more than offsetting the increase in average productivity and the carry-over effect from reduced employers' social security contributions in the previous year.

### 5.3 INCOME INEQUALITY AND POVERTY

In periods of fiscal crisis and adjustment, targeted support to weaker groups of the population not only contributes to maintaining social cohesion, which is vital for stability and growth, but is also crucial for the success of the adjustment programme itself. What follows is a synopsis of the most important findings, mainly regarding the magnitude and evolution of various social indicators (inequality, poverty, social exclusion, living conditions, etc.) in Greece during the recent crisis. Household survey data is the internationally accepted data source for the estimation and analysis of these indicators. The two most important relevant surveys are the Income and Living Conditions of Households (EU-SILC) survey and the Household Spending Survey, both conducted in Greece on an annual basis by ELSTAT.

The at-risk-of-poverty rate for Greece now appears to stabilise, after having increased in the first years of the crisis. Specifically, on the basis of the EU-SILC survey data for 2013, the share of Greece's population that live below the poverty threshold remained at 23.1%, i.e. same as in the 2012 survey, but significantly above the EU-28 figure (16.7%).<sup>21</sup> On the basis

<sup>20</sup> For instance, changes would depend on the timeframe of the gradual increase in minimum wages (either legislated or after collective bargaining) and the size of its effect on higher wage brackets at sectoral or firm level. It should be noted that a gradual elimination of the 22% reduction in minimum wages that was enacted in February 2012 would imply a progressive increase in their current level by 28.2%.

<sup>21</sup> The relative poverty line follows the population's average living standards, set at 60% of the median equivalised disposable income of all households (Eurostat definition). To calculate the equivalised household income, the first adult is given a weight of 1.0, the second and each subsequent person aged 14 and over are given a weight of 0.5, and each child under 14 is given a weight of 0.3. This method takes into account household economies of scale in consumption, household composition and the different needs of adults and children. In the 2013 survey, the relative poverty threshold was €5,023 for a single-person household and €10,547 for a four-person household with two adults and two children under 14.

of the Household Spending Survey for 2013, the at-risk-of-poverty indicator is lower in terms of consumer monetary expenditure of households (21.0%, against 21.2% in 2012), and is limited to 14.7% of the population (15.3% in 2012) when taking into account imputed expenditure (owner-occupancy imputed rent; self-produced consumption in rural households, etc.).

The same data imply stability between the two most recent survey years (EU-SILC 2012 and 2013) also in terms of income inequality, as calculated on the basis of the Gini coefficient, although Greece still ranks high among EU countries (Greece 2013: 34.4, EU-28: 30.5). Moreover, during the same years, the wealthiest 20% of the country's households had a 6.6 times higher income share than the poorest 20% (S80/S20 indicator, EU-28: 5.0).<sup>22</sup>

However, other social indicators indicate further deterioration during the most recent years of the crisis. The Greek population living either at risk of poverty or in social exclusion, i.e. living in material deprivation or in households with very low work intensity, increased to 35.7% in 2013 (or 3,904 thousand people) from 34.6% in the previous year. Likewise, the percentage of persons in material deprivation rose to 37.3% in 2013, from 33.7% in 2012. In addition, the relative poverty gap or intensity<sup>23</sup> is calculated at around 32.7% in Greece in the 2013 survey, against 29.9% in 2012.

Poverty rates in Greece deteriorated substantially in the past few years in absolute terms – i.e. when the poverty line remains constant over time in terms of real purchasing power. Specifically, on the basis of 2008 data, 44.3% of the population in 2013 is characterised as at-risk-of-poverty population.<sup>24</sup> This is attributable to the continued decline in household average disposable income, on the basis of household surveys, combined with the poverty threshold remaining at the high pro-crisis levels.

In Greece, groups at high risk of poverty include principally the unemployed (in the

2013 survey the relative poverty rate was 46.3%), particularly unemployed men (50.7%), households with three or more adults and dependent children (38.0%), single-parent households with at least one dependent child (37.2%), people with a relatively lower level of education (31.9% for lower secondary school graduates), households living in rented accommodation (30.3%), and children 0-17 years of age (28.8%). However, in recent years, poverty in Greece seems to shift away from the elderly towards younger couples with children, as well as young workers and, to an even larger degree, the unemployed.<sup>25</sup>

In this conjuncture, it is clear that policy interventions should aim at improving the efficiency of reduced social expenditure, and give priority to eliminating extreme poverty in families with children, no employed members, no unemployment benefit or other income support and, quite often, no access to social security. For a more effective social welfare system, it is recommended, among other things, to enhance the governance of social programmes by speeding up the consolidation of their management; intensify controls on recipients of welfare benefits; and target income support benefits and benefits in kind at the most vulnerable people (access to healthcare, etc.). Furthermore, the problem of protecting children and the unemployed from the adverse

<sup>22</sup> The share of the average equivalised expenditure of the wealthiest 20% of Greece's population is 5.7 times larger than the respective share for the poorest 20% of the country's population (Household Spending Survey 2013, 2012: 5.9). Actually, the indicator falls to 4.5 when imputed expenditure is also included in the calculation of the monetary consumer expenditure for purchases.

<sup>23</sup> The relative poverty gap or intensity measures the distance of the poverty threshold (for total population) from the median equivalised disposable income of persons below the poverty threshold, as a percentage of the poverty threshold.

<sup>24</sup> Poverty rate for 2013, calculated on the basis of the poverty threshold for 2008 and adjusted for the year 2013 on the basis of the Harmonised Index of Consumer Prices.

<sup>25</sup> Similar results were reached in recent studies by researchers of the Athens University of Economics and Business. See Athens University of Economics and Business, Policy Analysis Research Unit, Newsletter 8/2014, Manos Matsaganis and Chrysa Leventi, "Income distribution in Greece (2009-2013)", and Newsletter 7/2014 "Poverty and Inequality 2009-2013: available estimates and data". These studies show that in the past few years a significant amount of re-ranking took place in the composition of the poorest income deciles and, in particular, a new category of poor (households with unemployed members living in urban areas) seems to be taking the place of the traditionally poor (elderly households living in rural areas) at the lowest income deciles.



effects of the economic crisis should be a top priority for public policy.<sup>26</sup>

Certain recent income support measures are a step in the right direction. These include: unemployment benefit to the self-employed, widening of the eligibility criteria for the long-term unemployment benefit, and the pilot running of a minimum guaranteed income scheme, which is now well under way, after approval of relevant applications by the 13 participating municipalities at the start of the programme. Full implementation of the latter at a countrywide level should definitely lead to a gradual improvement of social indicators, i.e. indicators of economic prosperity and social welfare, income inequality and, mainly, absolute poverty.

#### 5.4 BUSINESS PROFITS

In January-September 2014, ATHEX-listed non-financial corporations recorded a small decline in gross profit margins and a clear increase in net profit margins (i.e. the profits-to-turnover ratio). According to published financial statements of 163 ATHEX-listed non-financial corporations,<sup>27</sup> sales increased moderately by 2.9%, while gross profits fell slightly by 1.2%. However, corporations recorded an increase in net pre-tax profits by 78.9% year-on-year (€545.6 million, against €305.0 million). Thus, the gross profit margin fell slightly by 0.5 percentage point (to 13.8%, from 14.3% in January-September 2013), while the net profit margin rose by 1.4 percentage point to 3.2%, from 1.8% a year earlier. Both return on equity (ROE) and return on assets (ROA) remained positive and increased year-on-year (to 2.6% and 1.1%, from 1.5% and 0.6%, respectively). The non-financial accounts of institutional sectors published by ELSTAT present a different picture. According to them, the gross operating surplus of non-financial corporations decreased at an annual rate of 6.0% in January-September 2014 and the net operating surplus at an annual rate of 6.4%, while — as mentioned above — the compensation of employees increased slightly in

the same period in the business sector at an annual rate of 0.7%, although it fell by an annual 1.1% in total economy. However, for the year as a whole, a comparison between the change in unit labour costs in total economy (annual estimate: -2.7%) and the change in the GDP deflator (also -2.7% in January-September 2014, according to provisional ELSTAT estimates) suggests a stabilising outlook for the profit margin in total economy.<sup>28</sup>

## 6 COMPETITIVENESS

The international competitiveness of the Greek economy is estimated to have improved further in 2014, by 3.4% on the basis of the relative labour costs and by 1.8% on the basis of the relative consumer price index.

The loss of unit labour cost competitiveness in 2000-2009 was restored in 2010-2014, despite the relatively limited decline in the nominal effective exchange rate during this period, mostly due to the deep and protracted downturn that caused a large decline in labour demand and to labour market reforms. According to the revised real effective exchange rate index of the Bank of Greece based on the unit labour cost for total economy, the cumulative loss of competitiveness against Greece's major trading partners, after reaching 26.3% in 2000-2009, narrowed from then on, and was almost eliminated in 2014; thus, competitiveness now stands close to its 2000 levels. Specifically for 2014, it is estimated that, while Greece's nominal effective exchange rate appreciated by 0.7% (annual average terms), the real effective exchange rate on the basis of unit labour cost declined (improved) by 3.4%

<sup>26</sup> Similar recommendations are also made in the special chapter "A fair sharing of the costs and benefits of adjustment", in *OECD Economic Surveys: Greece 2013*, November 2013. See also OECD (2014), "Trends in Income Inequality and its Impact on Economic Growth", *Social, Employment and Migration Working Papers* No. 163, as well as Greece: *Reforms of Social Welfare Programmes*, OECD, July 2013.

<sup>27</sup> This figure does not include data on the two refineries.

<sup>28</sup> Nevertheless, this comparison ignores other input costs (such as raw material and intermediate goods, energy consumption), financial costs, and the tax burden on businesses.



**Table V.12 Nominal and real effective exchange rate (EER) indices<sup>1</sup> (2000=100)**

	Nominal EER	Real EER*			
		Broad EER-28		EER-euro area	
		CPI-deflated	ULCT-deflated <sup>2</sup>	CPI-deflated	ULCT-deflated <sup>2</sup>
2000	100.0	100.0	100.0	100.0	100.0
2001	101.7	101.1	99.3	99.9	98.9
2002	104.0	103.7	107.3	101.5	105.8
2003	109.2	109.3	110.2	102.8	104.4
2004	111.0	111.4	112.2	103.7	105.2
2005	109.9	111.2	118.3	105.1	113.0
2006	110.0	112.1	115.2	106.3	110.8
2007	111.4	113.9	117.4	107.2	112.4
2008	114.1	116.8	121.5	108.1	113.7
2009	115.5	118.5	126.3	109.2	116.3
2010	112.2	118.0	123.3	112.6	117.8
2011	112.7	118.5	121.7	113.0	116.6
2012	110.5	114.2	112.5	111.3	110.4
2013	112.7	113.4	104.2	108.7	101.2
2014**	113.5	111.4	100.7	106.9	97.1
2015**	113.5	109.4	97.7	105.5	94.2

Sources: ECB: exchange rates, CPI, unit labour costs in the total economy for Greece and competitor countries.

\* The index is subject to regular revisions.

\*\* Estimates.

1 The broad real EER index includes Greece's 28 main trading partners. Weights are calculated on the basis of imports and exports of manufacturing goods (SITC 5-8).

2 The ULCT-deflated REER series were revised in November 2014. Unit labour costs in the whole economy for Greece are calculated by the ECB and not by the Bank of Greece. Furthermore, the time series of national accounts data on unit labour costs were revised in January 2015, on the basis of ESA 2010.

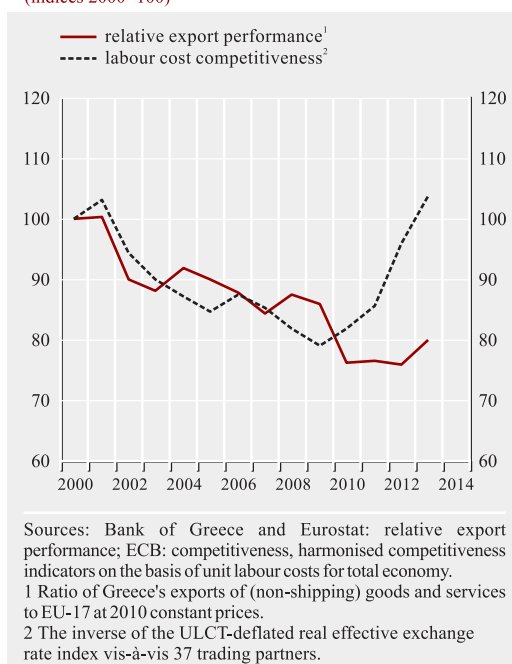
against its 28 major trading partners and by 4.0% against the euro area (see Table V.12). A similar improvement is also evident in the respective harmonised competitiveness indicator compiled by the ECB, which improved by 4.1% in the third quarter of 2014 year-on-year and was 1.2 percentage points above its 2000 level. Greece now registers the third best performance after Germany and Portugal as regards developments in labour cost competitiveness after 2000.

By contrast, the cumulative loss of competitiveness on the basis of consumer price indices, after reaching 18.5% in 2000-2009, declined at a slower pace due to the relatively delayed decrease in the inflation differential against major trading partners, as a result of

increased indirect taxation and higher energy and financing costs for enterprises. Essentially, gains in international competitiveness as regards the general price level started in 2011, when the inflation differential between Greece and its major trading partners became negative for the first time since 2000, by 0.1 percentage point in 2011, 1.7 percentage points in 2012 and 2.7 percentage points in 2013. In 2014, international competitiveness in terms of the consumer price index improved further by 1.8% against the 28 major trading partners and by 1.7% against the euro area. A substantial improvement is also evident in the respective harmonised competitiveness indicator compiled by the ECB, which fell (improved) by 1.3% in 2014, and was 12.1% above its 2000 level.

**Chart V.13 Greece's labour cost competitiveness and export performance vis-à-vis the euro area**

(indices 2000=100)



Developments in competitiveness on the basis of labour costs seem to affect the relevant Greek export performance (see Chart V.13). However, after 2009, improved competitiveness has translated into only a limited increase in exports of goods and services. The close relationship between competitiveness and exports was broken after 2009, probably due to lack of financing and increased relative financing costs for domestic enterprises, which made it difficult for them to invest (see *Monetary Policy 2013-2014*, June 2014, Special Feature III.3).

Based on most composite global competitiveness indices, the structural competitiveness of the Greek economy, after deteriorating for a number of years, has been showing signs of improvement since 2013. According to the World Economic Forum's Global Competitiveness Index, Greece moved up to rank 81st, from 91st in 2012, while according to the World Bank's "ease-of-doing-business index", Greece moved up to rank 61st, from 65th and

89th, respectively, in the previous two years. By contrast, on the basis of the IMD composite Global Competitiveness Index, Greece ranks 57th, from 54th, in a total of 60 countries. Although Greece received the highest score on responsiveness to OECD recommendations for structural reforms, it continues to occupy one of the lowest positions — on the basis of most of the above indices — among both the EU economies and all advanced economies. According to these composite indices, currently the most important constraints to improving the international competitiveness of Greek enterprises are access to financing, bureaucracy, and the continuously changing tax framework.

## 7 BALANCE OF PAYMENTS: DEVELOPMENTS AND PROSPECTS

According to Bank of Greece data, the positive course of the current account balance observed in 2010-2013 continued in 2014, recording a surplus, for the second consecutive year, of 0.9% of GDP (see Table V.13). The main driver behind this development was the improved services balance, which fully offset the higher trade deficit; as a result, the overall balance of goods and services, which represents the bulk of the current account balance, recorded a surplus of €1.8 billion.

Receipts from exports of goods and services rose by 8.4%, as competitiveness continued to improve, despite the fact that external demand for goods — mainly from EU countries, i.e. Greece's major trading partners — did not increase as expected. Apart from improved competitiveness, which is associated with endogenous factors, the substantial depreciation of the euro has had a positive effect on export activity of Greek enterprises. The rise in exports of goods (4.9%) continued stronger than in 2013, due to positive growth rates in key export industries and structural changes in labour, despite the financing difficulties faced by domestic enterprises, and the less favourable than expected conditions prevailing

**Table V.13 Balance of payments**

(million euro)

	2012	2013	2014
<b>I CURRENT ACCOUNT (I.A+I.B+I.C+I.D)</b>	<b>-4,615.0</b>	<b>1,088.5</b>	<b>1,656.7</b>
<b>BALANCE OF GOODS AND SERVICES (I.A+I.B)</b>	<b>-4,480.1</b>	<b>-250.5</b>	<b>1,820.1</b>
Receipts	49,547.0	50,494.3	54,731.8
Payments	54,027.1	50,744.8	52,911.7
<b>I.A Trade balance (I.A.1 – I.A.2)</b>	<b>-19,619.0</b>	<b>-17,229.4</b>	<b>-17,976.1</b>
<i>I.A.1 Exports of goods</i>	22,020.6	22,534.8	23,647.5
Oil	7,426.4	7,941.2	8,188.8
Ships (receipts)	737.8	443.0	626.0
Goods excluding oil and ships	13,856.5	14,150.7	14,832.7
<i>I.A.2 Imports of goods</i>	41,639.7	39,764.2	41,623.6
Oil	17,646.3	15,638.7	15,734.8
Ships (payments)	1,780.4	1,926.2	2,799.2
Goods excluding oil and ships	22,213.0	22,199.3	23,089.7
<b>I.B Services balance (I.B.1 – I.B.2)</b>	<b>15,138.9</b>	<b>16,978.9</b>	<b>19,796.2</b>
<i>I.B.1 Receipts</i>	27,526.4	27,959.5	31,084.2
Travel	10,442.5	12,152.2	13,442.5
Transport	13,287.4	12,089.9	13,183.1
Other services	3,796.5	3,717.4	4,458.7
<i>I.B.2 Payments</i>	12,387.4	10,980.6	11,288.1
Travel	1,843.9	1,835.2	2,074.1
Transport	6,328.0	5,553.0	5,252.5
Other services	4,215.5	3,592.4	3,961.4
<b>I.C Income balance (I.C.1 – I.C.2)</b>	<b>-1,566.4</b>	<b>-3,127.2</b>	<b>-2,894.2</b>
<i>I.C.1 Receipts</i>	3,832.2	3,423.0	3,414.7
Wages, salaries	200.8	209.3	209.9
Interest, dividends, profits	3,631.4	3,213.7	3,204.8
<i>I.C.2 Payments</i>	5,398.6	6,550.2	6,308.9
Wages, salaries	468.0	453.0	491.7
Interest, dividends, profits	4,930.7	6,097.1	5,817.2
<b>I.D Current transfers balance (I.D.1 – I.D.2)</b>	<b>1,431.5</b>	<b>4,466.2</b>	<b>2,730.8</b>
<i>I.D.1 Receipts</i>	5,125.6	7,687.8	5,966.8
General government (mainly receipts from the EU)	4,060.2	6,410.6	4,857.7
Other sectors (emigrants' remittances, etc.)	1,065.4	1,277.3	1,109.0
<i>I.D.2 Payments</i>	3,694.1	3,221.6	3,235.9
General government (mainly payments to the EU)	2,647.9	2,433.0	2,417.3
Other sectors	1,046.2	788.6	818.7
<b>II CAPITAL ACCOUNT (II.1–II.2)</b>	<b>2,327.6</b>	<b>3,040.8</b>	<b>2,510.6</b>
<b>II.1 Receipts</b>	<b>2,564.6</b>	<b>3,380.6</b>	<b>2,866.2</b>
General government (mainly receipts from the EU)	2,486.0	3,298.9	2,789.8
Other sectors	78.6	81.7	76.4
<b>II.2 Payments</b>	<b>237.1</b>	<b>339.8</b>	<b>355.6</b>
General government (mainly payments to the EU)	13.7	9.7	8.8
Other sectors	223.3	330.1	346.7
<b>CURRENT AND CAPITAL ACCOUNT (I+II)</b>	<b>-2,287.5</b>	<b>4,129.3</b>	<b>4,167.3</b>
<b>III FINANCIAL ACCOUNT (III.A+III.B+III.C+III.D)</b>	<b>2,658.2</b>	<b>-3,299.5</b>	<b>-2,268.8</b>
<b>III.A Direct investment<sup>1</sup></b>	<b>827.1</b>	<b>2,713.6</b>	<b>991.8</b>
By residents abroad	-527.3	591.5	-645.0
By non-residents in Greece	1,354.3	2,122.2	1,636.8
<b>III.B Portfolio investment<sup>1</sup></b>	<b>-99,903.9</b>	<b>-6,583.1</b>	<b>-6,978.0</b>
Assets	-58,086.1	1,023.6	-8,910.1
Liabilities	-41,817.8	-7,606.7	1,932.1
<b>III.C Other investment<sup>1</sup></b>	<b>101,744.1</b>	<b>677.0</b>	<b>4,173.5</b>
Assets	13,863.4	17,491.9	351.7
Liabilities	87,880.7	-16,814.9	3,821.8
(General government borrowing)	109,093.9	30,061.2	4,000.2
<b>III.D Change in reserve assets<sup>2</sup></b>	<b>-9.0</b>	<b>-107.0</b>	<b>-456.0</b>
<b>IV ERRORS AND OMISSIONS</b>	<b>-370.8</b>	<b>-829.8</b>	<b>-1,898.5</b>
<b>RESERVE ASSETS</b>	<b>5.500</b>	<b>4.172</b>	<b>5.117</b>

Source: Bank of Greece.

1 (+) net inflow, (–) net outflow.

2 (+) decrease, (–) increase.

in international markets. Receipts from services rose faster (11.2%) than in 2013; this was due both to the continued recovery of tourism which started the previous year, as a result of the improved image of the country abroad, and to the substantial contribution of receipts from shipping, owing to higher freight rates. Additionally, “other” services also showed a remarkable increase in receipts. Lastly, the improvement in the current account was also supported by a decline in the income account deficit, while the surplus in current transfers was lower than in 2013.

The current account balance is expected to continue improving in 2015, as a result of both the ongoing increase in the international competitiveness of the domestic economy and the recovery in global trade and external effective demand. A higher services balance is expected to play the key role in the above developments, due to favourable projections for receipts in both tourism and shipping. Meanwhile, a positive contribution is expected from exports of goods, which should largely offset the emerging rise in corresponding imports, if the flow of financing to enterprises is restored and the recovery of investment activity strengthens. Moreover, the decline in oil prices and the depreciation of the euro are expected to have a positive effect on the current account. Lastly, the current transfers balance is expected to remain in surplus. However, any uncertainty as regards the outcome of the new government’s bargaining with Greece’s European partners, as well as geopolitical and international risks, may affect developments in these aggregates.

## 7.1 CURRENT ACCOUNT

### 7.1.1 Trade balance

After contracting substantially in 2010-2013, the trade deficit recorded an increase in 2014, the largest part of which (about 90%) was attributable to higher net payments for the purchase of ships, and – to a lesser extent – the net import bill for other goods.

Increased receipts from exports of goods continued in 2014, though at the beginning of the year that pace was slower than in 2013.<sup>29</sup> This was the combined outcome of the appreciation of the euro and the slowdown in the world economy. However, in the last months of the year, the growth rate of exports of goods gradually recovered to stand above its 2013 level (4.9%, against 2.3%). In real terms, the growth rate of exports in 2014 is estimated to have been even stronger (7.7%), due to the decline in the prices of exported goods.<sup>30</sup>

Oil export receipts continued to rise compared with 2013, although at a slower pace, due to lower crude oil prices in international markets. However, their contribution to the total increase in receipts (around 1/5) remains substantial. With the exception of fuel, the largest contribution to the increase in export receipts came from branches with a remarkable export performance also in the previous years, such as chemicals and plastics, food and beverages, machinery and electrical equipment, without significant changes in the sectoral breakdown of exports (see Chart V.14).

As regards the geographic breakdown (see Chart V.15), the marked shift to non-euro area markets, which had contributed to the recovery in Greek exports in previous years, did not continue in the past two years. In 2013, exports to euro area markets started to recover and Greek exports appear to maintain their shares in these markets also in 2014. Therefore, the recovery of growth in these economies can be important in supporting demand for Greek products.

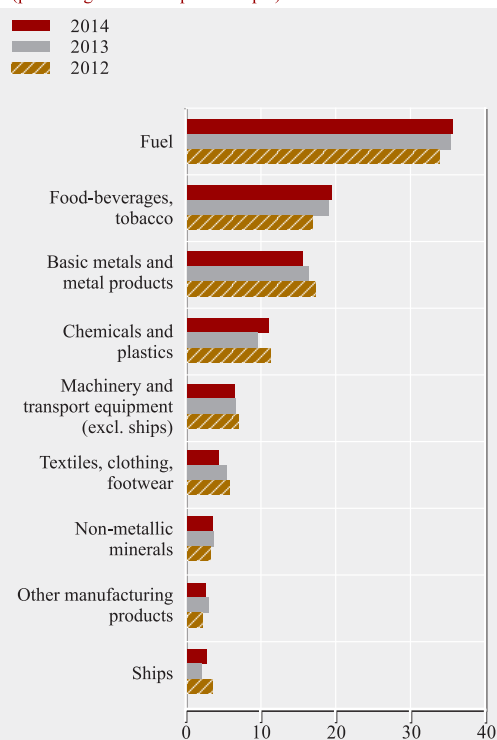
The goods import bill, after following a downward course in the past few years, recovered in 2014 and rose faster than the corresponding export bill. This largely reflects the increased

<sup>29</sup> Exports of goods in January-August 2014 decelerated substantially against 2013.

<sup>30</sup> In contrast with the Bank of Greece balance of payments data, the ELSTAT trade statistics for 2014 show a small decrease in the exports of goods by 1.4% (an increase of 1.2% in real terms). It should be noted that the decline in exports was -4.4% in the first nine months of the year and was later contained.

**Chart V.14 Sectoral breakdown of Greek exports of goods**

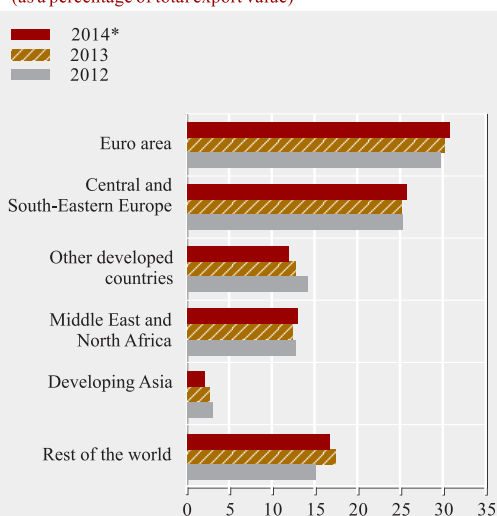
(percentage of total export receipts)



Source: Bank of Greece, balance of payments statistics.

**Chart V.15 Greek exports of goods, by destination**

(as a percentage of total export value)



Source: Eurostat, COMEXT database.

\* Data for January-September.

(by almost 45%) payments for purchases of ships and – to a lesser degree – the higher import bill for oil and other goods. Moreover, this development is also associated with the stabilising path of private consumption expenditure and a rise in international tourism, given that the increase in the imports of consumer goods was stronger than that of other imports.

The higher import bill (even excluding sales and purchases of ships) fully offset the increase in export receipts, thus widening the trade deficit. This trend is likely to be maintained, if the stabilisation of consumption – observed already in 2014 – is also supported by a recovery in investment in capital equipment. This should make it all the more important to enhance the extroversion of Greek enterprises in order to contain the upward course of the trade deficit.

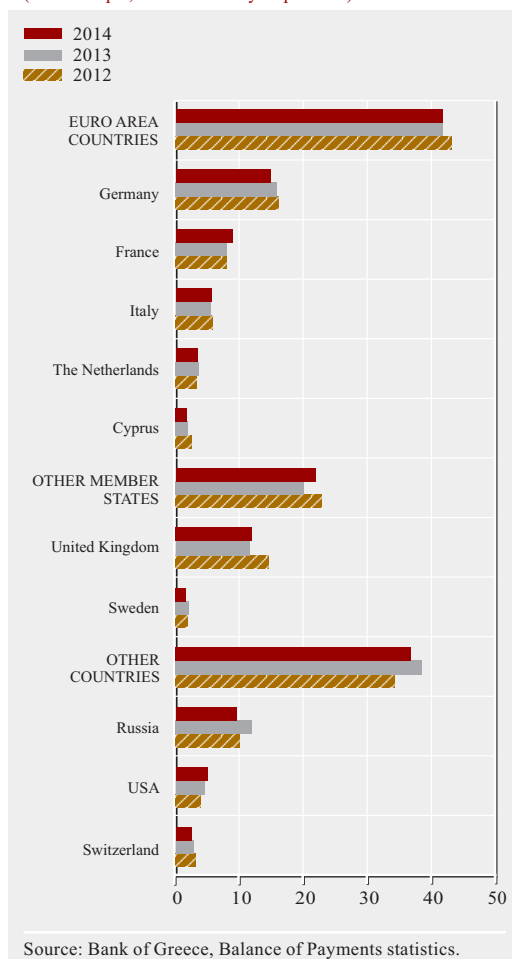
Positive developments in the exports of goods are expected to continue in 2015, as the international economic environment is expected to improve, followed by accelerating growth rates in the EU and other markets, and a pick-up in world trade. In addition, positive effects are also anticipated as a result of the increase in competitiveness, combined with restored access of Greek businesses to liquidity and an improved business environment. Downward risks relate to a potential intensification of geopolitical tensions (e.g. Middle East, Russia, Ukraine).

### 7.1.2 Services balance

The increase in the services surplus by €2.8 billion was the main factor behind the improvement in the current account balance in 2014 and reflects a better performance of all individual components. The recovery in net receipts from travel services, which was substantial compared to the previous year, was accompanied by a recovery in transport receipts, which grew even faster relative to the beginning of 2014. Moreover, the “other” services balance also recorded a significant positive course.

**Chart V.16 Tourism receipts: breakdown by country of origin of tourists**

(% of receipts, data for January-September)



Source: Bank of Greece, Balance of Payments statistics.

Travel receipts in 2014 rose by 10.6% and accounted for nearly half of total receipts from services, thus financing 75% of the trade deficit. Furthermore, tourist arrivals rose by 23%, while both the average expenditure by trip and the average duration of stay declined, which explains the lower growth in tourist receipts compared with 2013 (16.4%). The large increase in the number of arrivals is mainly attributable to the country's improved image abroad, geopolitical instability in the wider Eastern Mediterranean, which enhanced the shift of tourist flows towards our country, as well as the improved competitiveness of the Greek tourism product.<sup>31</sup> A key contribution to supporting tourist traffic came from the exten-

sion of the tourist season, and the country's improved direct connection to major markets.

Travel receipts mainly concern visitors from EU countries, but their contribution to total receipts is on a downward trend. On the other hand, significant upward trends are recorded in contributions from non-EU countries, such as the United States and Russia (see Chart V.16). Specifically in the case of Russia, the small decline in its share of total tourism receipts in 2014 is mostly attributable to issues arising from bankruptcies of Russian travel agencies and less so to the Ukraine crisis, while markets such as China show great growth potential.

Geopolitical instability in Eastern Mediterranean countries did have a positive effect on tourist flows to Greece; however, it also had a – smaller – negative effect on the cruise line industry,<sup>32</sup> which served about 2.5 million travellers in 2014.<sup>33</sup>

The outlook for the travel balance in 2015 is positive, after the decrease in oil prices and the weakening of the euro in international markets. Thus, there are signs of an increase in bookings from traditional markets, despite estimates for reduced arrivals of cruise visitors.<sup>34</sup> However, political uncertainty might reverse these trends. Among the medium-term target for the new tourist season should be to improve the quality/price ratio in order to attract high-income tourists, promote the country's cultural infrastructure (see Box V.1), simplify procedures to foster tourism entrepreneurship, and further improve competitiveness.<sup>35</sup> Some longer-term targets are to

<sup>31</sup> According to calculations of the Association of Greek Tourism Enterprises, the price of the Greek tourist package was 8% higher in 2014, marking one of the lowest increases compared with major competitors (Turkey 8%, Cyprus and Spain 9%, Italy 10%, Portugal 7%).

<sup>32</sup> Greece is the third cruise destination in Europe, while the Mediterranean, as a cruise destination, has lost part of its dynamics. The share of the Mediterranean declined from 21.7% in 2013 to 18.9%, while the Far East market is gradually emerging (Cruise Lines International Association, 2014).

<sup>33</sup> Reduced cruise ship arrivals and less port visits stopped the upward trend of receipts from cruising.

<sup>34</sup> Cruise Ship Owners and Shipping Agencies Association.

<sup>35</sup> According to the Travel and Tourism Competitiveness Index for 2013, Greece ranks 32nd among 140 countries, from 29th in 2011 (World Economic Forum, 2014).



extend the tourist season, improve airport and port infrastructure and enhance cruise and yachting infrastructure.

Net transport receipts stood at €7.9 billion in 2014, up by €1.4 billion compared with the previous year. Sea transport receipts, which account for over 85% of total receipts from transport services, rose by 7.3%, primarily due to higher freight rates in international markets (by around 14.0%).<sup>36</sup> Although in early 2014 freight rates registered stronger annual growth rates, they have decelerated since the summer of 2014. Similarly, the shipping industry confidence index,<sup>37</sup> which in the first quarter of 2014 reached its six-year peak, has been declining since the second quarter of the year, reaching its lowest level for the past 2 years at end-2014.

There is some optimism as regards the short-term outlook for the sea transport services balance, since the estimated growth rate of the global fleet is expected to be in line with the growth rate of world trade in 2015. Nevertheless, the significant number of orders for new vessels placed in early-2014, together with the decelerating rate of scrapping (withdrawal) of old ships, may halt the recovery of freight rates in international freight markets.

### 7.1.3 Income balance

In 2014 the income account deficit decreased by €233 million (or 7.4%) against 2013, mostly due to lower interest, dividend and profit payments.

### 7.1.4 Current transfers balance

In 2014 the current transfers balance registered a surplus of €2.7 billion. The general government net transfer payments (mostly from the EU) came to €2.4 billion in 2014, from €4.0 billion in 2013, mostly due to the deferral of transfers of ANFA returns amounting to €1.9 billion,<sup>38</sup> in accordance with the Eurogroup decision of 27 November 2012. The rate of absorption of funds from the European Social Fund,

which are recorded under current transfer receipts, improved further in 2014 compared with 2013, while receipts based on the Common Agricultural Policy remained unchanged at the average level of previous years. The course of net current transfers in 2015 will depend on an agreement with European partners concerning the current evaluation of the economic adjustment programme, which is expected to free the transfer of ANFA returns.

## 7.2 CAPITAL ACCOUNT

In 2014, the capital account (mostly transfers from the EU) recorded a surplus of €2.5 billion, against €3 billion in 2013, owing to the high absorption of EU structural funds in 2013. The annual absorption target (in terms of applications) of €3 billion for 2014 was reached by 91%. Overall, since 2007, absorption of structural funds from the National Strategic Reference Framework stands at 87.5%.

## 7.3 FINANCIAL ACCOUNT

The financial account showed a net outflow of €2.3 billion in 2014, since the net outflow in portfolio investment more than offset the net inflow in other investment and the net inflow in direct investment.

Under portfolio investment, a net outflow of €7.0 billion was recorded, as the net outflow (€8.9 billion) for residents' investment abroad (mostly in foreign bonds and Treasury bills) was partly offset by a rise in liabilities (€1.9 billion). The latter was mainly the result of a rise in non-residents' investment (€8.2 billion) in shares of Greek firms, which was largely offset by a decrease in non-residents' investment in Greek government bonds and Treasury bills.

Under "other investment", the net inflow of €3.8 billion, reflecting a rise in residents' lia-

<sup>36</sup> Clarkson Research Services, ClarkSea Index.

<sup>37</sup> Moore Stephens, Shipping confidence survey.

<sup>38</sup> ANFA returns in 2013 amounted to €2.3 billion.



bilities, is due to a net increase in the outstanding debt of the public and the private sector to non-residents (inflow of €5.7 billion), and was partly offset by a drop in non-residents' deposit and repo holdings in Greece (outflow of €1.7 billion). This increase in residents' liabilities was supported by a corresponding decline in their assets,

which mostly reflects lower deposit and repo holdings.

In 2014, non-residents' direct investment in Greece recorded a net inflow of €1.6 billion, i.e. down by €485 million. The most significant transaction concerned an inflow of €595 million for the participation of Capital Group Compa-

**Table V.14 Greece's international investment position by type of investment and sector**

(million euro)

	2012	2013	2014*
<b>I. DIRECT INVESTMENT</b>	<b>15,310</b>	<b>10,039</b>	<b>11,682</b>
1.1 Abroad by residents	34,080	27,309	27,801
1.2 In Greece by non-residents	18,770	17,270	16,118
<b>II. PORTFOLIO INVESTMENT</b>	<b>55,401</b>	<b>54,198</b>	<b>65,239</b>
<b>1. General government</b>	<b>-35,202</b>	<b>-30,538</b>	<b>-26,666</b>
1.1 Assets	14,865	15,024	12,582
1.2 Liabilities	50,067	45,562	39,248
<b>2. Bank of Greece</b>	<b>15,749</b>	<b>15,735</b>	<b>24,907</b>
2.1 Assets	15,749	15,735	24,907
2.2 Liabilities	0	0	0
<b>3. Other credit institutions</b>	<b>63,568</b>	<b>61,507</b>	<b>54,418</b>
3.1 Assets	64,084	63,610	61,966
3.2 Liabilities	516	2,103	7,548
<b>4. Other sectors</b>	<b>11,286</b>	<b>7,494</b>	<b>12,580</b>
4.1 Assets	20,415	17,635	21,360
4.2 Liabilities	9,129	10,141	8,780
<b>III. OTHER INVESTMENT</b>	<b>-287,064</b>	<b>-288,501</b>	<b>-298,149</b>
<b>1. General government</b>	<b>-191,656</b>	<b>-220,581</b>	<b>-223,973</b>
1.1 Assets	946	1,757	2,269
1.2 Liabilities	192,602	222,338	226,241
<b>2. Bank of Greece</b>	<b>-97,080</b>	<b>-50,252</b>	<b>-48,177</b>
2.1 Assets	1,275	1,354	1,553
2.2 Liabilities	98,355	51,606	49,730
<b>3. Other credit institutions</b>	<b>-23,719</b>	<b>-35,597</b>	<b>-41,907</b>
3.1 Assets	51,783	35,150	31,332
3.2 Liabilities	75,502	70,747	73,239
<b>4. Other sectors</b>	<b>25,391</b>	<b>17,929</b>	<b>15,908</b>
4.1 Assets	37,143	34,330	34,656
4.2 Liabilities	11,752	16,401	18,748
<b>IV. RESERVE ASSETS</b>	<b>5,500</b>	<b>4,172</b>	<b>5,117</b>
<b>NET INTERNATIONAL INVESTMENT POSITION (I+II+III+IV)</b>	<b>-210,853</b>	<b>-220,092</b>	<b>-216,111</b>
<b>% of GDP</b>	<b>-108.8%</b>	<b>-120.6%</b>	<b>-120.6%</b>

Source: Bank of Greece.

\* Bank of Greece estimates on the basis of provisional balance of payments and IIP data.

nies Inc. (United States) in the capital increase of EFG Eurobank Ergasias SA in May 2014.<sup>39</sup>

The increase in foreign direct investment (FDI) will depend on the continuation of fiscal adjustment, the improvement of competitiveness and the promotion of a climate of confidence in the growth prospects of the Greek economy. At end-2014, Greece's reserve assets stood at €5.1 billion, compared with €4.2 billion at end-2013.

## 8 INTERNATIONAL INVESTMENT POSITION AND GROSS EXTERNAL DEBT

At end-2014, Greece's net foreign liabilities declined by €4.0 billion, and the country's negative net International Investment Position<sup>40</sup> (net IIP) improved to €216 billion, from €220 billion at end-2013 (see Table V.14 and Box V.6). Net IIP as a percentage of GDP remained unchanged at 120% in both years, despite the drop in nominal GDP due to negative inflation in 2014. The improvement in net

IIP largely reflects changes in the valuation of the country's liabilities, primarily due to the significant decline in domestic stock prices and, secondarily, to lower bond prices, particularly in the last month of the year.<sup>41</sup> This was also supported by the substantial repayment of bonds held by national central banks and the ECB.

<sup>39</sup> Other noteworthy inflows in 2014 were: (i) €146 million for the participation of Fairfax Financial Holding (Canada) in the capital increase of Eurobank Properties; (ii) €200 million for the participation of parent company Crystal Almond (Luxembourg) in the share capital increase of its subsidiary Wind Hellas; (iii) €160 million for the participation of Madison Point Investment SARL (Luxembourg) in the share capital increase of Credit Agricole Leasing Hellas SA; (iv) €118 million for the acquisition of 25% of the shares of Costa Navarino by Fivedunes Limited based in Cyprus (Olayan Group); and (v) €160 million for the participation of parent company Crystal Almond SARL (Luxembourg) in the share capital increase of Wind Hellas.

<sup>40</sup> The International Investment Position (IIP) reflects the country's net foreign liabilities, taking into account direct investment, portfolio investment, "other" investment and reserve assets. It should be noted that, in compliance with international reporting requirements, direct investment, bonds and equities are valued at market price as at the last day of the reference period.

<sup>41</sup> It should be noted that changes in net IIP reflect not only changes in non-residents' investment in Greece and residents' investment abroad, i.e. current account flows, but also changes in the valuation of such investment. The latter is difficult to calculate, as they are associated with changes in the market price of Greece's foreign assets and liabilities and mostly stem from changes in bond and stock prices, as well as exchange rates.

### Box V.6

#### HIGH NEGATIVE NET INTERNATIONAL INVESTMENT POSITION: DOES IT POSE A RISK TO THE GREEK ECONOMY?

A significant negative effect of persistent current account deficits in Greece, which in 2001-2012 averaged 9% of GDP per annum, was the expansion of net external liabilities, which in turn led to a considerable widening of the negative net international investment position (IIP), especially after 2000 (see European Commission, 2012).<sup>1</sup> More specifically, the stock of net external liabilities rose from about 45% of GDP in 2001 to almost 100% in 2010 and is expected to reach 121% in 2014 (see Chart A). However, the factors that contributed to the widening of the net IIP are not the same for the period before the crisis (2000-2009) and during the crisis (2010-2014).

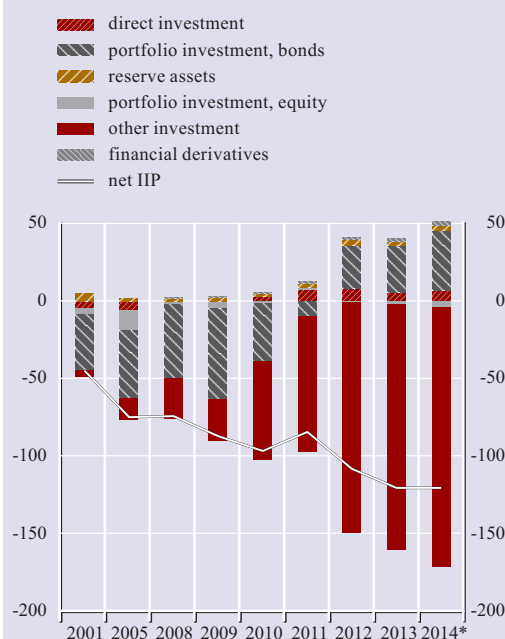
The stock of external assets and liabilities is a crucial aggregate for any country (D'Auria et al., 2012).<sup>2</sup> This is all the more so for countries with a high negative net IIP, as it weighs on their growth prospects and constitutes a source of external financial fragility which could pose risks and lead to a crisis. As regards growth, the adverse effects work through two main channels. The first one is direct and is associated with the negative income balance in the current account, squeezing dis-

<sup>1</sup> European Commission (2012), "Capital flows into vulnerable countries: official and private funding trends", *Quarterly Report on the Euro Area*, 11:1.

<sup>2</sup> D'Auria F., J. in't Veld and R. Kuenzel (2012), "The dynamics of international investment positions", *Quarterly Report on the Euro Area*, 11:3.

Chart A Breakdown of net IIP

(% of GDP)



Sources: Bank of Greece and ELSTAT.

\* Estimate.

posable income in relation to the country's GDP. The second one is rather indirect and is linked to potential economic distortions that could undermine growth prospects. For instance, when a high negative IIP is linked to high government debt – due to large fiscal deficits in previous years – it may lead to higher taxation or lower public investment, thereby undermining growth. On the other hand, if the bulk of high external liabilities concerns the private sector, this affects growth through a negative impact on domestic demand. Capital flows, especially short-term ones, are particularly sensitive to changes in the economic environment. This poses risks to the ability to attract funds necessary to cover new financing needs or refinance existing liabilities. In general, despite the fact that global financial integration enables more efficient capital allocation worldwide, a high negative net IIP is likely to amplify the risks arising from asset price changes and the credit cycle.<sup>3</sup> The experience of the recent global financial crisis has highlighted the adverse repercussions of a sudden drying of capital inflows.<sup>4</sup>

In order to adequately assess the potential risks from a negative IIP, one should take into consideration not only its size, but also its composition (Catão and Milesi-Ferretti, 2014).<sup>5</sup> A very important element in this regard is the relative weight of debt liabilities in the a country's external liability position, as opposed to non-debt liabilities, i.e. those generated by portfolio equity investment or direct investment by non-residents. A high share of debt liabilities in the IIP means that the country is more vulnerable to external developments, given that such liabilities have to be serviced through payments that are fixed in advance irrespective of the economic conditions prevailing in the country. By contrast, the payment of dividends or the distribution of profits depends on the profitability of domestic firms, which is largely a function of the economic situation. Maturity mismatches between external liabilities and assets constitute an additional element which, apart from their implications for asset/liability yield differentials, can affect the rollover of maturing external debt, especially when the creditworthiness of the country is low. Lastly, apart from the difference in the relative size of liabilities and assets, differences in relative yields affect the investment income balance, hence the ability to achieve the current account surpluses necessary for stabilising the IIP.

<sup>3</sup> Regarding global external imbalances, see also Box III.3.

<sup>4</sup> A sudden stop of capital inflows requires either recourse to (international) official borrowing through economic support programmes or a swift reversal of current account deficits, in order to avoid default. The interruption of external financing, which led to Greece's recourse to the support mechanism, has not been an exclusively Greek phenomenon, as other euro area member countries have also resorted to the support mechanism. In other countries, e.g. the Balkan countries, the interruption of capital inflows led to a recession and an abrupt reversal of current account deficits.

<sup>5</sup> Catão, Luis A.V. and Milesi-Ferretti, Gian Maria (2014), "External Liabilities and Crises", *Journal of International Economics*, Elsevier, 94:1, 18-32.

### The composition of the Greek net IIP after the crisis

In the period between 2000 and the onset of the crisis in 2010, the increase in the net IIP of Greece was a result of growing deficits in the combined current and capital account (corresponding to the economy's external financing requirements), which were financed mainly through borrowing. However, the strong growth of nominal GDP at the time served to dampen the deterioration in the IIP expressed as a percentage of GDP (see Chart B).

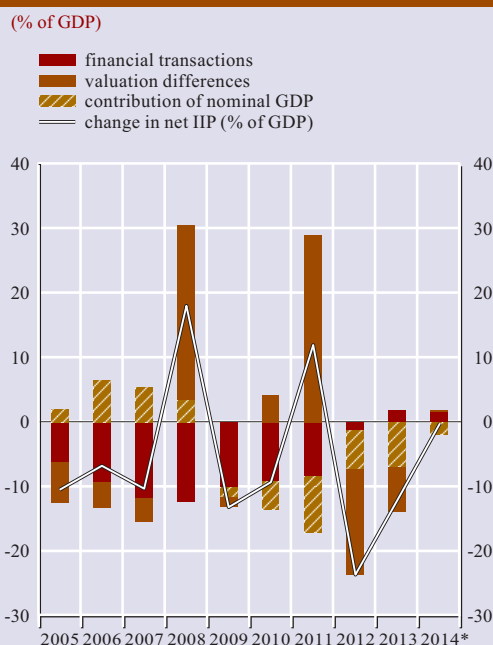
Since the onset of the crisis, developments in Greece's IIP have been driven by two main factors:

- the decrease in the valuation of the IIP, initially due to the dramatic fall in the prices of Greek government bonds (see valuation differences in Chart B) and subsequently because of the reduction in general government bond liabilities through (a) the PSI and the debt buyback that were completed in December 2012; and (b) the rise in external assets, deriving mainly from EFSF notes given to Greek banks in the context of their recapitalisation as well as to pension funds and private sector investors as part of the PSI;<sup>6</sup>
- the substantial contraction of nominal GDP in 2010-2014 by a cumulative 21% by end-2014 (see contribution of nominal GDP in Chart B). It should be noted that the increase in the IIP as a percentage of GDP stemmed primarily from the decrease in GDP as the absolute size, at current values, of the IIP in 2014 is in fact lower than in 2010.

As a result of the above factors, both the level of the country's IIP and its composition have changed drastically (see Chart A). The change in the composition is primarily linked to changes in the valuation of government bonds. More specifically, before the crisis, general government bonds formed the bulk of net external liabilities. During the crisis, with the dramatic fall in the valuation of Greek bonds, combined with the PSI and the bond buyback programme and the classification of loans from the support mechanism under "other investment", net government loan liabilities became the major component of the IIP. At the same time, the ratio of non-debt liabilities (i.e. liabilities related to portfolio equity or direct investment by non-residents) to the respective debt liabilities deteriorated significantly, from 12% in 2009 to almost 9% in 2014.

In assessing the consequences of a high net IIP, another crucial factor to consider is the composition of foreign liabilities in terms of whether they are held by the private sector or the official sector. Official liabilities arise from the country's participation in the support programme and are

Chart B Contributions to net IIP changes

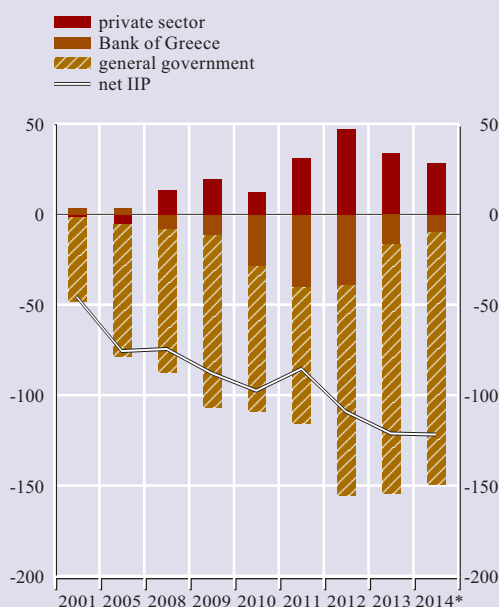


Source: Calculations based on Bank of Greece and ELSTAT data.  
\* Estimate.

<sup>6</sup> It should be noted that, after the PSI and the bond buyback, the largest part of the liabilities of general government no longer concerns bonds, but rather loans from the support mechanism.

Chart C Sectoral breakdown of net IIP

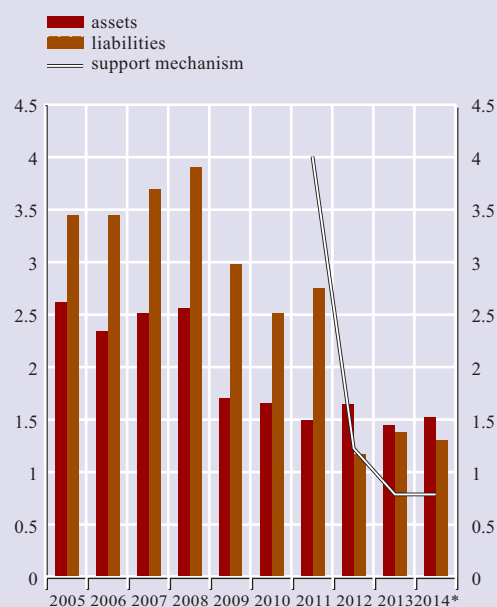
(% of GDP)



Source: Calculations based on Bank of Greece and ELSTAT data.  
\* Estimate.

Chart D Implicit yields

(%)



Source: Calculations based on Bank of Greece data.  
\* Estimate.

owed to Greece's lenders, i.e. international institutions and euro area governments. The high share of official liabilities partly mitigates the adverse impact of the high negative IIP, given the low interest rates and the long maturities involved: the weighted average maturity of central government debt is a little more than 16 years and about fourth fifths of the debt mature after 5 years. Additionally, these funds do not directly affect the country's external financial vulnerability, as they constitute liabilities vis-à-vis sovereign states and international organisations, i.e. they are not traded on world markets. Chart C illustrates the country's IIP broken down by sector. This breakdown shows that the increase in the IIP is almost exclusively due to the net liabilities of general government, while the private sector has a net asset position. This, viewed together with Chart A, suggests that the net liability position of general government reflects loans from the support mechanism, which are classified under "other investment". In particular, 55% of the Greece's total external liabilities is accounted for by liabilities to international organisations and euro area governments.

As mentioned above, the low interest rate and the long maturity of loans under the support mechanism have a favourable effect on the income balance. More specifically, the 10-year interest payment deferral for EFSF loans, combined with the cut in the interest rate on bilateral loans from euro area countries – in the context of the first economic support programme – imply effectively reduced interest payments as from 2012.<sup>7</sup> This is also reflected in the considerably lower implicit yield<sup>8</sup> on liabilities. Indeed, as from 2012 the implicit yield on total liabilities was lower than that

<sup>7</sup> Eurogroup statement on Greece, 27.11.2012 ([http://eurozone.europa.eu/media/367646/eurogroup\\_statement\\_greece\\_27\\_november\\_2012.pdf](http://eurozone.europa.eu/media/367646/eurogroup_statement_greece_27_november_2012.pdf)).

<sup>8</sup> Implicit yields on liabilities (assets) are calculated as the ratio of interest, dividend and profit payments (receipts) to total liabilities (assets).

on total assets. This positive asset-liability yield differential is on the one hand attributable to the lower interest rate on loans and on the other hand to the negative yield (loss) on foreign direct investment in Greece (see Chart D).

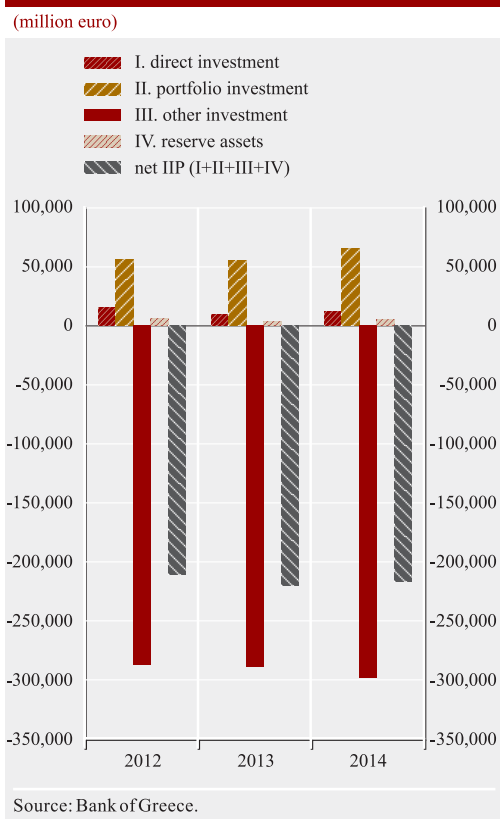
Over the past few years, while the current account balance has improved and even registered a surplus for the second consecutive year in 2014, net external liabilities are still high – approximately 121% of GDP – although they showed some signs of stabilisation in late 2014. Despite this high level, the risks to the Greek economy are, for the time being, rather limited, as a large part of liabilities concerns loans from the support mechanism carrying a low interest rate and having an extended maturity. Over the medium term, however, the need to reduce the negative IIP requires satisfactory and permanent current account surpluses (see Hobza and Demertzis, 2014).<sup>9</sup> This means that further enhancing the export orientation of the economy will be the crucial factor that will largely determine both the speed and duration of an improvement in Greece's net IIP.

<sup>9</sup> Hobza, A. and M. Demertzis, (2014), "External rebalancing in the euro area: progress made and what remains to be done", *Quarterly Report on the Euro Area*, 13:4.

A breakdown by investment category (see Chart V.17) shows that the positive net position for direct investment increased remarkably (€1.6 billion in 2014 against 2013). This, despite the increase in the net inflow of direct investment in Greece in 2014, was a result of the lower valuation of non-residents' investment in Greece, mostly due to the substantial decrease in the share prices of listed companies with foreign direct investor holdings.

Similarly, a remarkable improvement of €11 million was recorded in 2014 in the net asset position of portfolio investment compared with 2013. A key driver of this development was on the one hand the increase in the assets of the Bank of Greece (by €9.2 billion, mainly due to the rise in foreign short-term securities holdings) and the private sector (excluding credit institutions) by €3.7 billion, and on the other hand the concurrent decline in stock and sovereign bond prices. Indeed, owing to the fall in sovereign bond prices and the repayment of some bonds, the general government liabilities decreased by €6.3 billion. Conversely, these developments were partly offset by the rise in the country's equity liabilities by €5.4 billion, owing to non-residents' investment after the capital increase of four core banks.

**Chart V.17 Breakdown of IIP by type of investment**



Lastly, in other investment, the net liability position deteriorated significantly (€9.6 bil-

**Table V.15 Gross and net external debt (current prices)**

(million euro)

	2012	2013	2014*
<b>A. General government</b>	<b>242,669</b>	<b>267,900</b>	<b>265,489</b>
<b>B. Bank of Greece</b>	<b>98,355</b>	<b>51,606</b>	<b>49,730</b>
<b>C. Other credit institutions</b>	<b>75,502</b>	<b>70,747</b>	<b>74,390</b>
<b>D. Other sectors</b>	<b>13,521</b>	<b>19,001</b>	<b>20,776</b>
<b>E. Direct investment</b>	<b>7,411</b>	<b>7,101</b>	<b>7,234</b>
Liabilities to subsidiaries	2,097	1,946	1,950
Liabilities to direct investors	5,314	5,155	5,284
<b>Gross external debt (A+B+C+D+E)</b>	<b>437,458</b>	<b>416,355</b>	<b>417,619</b>
<b>Net external debt</b>	<b>235,414</b>	<b>236,638</b>	<b>231,772</b>
<b>Gross external debt of the general government as a percent (%) of GDP</b>	<b>124.96%</b>	<b>146.84%</b>	<b>148.12%</b>
<b>Total gross external debt as a percent (%) of GDP</b>	<b>225.26%</b>	<b>228.22%</b>	<b>233.00%</b>
<b>Total net external debt as a percent (%) of GDP</b>	<b>121.22%</b>	<b>129.71%</b>	<b>129.31%</b>

Source: Bank of Greece.

\* Bank of Greece estimates on the basis of provisional balance of payments and IIP data.

lion). This development is mainly a result of (i) an increase (by €3.9 billion) in general government liabilities due to loans for the country's net financing from the support mechanism; (ii) the rise in companies' outstanding external debt by €2.3 billion; and (iii) the decrease in banks' net external position in deposits and loans by €6.3 billion. These developments were offset to a small extent by a decline of €1.9 billion in the country's liabilities through movements in the TARGET account.

Greece's gross external debt at current values rose by €1.3 billion at end-2014.<sup>42</sup> Specifically, it stood at €417.6 billion (233% of GDP) at the end of the year, from €416.4 billion (228% of GDP) in 2013 (see Table V.15). The increase at current values is primarily attributable to the

rise in liabilities of resident financial institutions abroad, which was in part offset mainly by lower general government liabilities in debt securities (bonds and Treasury bills).

The net external debt decreased by €4.9 billion in 2014 (€231.8 billion in 2014 (129% of GDP) from €236.6 billion in 2013 (see Table V.15). However, it stood higher than the net IIP, since it does not include the positive net equity position, either from direct investment or from portfolio investment, as well as the positive position in derivatives and foreign reserves.<sup>43</sup>

<sup>42</sup> Gross external debt equals IIP liabilities minus equity and financial derivatives.

<sup>43</sup> The net external debt equals the net IIP minus the net position in equity from direct investment and portfolio investment, as well as the net position in derivatives, special drawing rights, gold and equity included in reserve assets.



## VI FISCAL DEVELOPMENTS AND PROSPECTS

Remarkable progress has been made in public finances over the past five years. After a marginal improvement against the 2012 target, the general government primary balance – as defined in the Economic Adjustment Programme – considerably outperformed the programme’s target for a balanced primary result in 2013, by achieving a primary surplus of 1.2% of GDP. The yield of fiscal efforts is also reflected in the improved structural primary balance in general government, which reached 17 percentage points of GDP in 2010-2013. The achievements so far at the fiscal level should be safeguarded and consolidated by further structural reforms that will create suitable conditions to attract private investment. Achieving primary surpluses, coupled with the already evident recovery of economic activity, shall decisively contribute to the reduction of the debt-to-GDP ratio and the return of the country to a sustainable growth path.

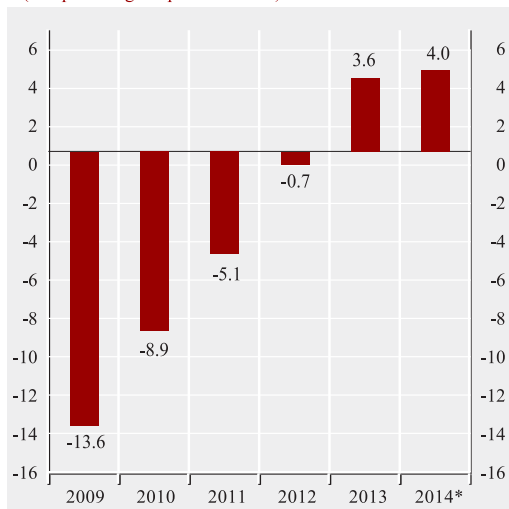
### I OVERVIEW OF DEVELOPMENTS AND PROSPECTS<sup>1</sup>

The gradual normalisation of fiscal imbalances is evident. Specifically, the primary balance in the general government, as defined by the Economic Adjustment Programme methodology, has outperformed the programme’s target, for a second consecutive year in 2013, standing at a surplus of 1.2% of GDP, against a target for a balanced primary budget (see Table VI.1). This outcome is considerably improved also against the 2015 draft budget estimates for a primary surplus of 0.8% of GDP, which is attributable to the revision of fiscal data compiled by ELSTAT in the context of the second EDP notification in October 2014, compared with the first EDP notification of April 2014. The revision incorporates, among other things, the transition to the European System of Accounts (ESA) 2010 (see Box VI.1).

According to the second EDP notification transmitted by ELSTAT to Eurostat in October 2014, the general government balance in 2013 improved by 0.5% of GDP compared with

**Chart VI.1 Structural primary balance of general government**

(as a percentage of potential GDP)



Source: Bank of Greece.

\* Forecast.

Note: The structural primary balance of general government is calculated according to the Eurosystem methodology.

the first EDP notification of April, standing at a deficit of 12.2% of GDP, up from 8.6% in 2012. This widening of the deficit compared to 2012 is solely due to expenditure in support of the banking sector. The general government deficit, adjusted for net state support to financial institutions in both years, has significantly improved, having declined from 5.9% in 2012 to 1.8% in 2013.

Moreover, the structural primary balance<sup>2</sup> of general government improved by 17 percentage points in 2010-2013, as a surplus of 3.6% of potential GDP was recorded in 2013 and a further improvement by nearly half a percentage point is projected for 2014 (structural primary surplus of 4.0% of potential GDP) (see Chart VI.1). In the same period, the IMF<sup>3</sup>

<sup>1</sup> The cut-off date for data and information used in this chapter was 6 February 2015.

<sup>2</sup> According to Eurosystem methodology. The structural balance is cyclically adjusted and net of temporary factors (such as one-off payments in support of the country's banks). As a theoretical concept, its estimated size may vary considerably, depending on the calculation method used.

<sup>3</sup> IMF (2014), *Fiscal Monitor*, October (Statistical Table 4).

**Table VI.1 General government and state budget balances**

(as a percentage of GDP)

	2010	2011	2012	2013	2014
<b>General government balance<sup>1</sup></b> (national accounts data – convergence criterion)	<b>-11.1</b>	<b>-10.1</b>	<b>-8.6</b>	<b>-12.2</b>	<b>-1.3*</b>
– Central government	-10.6	-9.2	-8.1	-14.5	-
– Social security funds, local government, legal entities in public law	-0.5	-0.9	-0.5	2.3	-
<b>General government balance adjusted for net support to financial institutions<sup>1</sup></b>	<b>-11.5</b>	<b>-10.4</b>	<b>-5.9</b>	<b>-1.8</b>	<b>-1.3*</b>
<b>General government primary balance adjusted for net support to financial institutions<sup>1</sup></b>	<b>-5.6</b>	<b>-3.2</b>	<b>-0.9</b>	<b>2.2</b>	<b>2.9*</b>
<b>General government primary balance (Economic Adjustment Programme)<sup>2</sup></b>			<b>-1.3</b>	<b>1.2</b>	<b>1.8*</b>
<b>State budget balance</b>					
<i>Administrative data<sup>2</sup></i>	<b>-9.9</b>	<b>-11.0</b>	<b>-8.1</b>	<b>-2.9</b>	<b>-2.0</b>
<i>Cash data<sup>3</sup></i>	<b>-10.5</b>	<b>-11.1</b>	<b>-5.5<sup>4</sup></b>	<b>-7.0<sup>5</sup></b>	<b>-2.3<sup>6</sup></b>

Sources: Bank of Greece, Ministry of Finance and ELSTAT.

\* Provisional data (State General Accounting Office, Introductory Report on the 2015 Budget).

1 ELSTAT data, as notified to the European Commission (Excessive Deficit Procedure). Figures may not add up due to rounding.

2 State General Accounting Office data (State Budget Execution Bulletins and Introductory Report on the 2015 Budget).

3 Bank of Greece data. These data refer only to the state budget on a cash basis, excluding movements in the OPEKEPE account.

4 Excluding accrued interest of €4,751 million, paid in the form of EFSF notes, on PSI bonds, as well as interest payments of €519 million as a result of the debt buyback through EFSF notes.

5 Excluding revenue of €2.0 billion from the transfer of profits on Greek government bond holdings of Eurosystem central banks (Securities Markets Programme – SMP). Including expenditure of around €6,155 million for the payment of arrears.

6 Excluding revenue of €62 million from the transfer of profits on Greek government bond holdings of Eurosystem central banks (Securities Markets Programme – SMP). Including expenditure of around €1,152 million for the payment of arrears.

estimates that the cyclically adjusted primary balance in Greece has improved by 19 percentage points of potential GDP, compared with 8.2 percentage points in Portugal, 7.8 percentage points in Ireland and 7.2 percentage points in Spain.

As regards 2014, for which final data are not yet available, the improvement in fiscal aggregates continued; the state budget execution steadily exceeded the targets set for the period until November and the general government cash balance improved over 2013. These developments have helped create the necessary conditions for the return of Greece to the markets in April and June 2014, when the government raised €4.5 billion through a five-year and a three-year bond issue. Moreover, cuts of 3.9% in social security contributions as from July and 30% in the excise tax on heating fuel as from 15 October 2014 were decided. The effect of the above measures has been included in the

introductory report to the 2015 Budget, which estimates that the EAP target for 2014 in the general government primary balance (1.5% of GDP) will be exceeded, for a third consecutive year, achieving a primary surplus of 1.8% of GDP. In the same vein, the programme's target for a primary surplus of 3.0% of GDP in 2015 is expected to be attained.

However, this improvement seems to have been temporarily halted due to increased political uncertainty at the end of the year and to the non-completion of the last programme review due in October, resulting in the postponement of the disbursement of the last tranche by the EFSF (€1.8 billion) and by the IMF (€3.5 billion), as well as of SMP (Securities Markets Programme) revenue (€1.9 billion), the payment of which is conditional on successful completion of the programme review. As a result, an upward trend in government bond spreads has been recorded since

October and the 2014 state budget balance diverged significantly from the annual target set in the Introductory Report to the 2015 Budget, mainly due to the non-collection of SMP revenue and the tax revenue shortfalls in December (see Table VI.2).

Building confidence in the prospects of the Greek economy is a prerequisite for the gradual reduction of the public debt-to-GDP ratio. On a more general note, achieving fiscal targets should be pursued mainly through the implementation of structural reforms. There is little room for further improving the budget balances through revenue-enhancing measures as the tax-paying capacity of compliant tax-payers has been exhausted. Furthermore, imposing tax collection measures without expanding the tax base and cutting productive spending both weigh heavily on economic activity in the current juncture. Indicatively, a recent IMF study<sup>4</sup> on 17 OECD countries shows that during protracted recession periods, fiscal multipliers on output are around -2 at a five-year horizon, while the medium-term employment multiplier during such episodes is around -3, meaning that a cumulative increase of 1 percent of GDP in the primary surplus leads to a 3 percentage point decrease in the employment rate.

Primary balance improvement needs to be driven for the most part by the benefits that could be gained from the reforms associated with fiscal management. Law 4270/2014<sup>5</sup> is in line with the Fiscal Compact, reinforcing the fiscal governance framework through rules on structural deficit, public debt and the rate at which debt levels above the limit of 60% of GDP should decrease. Given that the general budget deficit must not exceed 3% of GDP, the structural deficit should not be more than 0.5% of GDP, whereas when public debt is over the 60% of GDP reference value, the excess of the debt ratio must be reduced at an average rate of one twentieth per year over a three-year period.

Moreover, cracking down on tax evasion and eliminating tax exemptions that are neither

based on social criteria nor aim at strengthening the country's growth are decisive steps to support fiscal effort and would help: (i) safeguard the sustainability of fiscal achievements, currently being threatened by the exhaustion of compliant taxpayers' capacity; (ii) spread more evenly the tax burden, to the benefit of taxpayers who have been paying their taxes regularly over the years, thus enhancing the social acceptance of the fiscal effort; (iii) mitigate the negative impact on economic activity by alleviating low income groups with high marginal propensity to consume; and (iv) allow for a reduction in tax rates, with a positive impact on attracting investment and competitiveness.

Tackling the deficits of the social security system should also be one of the government's top priorities. The sustainability of social security funds' budgets requires a realistic assessment of the social security system's potential, which is affected by both demographic developments and the continuous rise in unemployment from 2009 to the first quarter of 2014. In addition to the recent interventions, which have limited the parametric diversity of the social security system, it would be appropriate to review the existing exceptions from general provisions.

Interventions on tackling unemployment could be twofold, aiming at not only the enhancement of economic growth, but also the improvement of the social security system's revenue and, by extension, the stabilisation of the positive fiscal balance and the sustainability of public debt. The overall reduction of social security contributions by 3.9 percentage points as from 1 July 2014 points in this direction.<sup>6</sup>

4 "Medium-Term Fiscal Multipliers during Protracted Recessions", IMF Working Paper 14/213, December 2014.

5 "Principles of fiscal management and supervision (transposition into Greek law of Directive 2011/85/EU) – public accounting and other provisions".

6 According to an IMF Report (*Fiscal Monitor*, October 2014) the relationship between the tax wedge, i.e. the difference between the labor costs paid by employers and net take-home wage of employees) is negatively associated with employment. Cuts in employer social security contributions appear to be especially effective in reducing youth unemployment, particularly in more rigid labour markets.

## THE IMPACT OF THE TRANSITION TO THE ESA 2010 NATIONAL ACCOUNTS FRAMEWORK ON FISCAL DATA

Fiscal data for the years 2010-2013 transmitted to Eurostat by ELSTAT in the context of the Excessive Deficit Procedure (EDP, second notification – 13 October 2014) were compiled for the first time on the basis of the new Regulation on the System of National Accounts (ESA 2010). The adoption of a new national accounts framework is obligatory for all European Union countries as from 1.9.2014 and affects both the deficit and the debt of the general government.<sup>1</sup>

The new Regulation introduced several changes to Greece's fiscal data, as it:

- (i) revised the definition of the general government sector by changing the rules for classification of units under this sector. Under the new classification, three entities (Hellenic Aerospace Industry S.A., Hellenic Vehicle Industry S.A. and New Economy Development Fund S.A. (TANEO)) were classified under the general government sector;
- (ii) revised the rules for recording standardised guarantees in the form of liability provisions. This is a special type of guarantees, provided for small amounts to numerous entities. Under the new methodology, expenditure for calls under standardised guarantees is recorded on the basis of relevant provisions for expected calls under standardised guarantees, whereas previously it was recorded on a cash basis;
- (iii) revised the rules for recording sales of intangibles such as government licenses. Under the previous system, these were recorded as one-off sales of assets, while now the relevant revenue is recorded on an accrual basis during the reference period (a number of years); and
- (iv) abolished the different treatment of net interest flows on swaps between the EDP and the ESA 95/10. Under the EDP, these were treated as interest payment; this was brought in line with the ESA, under which it is recorded as a financial transaction; thus, a unified presentation of deficit is now available.

*Changes brought about by the new ESA 2010 have had a negative impact on Greece's fiscal balance for 2010-2012 and a positive effect for 2013, while the revised definition of general government in itself drove its debt upwards for all years (see table).*

In general, in the euro area countries, specifically in 2013, the adoption of the new regulation had a negligible impact overall, actually improving the fiscal balances in six countries (Ireland (0.9% of GDP), Greece (0.3% of GDP), Italy (0.2% of GDP), Luxembourg, Malta and the Netherlands (0.1% of GDP)), while worsening it in four countries (Finland (0.3% of GDP), Slovakia (0.2% of GDP), Portugal and France (0.1% of GDP)), and having a negligible impact on the other countries. The largest impact was seen on the debt of euro area countries (up by 0.9% of GDP), as the new regulation pushed it up in 13 countries, most importantly Austria (8.7% of GDP), Ireland (7.2% of GDP), Belgium (4.9% of GDP), Portugal (3.5% of GDP) and Finland (1.2% of GDP).<sup>2</sup>

<sup>1</sup> According to ELSTAT, the revision exercise and the adoption of ESA 2010 concerns the 2006-2013 period. At a later stage, data for the years 1995-2005 will also be revised.

<sup>2</sup> See Eurostat, Special note: Revisions to government deficit and debt of EU Member States for 2010-2013, October 2014.

In addition to the transition to the new national accounts framework, there were other methodological and statistical changes that affected fiscal data in Greece's second EDP notification for 2010-2013. These include the regular update of the register (classification of "Egnatia Odos S.A." under general government) and the redating of revenue from the sale of Organisation of Football Prognostics (OPAP S.A.) licenses. Specifically in 2013, the impact from state support to financial institutions was revised downwards, thus reducing the deficit against the level announced in the first EDP notification in April 2014.

The fiscal deficit-to-GDP ratio has also been influenced by the implementation of the new ESA 2010 rules in the calculation of GDP. In the case of Greece, the implementation of the new national accounts framework pushed the nominal GDP level upwards in 2010, 2012 and 2013 and downwards in 2011, mainly as a result of the classification of expenditure for Research and Development under fixed assets and the capitalisation of defence spending.<sup>3</sup> The rise in GDP had a positive "denominator effect" on the deficit- and debt-to-GDP ratios (see table).

<sup>3</sup> For more information, see Box V.2.

#### Revision of the fiscal balance and general government debt as a percentage (%) of GDP: differences between the notification of April 2014 and October 2014

	Fiscal balance*				General government debt**			
	2010	2011	2012	2013	2010	2011	2012	2013
<b>Total revision</b>	<b>-0.2</b>	<b>-0.5</b>	<b>0.3</b>	<b>0.5</b>	<b>-2.3</b>	<b>1.0</b>	<b>-0.3</b>	<b>-0.1</b>
<i>of which</i>								
ESA 2010	-0.3	-0.1	-0.3	0.2	0.3	0.4	0.4	0.2
Other revisions	-0.1	-0.4	0.6	0.3	0.0	0.0	0.0	0.1
GDP	0.2	0.0	0.0	0.0	-2.7	0.6	-0.7	-0.4

Sources: ELSTAT and Eurostat.

\* A positive sign marks an improvement.

\*\* A positive sign marks an increase in debt.

## 2 CURRENT FISCAL DEVELOPMENTS (JANUARY-DECEMBER 2014)

### General government (State General Accounting Office data)

According to general government cash data compiled by the State General Accounting Office for January-December 2014, the general government cash balance improved, posting a deficit of 1.9% of GDP, against 3.8% of GDP in 2013. During the same period, the primary balance of general government was in surplus of 1.2% of GDP, compared to 0.5% of GDP in the previous year. This improvement is attrib-

utable to the large cuts in expenditure for the payment of government arrears in 2014 relative to 2013 (by approximately €5 billion) and was mitigated by the fact that SMP income of approximately €2 billion was received in 2013, which was not received in 2014. Taking into account these two factors, this period's primary balance would stand at around last year's levels.

### The State Budget (administrative data)

The state budget balance in 2014 improved considerably compared with 2013, despite the fact that SMP revenue of €2 billion was col-



Table VI.2 State budget balance

(EUR millions)

	Annual data					Percentage changes			
	2012	2013	2014		2015	2013/2012	2014/2013		2015/2014
			Estimate	Execution			Estimate	Execution*	
(1)	(2)	(3)	(4)	(5)	(6=2:1)	(7=3:2)	(8=4:2)	(9=5:4)	
<b>I. Revenue</b>	<b>51,925</b>	<b>53,079</b>	<b>55,280</b>	<b>51,367</b>	<b>55,603</b>	<b>2.2</b>	<b>4.1</b>	<b>-3.2</b>	<b>8.2</b>
1. Ordinary budget (net)	48,325	48,414	50,149	46,650	50,871	0.2	3.6	-3.6	9.0
Revenue before tax refunds	51,482	51,433	52,811	49,636	53,171	-0.1	2.7	-3.5	7.1
Special revenue from licensing and concession fees	15	86	474	384	577				
Tax refunds	3,172	3,105	3,136	3,370	2,877	-2.1	1.0	8.5	-14.6
2. Public Investment Budget	3,601	4,665	5,131	4,717	4,732	29.5	10.0	1.1	0.3
– Own resources	166	154	200	67	750	-7.2	29.9	-56.5	1,019.4
– EU funds	3,434	4,511	4,931	4,649	3,982	31.4	9.3	3.1	-14.3
<b>II. Expenditure</b>	<b>67,614</b>	<b>58,456</b>	<b>56,041</b>	<b>55,063</b>	<b>55,705</b>	<b>-13.5</b>	<b>-4.1</b>	<b>-5.8</b>	<b>1.2</b>
(State budget primary expenditure)	55,391	52,412	50,341	49,494	49,805	-5.4	-4.0	-5.6	0.6
1. Ordinary budget	61,499	51,806	49,241	48,471	49,305	-15.8	-5.0	-6.4	1.7
– Interest payments	12,223	6,044	5,700	5,569	5,900	-50.6	-5.7	-7.9	5.9
– Ordinary budget primary expenditure	47,529	44,227	42,416	41,928	41,887	-6.9	-4.1	-5.2	-0.1
– Military procurement	410	529	450	345	700				
– Guarantees called to entities classified:	796	879	624	587	818				
inside general government	679	514	451	442	667				
outside general government	117	365	173	145	151				
– Fee for disbursement of EFSF loans	541	127	51	42	0				
2. Public Investment Budget	6,114	6,650	6,800	6,592	6,400	8.8	2.3	-0.9	-2.9
<b>III. State budget balance</b>	<b>-15,688</b>	<b>-5,377</b>	<b>-761</b>	<b>-3,697</b>	<b>-102</b>				
% of GDP	-8.1	-2.9	-0.4	-2.0	-0.1				
1. Ordinary budget	-13,174	-3,392	908	-1,821	1,566				
2. Public investment budget	-2,513	-1,985	-1,669	-1,875	-1,668				
<b>IV. State budget primary balance</b>	<b>-3,465</b>	<b>667</b>	<b>4,939</b>	<b>1,872</b>	<b>5,798</b>				
% of GDP	-1.8	0.4	2.8	1.0	3.1				
Amortisation payments	23,905	12,755	24,930	24,818	16,130	-46.6	95.5	94.6	-35.0

Source: State General Accounting Office.

\* Provisional data.



lected in 2013, against only €62 million in 2014. However, it missed the annual target in the Introductory Report to the 2015 Budget (see Table VI.2). This improvement from 2013 is attributable mainly to the considerable containment of expenses under the state budget, while state budget revenue (excluding SMP revenue) increased marginally. The divergence of the 2014 state budget result from the annual target is solely attributed to a shortfall in state budget revenue and was mitigated by the larger than expected containment of state budget expenditure. The worse than expected revenue performance is attributed primarily to the non-collection of SMP revenue (€1.9 billion), the considerable shortfall in tax revenue and, to a lesser extent, the PIB revenue shortfall, in addition to the higher than forecast tax refunds.

### Ordinary Budget Revenue

In 2014, ordinary budget revenue (before refunds)<sup>7</sup> fell by 2.9% against 2013, suggesting a shortfall of approximately €3.3 billion against the revised annual target for an increase of 2.7% included in the Introductory Report to the 2014 Budget (see Table VI.3). This development is accounted for by €1.9 billion to the non-collection of SMP revenue and by €1.4 billion to a shortfall in tax revenue – particularly income tax, tax arrears, VAT and tax on liquid fuel. Excluding SMP revenue, the rate of change in ordinary budget revenue before tax refunds is slightly positive compared with 2013.

- Receipts from direct taxation increased by 2.0% against 2013, primarily driven by corporate income tax and unified property tax (ENFIA) receipts. However, the considerable shortfall (of approximately €900 million) from the annual target is due to the 2014 Budget's high targets regarding personal and corporate income tax and to the reduced performance of tax arrears receipts. In particular:

- Personal income tax receipts dropped (-1.5%) relative to 2013, owing to reduced incomes. The large shortfall against the annual

target is due to high targeting, which was partly based on the increased income taxation of sole proprietors. It should be noted that, in addition to the 2014 income tax, this category includes receipts from the last two instalments of the 2013 income tax.

- Receipts from corporate income tax recorded a significant increase (+57.9%) against 2014 owing to the increased profits for businesses and banks in 2013 and to the increased tax rate on corporate profits.

- The special income tax categories recorded a decrease (-7.3%) relative to 2013, which is due in part to decreased receipts from taxation on deposits, as a result of lower deposit rates.

- Receipts from taxes on inheritance, gifts, parental donations and real estate increased substantially (+16.1%) compared with 2013, owing to satisfactory unified property tax (ENFIA) receipts. Furthermore, this category has been bolstered by the last instalments of the real property tax (FAP) for 2011-12 and the Special Emergency Property Tax (EETA) for 2013, collected through electricity bills. It should be noted that the payment of ENFIA will be completed in the first two months of 2015, as only four out of six instalments were collected in 2014.

- Revenue from tax arrears declined considerably (-31.8%) compared with 2013, as taxpayers did not respond warmly to the new favourable schedule for settlement of arrears to the State.

- Receipts from indirect taxation fell by 3.2% compared with 2013, resulting in a shortfall of around €400 million against the annual target, as they declined across most indirect tax categories. In more detail:

- VAT receipts (on imported and domestic goods and services) declined (-1.7%) compared with 2013, falling short of the annual tar-

<sup>7</sup> Including special revenue from licensing and concession fees.



**Table VI.3 Ordinary budget revenue**

(million euro)

	2011	2012	2013	2014*	Percentage changes		
					2012/2011	2013/2012	2014*/2013
<b>I. Direct taxes</b>	<b>20,318</b>	<b>21,096</b>	<b>20,058</b>	<b>20,464</b>	<b>3.8</b>	<b>-4.9</b>	<b>2.0</b>
1. Income tax	12,933	13,311	11,488	12,206	2.9	-13.7	6.3
– Personal	8,285	9,968	7,971	7,849	20.3	-20.0	-1.5
– Corporate	2,760	1,715	1,681	2,655	-37.9	-2.0	57.9
– Special categories of income tax	1,888	1,628	1,837	1,703	-13.8	12.8	-7.3
2. Property taxes	1,172	2,857	2,991	3,474	143.8	4.7	16.1
3. Tax arrears	1,911	1,812	2,826	1,928	-5.2	56.0	-31.8
4. Extraordinary and other direct taxes	4,302	3,116	2,752	2,855	-27.6	-11.7	3.7
<b>II. Indirect taxes</b>	<b>28,632</b>	<b>26,082</b>	<b>24,556</b>	<b>23,776</b>	<b>-8.9</b>	<b>-5.9</b>	<b>-3.2</b>
1. Customs duties and special contributions on imports-exports	198	154	146	166	-22.2	-5.2	13.7
2. Consumption taxes on imports	1,910	1,433	1,378	1,509	-25.0	-3.8	9.5
– VAT	1,810	1,380	1,322	1,426	-23.8	-4.2	7.9
– Car registrations	89	44	45	72	-50.6	2.3	60.0
3. Consumption taxes on domestic products	25,106	23,147	21,469	20,807	-7.8	-7.2	-3.1
– VAT	15,077	13,575	12,533	12,192	-10.0	-7.7	-2.7
– Fuel	4,653	4,464	4,228	4,113	-4.1	-5.3	-2.7
– Tobacco	3,045	2,707	2,503	2,418	-11.1	-7.5	-3.4
– Road duties	1,117	1,305	1,183	1,119	16.8	-9.3	-5.4
– Special levies and contributions on cars	42	36	35	30	-14.3	-2.8	-14.3
– Other	1,172	1,059	987	935	-9.6	-6.8	-5.3
4. Transaction taxes	905	733	819	606	-19.0	11.7	-26.0
– Capital transfers	509	387	503	277	-24.0	30.0	-44.9
– Stamp duties	393	342	313	327	-13.0	-8.5	4.5
5. Other indirect taxes	513	614	744	688	19.7	21.2	-7.5
<b>III. Total tax revenue</b>	<b>48,951</b>	<b>47,178</b>	<b>44,614</b>	<b>44,241</b>	<b>-3.6</b>	<b>-5.4</b>	<b>-0.8</b>
<b>IV. Non-tax revenue<sup>1</sup></b>	<b>6,490</b>	<b>4,318</b>	<b>6,904</b>	<b>5,780</b>	<b>-33.5</b>	<b>59.9</b>	<b>-16.3</b>
– Transfers of earnings on Greek government bond holdings by the Eurosystem central banks (ANFA and SMP)		303	2,715	580	-	-	-
<b>V. Total revenue before tax refunds</b>	<b>55,442</b>	<b>51,497</b>	<b>51,519</b>	<b>50,020</b>	<b>-7.1</b>	<b>0.0</b>	<b>-2.9</b>

Source: State General Accounting Office.

\* Provisional data.

<sup>1</sup> Including revenue from licensing and concession fees.

get for a marginal increase. Against a backdrop of a recovery in private consumption and a rise in tourism, this development indicates tax evasion. It should be noted that oil VAT receipts declined significantly due to the drop in international oil prices and the lower excise duty on heating oil.

– Receipts from taxation on liquid fuel declined (-2.7%) compared with 2013 owing to a 30% cut in the excise duty on heating oil.

– Real estate transfer tax receipts continue to fall substantially (-42.9% against 2013), due to the large decline in real estate demand. Road

duties dropped slightly (-5.4%), while receipts from car registration fees increased (+60.0%), owing to a recovery in car demand.

- Non-tax revenue decreased noticeably, by 16.3% relative to 2013, with a considerable shortfall of approximately €1.9 billion against the annual target, due to the non-collection of SMP revenue in the same amount. This category includes ANFA receipts of €518 million, ELA of €427 million and €384 million from licensing and concession fees.

- Finally, tax refunds in 2014 were particularly increased (+8.5%), overshooting the annual target and further reducing net ordinary budget revenue (after tax refunds) (see Table VI.2).

#### Ordinary Budget Expenditure

Continuing the downward trend since 2012, Ordinary Budget Expenditure declined further in 2014 compared with 2013, actually overshooting the forecasts of the Introductory Report to the 2015 Budget (see Table VI.4). This was mainly a result of a large containment of ordinary budget primary expenditure and a decline in interest payments, which stood below the annual target.

Based on available disaggregated data, developments in the main categories of ordinary budget expenditure are as follows:

- The wage and pension bill increased marginally (+0.3%) relative to 2013, against an annual target of +0.7%, due to higher pension spending (+4.2%), mainly owing to a rise in the number of pensioners, while wage spending declined (-1.5%), principally due to a reduction in the number of civil servants. Expenditure in this category includes a partial recovery of wages by armed forces and law enforcement personnel, in active employment or retired, from July onwards.

- Social security and healthcare spending decreased against 2013 (-9.4%), almost in line with the relevant annual target (-9.6%), due to

further cuts in grants to social security funds (-12.9%) and reduced spending for covering hospital deficits and arrears (-12.3%). On the contrary, spending on social protection increased further in 2014 (+24.0%), including the payment of a social dividend amounting to €506 million.

- Operating and other expenditure also fell from 2013 (-9.5%), overrunning the annual target (-9.0%), due to reduced grants to transport organisations and local authorities, lower agricultural subsidies and the containment of consumption expenditure, which, despite the local elections and the European Parliament elections, stood only marginally above last year's level (+0.8%), against estimates for a larger increase (+16.9%).

- Earmarked spending declined compared with 2013 (-7.2%) and overran the annual target (-5.6%), due to the rationalisation of parafiscal charges.

- Finally, interest payments declined further in 2014 compared with 2013 (-7.9%), continuing the downward trend observed since 2012, as a result of —among other things— the implementation of the Eurogroup decisions of 27.11.2012 lowering the interest rate margin on loans under the Support Mechanism and deferring interest payments.<sup>8</sup> It should be noted that interest payments have decreased by 66% since 2011.

#### Public Investment Budget

Public investment budget improved against 2013, yet the annual target was missed. Revenue increased by 1.1% compared with 2013, falling short of the annual target in the Introductory Report to the 2015 Budget by about €400 million, while expenditure, after being frontloaded during the year, stood at marginally lower levels than in 2013 and by €209 million lower than the annual target, partly offsetting the revenue shortfall (see Table VI.2).

<sup>8</sup> See *Annual Report 2013*, p. 101.

Table VI.4 Outlays under the ordinary budget and the public investment budget

(million euro)

	Annual data					Percentage changes			
	2012	2013	2014*		2015	2013/12	2014*/13	2015/14*	
	(1)	(2)	(3)	(4)	Budget	(6=2:1)	(7=3:2)	(8=4:2)	(9=5:4)
<b>I. Outlays under the ordinary budget</b>	<b>61,499</b>	<b>51,806</b>	<b>49,241</b>	<b>48,471</b>	<b>49,305</b>	<b>-15.8</b>	<b>-5.0</b>	<b>-6.4</b>	<b>1.7</b>
1. Personnel outlays	20,511	18,422	18,548	18,478	18,766	-10.2	0.7	0.3	1.6
of which: wages	13,947	12,572	12,457	12,385	12,417	-9.9	-0.9	-1.5	0.3
pensions	6,564	5,850	6,091	6,093	6,349	-10.9	4.1	4.2	4.2
2. Social security and healthcare	17,134	15,922	14,390	14,421	13,931	-7.1	-9.6	-9.4	-3.4
of which: grants to social security funds	14,466	12,740	11,085	11,101	11,312	-11.9	-13.0	-12.9	1.9
grants to hospitals for the payment of arrears	1,401	1,654	1,450	1,450	1,118	18.1	-12.3	-12.3	-22.9
social welfare	1,206	1,462	1,799	1,813	1,444	21.2	23.1	24.0	-20.4
3. Operating and other expenditure	6,410	6,337	5,766	5,733	5,394	-1.1	-9.0	-9.5	-5.9
of which: consumer expenditure and off-budget items	2,066	1,732	2,025	1,746	1,565	-16.2	16.9	0.8	-10.4
4. Earmarked spending	3,474	3,549	3,350	3,295	2,796	2.2	-5.6	-7.2	-15.1
5. Reserve	0	0	362	0	1,000				
6. Interest payments	12,223	6,044	5,700	5,569	5,900	-50.6	-5.7	-7.9	5.9
7. Ministry of National Defence programmes for the procurement of military equipment	410	529	450	345	700	29.0	-14.9	-34.8	102.9
8. Guarantees called-in from entities within general government	679	514	451	442	667	-24.3	-12.3	-14.0	50.9
9. Guarantees called-in from entities outside general government	117	365	173	145	151				
10. Loan disbursement fee to the European Financial Stability Facility (EFSF)	541	127	51	42	0	-76.5	-59.8	-66.9	-
<b>II. Outlays under the public investment budget</b>	<b>6,114</b>	<b>6,650</b>	<b>6,800</b>	<b>6,592</b>	<b>6,400</b>	<b>8.8</b>	<b>2.3</b>	<b>-0.9</b>	<b>-2.9</b>
1. Project execution	1,500	1,696	...	...	...				
2. Grants	4,570	4,882	...	...	...				
3. Administrative costs	44	72	...	...	...				
<b>III. Outlays under the state budget (I+II)</b>	<b>67,614</b>	<b>58,456</b>	<b>56,041</b>	<b>55,063</b>	<b>55,705</b>	<b>-13.5</b>	<b>-4.1</b>	<b>-5.8</b>	<b>1.2</b>
Primary expenditure under the state budget (III-16)	55,391	52,412	50,341	49,494	49,805	-5.4	-4.0	-5.6	0.6
Primary expenditure under the ordinary budget (I1+I2+I3+I4+I5)	47,529	44,227	42,416	41,928	41,887	-6.9	-4.1	-5.2	-0.1
Amortisation payments	23,905	12,755	24,930	24,818	16,130	-46.6	95.5	94.6	-35.0

Source: State General Accounting Office.

\* Provisional data.

## State Budget developments on a cash basis

In 2014 the cash balance (borrowing requirements) of the state budget<sup>9</sup> improved by 4.7% of GDP against 2013, standing at a deficit of 2.3% of GDP, against a deficit of 7.0% of GDP in 2013 (see Table VI.5 and Chart VI.2). The primary cash balance of the State Budget improved by 4.4% of GDP, turning to a surplus of 0.8% of GDP from a deficit of 3.6% of GDP in 2013. This amelioration is mainly attributable to extraordinary factors including revenue from the redemption of preference shares by credit institutions, increased profits of the Bank of Greece transferred to the Greek State, as well as reduced expenditure for the payment

of government arrears. Excluding these factors, the primary cash balance of the State Budget improved by 1.1% of GDP against 2013, primarily as a result of an amelioration in the ordinary budget primary balance (+0.9%) due to contained primary expenditure, which offset the decline in revenue, and secondly owing to the improved Public Investment Budget balance (+0.1%) due to increased revenue.

The state budget borrowing requirement and principal and interest payments were financed through (i) borrowing from the Support Mechanism (€11.7 billion); (ii) tapping the

<sup>9</sup> Excluding movements in the OPEKEPE account.

**Table VI.5 State budget deficit on a cash basis<sup>1,2</sup>**

(million euro)

	Annual data				
	2010	2011	2012	2013	2014*
<b>State budget</b>	<b>23,396</b>	<b>23,144</b>	<b>10,697</b>	<b>12,794</b>	<b>4,209</b>
% of GDP	10.5	11.1	5.5	7.0	2.3
— Ordinary budget <sup>3</sup>	18,333 <sup>4</sup>	20,462 <sup>5</sup>	8,503 <sup>6</sup>	10,785 <sup>7</sup>	2,343 <sup>8</sup>
— Public investment budget	5,063	2,682	2,194	2,009	1,866

Source: Bank of Greece.

\* Provisional data.

1 As shown by the respective accounts with the Bank of Greece and other credit institutions.

2 Excluding movements in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee Community Aid) account.

3 Including movements in public debt management accounts.

4 Including expenditure of (a) €297.9 million (bond re-issuance) for covering the State's debt to IKA and (b) €714.7 million for covering the State's debt to Hellenic Petroleum SA (ELPE), Egnatia Motorway SA and the Agricultural Bank of Greece (ATE) (bond issuance). Not including expenditure of (a) €849.2 million (bond re-issuance) for covering hospitals' debt under Article 27 of Law 3867/2010, as such amounts burden the debt of 2010 and (b) €424.3 million for covering ELGA's debt obligations (bond issuance), as this is in replacement of a previous loan with similar terms. Also, a payment of €1.500 million to the Hellenic Financial Stability Fund is not included.

5 Not including revenue of (a) €675 million from ATE for the buyback of its preferential shares and (b) €250 million from the Deposits and Loans Fund due to a decrease in its reserves. By contrast, the revenue of €1,536 million from privatisation proceeds is included. Not including expenditure of (a) €4,011 million (bond re-issuance) for covering hospitals' debt under Article 27 of Law 3867/2010, as such amounts burden the debt of 2011; (b) €350 million for covering ELGA's debt obligations (bond issuance), as this is in replacement of a previous loan with similar terms and (c) €140.2 million for covering debt due to former Olympic Airlines employees that were laid off (bond issuance). Also not including expenditure of €1,551.8 million for the participation of the Greek State in share capital increases, €1,434.5 million of which concerns ATE, as well as the proceeds of a bond issuance (re-issuance) of €1,380 million for the purchase of ETE (National Bank of Greece) and Bank of Piraeus preference shares.

6 Including revenue of (a) €303 million relating to ANFA returns and (b) €10.6 million from privatisation proceeds, but excluding expenditure of (a) €4,751 million for accrued interest on PSI bonds, as well as interest payments of €519 million due to the debt buyback, paid through EFSF notes; (b) €9.9 million (bond issuance) for covering the State's debt to the Jewish Community of Thessaloniki; and (c) €73 million for the participation of the Greek State in capital increases (Horse Racing Organisation of Greece SA (ODIE), Hellenic Vehicle Industry (ELVO), Hellenic Defence Systems SA, etc.). Including expenditure of €901.3 million relating to Greece's participation in the European Stability Mechanism (ESM).

7 Including revenue of (a) €682 million relating to ANFA returns and (b) €998 million from privatisation proceeds. Excluding revenue of €2.0 billion from the transfer of profits on Greek government bond holdings of Eurosystem central banks (Securities Markets Programme - SMP). Excluding the participation of the Greek State (€37.6 million) in capital increases of Hellenic Defence Systems SA etc. Including expenditure of roughly €6,155 million for the payment of arrears and €901 million relating to Greece's participation in the European Stability Mechanism (ESM).

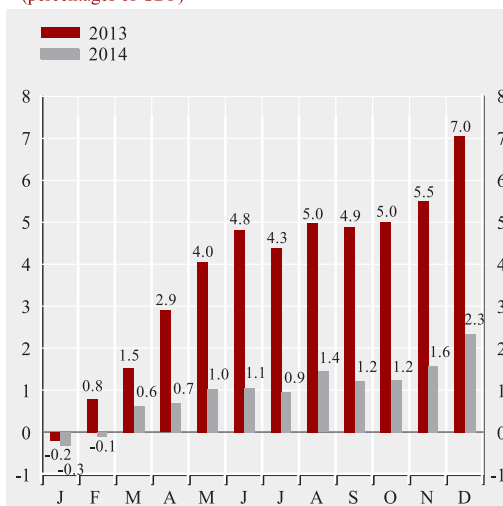
8 Including revenue of (a) €518 million relating to ANFA returns; (b) €480 million from Bank of Greece's profits; (c) €1,310 million from the repayment of preferential shares; and (d) €443 million from privatisation proceeds. Excluding revenue of €62 million from the transfer of profits on Greek government bond holdings of Eurosystem central banks (Securities Markets Programme - SMP). Also excluding expenditure of €51 million for the participation of the Greek State in capital increases (DEPOS SA, EAB SA etc.), but including expenditure of €1,152 million for the payment of arrears and €451 million relating to Greece's participation in the European Stability Mechanism (ESM).

markets (€4.5 billion); (iii) re-issue of Treasury Bills (amounting to approximately €15 billion); and (iv) Greek government bond repos (see Table VI.6).

In more detail, a tranche of €6.3 billion was received from the EFSF in April, €3.4 billion from the IMF in June, as well as €1 billion in July and €1 billion in August from the EFSF. On 10 April 2014, the Greek State returned to the global markets by issuing a 5-year bond of €3 billion at a yield of 4.95% and an annual coupon of 4.75%, which was followed on 10 July 2014 by the issue of a 3-year bond of €1.5 billion at a yield of 3.5% and a coupon of 3.375%. In both cases demand exceeded supply, with the funds offered for the 5-year and the 3-year bond amounting to €20 billion and €3 billion, respectively. Furthermore, the Public Debt Management Agency repeatedly entered into Greek government bond repos with the Common Fund of Legal Persons in Public Law and Social Security Funds ("Common Fund"), which is managed by the Bank of Greece.

**Chart VI.2 Net borrowing requirements of central government on a cash basis (January 2013-December 2014)**

(percentages of GDP)



Source: Bank of Greece.

Notes: "Monthly" figures refer to cumulative percentages from the start of the year. Excluding the balance in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee CommunityAid) account.

**Table VI.6 Financing of the state budget cash deficit**

(million euro)

	2011		2012		2013		2014*	
	Amount	% of total	Amount	% of total	Amount	% of total	Amount	% of total
Greek government bonds and Treasury bills <sup>1</sup>	-19,763 <sup>4</sup>	-85.4	-8,365 <sup>5</sup>	-78.2	-11,799	-92.2	-9,632	-228.8
Change in the balances of central government accounts with the credit system <sup>2</sup>	3,086	13.3	-2,895	-27.1	3,415	26.7	9,621	228.6
External borrowing <sup>3</sup>	-1,650	-7.1	-1,071	-10.0	-3,600	-28.1	-7,483	-177.8
Borrowing from the IMF/EU	41,471	179.2	23,028	215.3	24,778	193.7	11,703	278.0
– from the EU	31,900		21,397		18,100		8,300	
– from the IMF	9,571		1,631		6,678		3,403	
<b>Total</b>	<b>23,144</b>	<b>100.0</b>	<b>10,697</b>	<b>100.0</b>	<b>12,794</b>	<b>100.0</b>	<b>4,209</b>	<b>100.0</b>

Source: Bank of Greece.

\* Provisional data.

1 Comprising Treasury bills, short-term securities and government bonds issued in Greece, as well as bonds convertible into shares.

2 Comprising changes in the central government accounts held with the Bank of Greece and other credit institutions. Excluding changes in the OPEKEPE account.

3 Comprising borrowing abroad and securities issuance abroad (all currencies). Excluding non-residents' holdings of bonds issued in Greece.

4 Excluding bonds issued by the Greek government for the payment of arrears of public hospitals, ELGA and Olympic Airlines.

5 Excluding expenditure of €9.9 million (bond issuance) for covering the State's debt to the Jewish Community of Thessaloniki.

**Table VI.7 Consolidated debt of general government<sup>1</sup>**

(million euro)

	2007	2008	2009	2010	2011	2012	2013
Short-term	2,180	6,268	12,765	12,179	14,650	18,897	14,073
– securities	1,626	5,496	10,820	9,121	11,844	16,516	11,993
– loans	554	772	1,945	3,058	2,806	2,381	2,080
Medium- and long-term	237,118	257,627	286,760	317,107	340,484	285,020	304,241
– securities	191,867	210,765	242,129	243,407	239,947	76,983	67,213
– loans	45,251	46,862	44,631	73,700	100,537	208,037	237,028
Coin and deposits	693	727	1,477	1,005	820	774	819
<b>Total</b>	<b>239,991</b>	<b>264,622</b>	<b>301,002</b>	<b>330,291</b>	<b>355,954</b>	<b>304,691</b>	<b>319,133</b>
<b>% of GDP</b>	<b>103.1</b>	<b>109.3</b>	<b>126.8</b>	<b>146.0</b>	<b>171.3</b>	<b>156.9</b>	<b>174.9</b>
– euro-denominated debt	238,075	262,989	299,742	324,278	346,769	294,704	305,883
of which:							
to the Bank of Greece	(7,667)	(7,169)	(6,705)	(6,154)	(5,684)	(5,212)	(4,735)
to the IMF/EU				(27,121)	(65,379)	(174,557)	(199,915)
– non-euro denominated debt <sup>2</sup>	1,916	1,633	1,260	6,013	9,185	9,987	13,250
of which: to the IMF/EU				(4,704)	(7,831)	(8,541)	(13,237)

Source: State General Accounting Office.

<sup>1</sup> According to the definition in the Maastricht Treaty.<sup>2</sup> Valuation using exchange rates as at 31 December of each year.

### General Government Debt

According to the Introductory Report to the 2015 Budget, the public debt-to-GDP ratio is expected to rise to 177.7% (or €318 billion) in 2014, from 174.9% of GDP or €319.1 billion in 2013 (see Table VI.7). The increase in the debt-to-GDP ratio reflects exclusively the reduction in nominal GDP, as in absolute terms public debt is expected to decline slightly on account of the expected primary surplus in 2014 and the negative effect of the deficit-debt adjustment (see Table VI.8). The aggravating effect of nominal GDP on the debt-to-GDP ratio is reflected in the change in GDP and interest rates, contributing to the increase in the debt-to-GDP ratio by about 7.6 percentage points, given the fact that the average nominal rate on government loans has not changed significantly (see Box VI.2).

Steps towards the consolidation of public finances by improving the primary balance have contributed to reducing the debt-to-GDP

ratio by 2.9 percentage points, but have not offset the effect of the declining GDP, showing how crucial structural reforms are for reducing the debt-to-GDP ratio.

### 3 THE 2015 BUDGET

According to the Introductory Report to the 2015 Budget, fiscal policy is geared towards a continued improvement in the fiscal balance. The general government deficit (based on ESA 2010) is expected to be almost eliminated in 2015 and stand at 0.2% of GDP, from 1.3% in 2014. The general government primary balance, according to the Economic Adjustment Programme, is projected to reach the programme's target for a surplus of 3.0% of GDP, against an estimated surplus of 1.8% of GDP in 2014.

The aforementioned projections are based, in turn, on the forecasted recovery of the Greek economy at a growth rate of 2.9% of GDP for 2015, mainly driven by the recovery in invest-

**Table VI.8 Decomposition of changes in the general government debt-to-GDP ratio<sup>1</sup>**

(percentage points of GDP)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014*
General government debt-to-GDP ratio	94.9	106.7	103.4	103.1	109.3	126.8	146.0	171.3	156.9	174.9	177.7
Changes in the general government debt-to-GDP ratio	0.8	11.8	-3.2	-0.3	6.2	17.5	19.2	25.3	-14.4	18.0	2.8
– Primary balance	2.5	0.9	1.6	2.1	5.0	10.2	5.2	2.9	3.6	8.2	-2.9
– Change in GDP and change in interest rates	-2.4	1.6	-4.7	-2.1	1.0	7.2	12.1	20.2	17.0	14.1	7.6
– Deficit-debt adjustment <sup>2</sup>	0.7	9.2	-0.2	-0.4	0.3	0.1	1.9	2.2	-35.0	-4.3	-1.9

Source: Ministry of Finance, General Directorate of Economic Policy, "Hellas: Macroeconomic Aggregates".

\* Provisional data.

1 Changes in the debt ratio have been decomposed using the following formula:

$$\left( \frac{D_t}{Y_t} - \frac{D_{t-1}}{Y_{t-1}} \right) = \frac{PB_t}{Y_t} + \left( \frac{D_{t-1}}{Y_{t-1}} * \frac{i_t - g_t}{1 + g_t} \right) + \frac{SF_t}{Y_t}$$

where  $D_t$  = general government debt $PB_t$  = primary balance (deficit (+) or surplus (-)) $Y_t$  = GDP at current prices $g_t$  = nominal GDP growth rate $i_t$  = average nominal interest rate on government debt $SF_t$  = deficit-debt adjustment

2 The deficit-debt adjustment includes expenditure or liability assumption by general government that does not affect the deficit but increases debt, as well as revenue (e.g. privatisation proceeds) that does not affect the deficit but reduces debt.

ment (+11.7%) and exports (+5.2%), as well as the increase in employment (+2.6%). The improvement in the general government balance is expected to be driven mainly by an amelioration in the central government budget balance and – to a lesser extent – by an improvement in the budget balance of local authorities, thus offsetting the projected deterioration in the fiscal balance of social security funds.

The estimated improvement of the central government balance in 2015 will be driven both by increased ordinary budget revenue and the containment in primary expenditure, including the effects of the 30% cut in the excise tax on heating fuel decided in October 2014, the extension of the special solidarity levy

(reduced by 30%), maintaining a reduced VAT rate on food services, as well as retrospective payments of increased wages to armed forces and law enforcement personnel (in active employment or retired). It is also based on the effects of structural interventions regarding the collection of tax arrears, the improvement in tax compliance, curbing tax and contribution evasion and on sound financial management and enhanced supervision.

It is expected that in 2015 the general government debt will fall by 6.3%, from 171.7% of GDP to 171.4% of GDP in 2014, owing to the significant cash surplus, the implementation of the privatisations programme and the expected nominal GDP growth in 2015.

**Box VI.2****THE IMPACT OF LOW INFLATION ON FISCAL AGGREGATES**

The gradually declining rates of inflation observed in the euro area since 2011 and the subsequent contraction in growth in many countries raise questions about Member States' ability to comply with the new rules of the Stability and Growth Pact (SGP).



A deflationary period entails various risks, although certain benefits cannot be ruled out (see Box V.5), while it has a direct and indirect impact on fiscal aggregates and thus on fiscal policies. According to Tanzi et al. (1987)<sup>1</sup> and Abbas et al. (2013),<sup>2</sup> **inflation directly and/or indirectly affects fiscal policy**, as it is associated with: (i) the level and dynamics of public debt; (ii) the market interest rates that express the cost of public debt refinancing; and (iii) the level of government expenditure and tax revenues.

Specifically, an unexpected decline in inflation<sup>3</sup> affects the debt-to-GDP ratio both through the primary balance and through the snowball effect (which is calculated by multiplying the differential between the cost of public debt service and the nominal GDP growth rate by the debt of the previous period<sup>4</sup>). Furthermore, if monetary policy responds to the unexpected decrease in inflation with key interest rate cuts, then debt will also be affected by the weighted average cost of debt service. The magnitude of such an impact on the debt service cost also depends on the kind of government bond yields. For instance, in the case of fixed-rate debt securities, the impact of lower inflation is zero, whereas in the case of inflation-linked bonds, lower inflation is estimated to have a downward effect on the debt service cost. Nevertheless, the impact of such a shock on the cost of borrowing is rather limited for two reasons: (i) coupon payments are associated with earlier inflation levels and therefore exhibit a low correlation with current inflationary shocks; and (ii) it is estimated that shocks influencing inflation expectations are not fully passed through to nominal interest rates.<sup>5</sup>

Furthermore, an unexpected decline in inflation is likely to raise the government expenditure-to-GDP ratio in the short run. Although a fall in prices (of goods and services) could potentially lower some expenditure categories such as intermediate government consumption and public investment, government outlays on wages, pensions and other social benefits would only decrease, in absolute terms, insofar as they are index-linked. Actually, government expenditure is not automatically indexed, as its level is determined annually on a discretionary basis during the drafting of the state budget, which means that indexation occurs with a time lag, unless temporarily suspended due to emergency budgetary needs. In such an event, an unexpected decrease in inflation leads to an increase in government expenditure as a percentage of GDP, at least over the short term.

1 Tanzi, V., M.I. Blejer and M.O. Teijeiro (1987), "Inflation and the Measurement of Fiscal Deficits", *International Monetary Fund Staff Papers*, 34 (4).

2 Abbas, S.A., B. Akitoby, J. Andritzky, H. Berger, T. Komatsuzaki and J. Tyson (2013), "Dealing with High Debt in an Era of Low Growth", IMF Staff Discussion Note 13/7.

3 The impact on fiscal aggregates is likely to worsen in a deflationary environment. In such an event, a decline in the price level would probably have a stronger effect due to downward government expenditure rigidity (e.g. social benefits, wages, etc.) and therefore would lead to a steeper deterioration in the fiscal position (as a percentage of GDP). Besides, the origin of such a shock plays an important role. If deflation is demand-driven, it leads to a narrowing of profit margins and a decline in employment, hence to lower tax revenues. Conversely, according to Bordo et al. (2004), if deflation is supply-driven, it could have a positive budgetary impact, as it increases output and transactions, thereby boosting revenue categories such as consumption taxes. The impact also depends on monetary policy, and is expected to be stronger when a monetary policy at the zero lower bound is pursued. See Bordo, M.D., J.L. Lane and A. Redish (2004), "Good versus bad deflation: lessons from the gold standard era", WP No. 10329, National Bureau of Economic Research.

4 In more detail,  $\Delta b_t = \left( \frac{i_t - g_t}{1 + g_t} \right) b_{t-1} - pb_t + sf_t$ , where  $i_t$  and  $g_t$ ,  $pb_t$  express the weighted average nominal interest rate, the nominal GDP growth rate and the level of primary balance (as a percentage of GDP), respectively, while  $b_t$  and  $sf_t$  express the ratios of public debt and deficit-debt adjustment to GDP, respectively, during the period  $t$ . According to international literature, the first term of the right side of the equation expresses the snowball effect.

5 In more detail, according to Ardagna et al. (2007) and Laubach (2009), a one-percentage-point increase in expected inflation raises bond yields by 0.1-0.3 percentage points. For advanced economies, Arslanalp and Poghosyan (2014) argue that the smaller impact of inflation on the debt service cost could be driven by the fact that in these countries inflation expectations are firmly anchored at a low level. See Ardagna, S., F. Caselli and T. Lane (2007), "Fiscal Discipline and the Cost of Public Debt Service: Some Estimates for OECD Countries", *B.E. Journal of Macroeconomics*, 7(1); Arslanalp, S. and T. Poghosyan (2014), "Foreign Investor Flows and Sovereign Bond Yields in Advanced Economies", IMF Working Paper 14/27; Laubach, T. (2009), "New evidence on the interest rate effects of budget deficits and debt", *Journal of the European Economic Association*, 7(4).

On the revenue side, decelerating or negative inflation may have a negative effect on tax revenues as a result of lower nominal taxable incomes (fiscal drag).<sup>6</sup> In the case of direct taxes, the key determinants of this negative impact on revenue in an environment of low inflation or deflation are: (i) labour market and downward nominal wage rigidities; and (ii) the progressivity of a tax system, as a decline in nominal incomes and profits, due to lower inflation, pushes incomes and corporate profits into lower tax brackets (bracket creep). Indirect taxes are generally ad valorem taxes, thus the ratio of indirect tax revenue to GDP remains potentially unaffected by inflationary shocks for a given level of real GDP growth. By contrast, revenue from excise duties, which are typically per unit taxes, is not directly affected by deflationary shocks, provided that consumption behaviour remains unchanged. However, the total impact on the amount of revenue from excise duties depends on whether the shock is supply- or demand-driven.

In the case of Greece, the impact of an unexpected deflationary shock on the general government primary balance, albeit smaller relative to other euro area countries, e.g. Italy, France or Austria, should be viewed as more lasting, since it lingers on for a comparatively longer period of time after the shock.<sup>7</sup> The observed persistence of the impact on the primary fiscal balance is mainly due to: (i) the relatively more inelastic nature of primary expenditure, as not only wage outlays, but also social transfers do not respond immediately to lower inflation levels; and (ii) the comparatively more elastic response of total revenue to such a shock.

<sup>6</sup> This occurs under a progressive tax system, where tax brackets are not adjusted for inflation.

<sup>7</sup> The shock was defined as a one-off decline of one percentage point in the annual rate of change in the GDP deflator. Any potential second-round macroeconomic effects from lower inflation are not taken into account (partial equilibrium analysis).

## ANNEX TO CHAPTER VI TAX POLICY MEASURES

The efforts to overhaul the tax system which had started in 2013 were continued through 2014, including amendments to the new tax codes adopted in 2013. The main arrangements are set out in the April 2014 omnibus law.<sup>10</sup> At the same time, the effort to rationalise tax administration and curtail administrative costs made some headway, mainly with the adoption of the first Operational Plan of the General Secretariat of Public Revenue. Lastly, provisions included in different laws within the ambit of several ministries regulate a number of tax matters, such as pending issues regarding the unified property tax (ENFIA), a cut in the excise duty on heating oil, the new VAT payment system, the new framework for the settlement of tax arrears, the maintenance of a lowered VAT rate on food services, the extended implementation of the special solidarity levy on natural persons for financial years 2015 and 2016 reduced by 30%, etc.

Omnibus Law **4254/2014** (April 2014)<sup>11</sup> includes, among other things, a number of provisions modifying the legislation on income tax, VAT, the Code of Tax Recording of Transactions, and the Tax Procedures Code. Specifically:

— Properties that were acquired before 1995 are exempt from the capital gains tax.<sup>12</sup> The capital gains tax is calculated on the basis of the market price of the property rather than its objective value. Depending on how the property was acquired (i.e. sale, inheritance, gift or parental donation, etc.), there are different methodologies for computing the acquisition price. Under the recent, more favourable provisions of this law, the requirement that no other real estate transfer must be made during the holding period is abolished. Explanatory circular **POL. 1251/10.12.2014**<sup>13</sup> provides detailed instructions on the calculation of the capital gains tax for all transfers of buildings, land plots and fields inside and outside city limits or zoned areas. Special reference is made to those cases in which the seller of real estate must be treated as a sole proprietor. In more detail, under Law 4172/2014, if a seller

carries out more than three transactions in real estate over a period of two years, the proceeds from the sale are deemed as business profit; as a result, he/she is taxed as a sole proprietor at a rate of 26%, rather than at a tax rate of 15% with a tax-free amount of €25,000. Law 4316/2014 provides for the suspension of implementation of the capital gains tax on real estate transfers until 31 December 2016.

— Small investors are exempted from the capital gains tax on shares.<sup>14</sup> The tax is only levied where the transferor holds at least 0.5% of the company's share capital, as well as on all equities acquired from 1 January 2009 onwards.

— Tax withholding on royalties paid is abolished where enterprises are tax liable or domiciled in Greece.<sup>15</sup>

— Fines applicable on late submission of VAT returns and failure to issue invoices and retail receipts, as specified in the July 2013 Tax Procedures Code (Law 4174/2013), are reduced by up to 80%.

— The monthly amount of wages, pensions and social security benefits exempt from seizure is raised from €1,000 to €1,500, while the seizure of assets for tax arrears of up to €500 is abolished.

<sup>10</sup> Measures passed up to February 2014 are described in the *Annual Report 2013*, pp. 117-121.

<sup>11</sup> "Measures for the support and development of the Greek economy, in the context of the implementation of Law 4046/2012, and other provisions".

<sup>12</sup> The capital gains tax on property-selling owners was introduced by Law 4110/2013, as from 1 January 2013 at a rate of 20%, but eventually was never implemented. Subsequently, Law 4172/2013 (see *Annual Report 2013*, p. 118) lowered the tax rate to 15% and abolished the criterion of the time of purchase of the property by the seller. As a result, the capital gains tax is levied on any real estate resold after 1 January 2014, no matter when acquired. These capital gains decrease with the age of the property on the basis of specific depreciation rates. Capital gains, adjusted for the aforementioned rates, are tax-exempt up to the amount of €25,000, provided that the taxpayer has held the property for a period of at least five years and has not made any other transfer of real estate during this period.

<sup>13</sup> "Additional instructions and clarifications on the calculation of the capital gains tax on real estate sales".

<sup>14</sup> For the umpteenth time, the capital gains tax was introduced by Law 4172/2013 (see *Annual Report 2013*, p. 118), at a rate of 15% on all financial instruments acquired from 1 January 2014 onwards.

<sup>15</sup> Tax law 4172/2013 provided for tax withholding at a rate of 20% as from 1 January 2014 on rentals paid for the hire of industrial, commercial or scientific equipment that are treated as royalties.

- From 1 July 2014 and from 1 January 2015 onwards, a number of parafiscal charges are abolished.<sup>16</sup>

- As from 1 July 2013, contributions to the wage-earners' fund (Social Insurance Institute – IKA) are reduced by 2.9% for employers and by 1% for employees.

According to a provision of **Law 4258/2014** (April 2014),<sup>17</sup> car owners who had their vehicles de-registered can pay the road duties for the year 2014 on the basis of the actual months of circulation after the vehicle's re-registration, instead of paying the total annual amount.

The first **Operational Plan of the General Secretariat of Public Revenue for 2013-2014**, which was released in May 2014, enhances the independence of the Secretariat and aims at a more efficient and effective functioning of the Tax and Customs Administration. Against this backdrop, special emphasis is placed on the activation of new auditing techniques, such as online access to bank accounts by auditors, tighter and accelerated procedures for the seizure of debtors' bank accounts, as well as close cooperation between auditing services and the National Cadastre, IKA, EOPYY (the national healthcare provision organisation), courts of justice, etc. At the same time, e-garishment is extended to other financial instruments, such as mutual fund shares/units, repos, or time deposits.

Omnibus law **4281/2014** (August 2014)<sup>18</sup> includes, among other things, provisions to rationalise tax administration and curtail administrative costs for taxpayers. In more detail:

- The requirement on VAT-registered firms and sole proprietors to file an annual year-end VAT return is abolished for reporting periods ending after 1 January 2014.

- Small enterprises and sole proprietors with gross income of up to €10,000 are exempt from the obligation to pay VAT.

- The tax administration may suspend the use of a tax registration number if there exists objective evidence that a taxpayer has ceased economic activity or commits tax evasion.

- In the calculation of payable tax, account is taken of medical expenses and expenses for purchase of goods and services during fiscal year 2014, even if such expenses are reported in late or amended income tax returns.

- The General Secretariat of Public Revenue will hire 400 employees.

- General government entities will receive grants to pay their arrears.

A provision of **Law 4286/2014** (September 2014)<sup>19</sup> settles pending issues concerning changes in the calculation of the unified property tax (ENFIA)<sup>20</sup> and exemptions from ENFIA. Specifically, under this provision, the tax can be paid in six instalments, the first one payable until 30 September 2014 and the last one until end-February 2015. Furthermore, a 20% cut is introduced in the (principal and supplementary) tax levied on residential and retail properties that are privately-owned and newly-built, but unoccupied and not yet connected to the electricity grid throughout 2013. As for unfinished properties that are unoccupied and not yet connected to the electricity network, a 60% cut is applicable. Moreover, in order to qualify for this reduced rate, the taxpayer is no longer required to submit tax and social security clearance certificates; instead,

<sup>16</sup> These are charges levied on taxpayers or transacting parties, whether natural persons or corporations, to provide funding to third parties, which may be legal persons under public and/or private law, social security funds and other public or private institutions.

<sup>17</sup> "Demarcation process and provisions on streams –urban planning, and other provisions".

<sup>18</sup> "Measures for the support and development of the Greek economy, organisational matters of the Ministry of Finance and other provisions."

<sup>19</sup> "General provisions on the creation of a hospital fee system – establishment and statute of the société anonyme 'Hospital Fee System Company S.A.' – Transposition into Greek law of Commission Directive 2012/39/EU of 26 November 2012 amending Directive 2006/17/EC, and other provisions".

<sup>20</sup> The unified property tax (ENFIA) was introduced by Law 4223/2013. Its main provisions were described in *Annual Report 2013*, pp. 119-121.

the eligibility criterion will be the value of the property. The said law also clarifies that in regions that are not subject to the system of objective determination of property values, the most favourable price for taxpayers is taken into account. Under another provision of the same law, a lower tax rate is levied on hotels that operate as sole proprietorships. Finally, exemption from ENFIA for the year 2014 applies to all properties on the island of Kefalonia, to properties in some districts of Kozani that have been designated as no longer fit for operational urban planning, provided that such properties are not connected to the electricity grid, as well as to land plots where earthquake-damaged structures stand in the regions of Fokida and Fthiotida.

Decision **POL. 1214/30.9.2014**<sup>21</sup> of the General Secretariat of Public Revenue introduces a new VAT payment regime, under which from 1 January 2014 onwards VAT is to be paid by enterprises to the State only after actual receipt of payment. This special VAT payment regime is optional and all enterprises (old and new) may apply to join it, provided that their annual turnover does not exceed €500,000, irrespective of business activity.

Under **Law 4301/2014** (October 2014),<sup>22</sup> the rate of the excise duty on heating and lighting oil to be consumed from 15 October until 30 April every year is lowered from €330/kilolitre to €230/kilolitre.

Another provision of the same law formalises the agreement on the voluntary contribution of the Greek shipping community, whilst including some modifications to its payment. Specifically, the envisaged amount of €420 million is to be paid over the 2014-2017 period in four annual instalments of €105 million each. For the current year, the voluntary contribution is payable until end-October, while the last instalment will be paid until February 2017 and will be included in the 2016 government revenue.

**Law 4305/2014** (October 2014)<sup>23</sup> introduces, among other things, a number of provisions on

the settlement of tax arrears and on other tax issues. In more detail:

- A new scheme is provided for the payment of tax arrears, applying to all tax arrears until 1 October 2014. The deadline for applications to join the scheme is 31 March 2015. The minimum instalment amount is €50. Natural and legal persons with tax arrears of up to €1 million can apply. The number of instalments ranges from 12 to 100, at a favourable annual interest rate of 4.56% (against a previous rate of 8.75%). The first instalment is payable within three days from the filing of the application, while the deadline for the next instalments is the last working day of every next month. Finally, no income- or property-based eligibility criteria apply. Taxpayers have the option to either apply to join the new scheme or remain under the old scheme<sup>24</sup> with more favourable terms and conditions than those they currently enjoy.

- The implementation of the lowered VAT rate (13%) for restaurants and catering is extended until 31 December 2015.<sup>25</sup>

- The social solidarity levy on natural persons, reduced by 30%, was extended for fiscal years 2015 and 2016 as follows: 0% for incomes of up to €12,000, 0.7% from €12,001 to €20,000, 1.4% from €20,001 to €50,000, 2.1% from €50,001 to €100,000 and 2.8% for incomes of over €100,000.<sup>26</sup>

<sup>21</sup> “Special regime for VAT repayment after actual receipt of payment under Article 39.b of the VAT Code”.

<sup>22</sup> “Organisation of the legal form of religious communities and their associations in Greece and additional provisions within the fields of responsibility of the General Secretariat of Religious Affairs, and other provisions”.

<sup>23</sup> “Open access to public sector documents, information and data for re-use, amendments to Law 3448/2006 (Aæ 57), transposition of the provisions of Directive 2013/37/EU of the European Parliament and the Council into Greek law, further enhancement of transparency, provisions on the entry examination for the National School of Public Administration and Local Government, and other provisions”.

<sup>24</sup> Law 4152/2013, see *Annual Report 2013*, pp. 117-118.

<sup>25</sup> It was first introduced by Law 4172/2013 for the August-December 2013 period. Under Law 4224/2014, it was extended until 31 December 2014.

<sup>26</sup> A special solidarity levy was first introduced by Law 3986/2011 (see *Annual Report 2011*, p. 121) for fiscal years 2011-2015 (reporting periods 2010-2014) on incomes exceeding €12,000. Following the extension of the levy's effect, total implementation period came to seven years.

Furthermore, **Law 4316/2014** (December 2014)<sup>27</sup> introduces a number of tax incentives for those who wish to purchase new cars under the vehicle scrappage scheme, as well as for real estate owners, Athens Exchange investors, and construction companies. At the same time, pending issues in tax legislation are settled and rectified. Specifically:

- The time limit for the replacement of old-technology cars (vehicle scrappage scheme) with new private passenger cars of up to 2,000cc engine capacity is extended until 31 December 2015, with the current tax incentives remaining unchanged (exemption from, or reduction in, registration fees). This provision refers to cars that were first registered until 31 December 2001.

- Legal provisions regarding the taxation of profit realised on the transfer of securities (shares, bonds, derivatives, etc.) are amended. Specifically, the income generated from the above transactions is taxable as capital gains (at a rate of 15%) even if the taxpayer is professionally engaged in such activities. In particular for securities traded on regulated markets or on a multilateral trading facility, the capital gains tax applies to securities acquired after 1 January 2009.<sup>28</sup> Any capital losses of a given year from the transfer of derivatives are carried forward to be set off against future capital gains (over the next five years) from all kinds of securities.<sup>29</sup>

- The obligation of construction companies to pay VAT on newly built properties that have not been used in any way within four years from their completion is abolished.

- The period of prescription of tax cases ending on 31 December 2014 is extended by one year.

- Taxpayers are allowed to submit an original or amended real estate return (E9 Form) for the past five years without incurring any fine.

- Any change in the declared real estate data from 1 January 2014 onwards must be reported by filing an E9 Form within 30 days.

- The framework for the functioning and supervision of the local authorities' financial independence observatory, as currently in force, is substantially strengthened.<sup>30</sup> Over-indebted local authorities are only placed under a recovery plan on an instruction from the Observatory and following verification by the Minister of Interior.

<sup>27</sup> "Establishment of a dementia observatory, improvement of perinatal care, provisions on matters within the scope of the Ministry of Health, and other provisions."

<sup>28</sup> This was only applicable to listed shares.

<sup>29</sup> Capital losses were only set off against capital gains from the same kind of securities.

<sup>30</sup> The Observatory was established under Law 4111/2013, as amended by Law 4172/2013, its object being to assess and monitor budget implementation by all local authorities of the country (municipal and regional), as well as all legal persons established by them.



## VII MONEY, CREDIT, BANKS AND INSURANCE COMPANIES<sup>1</sup>

*The most important challenge that the Greek banking sector still has to address is that of non-performing loans (NPLs). Following further refinement of the relevant regulatory framework in the course of 2014, banks for their part will have to ensure a more effective management of their troubled assets. The problem of non-performing loans remains one of the principal reasons behind a weak credit expansion in Greece, despite the economic recovery achieved and the improved conditions under which credit institutions raise funds to be channeled into the real economy.*

### OVERVIEW OF DEVELOPMENTS AND PROSPECTS

In 2014 there have been no significant net deposit outflows, except in December, which is explained by the fact that it was a pre-election period. Maintaining an environment of confidence and rising economic activity as a result of economic recovery had an upward effect on deposits, while the decline in deposit rates had a downward effect. Overall, the average level of deposits of the private non-financial sector remained unchanged between 2013 and 2014.

Recapitalisation and restructuring of the banking system in 2014 and in previous years and, more generally, improved macroeconomic conditions contributed to an enhanced supply and demand for bank credit. This contained the annual rates of decline of the various components of credit expansion to the private sector. However, banks' credit activities remain limited due to the impact of remaining uncertainties, as well as the very large stock of NPLs.

In this context, banks maintained high credit risk provisions to ensure that the coverage of NPLs would reach 55%. Despite the significant improvement in their operating results (January-September 2014) following the rationalisation of operating costs as a result of the restructuring in the banking sector and the lower deposit rates, and despite the favourable effect of the deferred tax credit, banks

recorded after tax losses, due to the large amount of such provisions.

In the course of 2014, progress was made in laying out the regulatory framework on the management of NPLs, by (a) the preparation of a relevant Code of Conduct by the Bank of Greece, and (b) the adoption of an Executive Committee Act, also by the Bank of Greece, setting out the obligations of banks arising from prudential supervision with regard to the management of non-performing loans and (c) the adoption of a law on the settlement of bank debt of sole proprietors and enterprises. The management of troubled assets, which could be carried out by a specialised entity, would help to reduce the adverse effects of these assets on banks' ability to finance sound entrepreneurship.

In early 2014, the results of the stress test carried out by the Bank of Greece were released, thus, along with the decline in government bond yields, facilitating banks to raise funds from capital markets. Towards the end of the year the Comprehensive Assessment of the ECB was completed by reaffirming the adequacy of the capital base of Greek banks. Subsequently, on 4 November the Single Supervisory Mechanism was launched, under which the ECB will be cooperating with competent national authorities for the purposes of exercising prudential supervision of the banking system in the euro area. As part of the Single Supervisory Mechanism and also as the competent authority for the macroprudential supervision of the Greek financial system, the Bank of Greece gears its action to safeguarding the stability of the banking system, protecting deposits and creating viable and well-capitalised credit institutions, while at the same time maintaining healthy competition. The Bank also supervises private insurance undertakings and ensures that they are aligned with the requirements of the European supervisory framework "Solvency II".

<sup>1</sup> The cut-off date for information and data used in this Chapter is 16 February 2015.



Finally, with regard to interest rate developments, deposit rates and interest rates on many loan categories continued their downward course in 2014. The lack of uncertainty shocks, during most of the year, contributed to a decline in deposit rates. Combined with (a) lower cost of refinancing by the Bank of Greece, (b) lower interbank rates, (c) mitigated credit risk, and (d) programmes run by the Hellenic Fund for Entrepreneurship and Development (ETEAN), the EIB etc., this decline contributed to the lower bank financing costs for many, although not all, creditors. Indeed, upward pressure was exerted on some bank lending rates, e.g. on loans for house purchase, explained by the rise in loan demand, as well as by the effort of banks to cover losses from NPLs.

## I DEVELOPMENTS IN DEPOSITS

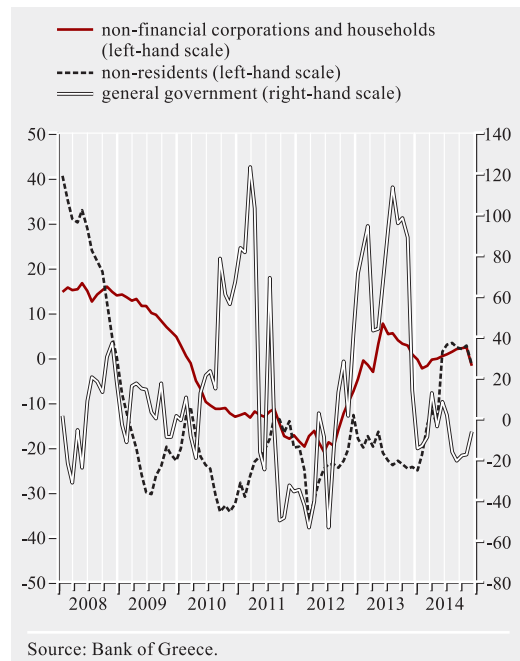
For six (not consecutive) months in 2014, net inflows were recorded in bank deposits by the private non-financial sector<sup>2</sup> and net outflows for the other six. However, the total amount of net monthly deposit outflows outweighed the total amount of net monthly inflows by about €2.8 billion. As a GDP percentage, these deposits are expected to increase on an average annual basis in 2014 compared with the previous year.

With regard to annual growth rates, term deposits by households decelerated, while in general the growth rate of term deposits by non-financial corporations as well as the growth rate of overnight deposits (by both non-financial corporations and households) seem to have accelerated compared with 2013 (see Chart VII.1).

Overall, the annual growth rate of general government deposits weakened in the course of 2014 vis-à-vis 2013. This development mostly reflects the fact that principal payments by the State were higher in 2014 than in 2013, while the assessment of the Economic Adjustment Programme was not concluded and, thus, the relevant loan instalments were not disbursed

**Chart VII.1 Sectoral breakdown of deposits with domestic credit institutions (January 2008-December 2014)**

(annual percentage changes)



and there was no inflow of loan funds provided by Greece's international lenders.

The estimated increase in the deposits of the non-financial sector as a percentage of GDP between 2013 and 2014 occurred despite the fall in deposit rates and reflects increased demand for money, which is necessary to finance the increased volume of transactions resulting from the entry of the Greek economy in a real GDP recovery phase.

This is confirmed by the accelerated annual growth of overnight deposits by both non-financial corporations and households – which also increased as a percentage of GDP between 2013 and 2014. This is also confirmed by the increased share of overnight deposits (from 37.3% in 2013 to 38.4% in 2014), which are primarily used in financing transactions, in total deposits by the non-financial sector.

<sup>2</sup> For the purposes of deposit statistics, this sector comprises non-financial corporations and households.

## 2 DEVELOPMENTS IN BANK FINANCING TO THE PRIVATE SECTOR AND THE GENERAL GOVERNMENT

Bank credit to non-financial corporations, sole proprietors, unincorporated partnerships and households continued to decline in 2014.

However, the decline of bank credit (on an annual basis) to both non-financial corporations and households weakened (see Chart VII.2). The annual growth rate of bank credit to non-financial corporations averaged -4.7% in the fourth quarter of 2013 and -4.4% in 2014 while it averaged -3.6% in 2013 and fell to -3.1% in 2014 as regards loans to households.<sup>3</sup>

Finally, the annual growth of bank credit to sole proprietors and unincorporated partnerships, which had already turned positive at end-2013, remained positive almost throughout 2014.

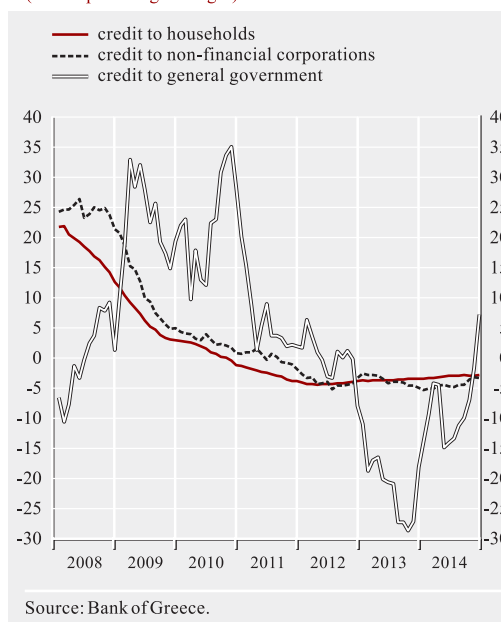
These developments suggest an improvement (i.e. a weakened decline or even an increase) in both supply and demand of bank credit, as also indicated by the bank lending survey, the results of which are analysed below. In addition, developments in the annual growth rates of bank credit to the private non-financial sector<sup>4</sup> of the Greek economy reflect the impact of some technical factors.<sup>5</sup>

Undoubtedly, the recapitalisation and restructuring of the Greek banking system in the past few years had a favourable impact on banks' ability to extend credit. However, the accumulation of a large stock of NPLs in banks' balance sheets leads to a reduction in the supply of new lending through various channels.

With regard to credit demand, the further improvement in macroeconomic conditions, as well as in the microeconomic environment in Greece during 2014 justifies in principle a containment of the decline or even an increase in demand.

**Chart VII.2 Evolution of bank credit  
(January 2008-December 2014)**

(annual percentage changes)



Source: Bank of Greece.

The annual rate of decline in bank credit to the general government<sup>6</sup> also slowed down in 2014 compared with 2013 (-8.1% against -21% respectively).

<sup>3</sup> The decline in the annual growth rate of consumer credit weakened more markedly (from -5% in 2013 to -2.9% in 2014), while the growth rate of loans for house purchase remained broadly stable (-3.2%).

<sup>4</sup> For the purposes of credit statistics, this sector comprises non-financial corporations, sole proprietors and unincorporated partnerships, and households.

<sup>5</sup> The annual growth rates of credit aggregates are calculated on the basis of net bank credit flows. The monthly net bank credit flow, i.e. the spread between the amount of new loan disbursements and the amount of capital payments on existing loans within a particular month, increases not only when new lending rises, but also when the flow of capital payments by borrowers to banks falls. Similarly, the monthly net bank credit flow can become less negative and therefore the annual growth rates of credit aggregates can improve accordingly, when the flow of capital payments by borrowers to banks decreases. Given that the stock of NPLs has been rising for several years (and that the amount of loan write-offs has not been rising proportionally), it cannot be ruled out that the observed slower decline in the annual growth rates, particularly in loan categories with high NPL rates – such as consumer loans and loans to small enterprises, some of which are classified under loans to sole proprietors and unincorporated partnerships – can be partly attributed to a lower flow of capital payments by borrowers to banks. This slower decline results from the fact that the stock of existing loans is not renewed by new lending, as well as from the rising share of existing debt that is not serviced properly.

<sup>6</sup> It is not influenced either by the progressive repayment of loans extended in the past by the Bank of Greece to the Hellenic Republic or by any transactions by the Bank of Greece on government securities.

The share of credit to the general government in total credit expansion declined (annual average 2008: 16.6%, 2013: 13.4%, 2014: 13.0%). The decline in the share of bank credit absorbed by the general government shows that, as the State's borrowing needs are covered mostly by Greece's international creditors, domestic banking resources are released to be used for financing the private sector of the Greek economy.

### 3 THE BANK LENDING SURVEY FOR 2014 IN GREECE

The Bank Lending Survey is conducted by the Eurosystem on a quarterly basis and provides valuable information on bank credit demand and supply conditions in Monetary Union member countries. The survey questionnaire is answered by a representative sample of domestic banks. Responses by individual banks are aggregated and then analysed.<sup>7</sup>

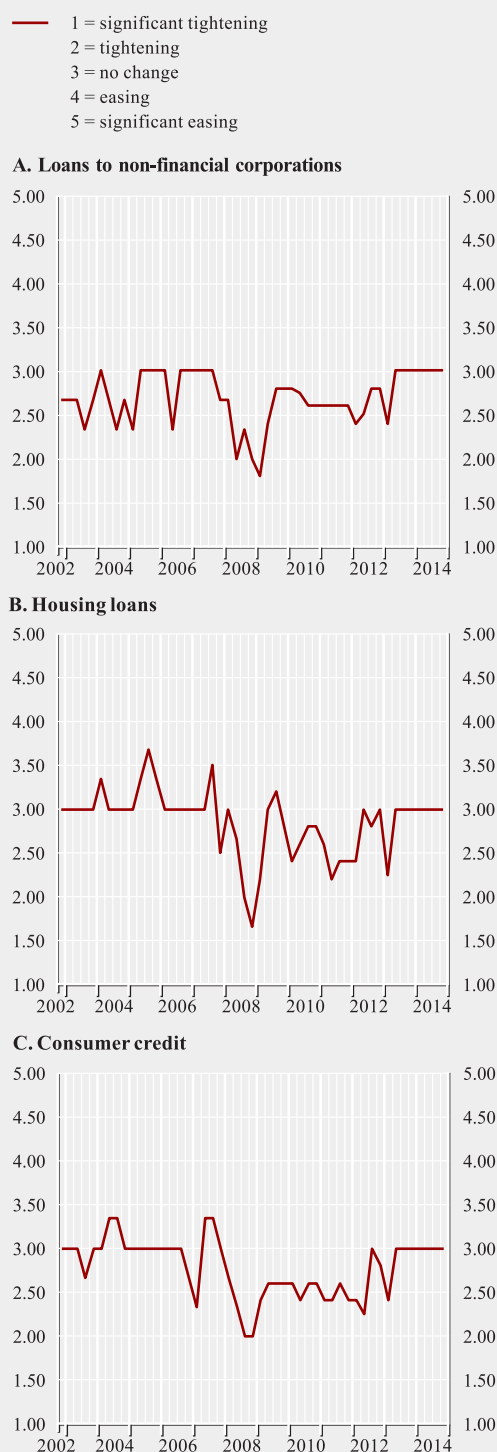
The responses of Greek banks show that trends typical in previous years, i.e. during the global financial crisis (2007-2008) and at the peak of the crisis in Greece (2009-2012), indicating a decline in credit supply and demand, have now come to an end. For a number of quarters, there have been no signs of revival of these trends. By contrast, on the basis of the responses from banks in the sample, lending supply and demand conditions have been either stable or clearly expansionary, respectively.

In particular, the tightening of credit standards has come to an end<sup>8</sup> across all loan categories

<sup>7</sup> Various aggregation methods can be used. In the present report we have used the average of the responses of Greek banks (on the basis of a scale from 1 to 5), as opposed to the "net percentage", i.e. the difference between the percentage of respondents in the sample who responded affirmatively/negatively to the particular question and the percentage who responded negatively/affirmatively, respectively.

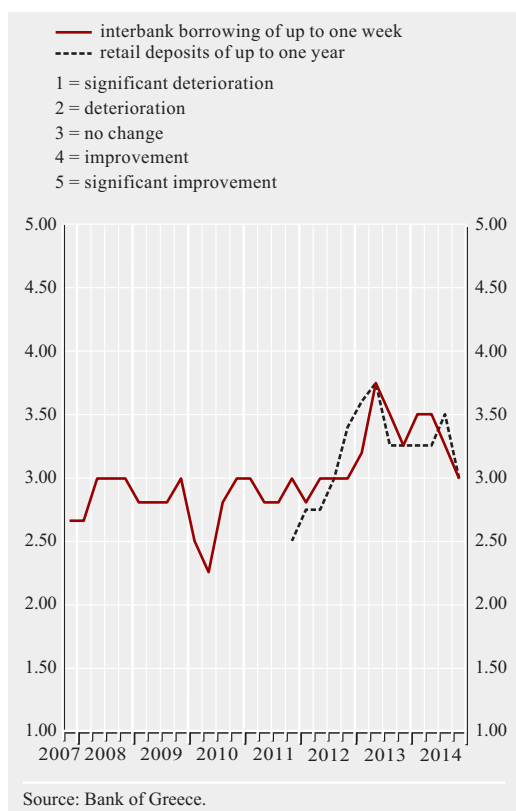
<sup>8</sup> The Survey defines credit standards as the internal guidelines or criteria that reflect a bank's lending policy. They are the written and unwritten criteria, or other practices related to this policy, which define (a) the types of loan a bank considers desirable and undesirable, (b) the bank's designated geographic priorities, (c) collateral deemed acceptable and unacceptable, etc. The diffusion index compiled in the framework of the Survey regarding credit standards is commonly used (e.g. for the purposes of empirical studies) as a representative variable summarising lending supply conditions.

**Chart VII.3 Quarter-on-quarter change in banks' credit standards (Q4 2002 - Q4 2014)**



Source: Bank of Greece.

**Chart VII.4 Ease of attracting retail and interbank deposits: quarter-on-quarter changes (Q4 2007 - Q4 2014)**



in the Survey (see Chart VII.3A, B and C). The Survey attributes this development to the elimination of the negative effect on credit supply from pressures on banks' capital base and liquidity exerted intermittently in the period from end- 2007 to early 2013 (see Chart VII.4). These findings are in line with the net inflow of deposits in the first eleven months of 2014, according to the monetary and banking statistics compiled and released by the Bank of Greece (see Section 1 above). Furthermore, as analysed in Section 6, 2014 saw the conclusion of the recapitalisation of credit institutions, with the contribution of funds from private shareholders. Banks also had the opportunity to raise funds by issuing bonds, while they also continued to obtain funding from the cross-border interbank market against collateral in the form of EFSF bonds and other debt securities.

**Chart VII.5 The impact of the macroeconomic environment on credit standards for loans to non-financial corporations (Q4 2002 - Q4 2014)**



According to the Survey, the negative impact on banks' credit behaviour exerted by the macroeconomic environment (see Chart VII.5), credit risk estimates and developments in the housing market (see Chart VII.7) has ceased after a number of years.

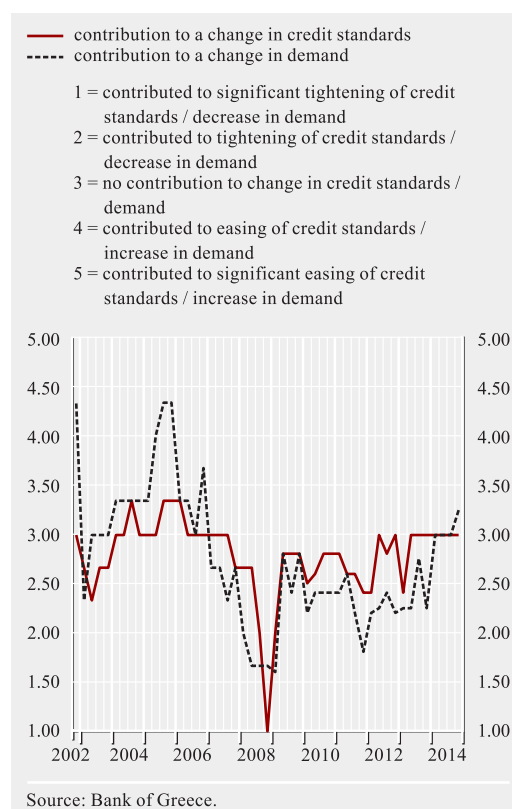
The recent more favourable developments in the supply of bank credit are illustrated by (a) the interruption of the trend of widening interest rate margins in most loan categories and (b) the interruption of the trend observed in the years prior to 2013 of a reduced average level and duration of loans (in the case of loans for house purchase, the loan-to-value had declined). With regard to loans to households, the trend of banks to request increasingly higher collateral came to a halt, while the tightening of loan covenants in business loans bottomed out.

The trend of contracting demand for housing loans and consumer credit observed for a number of years also came to a halt (see Chart VII.6 A-C). According to the responses of

**Chart VII.6 Quarter-on-quarter changes in loan demand, as estimated by banks (Q4 2002 - Q4 2014)**

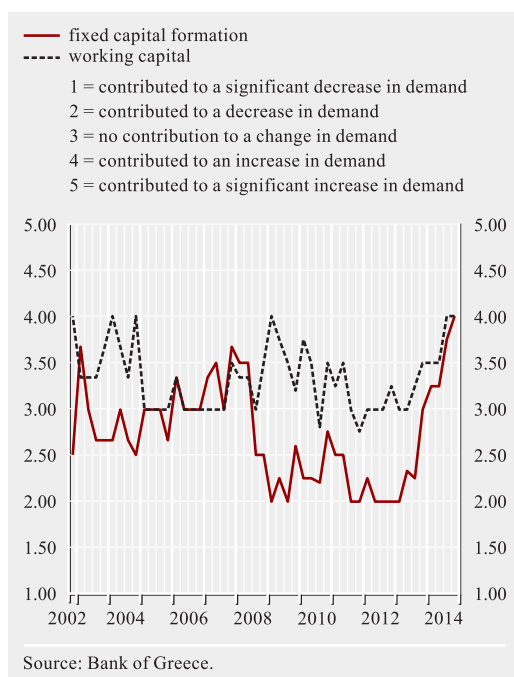


**Chart VII.7 The impact of expectations regarding the evolution of the real estate market on demand and supply of housing loans (Q4 2002 - Q4 2014)**



banks, this was in turn the result of the discontinuation of past trends, namely: negative effect of expectations regarding real estate price developments (see Chart VII.7) and negative effect on credit demand from the decline in consumer confidence, as well as the lower household expenditure on durable consumer goods. For the first time in over five years, according to the estimates in the sample group of banks, developments in consumer confidence have ceased to discourage households' recourse to bank lending and, on the contrary, supported a rise in demand for credit. With regard to demand for business loans, the negative effect resulting from the fact that investment activity and business restructuring through mergers and acquisitions remained very limited has come to a halt (see Chart VII.8). These findings are consistent with a

**Chart VII.8 Factors determining demand for business loans: needs for fixed capital formation and working capital (Q4 2002 - Q4 2014)**



recovery in economic activity and reduced uncertainty in the Greek economy, both supporting loan demand. In particular, they are consistent with (a) increased investment in transport equipment and machinery in the first nine months of 2014, following years of contraction, (b) increased consumer confidence in Greece in 2014 on the basis of the relevant European Commission indicator, (c) the recent positive changes in the volume of retail sales, as well as the increased private consumption in the first three quarters of 2014.

Finally, in the context of an *ad hoc* question asked in the third and fourth quarters of 2014, the Greek sample responded that the conduct of the targeted long-term refinancing operations (TLTROs) is expected to trigger a rise in credit expansion, particularly towards non-financial corporations. According to the estimates in the sample, however, these operations will only lead to a small improvement in credit standards and in bank lending terms and con-

ditions, while the conduct of the TLTROs is not expected to hold back to a considerable extent the pressures on the sample group of banks for further deleveraging.

In conclusion, the Bank Lending Survey presents a multitude of indications suggesting that a further deterioration of credit supply and demand conditions has been averted. On the contrary, conditions have stabilised and on some occasions sporadic or even recurrent indications of improvement have emerged. Certainly, this is the beginning of a revival of the domestic credit expansion to the private sector.

#### **4 THE RESULTS OF “SAFE” FOR GREEK SMEs, APRIL-SEPTEMBER 2014**

The Survey on the Access to Finance of euro area Enterprises (SAFE), which is conducted by the European Commission and the ECB on a biannual basis in euro area countries, reflects the views of enterprises regarding developments in their financial situation, external financing needs and the availability of financial resources. According to the responses given in all survey rounds, the issue of access to finance has been recognised by Greek enterprises as a major problem.

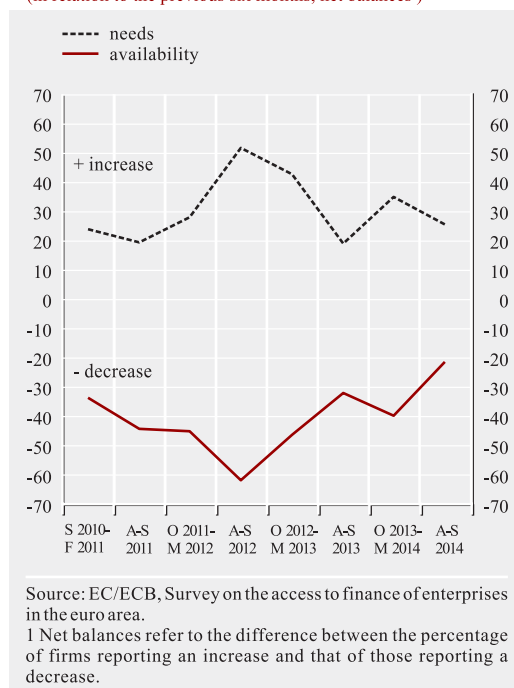
In more detail, Greek small and medium-sized enterprises (SMEs)<sup>9</sup> reported a considerable financing gap (see Chart VII.9), which had been widening up to September 2012. Thereafter, in the (three out of the four) past surveys the gap between the need for and the availability of bank loans contracted, mostly because the availability of bank loans declined at a slower pace. The need to replenish inventories (stocks) and working capital has been reported as the main purpose of external financing of Greek SMEs.

<sup>9</sup> The sample of Greek enterprises has progressively enlarged since the September 2010-February 2011 survey and has reached 500 enterprises from the sectors of manufacturing, construction, trade and services.



**Chart VII.9 Needs and availability of bank loans to SMEs in Greece**

(in relation to the previous six months, net balances<sup>1</sup>)

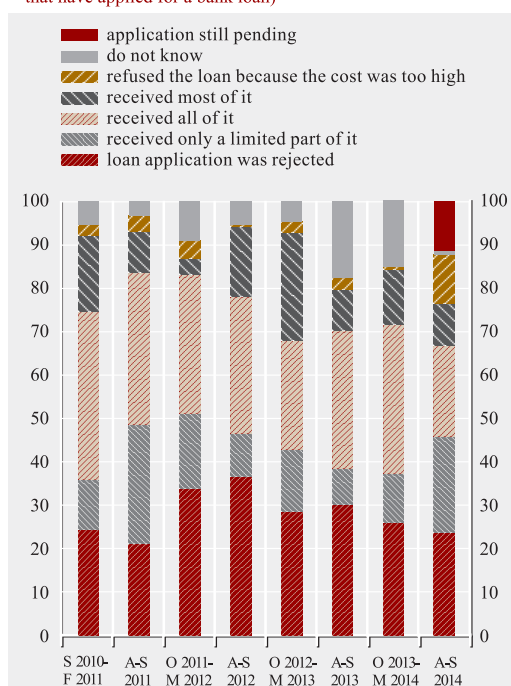


However, the percentage of enterprises that applied for a bank loan was generally low and declined from 40% in the period from October 2010 to March 2011 to 21% and 18% in the last two surveys – percentages that were among the lowest in the euro area. The main reason that reportedly deterred enterprises from filing for a loan was the fear of rejection by the bank (29% from 22% in the previous six-month period from October 2013 to March 2014). This reflects the unfavourable financial data for many enterprises, as well as the cautious stance of Greek banks. On the other hand, the percentage of banks reporting that they did not apply for a loan owing to sufficient internal funds has been enhanced progressively since end-2012 and reached 26% in the last Survey (up from 23% in the previous Survey), although it is still very low compared with the euro area average.

According to the latest Survey, the percentage of loan applications that were fully successful stood at 21%, the percentage of loan applica-

**Chart VII.10 Outcome of applications for bank loans in Greece<sup>1</sup>**

(over the preceeding six months, as a percentage of enterprises that have applied for a bank loan)



tions that were rejected stood at 24%, while the April-September 2014 period saw a very increased percentage of enterprises reporting that, although their application was approved, they ultimately refused to take the loan because the cost was too high (11%) (see Chart VII.10).

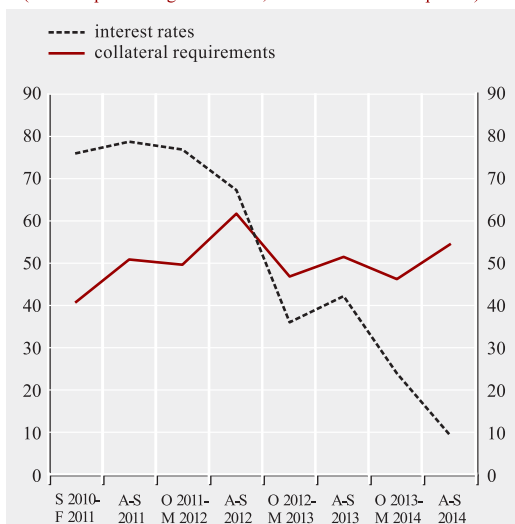
In addition to the reduced availability of bank loans, from 2010 to March 2012 the majority of Greek enterprises encountered rising interest rates; their share started to decline significantly from end-2012 and came to 9% in the last survey (down from 24%) (see Chart VII.11). This development has been supported by the corporate financing programmes of the European Investment Bank (EIB) and other entities.<sup>10</sup>

<sup>10</sup> The percentage of enterprises in the sample reporting to have availed themselves of guarantees or subsidised bank loans stood at 8% in the last two surveys.



**Chart VII.11 Change in interest rates and collateral requirements in Greece**

(over the preceding six months, net balances of enterprises<sup>1</sup>)



Source: EC/ECB, Survey on the access to finance of enterprises in the euro area.

<sup>1</sup> Net balances refer to the difference between the percentage of firms reporting an increase and that of those reporting a decrease.

Concerning loan terms and conditions other than interest rates, collateral required by lending banks (including marketable assets, prenotation of mortgage or personal guarantees) has been increasing in all Surveys from 2011 onwards and remained at high levels – the net percentage of enterprises that encountered tightening of collateral requirements reached 54% (up from 46%) in the latest Survey and remains the highest in the euro area.

In general, the last Survey conveys a less negative picture compared to the past. The responses of enterprises in most questions concerning the availability of and access to bank credit reveal that the deteriorating trend in financial conditions has been contained. Indeed, many determinants of financial conditions have clearly improved.

## 5 DEVELOPMENTS IN BANK INTEREST RATES

In the course of 2014, interest rates on new term deposits followed a downward trend

(household deposit rate: 2013: 2.4%, 2014: 1.5%). Banks did not experience pressure from insisting deposit outflows and, thus, were able to reduce the interest rates they offered to depositors.<sup>11</sup>

As in the immediately preceding years, the average interest rate on new bank lending to non-financial corporations followed a downward course with fluctuations in 2014 and, overall, it declined slightly (2013: 6.2%, 2014: 5.8%). With regard to loans with fixed maturity (which are taken into account in calculating the average interest rate mentioned above), a clearly downward course was seen in interest rates on new lending of relatively small loans, namely: (a) under €250,000 (2013: 7.1%, 2014: 6.2%) and (b) between €250,000 and €1 million (2013: 6.2%, 2014: 5.5%).

Interest rates on new loans of over €1 million, which form the bulk of new corporate loans with fixed maturity, exhibited a relatively stronger volatility, but also declined slightly overall (2013: 5.8%, 2014: 5.5%). Finally, interest rates on new loans without fixed maturity to non-financial corporations (e.g. overdrafts on current accounts) also followed a downward trend in 2014, as in the immediately preceding years (2013: 7.4%, 2014: 6.9%).

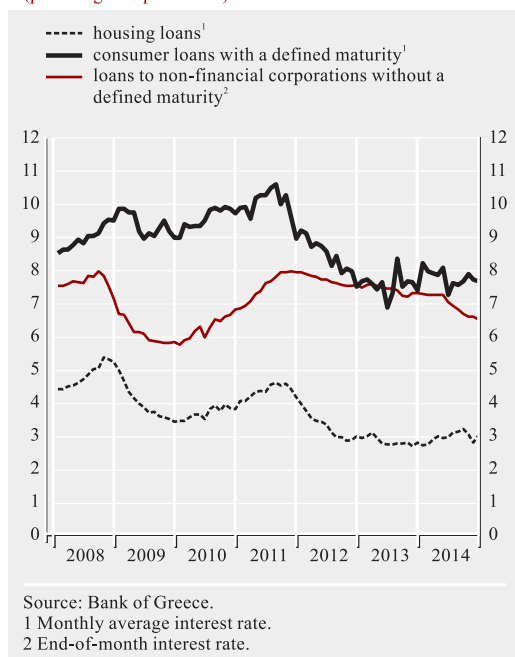
The course of interest rates on new loans for house purchase of the immediately previous years was reversed and an upward trend was exhibited in 2014 (average interest rate in Q4 2013: 2.7%, 2014: 2.9%) (see Chart VII.12). However, the change was only marginal.

With regard to consumer credit, the weighted average interest rates on new consumer loans either without (2013: 14.4%, 2014: 14.5%) or with a fixed maturity (2013: 7.5%, 2014: 7.8%) increased slightly in 2014.

<sup>11</sup> This development was supported by the reduced cost of market-based financing, including financing from the money market and, for a large part of the year, bond and stock markets, as well as by the reduced cost of central bank financing, which constitute to some extent alternative sources of financing for banks.

**Chart VII.12 Interest rates on new loans  
(January 2008 - December 2014)**

(percentages % per annum)



The interest rate on overall bank credit to households, which is a weighted average of interest rates on housing loans, as well as on various forms of consumer credit, reversed its course in previous years and followed an upward trend in 2014 (2013: 4.8%, Q4 2013: 4.7%, 2014: 4.8%).

However, in real terms interest rates on bank lending to both non-financial corporations and households have followed a downward trend already since the fourth quarter of 2013, mostly due to the fact that HICP inflation progressively turned less negative. Nevertheless, compared with the previous years, the annual average lending rate for 2014 (amounting to 6-7%) remained higher. The fact that real interest rates are at a historical high has a significant dampening effect on aggregate spending.<sup>12</sup>

With regard to the factors that influenced developments in bank lending rates, the reduced key Eurosystem rates, the decline in interbank rates, the reduced cost for issuing bonds, the zero recourse to Emergency Liq-

uidity Assistance by the Bank of Greece and, finally, the decline in the cost of accumulating retail deposits, have all put into place the conditions that allow banks to reduce interest rates on credit to the real economy. Co-financing of bank loans and the guarantees given by the National Hellenic Fund for Entrepreneurship and Development (ETEAN) and the European Investment Bank (EIB) to cover loans extended by commercial banks had the same effect. Besides, the improvement of macroeconomic and microeconomic conditions in the Greek economy should have reduced credit risk premia that are incorporated in lending rates.

On the other hand, the need of banks to compensate for the loss of income from troubled assets by maintaining high levels of intermediation margins exerts upward pressure on their new lending rates. Banks' lending rates are also influenced by developments in loan demand. As already mentioned (see sections 2 and 3 above), demand for all loan categories increased in 2014, a development that also supports upward pressure on bank interest rates.

## 6 DEVELOPMENTS IN THE BANKING SECTOR

Banks' operating results improved further in January-September 2014 compared with the corresponding period in 2013 (see Table VII.1). Operating income was supported by reduced interest payments as a result of the significant decline in interest rates on term deposits and the zero recourse to Emergency Liquidity Assistance by the Bank of Greece. Income from non-interest income operations exhibited a

<sup>12</sup> It should be noted that in the present conjuncture the expected inflation rate, which should be the basis for properly calculating the real interest rate, would exceed the rate used to deflate nominal interest rates. This is reasonable given that: (a) economic activity is expected to accelerate; (b) the wage reductions that were recently deemed necessary to improve competitiveness and the fiscal position will not have to be repeated; and (c) Greece is exiting the crisis conditions that caused the temporary downward course of the general level of prices; while (d) the stance of the single monetary policy is increasingly easing and the exchange rate of the euro is weakening. Therefore, it is likely that the simple calculation we have followed leads to an overestimation of the real interest rate in recent years.

**Table VII.1 Financial results of Greek commercial banks and banking groups  
(January-September 2013 - January-September 2014)**

(million euro)

	Banks			Banking groups		
	Jan.-Sept. 2013	Jan.-Sept. 2014	Change (%)	Jan.-Sept. 2013	Jan.-Sept. 2014	Change %
<b>Operating income</b>	<b>4,320</b>	<b>5,249</b>	<b>21.5</b>	<b>7,525</b>	<b>8,086</b>	<b>7.5</b>
Net interest income	3,434	4,408	28.4	5,792	6,447	11.3
– Interest income	8,392	8,184	-2.5	12,191	11,456	-6.0
– Interest expenses	-4,958	-3,775	-23.9	-6,399	-5,009	-21.7
Net non-interest income	886	841	-5.2	1,733	1,639	-5.4
– Net fee income	458	505	10.3	1,063	1,119	5.3
– Income from financial operations	408	70	-83.0	464	91	-80.3
– Other income	20	265	1,249.0	206	429	108.6
<b>Operating costs</b>	<b>-3,233</b>	<b>-3,243</b>	<b>0.3</b>	<b>-4,918</b>	<b>-4,728</b>	<b>-3.9</b>
Staff costs	-1,870	-1,803	-3.6	-2,733	-2,552	-6.6
Administrative costs	-1,140	-1,194	4.7	-1,755	-1,748	-0.4
Depreciation	-222	-246	10.6	-431	-428	-0.7
<b>Net income (operating income less costs)</b>	<b>1,088</b>	<b>2,006</b>	<b>84.4</b>	<b>2,606</b>	<b>3,358</b>	<b>28.9</b>
Provisions for credit risk	-4,461	-6,121	37.2	-5,390	-7,083	31.4
Other impairment losses <sup>1</sup>	-501	-224	-55.3	-329	-155	-53.0
Non-recurring profits/losses <sup>2</sup>	6,700	53	-99.2	6,985	95	-98.6
<b>Pre-tax profits</b>	<b>2,827</b>	<b>-4,285</b>	<b>-</b>	<b>3,872</b>	<b>-3,785</b>	<b>-</b>
Taxes	2,398	3,129	30.5	2,223	2,986	34.3
Profits/losses from discontinued operations	1	-52	-	-66	-224	239.6
<b>After tax profits</b>	<b>5,226</b>	<b>-1,208</b>	<b>-</b>	<b>6,029</b>	<b>-1,023</b>	<b>-</b>

Source: Financial statements of Greek commercial banks.

1 Impairment losses on securities as well as on tangible and intangible assets.

2 In the first nine months of 2013, non-recurring profits were mainly attributed to the positive effect from the acquisition of banks by core banks (negative goodwill).

small decline. Operating expenses shrank, reflecting the benefits from the voluntary exit plans implemented in 2013 and the ongoing rationalisation of the network of branches. However, net income was not sufficient to cover credit risk provisions, which were significantly increased by banks in their effort to enhance resilience. Despite the positive effect of the Deferred Tax Assets allowance, banks and banking groups recorded after tax losses.

The quality of banks' loan portfolios deteriorated further, although the growth rate of the outstanding balance of NPLs declined significantly in the course of the year. The NPL ratio stood at 34.2% at end-September 2014 from

31.9% at end-December 2013. The deterioration of the NPL ratio applies to all loan categories: housing loans (September 2014: 28.1%, December 2013: 26.1%), consumer credit (September 2014: 49.5%, December 2013: 47.3%) and business loans (September 2014: 34.4%, December 2013: 31.8%).<sup>13</sup>

However, the NPL coverage ratio rose significantly (September 2014: 54%, December 2013: 49.3%), as banks followed a conservative policy on credit risk provisions, and rightly so.

<sup>13</sup> In particular with regard to the characteristics of large non-performing corporate loans, see Special Feature VI.2, in *Monetary Policy Interim Report 2014*, Bank of Greece, December 2014.

The increase in loan write-offs marks a positive development (€446 million in the first nine months of 2014, against €363 million for 2013 as a whole), which will contribute to the gradual restructuring of their loan portfolio.

With regard to capital adequacy, the Common Equity Tier 1 (CET1) ratio on a consolidated basis improved significantly and stood at 15.2% in September 2014 (from 12% in December 2013), while the Capital Adequacy Ratio reached 15.4% in 2014 (from 13.4% in December 2013), mostly as a result of the capital increases by the four systemic banks.

In particular, after end-March 2014, when the results of the stress test conducted by the Bank of Greece were released,<sup>14</sup> within a period of two months the four systemic banks carried out capital increases for a total amount of €8.3 billion, attracting private investors. Thus, they covered their capital needs, as assessed by the stress test (€6.4 billion under the Baseline Scenario and €9.4 billion under the Adverse Scenario for the period from June 2013 to December 2016). Two banks repurchased the preference shares acquired by the Greek State in the context of the capital injection provided under Law 3723/2008. Moreover, Greek markets regained access to global bond markets by issuing senior debt. These developments reflect the particularly positive market response to the results of the stress test, as the latter was carried out in a transparent and conservative way.

Indeed, the Comprehensive Assessment that was carried out subsequently by the European Central Bank showed that the capital increases and restructuring plans implemented by the four systemic banks have greatly strengthened their capital position. According to the results of the Comprehensive Assessment released on 26 October 2014, three of the four Greek credit institutions that took part in the Comprehensive Assessment have no capital shortfall under the dynamic balance sheet assumption and the fourth credit institution (Eurobank Ergasias) has practically no shortfall.<sup>15</sup> In spite of these

positive results, the Bank of Greece considers that banks should keep their capital adequacy ratios at levels well above the regulatory minimum for precautionary reasons.

Upon the completion of the Comprehensive Assessment, on 4 November 2014 the Single Supervisory Mechanism (SSM) became operational. It constitutes the new banking supervision system and comprises a supranational authority, the ECB, and the competent national authorities of the participating countries. All these authorities cooperate on the basis of a single set of rules. The ECB directly supervises 120 significant banking groups, accounting for almost 85% of the total banking assets in the euro area. These include the four Greek systemic banks. Supervision involves examining banks' lending, borrowing and investment activities and overall compliance with European and national prudential regulation. In the context of day-to-day supervision, Joint Supervisory Teams, comprising staff from both the ECB and the national supervisors, have been established for each systemic bank.

Furthermore, the ECB monitors and oversees the supervision of smaller banks carried out by national supervisory authorities and sets out supervisory standards in close cooperation with national authorities. It can also take on the direct supervision of any bank in a participating Member State to ensure the consistent application of supervisory rules. The decision to grant or withdraw the authorisation of any credit institution is now taken by the ECB, which assesses data following a proposal of the Bank of Greece on both significant and less significant credit institutions.

At ECB level, supervisory tasks are exercised by a specifically established Supervisory Board, composed by the Chair, the Vice-Chair and four ECB representatives, as well as one rep-

<sup>14</sup> 2013 Stress test of the Greek banking sector, Bank of Greece, March 2014.

<sup>15</sup> For more details on the Comprehensive Assessment, see *Monetary Policy Interim Report 2014*, Bank of Greece, December 2014.

representative of each supervisory authority of the participating EU Member States.

The national supervisory authorities, in addition to participating in the Joint Supervisory Teams and supervising smaller banks, are also responsible for consumer protection, prevention of money laundering, payment services and branches of banks from third countries.

The major challenges facing the banking sector on the Greek economy's path to recovery, following successful restructuring and recapitalisation, are as follows:

- redesigning banks' business in line with the emerging new economic conditions;
- diversifying banks' funding sources;
- managing troubled assets (i.e. NPLs and forborne loans); and
- ensuring that the banking industry contributes to the overall effort to overhaul the real economy.

In 2014, banks accelerated the restructuring of their business models, focusing on: (a) rationalising operating costs and increasing operating profits; (b) shedding non-core business; and (c) redesigning activities abroad. Steps in this context include the voluntary retirement plans carried out by two banks, the sale of subsidiaries active in real estate management and deleveraging by reducing the loan portfolio in the countries of South Eastern Europe. Moreover, banks agreed with the European Commission their restructuring plans, which they are called upon to implement in a consistent way in the years to come.

With regard to funding sources, in the first half of 2014 Greek banks had unobstructed access to interbank funding and, as already mentioned, issued (unsecured) bank bonds in global markets,<sup>16</sup> while at the same time zeroing their recourse to the Emergency Liquidity Assistance provided by the Bank of Greece.

They also obtained medium-term financing on favourable terms in the context of the Targeted Longer Term Refinancing Operations (TLTROs).

However, political uncertainty was associated with a decline in deposits towards the end of 2014 and a widening of Greek government bond spreads, which raised the cost of any further issues to prohibitive levels. As soon as conditions allow it, Greek banks will have to consider the possibility of issuing covered bonds and securitising claims and bank bonds in order to reduce their dependence on the Eurosystem and raise the funds that are necessary to ensure that more new lending will be provided in the medium term.

The efficient management of NPLs is of utmost importance for banks to return to profitability. It will have positive chain effects on credit to healthy entrepreneurship, as banks' capacity to provide new credit is interrelated with the smooth and timely repayment of existing loans.

The management of NPLs should be such as not to give rise to moral hazard, namely it should not provide incentives for borrowers to default on their debts, when they are able to meet their liabilities. Moreover, restructuring arrangements for business loans should take into account the viability of business plans in order to ensure that resources are not committed to businesses with no prospect of viability, as this would restrict financing to healthy enterprises that are able to help economic growth and job creation. In this framework, Law 4307/2014 was adopted, which provides incentives for debt restructuring to small businesses and sole proprietors, and sets out extraordinary debt settlement procedures for enterprises.

Moreover, in the beginning of 2015 a Code of Conduct for the management of non-per-

<sup>16</sup> In this regard, foreign investment funds and institutional investors covered almost entirely their capital increases.

forming private debt entered into force. The Code was prepared by the Bank of Greece pursuant to the provisions of Law 4224/2013, which provides for the establishment of a permanent mechanism for resolving non-performing private debt. The Code was drafted on the basis of best international practices, the relevant framework in other EU Member States facing similar challenges (Ireland, Cyprus, Portugal), as well as the proposals put forward by stakeholders (e.g. banks, consumer associations) in the context of a consultation. The Code built upon the definitions of cooperating borrower and reasonable living expenses given by the Government Council. It describes the steps, time limits and information that must be provided as a minimum by both banks and borrowers to enable a proper assessment of risks and the repayment capacity of each borrower. The Code sets the aim of finding the most appropriate solution in each case and, if possible, alleviating the burden on borrowers who demonstrably are temporarily facing difficulties in repaying their debts.

A non-exhaustive list of solutions was put forward, including the repayment of interest only or of a reduced amount of amortisation payments during a short-term period, granting a grace period, deferring the payment of one or more instalments (skip payment(s)), settlement of the amount in arrears, etc. With regard to disputes arising from the implementation of the Code and for the purposes of seeking an out-of-court settlement of such disputes, borrowers were given the right to have recourse to the Hellenic Consumers' Ombudsman, designated as the third entity involved pursuant to Law 4224/2013. Disputes that could not be settled in accordance with the above shall be referred to the courts of law for a resolution on their merits.

In parallel, over the course of 2014, banks made the necessary organisational and operational changes that would enable a more intense management of NPLs, taking into account the supervisory framework for the management of loans in arrears and non-per-

forming loans set out in the Bank of Greece's Executive Committee Act No 42/30.5.2014.<sup>17</sup>

Along with effective management, an important factor in improving the collection of loan arrears in the Greek banking system lies in establishing positive growth rates (see Box VII.1). This would launch a self-sustaining process of reduction of troubled loans, as the repayment capacity of households and enterprises would improve.

In addition to the major challenge of managing loan arrears, another important effort that has already been undertaken aims at collecting claims of banks under liquidation. In the context of its supervisory role, the Bank of Greece has set out the specific regulatory framework underlying the operation of special liquidation procedures. It has promoted the enactment of significant institutional reforms and regulations aligned with the real needs of liquidation procedures, such as enabling liquidators to conclude loan forbearance agreements. Moreover, the Bank of Greece took the initiative to expedite, *inter alia*, the adoption of legislation on the establishment of a Special Liquidation Committee as an independent consulting body called upon to give its assent to requests of Special Liquidators. Furthermore, following instructions from the Bank of Greece, important work has been done concerning the return of debtors to negotiations and the improvement of the organisational structure of special liquidations, which resulted in an increased flow of debtors' requests for loan forbearance.

Proceeds from loans from the beginning of liquidations up to 31 December 2014 totaled €615.6 million on a cumulative basis (31 December 2013: €410.3 million), which is an important amount if account is taken of the fact that the 13 credit institutions under special liq-

<sup>17</sup> In brief, this Act requires banks to: (a) establish an independent arrears and NPLs management (ANPLM) function; (b) develop a separate, documented ANPLM strategy, the implementation of which will be supported by appropriate Management Information Systems (MIS) and procedures; and (c) establish regular reporting to the management of the credit institution and the Bank of Greece.



liquidation hold loan portfolios 96% of which are over 90 days in arrears. From total proceeds, an amount of €295.8 million has already been distributed to the Hellenic Financial Stability Fund and the Hellenic Deposit and Investment Guarantee Fund, while another €211 million has been approved for distribution.

Finally, it should be noted that the focus of special liquidation procedures has been on

achieving a more efficient and swift completion of their work, so as to limit costs and the length of procedures and, therefore, maximise the proceeds of liquidation. In parallel, the Bank of Greece continues to monitor the expenses of liquidators on a continuous basis, while consideration is given to the advisability and modalities of grouping individual or even all special liquidation procedures into a single procedure.

#### Box VII.1

##### NON-PERFORMING LOANS: KEY DETERMINANTS AND POLICY IMPLICATIONS

Over the past six years, the quality of banks' loan portfolios has worsened dramatically; this constitutes a major challenge for the Greek banking system. In Greece, the private sector NPL ratio (i.e. the ratio of non-performing loans to total loans to the private sector) came to 34.2% at end-September 2014 and is the highest throughout EU (see Chart A). The high and rising level of non-performing loans hampers the smooth functioning of the domestic banking system in many ways. There are various factors explaining the behaviour of NPLs. A substantial body of literature<sup>1</sup> confirms strong linkages between NPLs and variables such as gross domestic product (GDP), the rate of unemployment, or the interest rate margin. Also, the relationship of NPLs with (a) the bank's size and/or (b) several banking indicators (e.g. profitability or efficiency ratios, etc.) as well as (c) the skills and quality of the bank's management is explored.<sup>2</sup> Following the literature, the impact of macroeconomic, banking and behavioural variables on the path of private sector NPL ratio is examined (on a quarterly basis) between December 1999 and September 2014, thus also encompassing the crisis period.

An econometric exploration of the issue focuses on four key points: First, investigation of the role of economic activity in NPL developments; second, assessment of the extent to which factors other than GDP are also in play; third, review of the stability of the underlying relations during the crisis period; and fourth, projection of the future path of NPLs until end-2016.<sup>3</sup> The empirical analysis corroborates the theoretical assumption that the NPL ratio is affected by: (a) a change in GDP (negatively); (b) a change in unemployment (positively); and (c) the interest rate margin (positively).

The decline in GDP contributes to a rise in NPLs, as it negatively impacts on incomes (of both households and firms) and hence on borrowers' debt-servicing ability. Besides, at times of recession the value of borrowers' assets, which can be used as collateral (e.g. house value), tends to decline, thus making it more difficult to renew or refinance an existing loan as a result of banks' increased risk aversion. Furthermore, at times of economic upturn preceding a recession, credit

1 See, for instance, N. Klein (2013), "Non-Performing Loans in CESEE: Determinants and Impact on Macroeconomic Performance", IMF Working Paper 13/72; M. Quagliariello (2007), "Banks' riskiness over the business cycle: a panel analysis on Italian intermediaries", *Applied Financial Economics*, 17, 119-138.

2 For the Greek banking system, of particular relevance is the paper by Louzis, D.P., A.T. Vouldis, and V. Metaxas (2012), "Macroeconomic and Bank-Specific Determinants of Non-Performing Loans in Greece: A Comparative Study of Mortgage, Business and Consumer Loan Portfolios", *Journal of Banking and Finance*, 36, 1012-1027.

3 For the empirical analysis the method of a two-stage regression analysis was selected and the methodology of recursive coefficients was applied. Owing to the sample's peculiarities, account was taken of findings concerning the presence of a unit root in the series, as well as concerning a potential regime shift within the sample period, given the low (quarterly) frequency of the series.



standards tend to ease gradually, leading to loan approvals even for less creditworthy borrowers. Such borrowers are usually the first to face debt-servicing difficulties during an economic downturn. Conversely, when economic recovery is back on track, borrowers see an improvement in their incomes and, subsequently, in their loan repayment capacity.

Respectively, rising unemployment is associated with declining incomes, which limit households' debt-servicing capacity. Moreover, reduced household purchasing power also affects demand for goods and services and thus firms' sales, with a clear negative impact on the repayment of corporate loans. Turning to the interest rate margin, its widening, which is typically linked with rising lending rates, raises interest payments, i.e. the financial burden for borrowers, and tends to weaken their debt-servicing capacity.

At a second stage, the residuals of the first estimation are used as a dependent variable to exclude the impact of the aforementioned independent variables, and the impact of additional variables is explored.<sup>4</sup> Among the additional statistically significant variables, a downward effect on the NPL ratio is exerted by (a) the improvement of banks' efficiency ratio and (b) borrowers' willingness to meet their financial obligations.

Banks' increased efficiency contributes, on the one hand, to a better assessment and selection of loan applications and, on the other hand, to a more effective management of potential non-performing loans. Moreover, the recent restructuring of the banking sector, which enhanced efficiency in the functioning of credit institutions, helped improve the management of loans through a consolidation of portfolios with fewer banks.

The measure of borrowers' behavioural pattern is comparable, to the extent possible, to the degree of tax compliance on behalf of the economically active population.<sup>5</sup> The results suggest that a small part of the rise in NPLs is attributable to an "informed choice" on behalf of borrowers who have a sufficient stream of income to meet their debt obligations.

Lastly, the dynamics of the NPL ratio until end-2016 was estimated under the abovementioned empirical analysis, using a set of assumptions on the evolution of GDP, unemployment and the interest rate margin (see Chart A).

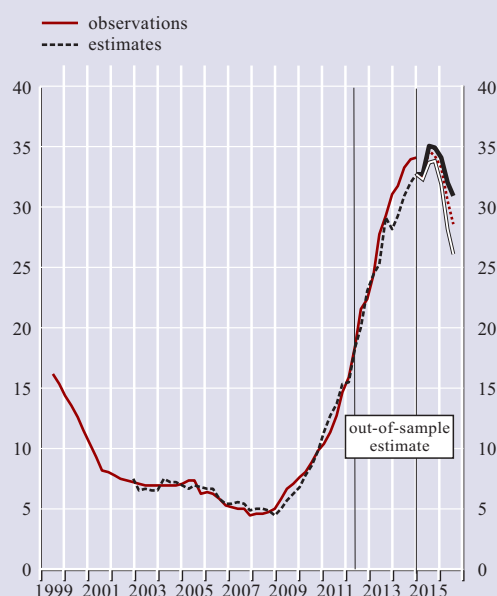
As regards GDP and unemployment, the forecasts included in the Medium-Term Fiscal Strategy Framework 2013-2016 are adopted. Moreover, three scenarios<sup>6</sup> about the evolution of the interest rate margin are tested. According to the projections, the upward trend of the NPL ratio is expected to come to a halt in 2015. Under the best-case scenario, the NPL ratio is projected to decrease by approximately 8 percentage points on a cumulative basis by the end of the first quar-

<sup>4</sup> On the basis of the model's coefficient of determination, those three variables account for about 90% of total volatility of the NPL ratio, thereby leaving the remaining 10% unexplained. In fact, on average during the entire period under review, the interpretability degree is shared almost equally among the three variables. Nevertheless, GDP appears to have the most stable effect over time (with percentages invariably above 40% in most quarters). By contrast, unemployment seems to have had a relatively weak effect before the crisis (its interpretability ranges around 15%), but becomes more relevant in 2008-2012 (when its interpretability exceeds 40%), while its impact has waned ever since. Furthermore, banks' pricing policy (as reflected in the interest rate margin) appears to be of greater relevance during the pre-crisis period (its interpretability ranges between 40% and 60%), while during the crisis the interpretability declines considerably at levels close to 20%. By way of illustration, in the last quarter of 2013, GDP seems to account for about 40% of the volatility in NPLs, unemployment for about 30% and the interest rate spread for about 20%.

<sup>5</sup> It is assumed that low tax compliance is, at least partly, the result of an informed choice (rather than of financial distress). Thus, the degree of tax compliance provides information on taxpayers' payment culture. It is also statistically tested whether low tax compliance across the population is consistent with frequent delays in repayment and/or default on bank loans.

<sup>6</sup> The baseline scenario assumes an unchanged margin of 3.5% for the entire period, the high-margin scenario assumes a stable quarter-on-quarter increase of 15 basis points and the low-margin scenario assumes a quarter-on-quarter decrease of 20 basis points.

## NPLs - an econometric estimation of future developments



Source: Bank of Greece, econometric estimations.

Scenario 1: Bank of Greece forecasts and decrease in the interest rate differential by 15 basis points per quarter (Q1 2016: 32%).

Scenario 2: Bank of Greece forecasts and interest rate differential equal to 3.5% (Q1 2016: 29%).

Scenario 3: Bank of Greece forecasts and increase in the interest rate differential by 20 basis points per quarter (Q1 2016: 26%).

loans provided for in Bank of Greece Executive Committee Act No. 42/30.5.2014 and (b) the work-out arrangements envisaged in the Code of Conduct under Law 4224/2013, effective from 1.1.2015.<sup>7</sup> A positive effect is also expected from the cooperation between banks in cases of borrowers with multiple creditors, as well as from targeted interventions (e.g. through an active involvement of banks in firms' corporate decisions in order to ensure the debt sustainability of those firms) in sectors with high NPL concentration.

ter of 2016, compared with end-September 2014, and is expected to come to levels close to 26%. Under the other two scenarios concerning the path of the interest rate spread, the NPL ratio is set to decline to about 29% and 32%, respectively.

As a result of the build-up of troubled assets in banks' total assets, economic growth alone, despite being the main driver of a declining NPL ratio, does not suffice to remedy the problem at the current juncture in Greece. Therefore, a drastic reduction in the NPL ratio necessitates effective policy action that is specific to the Greek reality. In Ireland and in Spain, special entities were established for the management of non-performing mortgage loans. It goes without saying that the implementation of such measures in Greece would require funding, ideally from sources other than bank balance sheets or the government budget, with a view to averting the re-emergence of capital shortfalls in banks. In this economic environment, another option would be the active management of NPLs, which may contain any problems arising from such assets. To this end, banks should make good use of (a) the supervisory framework for the management of loans in arrears and non-performing

<sup>7</sup> With regard to the Executive Committee Act and the Code of Conduct, see Section 6 in the main text.

## 7 DEVELOPMENTS IN THE PRIVATE INSURANCE MARKET

At end-September 2014, 67 insurance companies operated in Greece under the right of establishment, with total assets of €15.7 billion. In terms of gross written premium, the market share of Greek insurance undertakings amounted to 94.6%, of which 44.4% corre-

sponds to subsidiaries of European groups, while that held by branches of undertakings from EU Member States and third countries amounted to 5.4%. With regard to market concentration in terms of gross written premium, the five and ten largest undertakings in life insurance hold 76.4% and 92.7% of the market, and the five and ten largest undertakings in non-life insurance hold 38.5% and 64.2% of the market, respectively.

In the January-September 2014 period, the main feature of the insurance market was an overall decline in gross written premiums for the fourth consecutive year. However, in contrast to developments in non-life insurance, gross written premiums in life insurance have started to recover, recording positive growth rates.

Total premium income declined by 2.5% year-on-year, mostly as a result of the fall in non-life insurance premiums by 11.05%, which was partly offset by the rise in life insurance premiums by 10.35%. Overall, income came to €2.98 billion (January-September 2013: €3.05 billion), of which 45.4% came from life insurance and 54.6% from non-life insurance.

Total technical reserves of insurance undertakings supervised by the Bank of Greece rose to €11.98 billion (January-September 2013: €11.72 billion). This development is mostly attributable to a small increase in life insurance rather than a decline in total new business.

Throughout the January-September 2014 period, the Bank of Greece focused on monitoring compliance with Executive Committee Acts 30 and 31/30.9.2013 that entered into force on 1 January 2014. To this end, it intensified its on-site inspections in respect of insurance undertakings and independent insurance intermediaries and, where cases of non-compliance were identified, recommended corrective action.

In the context of preparations for Solvency II,<sup>18</sup> the new supervisory regime to become effective as of 1 January 2016,<sup>19</sup> the European Insurance and Occupational Pensions Authority (EIOPA) adopted Interim Guidelines, effective from 1 January 2014. These guidelines primarily address the requirement introduced by the new institutional framework to establish an appropriate system of governance (Pillar II), as well as supervisory reporting and disclosure of information to the public (Pillar III). The Bank of Greece incorporated these Interim Guidelines to its market preparation programme by disclosing and posting them on its

website, thus marking the beginning of the transition to the new supervisory framework.

In preparation for the quantitative requirements under Pillar I, between April and July 2014, the Bank of Greece, in collaboration with EIOPA,<sup>20</sup> conducted a stress test on the available regulatory capital of undertakings. The stress test was conducted with year-end 2013 as reference date and included two elements: a core module and a low-yield module. The purpose of the exercise was to identify the impact and the resilience of the entire insurance market to extreme scenarios of change in economic parameters and insurance risks rather than calculate capital requirements under these extreme conditions.

At the EU level, a total of 167 undertakings, of which 60 insurance groups and 107 individual (re)insurance undertakings representing 55% of gross written premium for the EU market, participated in the core stress test module. A total of 225 (re)insurance undertakings representing 60% of gross technical provisions participated in the low yield module. The Greek insurance market participated in the core module with 6 insurance undertakings representing 72.28% of gross written premium and in the low yield module with 11 insurance undertakings representing 93.10% of gross technical provisions. On 30 November 2014, the EIOPA released the results of the exercise,<sup>21</sup> stressing its educational character and pointing out its usefulness as a risk management tool, for both supervisory authorities and insurance undertakings.

In preparation for the qualitative requirements under Pillar II, the Department of Private Insurance Supervision of the Bank of Greece held meetings with the management and relevant staff of most undertakings, with the aim

<sup>18</sup> Directive 2009/138/EC.

<sup>19</sup> Directive 2013/58/EU.

<sup>20</sup> The detailed text on the specifications of the exercise is available at [https://eiopa.europa.eu/Publications/Surveys/eiopa-14-215\\_stress\\_test\\_2014\\_specifications.pdf](https://eiopa.europa.eu/Publications/Surveys/eiopa-14-215_stress_test_2014_specifications.pdf).

<sup>21</sup> The detailed text on the results of the exercise is available at: <https://eiopa.europa.eu/Publications/Surveys/Stress%20Test%20Report%202014.pdf>.

to provide information about the Interim Guidelines on System of Governance, with an emphasis on four key functions (actuarial, internal audit, risk management and compliance). Also, the need was pointed out for insurance undertakings to step up their preparations for bringing their practices, methods and systems effectively into line with the new rules. In this context, the Bank of Greece asked insurance undertakings to prepare a gap analysis against the requirements of the forthcoming Solvency II environment. This analysis provides the basis for identifying needs and actions required for the convergence and harmonisation of insurance firms with the new European regulatory framework. Moreover, the Bank of Greece has requested regular progress reports on Pillar II governance issues, as well as Pillar III pilot reports.

The eight working groups set up in 2012 on the initiative of the Bank of Greece with the mandate to enhance the quality of firms' statistics and develop appropriate actuarial models for assessing specific insurance risks completed their work. The project was implemented in collaboration with insurance undertakings and was completed ahead of schedule with the finalisation of the relevant reports. The results were presented to players in the insurance market.

Finally, the Bank of Greece participated in the works of the law drafting committee for the transposition of the Solvency II Directive into Greek law. The relevant draft law is expected to be enacted in early 2015. In parallel, with regard to the supervision of insurance intermediation, the Bank of Greece included in the relevant regulatory framework the Executive Committee Act 38/1.4.2014 (Government Gazette B 1340) re "*Adjustment of the compulsory minimum amounts of insurance cover against civil liability of insurance intermediaries*", as these amounts were specified in Article 4 (1A) point (6) of Presidential Decree 190/2006 and Credit and Insurance Committee Decision 122/3/15.12.2014 (Government Gazette B 3533) re "*Examination of complaints by insurance intermediaries*". Fulfilling its institutional obligations in the field of continuing education of intermediaries, the Bank of Greece adopted Executive Committee Act 45/21.11.2014 (Government Gazette B 3350) re "*Retraining and recertification of knowledge of (re)insurance intermediaries*" and Executive Committee Act 46/4.12.2014 (Government Gazette B 3510) re "*Amendment of provisions of Executive Committee Act 16/21.5.2013 (Government Gazette 1257) regarding examinations for the certification of knowledge of (re)insurance intermediaries*".



## VIII CAPITAL MARKETS<sup>1</sup>

Capital markets in 2014 were mainly marked by bouts of increased volatility and safe-haven flows. As regards Greece in particular, investor uncertainty, especially in the latter part of the year, put strong pressure on bond and stock prices, causing their evolution to diverge negatively from developments in the other EU markets, a trend that continued into early 2015.

### I OVERVIEW OF DEVELOPMENTS AND PROSPECTS

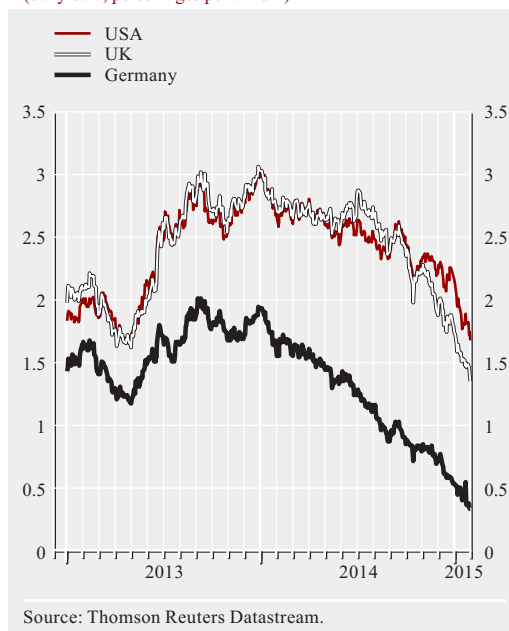
International financial market conditions continued to improve in the first half of 2014. Gradually, however, from the third quarter onwards, increasing investor uncertainty about the banking sectors of euro area countries, along with signs of weakening economic recovery in the euro area, led to a surge in volatility in European capital markets.

Against this background, and given idiosyncratic factors weighting on the valuation of Greek sovereign bonds, yields on Greek sovereign bonds rose significantly, returning to levels last seen in the third quarter of 2013.

Once again in 2014, developments in the market for Greek non-financial corporate bonds and in the Greek stock market were negative. During most of the year, Greek non-financial corporate bond yields moved in line with the yields on bonds issued by European non-financial corporations, which have higher credit ratings. Starting from late October, however, Greek non-financial corporate bond yields decoupled from their European counterparts and followed the same sharp upward course as Greek government bond yields. The Athens Exchange saw a marked fall in stock prices and banking shares in particular, in spite of the fact that the ECB's recent Comprehensive Assessment of the banking system of all euro area countries confirmed that Greek systemic banks were adequately capitalised.

**Chart VIII.1 US, UK and German 10-year government benchmark bond yields (January 2013 - January 2015)**

(daily data, percentages per annum)



### 2 INTERNATIONAL FINANCIAL MARKETS

#### 2.1 BOND MARKETS

2014 was marked by a reversal of the upward trend in the yields of benchmark bonds across the world's major economies (see Chart VIII.1) seen in 2013. In greater detail, while the 10-year benchmark bond yields of the United States, the United Kingdom and Germany rose in 2013 on the back of improving conditions in international financial markets and a search for yield on the part of investors, in 2014 expectations of a gradual reversal of the Federal Reserve's accommodative policy and the weak growth and inflation outlook of the euro area led to heightened uncertainty, prompting flights to safety. This led to a fall in yields on low credit risk highly and liquid bonds. Still, the US and UK benchmark bond yields stood at higher levels than their German counterparts, reflecting the stronger growth

<sup>1</sup> This text is based on information and data available up to 16 February 2015.



prospects of the former two economies relative to the euro area.

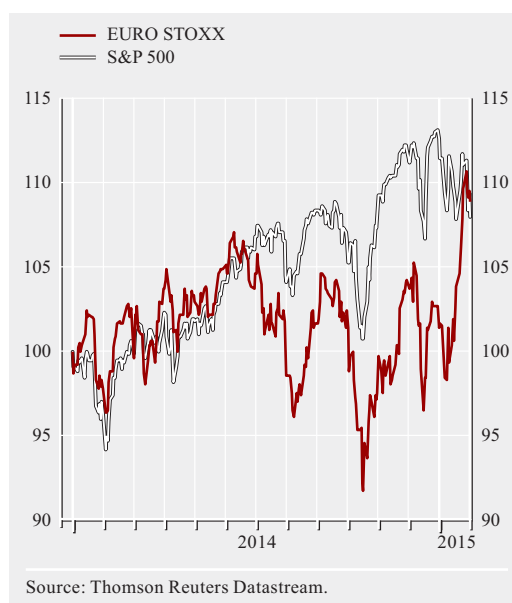
In the euro area, the downward revisions of GDP and inflation projections since the beginning of 2014 led to an increase in volatility which was particularly pronounced in the periphery bond markets. Also, in the context of geopolitical tensions, strong risk aversion took hold, leading to further declines in the yields of benchmark bonds in the largest euro area economies (e.g. Germany and France). It is worth noting in this regard that the yields on short-term bonds (with a maturity of up to 2 years) of high-rated sovereigns turned negative at the end of the third quarter of 2014, for the first time since the third quarter of 2012, implying investors' willingness to pay for safety. In the euro area periphery countries, sovereign bond yields continued to decline, in response to the ECB's monetary policy measures, with the 10-year Italian, Spanish, Irish and Portuguese bonds, reaching historical lows.

Investor uncertainty inevitably took a toll on markets for non-financial corporate bonds, which experienced a surge in yield volatility and a widening in yield spreads between higher- and lower-rated bonds, especially in the second half of 2014. Net new market-based financing of euro area non-financial corporations remained positive, although it was lower than in 2013.

## 2.2 EQUITY MARKETS

The performance of equity markets in the United States and in most euro area economies was positive. However, from the second half of 2014 onwards, stock price developments in the two economies decoupled, and at the end of the year euro area stock yields were much lower in annual terms than their counterparts in the US (see Chart VIII.2). This divergence was largely due to a deterioration in expectations for economic recovery in the euro area, in contrast with the improving US economic outlook.

**Chart VIII.2 EURO STOXX and S&P 500 price indices (1.1.2014 = 100)**



Moreover, stock price volatility was also partly due to factors exclusively related to the euro area banking sector, such as, initially, the news, in July 2014, that the Portuguese Banco Espírito Santo was unable to meet its obligations to international creditors and, later on, the wait for the results of the ECB's Comprehensive Assessment.

## 3 GREEK GOVERNMENT BONDS

The evolution of Greek government bond yields in 2014 followed two distinct patterns: initially, rising investor confidence in the Greek economy, underpinned by improvements in financial market conditions in the euro area in the first half of the year, helped to sustain the almost constant decline in Greek government bond yields that had gradually begun in the second half of 2012.

Against this background and reflecting continued declines, Greek government bond yields returned, for the first time since April 2010, to levels comparable to those prevailing

before Greece's sovereign rating was cut to below investment grade in April 2010. This development put the conditions in place for the Greek government to stage a return to the bond market for the first time since 2010, raising a combined total of €4.5 billion through the issuance of 5-year (10 April 2014, issue amount: €3 billion, coupon rate: 4.75%) and 3-year bonds (10 July 2014, issue amount: €1.5 billion, coupon rate: 3.375%). Both issues met with strong demand from foreign investors.<sup>2</sup>

In the third quarter of 2014, the decline in Greek sovereign bond yields came to a halt and conditions of high volatility prevailed. From September 2014 onwards, investor sentiment started to deteriorate, mainly reflecting adverse economic developments in major euro area economies, which triggered higher financial market volatility in the most vulnerable Member States. Starting from mid-October, Greek sovereign bond yields followed an upward trend, which continued into early 2015 (see Chart VIII.3).

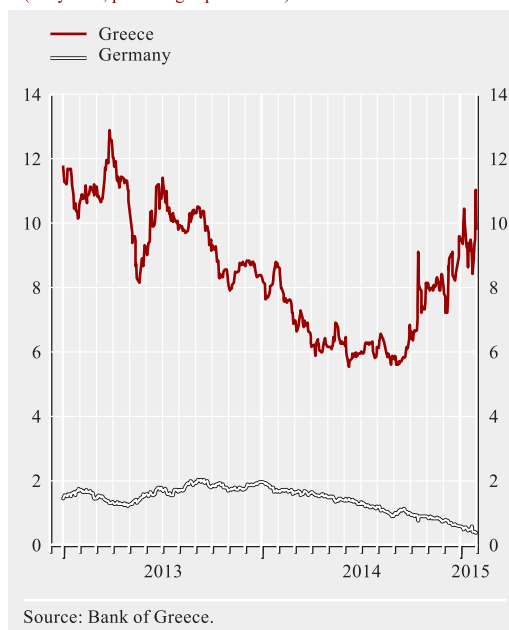
This upward trend intensified around the turn of the year, bringing the 10-year Greek government bond yield to 9.2% by 13 February 2015, up from 6.85% at the end of September, i.e. back to its level recorded in the third quarter of 2013.

Deteriorating investor confidence led to a comparatively stronger rise in yields on shorter maturities (13 February 2015: 3-year bond 15.2%, 5-year bond 12.9%, up from 4.2% and 5%, respectively, on 30 September 2014. As a result, the slope of the yield curve, measured by the yield spread between 10- and 3-year bonds turned negative (13 February 2015: -600 basis points, 30 September 2014: 265 basis points), reflecting heightened investor uncertainty about near-term developments.

With the deterioration of investor sentiment towards Greek government bonds, the secondary market experienced a large drop in the value of transactions.<sup>3</sup> Turning to primary

**Chart VIII.3 Greek and German 10-year government bond yields**  
(January 2013 - January 2015)

(daily data, percentages per annum)



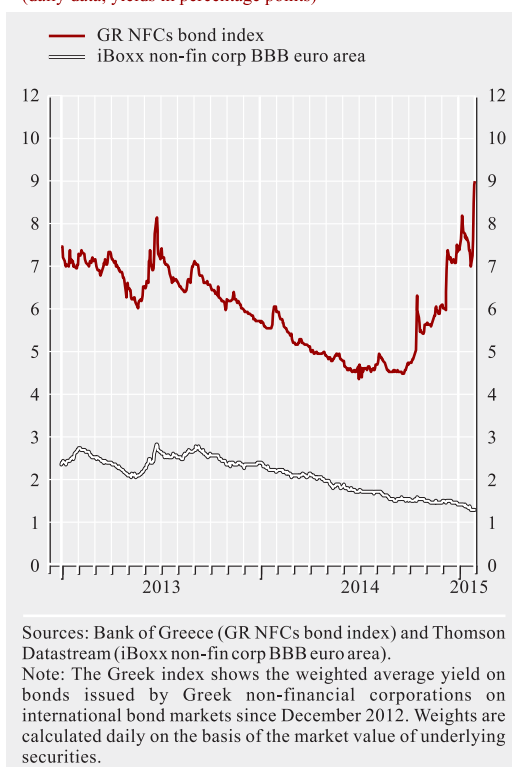
market activity, the issuance of medium- to longer-term bonds, along with regular issues of Treasury bills (2014: €40 billion, 2013: €40.1 billion), helped to cover part of the financing needs of the Greek government. This was also supported by the improvement in investor confidence in the early months of the year, which eased the cost of borrowing through Treasury bills (2014: 2.4%, 2013: 4.1%). However, a rise in uncertainty later in the year led to a slight increase in Treasury bill yields (the weighted average interest rate on Treasury bills issued in December 2014-February 2015 stood at 2.3%, up from 1.9% in July-November 2014).

<sup>2</sup> Indicative of the strong demand for the 5-year bond issue was the fact that the initial €2.5 billion offer was oversubscribed about eight times.

<sup>3</sup> Specifically, the average daily value of transactions on the Electronic Secondary Securities Market (HDAT) declined in November and December 2014 to some €25 and €17 million, respectively, from €45 million in January-October 2014. The average daily value of trading in the Dematerialised Securities System (SAT) also fell to €209 million in November and December 2014, compared with €309 million in January-October of the same year. In January 2015, the average daily value of transactions on HDAT was €28 million, while the average daily value of trading in SAT was €277 million.

**Chart VIII.4 Greek and euro area corporate bond yields  
(January 2013- January 2015)**

(daily data; yields in percentage points)



#### 4 BONDS ISSUED BY GREEK NON-FINANCIAL CORPORATIONS

From the end of 2012 onwards, the stabilisation of the domestic economic environment and the resulting improvement in confidence in the Greek economy enabled large non-financial firms with strong export activity and sound balance sheets to issue corporate bonds totalling €6.5 billion. In fact, the first half of 2014 saw €2.5 billion raised at a weighted average interest rate of 4.7%, significantly lower than the average weighted interest rate on previous issues by the same firms (2013: 8.3%). Most of the financing secured through such bond issues was intended for the repayment of bank loans.

The yields on Greek non-financial corporate bonds trended downwards until late September 2014, partly as their valuations fol-

lowed developments in the prices of bonds issued by European non-financial corporations, including even some higher-rated ones. Specifically, according to the composite index compiled by the Bank of Greece, the weighted average yield on Greek corporate bonds had fallen to 5% by end-September 2014, from 6.2% at end-December 2013 (see Chart VIII.4).

Thereafter, the notable improvement in the secondary market valuations of outstanding issues, which had been ongoing throughout 2013 and in January-September 2014, started to fade away. In fact, starting from late October 2014, when uncertainties surrounding the Greek economy gave rise to heightened volatility, a deterioration became evident, with a decoupling of Greek non-financial corporate bond yields from their euro area counterparts. Thus, the weighted average yield on Greek non-financial corporate bonds reached 10% on 13 February 2015, a level last seen in the second quarter of 2013.

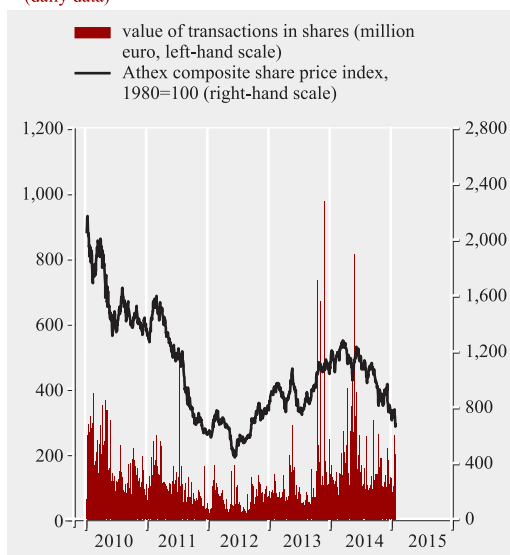
The spread of the weighted average yield on Greek non-financial corporate bonds vis-à-vis euro area corporate bonds stood at 870 basis points on 13 February 2015, the highest level that has been observed since the start of the Greek index series, suggesting a dramatic rise in uncertainties surrounding domestic developments. Against this backdrop, it became difficult for Greek non-financial firms to further tap international bond markets.

#### 5 DOMESTIC STOCK MARKET DEVELOPMENTS

The upward trend of share prices on the Athens Exchange that had begun in the second half of 2012 continued through the first months of 2014. During the second half of the year, however, share prices followed a downward course. As a result, the performance of the Athex composite share price index was strongly negative for 2014 as a whole (see Chart VIII.5), while the first months of 2015 were marked by high volatility.

**Chart VIII.5 Athens Exchange composite share price index and value of transactions (1 January 2010-30 January 2015)**

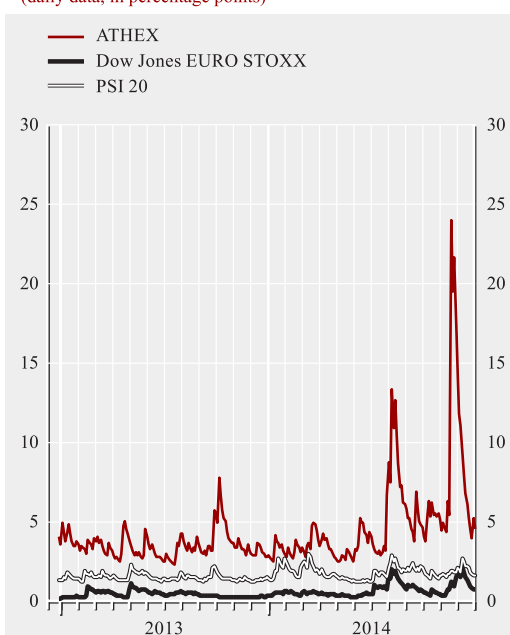
(daily data)



Source: Athens Exchange.

**Chart VIII.6 Share price volatility in the Athens Exchange, Dow Jones EURO STOXX and general share price index of the stock market of Portugal (January 2013 - December 2014)**

(daily data, in percentage points)



Source: Bank of Greece.

In greater detail, between January 2014 and 13 February 2015, the Athex composite share price index declined by 23.1%, having ranged between a peak of 1,369.56 on 18 March 2014 and a trough of 711.13 on 28 January 2015. Stock price developments in the second half of 2014 were initially driven by developments in the banking sub-index. Banking share movements largely reflected general, euro area-wide uncertainties about the outcome of the ECB's Comprehensive Assessment and eventual bank capital shortfalls. These concerns also explain the decline in the EuroStoxx banking sub-index in July-October 2014.

Moreover, country-specific factors associated with political uncertainty in Greece resulted in the Athex stock prices being further squeezed down. This happened despite (a) the announcement on 26 October 2014 of positive results of the ECB's Comprehensive assessment, which indicated virtually no capital shortfalls for Greece's systemic banks; and (b) the improved profitability of Athex-listed companies.<sup>4</sup>

Reflecting share price movements and changes in the appetite for risk in the course of the year, both the Athex Composite share price index and the Broad Dow Jones Euro Stoxx were subject to, occasionally strong, fluctuations in volatility. In the case of the Athex index, volatility spikes were sharper and longer lasting than in the Broad Dow Jones Euro Stoxx or in the indices of other stock markets of the European South (e.g. the Portuguese index – see Chart VIII.6).<sup>5</sup>

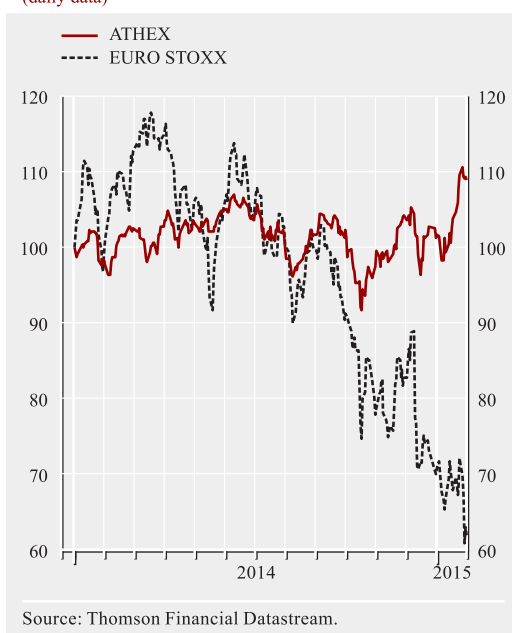
Indicative in this respect is the gradual decoupling of the Athex composite share price index from the evolution of the Broad Dow Jones Euro Stoxx and its deterioration in the second half of 2014 (see Chart VIII.7). In fact, since mid-October 2014, developments in the two

<sup>4</sup> Based on results for the January-September 2014 period, the total pre-tax profits of all companies rose by about 12% relative to the corresponding period of 2013. Yet, a significant number of firms continued to post negative profitability in 2014, with some of them, mainly smaller firms, showing negative equity too, which raises concerns about their viability.

<sup>5</sup> Volatility was estimated using a GARCH (1,1) model.

**Chart VIII.7 General index of the Athens Exchange and EURO STOXX (31.12.2013 = 100) (31 December 2013 - 31 January 2015)**

(daily data)



indices have appeared to move in opposite directions.

Turning to other aggregates of the Greek stock market, the average daily value of transactions stood at €127.2 million in 2014, rising by a substantial 46.5% against 2013, with the bulk of transactions being accounted for by the large capitalisation segment. Funds raised through the Athens Exchange amounted to €8.7 billion and mainly took the form of Greek banks' capital increases. Also, for the first time since 2009, 2014 saw a new listing of a company on the main market.

As regards the Athex banking sub-index, its decline between 1 January 2014 and 13 February 2015 was more pronounced (-52.6%) than that in the overall index, whereas the average daily value of transactions in banking shares, rising by 150% to €68.5 million in 2014 relative to 2013, outpaced the all-sector value of Athex transactions.

## IX ENVIRONMENT, ENERGY AND CLIMATE CHANGE<sup>1</sup>

*During 2014 new studies and reports emerged, which vividly illustrated the risks of climate change and the importance of early action to address it, while the rising use of shale fuels radically changed the landscape in the world energy market. Major steps were taken in the latter part of the year, mainly by the United States, China and the EU, to cut down greenhouse gas emissions, but strong public opinion pressure is still needed if a new compliant international agreement is to be signed in Paris in December 2015. The new policy targets for climate and energy defined by the European Union last October are more ambitious, but also more flexible to avoid harming the competitiveness of the European economy. Based on the latest data referring to 2013, Greece further increased its overachievement of the Kyoto Protocol emission reduction targets. This partly reflected a decline in production as a result of six years of recession (2008-2013). The main legislative and administrative measures taken by Greece in 2014 concerned: the establishment of a new vertically integrated power generation company; the lowering of energy costs for industry; the reduction of the excise tax on heating oil by 30% as from October 2014 implying lower energy costs for households as well; measures to ensure a more efficient functioning of the natural gas market; renewable energy sources; and certain issues in the area of environmental upgrading and sustainability. Lastly, Greece hosted several important scientific conferences on climate change. The Climate Change Impacts Study Committee (CCISC) continued to explore issues related to a National Strategy for Adaptation to Climate Change and finalised a major study on tourism and climate change, while a Memorandum of Understanding was signed in December 2014 between the Ministry of Environment, Energy and Climate Change (YPEKA), the Athens Academy Medical-Biological Research Institute and the Bank of Greece.*

### I KEY DEVELOPMENTS IN 2014, CLIMATE CHANGE RESEARCH AND POLICY RESPONSES

The year 2014 was the warmest – at least since records began in 1880.<sup>2</sup> Moreover, it was also a

year of significant changes in international energy market conditions as a result of the growing use of shale gas and oil.<sup>3</sup> On the scientific front, the most important development in 2014 was the *finalisation* of the Fifth Assessment Report (AR5) of the UN Intergovernmental Panel on Climate Change (IPCC).<sup>4</sup> A notable conclusion of the final Synthesis Report was that:

*“Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread and irreversible impacts globally (...). Mitigation involves some level of co-benefits and of risks due to adverse side effects, but these risks do not involve the same possibility of severe, widespread, and irreversible impacts as risks from climate change, increasing the benefits from near-term mitigation efforts.”*

In addition, three important reports were published by the World Bank. The first report, entitled *“Climate-Smart Development”* (23.06.2014) discusses how well-designed smart development projects can save lives, increase jobs and GDP and tackle climate change. The second report, entitled *“Turn Down the Heat: Confronting the New Climate Normal”*, Vol.3 (released on 23.11.2014) shows that the “new climate normal” of elevated temperatures poses major risks to economic growth. The third report, entitled *“Climate change and poverty: An analytical frame-*

<sup>1</sup> This chapter is based on information and data available up to 20 January 2015.

<sup>2</sup> Data released by NASA and the National Oceanic and Atmospheric Administration (NOAA) on 16 January 2015 while, on 3 December 2014, provisional estimates were released by the World Meteorological Organization (WMO). It should also be noted that nine of the ten warmest years since 1880 have occurred since 2000.

<sup>3</sup> See, for example, Thomas Friedman, “Why 2014 Is a Big Deal”, *New York Times*, 13.12.2014.

<sup>4</sup> After the Working Group I report was released in September 2013, the Working Group II report, (IPCC 5th Assessment Report – Working Group II, *Climate Change 2014 – Impacts, Adaptation and Vulnerability*) was released in March 2014. This was followed in April 2014 by the release of a third report (“IPCC 5th Assessment Report – Working Group III, *Climate Change 2014 – Mitigation of Climate Change*”) by Working Group III. Reports were combined into a synthesis report (“*Climate Change 2014 – Synthesis Report*”) released in November 2014.



work” (November 2014)<sup>5</sup> offers three major conclusions:

*“First, climate change is a major challenge for poverty reduction. Second, climate policies are compatible with poverty reduction provided that they (i) incorporate poverty concerns into adaptation and mitigation policies and (ii) are accompanied with the appropriate complementary policies. Third, climate change does not modify how poverty policies should be designed. But it creates greater needs and more urgency....”*

Other noteworthy studies and reports were produced inter alia by the Global Commission on the Economy and Climate, the International Monetary Fund, the US National Academy of Sciences and the UK Royal Society, the OECD, as well as French and British climate change bodies.<sup>6</sup>

Key milestones that shaped international policy responses to climate change in 2014 include:

— On 20/21 March 2014, the European Council endorsed the general directions for the EU’s contribution to efforts towards the conclusion of a new international agreement at the 21st UN Conference of the Parties (COP21) in Paris in December 2015. The aim would be to ensure that the new agreement incorporates sufficient commitments to contain global temperature increase to 2°C by 2100.

— On 7 May 2014, in its statement on climate change, the OECD ministerial council expressed strong support for efforts to reach an agreement in 2015, and made special mention to the developed countries’ goal to jointly mobilise USD100 billion per year by 2020 “to address the needs of developing countries, in the context of meaningful mitigation actions”.

— On 23 September 2014, a high-level summit was convened by the UN Secretary-General Ban Ki-moon in New York, ahead of the 20th UN Climate Change Conference in Lima in

December 2014. The summit provided an opportunity for goodwill statements of intent on the part of countries, without however any commitments.

— On 23 and 24 October 2014, the European Council endorsed: (a) a binding EU target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990, to be delivered collectively by all Member States, on the basis of considerations of “fairness and solidarity”; (b) a binding EU target of at least 27% for the share of renewable energy consumed in the EU in 2030; (c) an indicative EU target of at least 27% for improving energy efficiency (i.e. lowering energy consumption/and savings) by 2030.<sup>7</sup>

— On 12 November 2014, the Presidents of the United States of America and the People’s Republic of China announced in Beijing a major deal on climate change. The United States committed to reduce its emissions by 26-28% below its 2005 level by 2025. China intends to achieve the peaking of CO<sub>2</sub> emissions around 2030 and to make best efforts to peak early and intends to increase the share of non-fossil fuels in primary energy consumption to around 20% by 2030.<sup>8</sup>

<sup>5</sup> Policy Research Working Paper no. 7126, World Bank – Climate Change Group, Office of the Chief Economist.

<sup>6</sup> For example: (1) The Global Commission on the Economy and Climate, *Better Growth, Better Climate – The New Climate Economy Report*, September-October 2014; (2) National Academy of Sciences (US) and Royal Society, *Climate change – evidence and causes*, February 2014; (3) I. Parry, Ch. Veung, and D. Heine, “How Much Carbon Pricing is in Countries’ Own Interests? The Critical Role of Co-Benefits”, IMF WP/14/174, September 2014; (4) OECD, *Policy Challenges for the Next 50 Years*, Economic Policy paper, July 2014, Chapter 5; (5) Deep Decarbonization Pathway Project (DDPP), *Pathways to Deep Decarbonization – Interim Report*, July 2014; (6) A. Magnan, T. Ribera, S. Treyer, Th. Spencer, *What adaptation chapter in the New Climate Agreement?*, Institut du développement durable et des relations internationales, Policy Brief, July 2014; (7) Committee on Climate Change (UK), *Energy prices and bills – impacts of meeting carbon budgets*, December 2014.

<sup>7</sup> To a large extent, this decision is based on an initial proposal made by the European Commission on 22 January 2013 – see pertinent chapter in last year’s *Annual Report*.

<sup>8</sup> See (1) “Editorial – A Major Breakthrough on Climate Change” and “Climate Accord Relies on Environmental Policies Now in Place”, *New York Times*, 12.11.2014; (2) “Jeffrey Sachs: The climate breakthrough in Beijing gives the world a fighting chance”, *Financial Times*, 12.11.2014. Also, speaking at the University of Queensland in Australia on 15 November 2014, President Obama stressed the need for the United States to lead in the global fight against climate change.



– On 11 December 2014, pledges to the Green Climate Fund, mainly from developed countries as well as from some developing ones, amounted to US\$10.2 billion.<sup>9</sup>

– On 1-14.12.2014, the United Nations held its 20th Conference of the Parties (COP20) in Lima. After 11 days of negotiations, over 190 participating countries, wealthy and poor, agreed for the first time on the need for an agreement to reduce the use and burning of fossil fuels (oil, gas and coal) usage and consumption. Although no binding quantitative targets were set, each country undertook to draw up and submit, by end-March 2015 or June 2015 at the latest, a national emission reduction plan in preparation of the COP21 in Paris in December this year.<sup>10</sup>

## 2 SCIENTIFIC DIALOGUE IN GREECE

In Greece, three research bodies – the Hellenic Foundation for European and Foreign Policy (ELIAMEP), the Society for the Environment and Cultural Heritage (ELLET) and the European Centre for Environmental Research and Training (EKePEK) published in March 2014 a joint report on the input received in response to their public dialogue exercise *“Transition to a Green Greece 2010-2020”*. Moreover, in addition to seminars organised by the CCISC (see Section 5 below), a number of most interesting scientific conferences, such as the Athens Academy Medical-Biological Research Institute conference on “Energy-Environment-Health” (held on 18.6.2014) and the Goulandris Natural History Museum International Conference on “Climate Change: Past, Present and Future” (held on 21.11.2014) were hosted in 2014. The following assessments of the prospects of shale gas, hydraulic fracturing (fracking) and geothermal fields in Greece, made by Raphael Moissis in his speech at the former conference, are of particular relevance to the country’s energy policy:<sup>11</sup>

*“The prospect of using fracking to exploit geothermal fields is especially relevant for Greece.*

*Geothermal energy is the only inexhaustible, continuously available energy source that is free from stochasticity,<sup>12</sup> which is the major drawback of solar and wind energy. In Greece, there exist a number of geothermal fields which, for various reasons, remain unexploited. The new technique [i.e. fracking] seems to promise to amplify our ability to exploit these potential resources – a prospect that should not leave us indifferent.”<sup>13</sup>*

## 3 RECENT DATA ON GREENHOUSE GAS EMISSIONS IN THE EU AND GREECE (2012-2013)

In 2012, total greenhouse gas emissions in EU-28<sup>14</sup> came to 4,544 million tonnes of CO<sub>2</sub>-equivalent, 19% less than in 1990. Greenhouse gas

<sup>9</sup> However, developing countries criticised the amount that developed countries had pledged as still being far from the aforementioned targeted US\$100 billion per year by 2020. See Green Climate Fund, “Total pledges nearing USD 10.2 billion”, press release, 11.12.2014. Also, “China and Brazil rebuke rich world over climate cash pledge”, Financial Times, 1.12.2014, and “Le Fonds vert pour le climat frôle les 10 milliards de dollars de capitalisation”, Les Echos, 21.11.2014. In US dollar terms, the largest contributions so far have come from the United States (US\$3 billion), Japan (US\$1.5 billion), the United Kingdom (US\$1.12 billion), France (US\$1.03 billion), Germany (US\$1 billion), Sweden (US\$588 million), Italy (US\$312 million), Australia (US\$200 million), the Netherlands (US\$134 million) and Norway (US\$100 million).

<sup>10</sup> The modest optimism shared by most commentators after Lima rested on the assumption that the heavier weight of peer pressure and global public opinion would ultimately compel all countries to adopt binding emission targets. See e.g. “A Climate Accord Based on Global Peer Pressure”, New York Times, 14.12.2014.

<sup>11</sup> The speech was titled “Shale gas as an important addition to the energy repertoire and environmental reflection”. The importance of global shale gas exploitation and the debate in the area of fracking have been dealt with in the pertinent chapter of last year’s Annual Report.

<sup>12</sup> Stochasticity is defined as the quality of being subject to random, unpredictable variation.

<sup>13</sup> The speech offered the following snapshot of the state of play in Greece: “...The data so far suggests that the chances of gas deposits being discovered in Greece are far greater for conventional natural gas deposits than for deposits of shale gas. (...) Due to its geographic location, Greece plays a major role as a natural gas pipeline transit hub, a role that is also dependent on international investment projects for pipeline construction or deposit exploitation in the Eastern Mediterranean. The potential discovery of shale gas deposits, for which all the indications are that they will be comparatively small, would hardly make any difference to Greece’s significance as a transit hub. (...) Important developments are expected worldwide in connection with shale gas. Should the optimistic scenarios for the European shale gas materialise, it would boost the value of conventional deposits and the value of pipelines transporting gas from east to west. (...) Thus, while shale gas is presumed to have little or no value as an energy source for Greece, the country’s national interests and energy strategy crucially depend on global, and especially European shale gas developments...”.

<sup>14</sup> Excluding “land use, land-use change and forestry”, as well as emissions from international aviation and shipping.

**Table IX.1 Greenhouse gas emissions<sup>1</sup> and the Kyoto Protocol targets**

Country	2012 data							Provisional 2013 estimates	
	1990	Kyoto Protocol (base year) <sup>2</sup>	2012	Change 2011-2012	Change 1990-2012	Change 2012 over base year	Kyoto targets 2008-2012	Change 2012-2013	Change 1990-2013
	(in million tonnes of CO <sub>2</sub> equivalents)			(percentage changes)				(percentage changes)	
Austria	78.1	79.0	80.1	-3.3	2.5	1.3	-13.0	0.4	2.9
Belgium	143.0	145.7	116.5	-3.0	-18.5	-20.0	-7.5	0.3	-18.3
Denmark	68.7	69.3	51.6	-8.6	-24.8	-25.5	-21.0	3.1	-22.5
Finland	70.3	71.0	61.0	-8.8	-13.3	-14.1	0.0	-0.5	-13.8
France	557.4	563.9	490.1	0.0	-12.1	-13.1	0.0	0.3	-11.8
Germany	1,248.0	1,232.4	939.1	1.1	-24.8	-23.8	-21.0	1.2	-23.8
Greece	104.9	107.0	111.0	-3.3	5.8	3.7	25.0	-2.9	2.7
Ireland	55.2	55.6	58.5	1.4	5.9	5.3	13.0	-3.3	2.5
Italy	519.1	516.9	460.1	-5.4	-11.4	-11.0	-6.5	-4.8	-15.6
Luxembourg	12.9	13.2	11.8	-2.4	-8.2	-10.1	-28.0	-3.5	-11.4
Netherlands	211.8	213.0	191.7	-1.7	-9.5	-10.0	-6.0	0.1	-9.4
Portugal	60.8	60.1	68.8	-0.8	13.1	14.3	27.0	-2.5	10.3
Spain	283.7	289.8	340.8	-1.5	20.1	17.6	15.0	-7.4	11.2
Sweden	72.7	72.2	57.6	-5.2	-20.8	-20.2	4.0	-3.4	-23.5
United Kingdom	775.5	776.3	580.8	3.2	-25.1	-25.2	-12.5	-1.8	-26.4
<b>EU-15</b>	<b>4,262.1</b>	<b>4,265.5</b>	<b>3,619.5</b>	<b>-0.8</b>	<b>-15.1</b>	<b>-15.1</b>	<b>-8.0</b>	<b>-1.4</b>	<b>-16.3</b>
<b>EU-28<sup>2</sup></b>	<b>5,626.3</b>	<b>...</b>	<b>4,544.2</b>	<b>-1.3</b>	<b>-19.2</b>	<b>...</b>	<b>...</b>	<b>-1.8</b>	<b>-20.7</b>

Sources: For 2012: European Environment Agency Technical Report no. 9/2014, *Annual European Union greenhouse gas inventory 1990-2012 and inventory report 2014*, 27.5.2014. For 2013: European Environment Agency Technical Report no. 16/2014, *Approximated EU GHG inventory: proxy GHG emission estimates for 2013*, 30.9.2014.

1 Total emissions excluding land use, land use change and forestry.

2 For CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O, all Member States chose 1990 as their base year. For HFC, PFC and SF<sub>6</sub>, 12 Member States chose 1995 as their base year, while Austria, France and Italy chose 1990. For Cyprus, Malta and the EU-28, there are no Kyoto Protocol targets or base year data.

emissions in EU-15 (the “old” EU Member States) were 3,619 million tonnes (15% less than in 1990), accounting for 80% of total emissions (compared with 76% in 1990). Among the older Member States, Germany and the UK were the largest emitters of greenhouse gases in the EU in 2012 (33% of total EU-28 emissions and 42% of EU-15 emissions), followed by France and Italy (about 11% and 10% of EU-28, respectively). The Member States with the smallest shares in EU-28 were Luxembourg (0.3%), Denmark, Ireland, Sweden and Finland (about 1% each) (see Table IX.1).

However, countries which, owing to their size, account for high shares of total greenhouse gas

emissions in fact rank better in terms of emissions per capita or emissions per unit of GDP. This most likely reflects more efficient power generation, energy-saving by households and businesses, etc.

Breaking down the emissions of the six main greenhouse gases in the EU-28 in 2012, carbon dioxide (CO<sub>2</sub>) accounts for the largest share (82%), followed by methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) with 9% and 7%, respectively. CO<sub>2</sub> emissions in 2012 were 16% less than in 1990 and those of CH<sub>4</sub> and N<sub>2</sub>O were 34% and 36% less, respectively. As seen in Table IX.2, energy-related activities are the major source of greenhouse gases, accounting for 72% of

**Table IX.2 Greenhouse gas emissions by source: EU-28, EU-15 and Greece**

(in million tonnes of CO<sub>2</sub> equivalents)

	1990	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-28</b>											
Energy	4,325	4,058	4,004	4,103	4,107	4,044	3,961	3,678	3,783	3,642	3,604
Industrial processes	462	441	394	403	401	412	388	324	335	332	321
Solvents	17	14	14	12	12	12	11	10	10	10	10
Agriculture	617	533	521	493	490	490	489	478	475	475	469
Waste	206	207	190	166	164	160	156	152	147	144	141
<i>Total*</i>	5,626	5,253	5,122	5,178	5,173	5,119	5,006	4,642	4,751	4,603	4,544
<b>EU-15</b>											
Energy	3,281	3,215	3,261	3,341	3,330	3,268	3,201	2,968	3,048	2,906	2,893
Industrial processes	354	351	310	311	304	308	292	253	260	252	243
Solvents	13	12	11	10	10	9	9	8	8	8	8
Agriculture	443	421	423	394	389	388	388	379	378	378	373
Waste	171	172	152	127	125	121	117	113	109	106	102
<i>Total*</i>	4,262	4,171	4,156	4,183	4,157	4,095	4,007	3,722	3,803	3,650	3,619
<b>Greece</b>											
Energy	77	81	96	106	105	107	104	100	92	92	87
Industrial processes	11	12	14	14	12	12	12	10	11	9	10
Solvents	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Agriculture	11	10	10	10	9	10	9	9	9	9	9
Waste	6	6	6	5	5	5	5	5	5	5	5
<i>Total*</i>	105	110	127	135	132	135	131	124	118	115	111

Sources: European Environment Agency, *Annual European Community greenhouse gas inventory 1990-2012 and inventory report 2014*, 27 May 2014; Ministry of Environment, Energy and Climate Change, *Annual inventory submission under the Convention and the Kyoto Protocol for greenhouse and other gases for the years 1990-2012*, April 2014.

\* Excluding land use, land use change and forestry.

CO<sub>2</sub>-equivalent in 2012 in the EU-28, followed by agriculture (10%), industrial processes (7%) and waste (3%).

Most EU-15 Member States are on track to meet their Kyoto Protocol targets (see Table IX.1). Among the older Member States, twelve (including Greece) have already overachieved these targets, while the remaining three still have some way to go. The target set for Greece under the Kyoto Protocol was for the increase in greenhouse gas emissions over the period 2008-2012, relative to the base year, to be contained at 25%. Greece's greenhouse gas emissions in 2012 were only 3.7% above 1990 levels. According to provisional data, in 2013 that figure fell to just 0.7% (which is once again

well on track), a development attributable to a significant extent to the deep economic downturn during the reference period.

#### 4 RECENT GREEK LEGISLATION AND OTHER MEASURES FOR THE ENVIRONMENT, ENERGY AND CLIMATE CHANGE

Reducing pollutant levels and enhancing energy market efficiency are key policy priorities not only for energy savings and cost reduction but also for achieving energy sufficiency and safety. To this end:

— Law 4273/2014 on the establishment of a new vertically integrated power company was

passed by Parliament to facilitate the restructuring and privatisation of the Public Power Corporation (DEH).

— Ministerial decisions equalising the special fee for reducing emissions of atmospheric pollutants<sup>15</sup> for high and medium voltages and compensating pollutant costs for industry<sup>16</sup> were adopted. These should help curtail energy costs for industry, as well as reduce the amount of pollutants it produces. Aside from the above, the excise tax on heating oil was cut by 30% (with effect from 15.10.2014)<sup>17</sup> to allow households, too, to benefit from reduced energy costs.

— A ministerial decision was adopted (by authority of Law 4254/2014) allowing self-producers to install net-metered renewable photovoltaic (PV) Systems to meet their own energy needs, and setting different power limits for different types of producers.<sup>18</sup>

— Turning to the natural gas market, pollutant reduction and resource-saving will be facilitated by: (a) upgrading the Liquidified Natural Gas Terminal on Revythousa island — already under way — and creating a second Liquidified Natural Gas Terminal in Northern Greece; (b) creating a natural gas trading hub by the Hellenic Gas Transmission System Operator SA (DESFA); (c) expanding eligibility to participate in Public Gas Corporation SA (DEPA) gas auctions to all industrial customers, i.e. not only “electric power producers” and “large industries”; (d) a provision, passed by Parliament, for the further opening-up of the natural gas market;<sup>19</sup> (e) a subsidisation programme for replacing oil-fired heating systems with natural gas ones;<sup>20</sup> and (f) the “Vertical Gas Corridor” project announced in a Joint Statement by the Greek, Bulgarian and Romanian Ministers of Energy.<sup>21</sup>

— A draft law, on which public consultation ended last September, provided for the transposition into Greek law of EU Directives on improving energy efficiency.<sup>22</sup>

— Law 4280/2014 laid down the regulatory framework for (a) environmental upgrading and privately led urban development projects; and (b) the sustainable development of deserted, small or shrinking settlements.

## 5 OVERVIEW OF THE ACTIVITIES OF THE CLIMATE CHANGE IMPACTS STUDY COMMITTEE (CCISC) IN 2014

In the current second phase of its study, the Climate Change Impacts Study Committee (CCISC) of the Bank of Greece concentrated on selected key sectors in order to contribute to the formulation of a National Strategy for Adaptation to Climate Change (NSACC).

In December 2014, a Memorandum of Understanding was signed between the Ministry of Environment, Energy and Climate Change (YPEKA), the Athens Academy Medical-Biological Research Institute and the Bank of Greece to facilitate the implementation of a “National Strategy for Adaptation to Climate Change”. The aim is to deal with climate change at country level, building on the experience of the Bank of Greece Climate Change Impacts Study Committee in matters associated with the economic and other impacts of climate change. Apart from the formulation of a national strategy, the Memorandum of Understanding provides for the establishment of a monitoring mechanism, the integration of

<sup>15</sup> See press release by YPEKA on 5.3.2014.

<sup>16</sup> See press releases by YPEKA on 24.11.2014 and 12.9.2014.

<sup>17</sup> Article 29 of Law 4301/2014. See also press release by the Ministry of Finance on 10.9.2014.

<sup>18</sup> As also provided for in Article 7 of Law 4296/2014. See press release by YPEKA on 30.12.2014.

<sup>19</sup> Article 31 of Law 4301/2014 amending Article 82 of Law 4001/2011 provides that all types of industries, regardless of their consumption, even those outside the coverage area of a gas supply company, are eligible to be considered as “selecting” DEPA customers.

<sup>20</sup> Ministerial Decision (Government Gazette B 3071/14 November 2014) “Replacement of oil-fired heating systems with natural gas ones”.

<sup>21</sup> See press release by YPEKA on 9.12.2014.

<sup>22</sup> Among other things, the draft law provides for low-voltage networks to be equipped with smart meters and the setting of an indicative national energy efficiency target. See Draft Law (in public consultation until 26.9.2014) “Transposition into Greek Law of Directive 2012/27/EU of the European Parliament and of the Council, of 25 October 2012, on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC”.

adaptation policies into all sectoral policies, the encouragement of the international presence of Greece in climate change activities and the “promotion of public information and awareness” on its impacts.

In 2014, the CCISC hosted two lectures open to the general public. In the first (held on 14 May 2014), Professor Anil Markandya,<sup>23</sup> discussed on “Climate finance: Current Issues and Challenges”. In the second (held on 8 November 2014), Professor Lucas Bretschger<sup>24</sup> spoke on “Energy prices and growth: how to measure the costs of climate policies”.

Finally, on 6 November 2014, the CCISC published its report “Greek tourism and Climate Change: adaptation policies and a new development strategy” (available at the Bank of Greece website). The report discusses how climate change can affect the country’s tourism product and investigates the implications of human-induced climate change for sustainable growth and total quality management in tourism. It also attempts an evaluation of the

impact of climate change on tourism, including by considering alternative sea level rise scenarios. Finally, it presents the sector’s strategy and action plan for addressing the impact of climate change, with a focus on growth policies and the challenges faced by Greek tourism, especially in the islands. The report is the fruit of collaboration between scientists and the tourism industry and follows up on the conference “Greek Tourism and Climate Change: Adaptation Policies and a New Growth Strategy” held in July 2013, jointly organised by the Bank of Greece, the Mariolopoulos-Kanaginis Foundation for Environmental Sciences and the Research Centre for Atmospheric Physics and Climatology of the Academy of Athens. The report, in hard-copy format and in English translation, is due by the end of this year.<sup>25</sup>

23 President of the European Association of Environmental and Resource Economists (EAERE) and Scientific Director of the Basque Centre for Climate Change.

24 Director of the Center for Economic Research at the Swiss Federal Institute of Technology ETH Zürich and elected to succeed Anil Markandya in EAERE in 2016.

25 For an overview of the conclusions of this report, see Bank of Greece, press release, 6.11.2014.





**ANNEX**

**ANNUAL ACCOUNTS  
FOR THE YEAR 2014**

**AND AUDITOR'S REPORT**





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# BALANCE SHEET AS AT 31 DECEMBER 2014

## EIGHTY-SEVENTH YEAR

(in euro)

A S S E T S	31.12.2014	31.12.2013
<b>1. Gold and gold receivables</b>	<b>4,720,522,384</b>	<b>4,145,310,521</b>
<b>2. Claims on non-euro area residents denominated in foreign currency</b>	<b>1,570,953,046</b>	<b>1,059,044,295</b>
2.1 Receivables from the International Monetary Fund (IMF)	947,944,540	889,700,605
2.2 Balances with banks and security investments, external loans and other external assets	623,008,506	169,343,690
<b>3. Claims on euro area residents denominated in foreign currency</b>	<b>599,521,200</b>	<b>323,744,770</b>
3.1 General government	288,310,529	269,674,472
3.2 Other claims	311,210,671	54,070,298
<b>4. Claims on non-euro area residents denominated in euro</b>	<b>23,881</b>	<b>23,869</b>
4.1 Balances with banks, security investments and loans	23,881	23,869
4.2 Claims arising from the credit facility under ERM II	0	0
<b>5. Lending to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>56,039,400,000</b>	<b>63,225,800,000</b>
5.1 Main refinancing operations	47,149,400,000	61,780,800,000
5.2 Longer-term refinancing operations	8,890,000,000	1,385,000,000
5.3 Fine-tuning reverse operations	0	0
5.4 Structural reverse operations	0	0
5.5 Marginal lending facility	0	60,000,000
5.6 Credits related to margin calls	0	0
<b>6. Other claims on euro area credit institutions denominated in euro</b>	<b>1,095,137</b>	<b>9,790,608,293</b>
<b>7. Securities of euro area residents denominated in euro</b>	<b>31,056,804,080</b>	<b>21,363,739,306</b>
7.1 Securities held for monetary policy purposes	5,786,493,862	6,070,173,067
7.2 Other securities of euro area residents denominated in euro	25,270,310,218	15,293,566,239
<b>8. General government long-term debt denominated in euro</b>	<b>5,249,170,866</b>	<b>5,657,654,356</b>
<b>9. Intra-Eurosystem claims</b>	<b>1,773,729,971</b>	<b>1,742,834,574</b>
9.1 Participating interest in the ECB	564,765,496	531,289,922
9.2 Claims equivalent to the transfer of foreign reserves to the ECB	1,178,260,606	1,129,060,170
9.3 Net claims related to the allocation of euro banknotes within the Eurosystem	0	0
9.4 Net claims arising from balances of TARGET2 accounts	0	0
9.5 Other claims within the Eurosystem (net)	30,703,869	82,484,482
<b>10. Items in course of settlement</b>	<b>0</b>	<b>1,592,003</b>
<b>11. Other assets</b>	<b>2,144,317,151</b>	<b>2,184,699,692</b>
11.1 Coins	56,067,754	66,350,306
11.2 Tangible and intangible fixed assets	809,329,992	815,306,920
11.3 Other financial assets	89,368,646	83,776,615
11.4 Off-balance-sheet instruments revaluation differences	229,653	241,762
11.5 Accruals and prepaid expenses	614,144,364	645,867,967
11.6 Sundry	575,176,742	573,156,122
<b>TOTAL ASSETS</b>	<b>103,155,537,716</b>	<b>109,495,051,679</b>
<b>OFF-BALANCE-SHEET ITEMS</b>	<b>31.12.2014</b>	<b>31.12.2013</b>
1. Greek government securities relating to the management of the “Common capital of legal entities in public law and social security funds” according to Law 2469/97	24,816,741,275	20,844,649,345
2. Greek government securities and other debt securities relating to the management and custody of assets of public entities, social security funds and private agents and EFSF securities owned by the Hellenic Financial Stability Fund	16,239,481,356	16,546,729,134
3. Assets eligible as collateral for Eurosystem monetary policy operations and intraday credit	72,152,476,087	84,630,052,242
4. Assets accepted by the Bank of Greece as eligible collateral for emergency liquidity assistance to credit institutions	22,703,376,538	58,286,098,571
5. Other off-balance-sheet items	27,799,898,528	26,495,148,210
<b>TOTAL OFF-BALANCE-SHEET ITEMS</b>	<b>163,711,973,784</b>	<b>206,802,677,502</b>

<b>LIABILITIES</b>	<b>31.12.2014</b>	<b>31.12.2013</b>
<b>1. Banknotes in circulation</b>	<b>27,172,060,740</b>	<b>24,640,887,450</b>
<b>2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro</b>	<b>3,076,270,299</b>	<b>1,958,581,341</b>
2.1 Current accounts (covering the minimum reserve system)	2,926,270,299	748,581,341
2.2 Deposit facility	150,000,000	1,150,000,000
2.3 Fixed-term deposits	0	0
2.4 Fine-tuning reverse operations	0	0
2.5 Deposits related to margin calls	0	60,000,000
<b>3. Other liabilities to euro area credit institutions denominated in euro</b>	<b>0</b>	<b>0</b>
<b>4. Liabilities to other euro area residents denominated in euro</b>	<b>4,787,669,291</b>	<b>7,985,961,670</b>
4.1 General government	3,520,526,264	6,943,160,210
4.2 Other liabilities	1,267,143,027	1,042,801,460
<b>5. Liabilities to non-euro area residents denominated in euro</b>	<b>1,028,309,677</b>	<b>990,392,122</b>
<b>6. Liabilities to euro area residents denominated in foreign currency</b>	<b>15,085,742</b>	<b>76,581,690</b>
<b>7. Liabilities to non-euro area residents denominated in foreign currency</b>	<b>2,391</b>	<b>2,128</b>
7.1 Deposits and other liabilities	2,391	2,128
7.2 Liabilities arising from the credit facility under ERM II	0	0
<b>8. Counterpart of special drawing rights allocated by the IMF</b>	<b>932,888,415</b>	<b>874,914,774</b>
<b>9. Intra-Eurosystem liabilities</b>	<b>54,502,387,704</b>	<b>61,955,261,464</b>
9.1 Liabilities related to promissory notes backing the issuance of ECB debt certificates	0	0
9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem	5,183,480,790	10,839,345,715
9.3 Net liabilities arising from balances of TARGET2 accounts	49,318,906,914	51,115,915,749
9.4 Other liabilities within the Eurosystem (net)	0	0
<b>10. Items in course of settlement</b>	<b>2,558,265</b>	<b>1,799,852</b>
<b>11. Other liabilities</b>	<b>991,563,677</b>	<b>1,167,709,485</b>
11.1 Off-balance-sheet instruments revaluation differences	523,582	1,310
11.2 Accruals and income collected in advance	14,007,249	32,621,588
11.3 Sundry	977,032,846	1,135,086,587
<b>12. Provisions</b>	<b>6,788,684,202</b>	<b>6,651,794,477</b>
<b>13. Revaluation accounts</b>	<b>3,042,557,641</b>	<b>2,375,664,547</b>
<b>14. Capital and reserves</b>	<b>815,499,672</b>	<b>815,500,679</b>
14.1 Capital	111,243,362	111,243,362
14.2 Ordinary reserve	111,243,362	111,243,362
14.3 Extraordinary reserve	84,500,000	84,500,000
14.4 Special reserve from the revaluation of land and buildings	507,247,856	507,247,856
14.5 Other special reserves	1,265,092	1,266,099
<b>TOTAL LIABILITIES</b>	<b>103,155,537,716</b>	<b>109,495,051,679</b>

**Notes:**

1 Under Article 54A of the Bank's Statute, the financial statements of the Bank of Greece are drawn up in accordance with the accounting principles and rules established by the European Central Bank (ECB) and applying to all members of the European System of Central Banks (ESCB).

2 The Bank of Greece's Eurosystem key as at 31 December 2014 was 2.90547%.

3 Claims/liabilities denominated in euro or foreign currency are broken down into claims on/liabilities to euro area residents and non-euro area residents.

4 Account balances related to monetary policy operations are disclosed under distinct items.

5 Gold has been valued at the price provided by the ECB as at 31 December 2014: €987.769 per fine oz, compared with €871.220 as at 31 December 2013.

6 Claims/liabilities denominated in foreign currency have been converted to euro using the euro foreign exchange reference rates of the ECB as at 31 December 2014.

7 Securities (other than those held-to-maturity, non-marketable securities and securities held for monetary policy purposes) are valued at the mid-market prices of 31 December 2014. Marketable securities classified as held-to-maturity, non-marketable securities and securities held for monetary policy purposes are valued at amortised cost subject to impairment. In financial year 2014 no impairment losses were incurred.

8 "Other off-balance-sheet items" include the promissory note issued by the Greek government in favour of the IMF for the outstanding part of the loans received. At 31.12.2014 the value of the promissory note was SDR 20 billion, equivalent to €23.9 billion.

9 Certain balance sheet items and the profit and loss account for the year 2013 have been reclassified to ensure comparability with the respective items of the year 2014.

## PROFIT AND LOSS ACCOUNT FOR THE YEAR 2014

(in euro)

	2014	2013
<b>1. Net interest income</b>	<b>957,672,264</b>	<b>1,394,949,966</b>
1.1 Interest income	1,049,114,258	1,872,304,110
1.2 Interest expense	-91,441,994	-477,354,144
<b>2. Net result of financial operations, write-downs and risk provisions</b>	<b>39,587,522</b>	<b>26,741,117</b>
2.1 Realised gains arising from financial operations	39,587,522	26,806,573
2.2 Write-downs on financial assets and positions	-1,740,761	-10,143,337
2.3 Transfer from provisions for foreign exchange rate, interest rate, credit and gold price risks	1,740,761	10,077,881
<b>3. Net income from fees and commissions</b>	<b>73,515,465</b>	<b>70,215,064</b>
3.1 Fees and commissions income	74,854,516	72,870,971
3.2 Fees and commissions expense	-1,339,051	-2,655,907
<b>4. Income from equity shares and participating interests</b>	<b>29,004,290</b>	<b>54,181,615</b>
<b>5. Net result of pooling of monetary income</b>	<b>6,276,926</b>	<b>52,200,784</b>
<b>6. Other income</b>	<b>12,134,922</b>	<b>12,567,782</b>
<b>Total net income</b>	<b>1,118,191,389</b>	<b>1,610,856,328</b>
<b>7. Staff costs and pension benefit expenses</b>	<b>-258,748,290</b>	<b>-255,222,508</b>
<b>8. Other administrative expenses</b>	<b>-46,964,051</b>	<b>-36,953,947</b>
<b>9. Depreciation of tangible and intangible fixed assets</b>	<b>-13,918,569</b>	<b>-14,477,256</b>
<b>10. Consultancy fees for the auditing of the banking system</b>	<b>-13,956,549</b>	<b>-4,260,362</b>
<b>11. Provisions</b>	<b>-130,054,727</b>	<b>-468,793,052</b>
<b>Total expenses</b>	<b>-463,642,186</b>	<b>-779,707,125</b>
<b>PROFIT FOR THE YEAR</b>	<b>654,549,203</b>	<b>831,149,203</b>

## DISTRIBUTION OF PROFIT

(Article 71 of the Statute)

(in euro)

	2014	2013
Dividend to be distributed: €0.49728 per share for 19,864,886 shares	9,878,410	9,878,410
Tax on dividends (tax rate 26%, Articles 47 and 58, Law 4172/2013)	3,470,793	3,470,793
To the Government	641,200,000	817,800,000
	<b>654,549,203</b>	<b>831,149,203</b>

*Note: The gross dividend for financial year 2014 amounts to €0.6720 per share. Dividend to be distributed (€0.49728 per share) is subject to withholding tax at a rate of 10% in accordance with Law 4172/2013, Article 64 paragraph 1.*

Athens, 19 January 2015

THE GOVERNOR

THE DIRECTOR OF THE ACCOUNTING DEPARTMENT

YANNIS STOURNARAS

MARIA PAGONI

To the Shareholders of BANK OF GREECE A.E.

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the BANK OF GREECE A.E. (the “Bank”) which comprise the balance sheet as of 31 December 2014 and the statement of income, the appropriation account for the year then ended, and a summary of significant accounting policies and other explanatory information.

### **Management’s Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the accounting principles prescribed by the European Central Bank (ECB) as adopted by the Bank in Article 54A of its Statute and the accounting standards prescribed by Greek Law, where the Guideline of the ECB does not provide specific direction, as well as, for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

### **Auditor’s responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity’s preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Bank’s internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### **Opinion**

In our opinion, the financial statements give a true and fair view of the financial position of the Bank of Greece as at 31 December 2014 and of its financial performance for the year then ended in accordance with the accounting principles prescribed by the ECB as adopted by the Bank in Article 54A of its Statute and the accounting standards prescribed by Greek Law, where the Guideline of the ECB does not provide specific direction.



## **Report on Other Legal and Regulatory Requirements**

We verified that the contents of the Report of the Governor relating to the statement of income for 2014 are consistent and corresponds with the accompanying financial statements within the scope set by Articles 37 and 43A of C.L. 2190/1920.

Athens, 19 January 2015

KPMG Certified Auditors A.E.  
AM SOEL 114

Marios T. Kyriacou  
Certified Auditor Accountant  
AM SOEL 11121

Nikolaos Vouniseas  
Certified Auditor Accountant  
AM SOEL 18701



# NOTES ON THE ANNUAL ACCOUNTS

## ACCOUNTING POLICIES

### General principles regarding the preparation of the Bank's accounts

The annual accounts of the Bank of Greece, under Article 54A of its Statute, are prepared in accordance with the accounting rules and principles applicable to the European System of Central Banks (ESCB), as set out by the European Central Bank (ECB) in its Guideline ECB/2010/20 of 11 November 2010, as amended.

These rules and practices are based on internationally accepted accounting standards and have been adjusted to reflect the specific status of the national central banks (NCBs) of the Eurosystem.

Any issues that are not covered by the aforementioned rules or ECB guidelines or are governed by non-mandatory provisions are to be treated either in accordance with the ECB recommendations or in accordance with the Bank's Statute and Codified Law 2190/1920 on sociétés anonymes.

### Main accounting principles

The main accounting principles that apply to the Eurosystem (i.e. the ECB and the euro area NCBs, including the Bank of Greece) are the following:

- **Transparency:** accounting and financial reporting must reflect the Bank's real financial situation.
- **Prudence:** Unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account, but are recorded directly in revaluation accounts. Unrealised valuation losses at the year-end in excess of previous unrealised valuation gains are recognised as expenses and are taken to the Profit and Loss Account.
- **Post-balance-sheet events:** Assets and liabilities are adjusted for events that occur between the annual balance sheet date and the date on which the financial statements are approved if they affect the condition of assets or liabilities at the balance sheet date.
- **Materiality**
- **Going concern basis**
- **The accruals principle:** Income and expenses are recognised in the accounting period in which they are earned or incurred and not in the period in which they are received or paid.
- **Consistency and comparability:** The criteria for balance sheet valuation and income recognition are applied consistently to ensure comparability of data in the financial statements.

### Accounting approaches

- Transactions denominated in euro are recorded on value date using the cash approach.

- Foreign exchange transactions, financial instruments denominated in foreign currency and related accruals are recorded using the economic approach, according to which:
  - Transactions are recorded on off-balance-sheet accounts on the transaction/trade date.
  - On the settlement/value date the off-balance-sheet booking entries are reversed and the transactions are booked on balance sheet accounts.
  - Applying the economic approach, the foreign currency positions, realised gains and losses arising from net sales and the calculation of average cost are affected on the trade date.
  - Interest, premium or discount accrued related to financial instruments denominated in foreign currency is calculated and booked daily, and the foreign currency position is also affected daily.

#### **Balance sheet valuation rules**

- Assets and liabilities in foreign currency and gold are converted into euro at the exchange rate prevailing at the balance sheet date, as derived from the ECB's daily quotation of reference exchange rates.
- Income and expenses are converted into euro at the exchange rate prevailing on the trade date.
- No distinction is made between price and currency revaluation differences for gold. Instead, a single gold valuation is accounted for on the basis of the price in euro per fine ounce of gold, which is derived by converting into euro the year-end USD price of gold on the London market using the euro/USD exchange rate of the same day, on the basis of the ECB's daily quotation of reference exchange rates.
- The revaluation of foreign exchange assets and liabilities, including on-balance-sheet and off-balance-sheet instruments, is performed on a currency-by-currency basis.
- Securities held for monetary policy purposes are valued at amortised cost subject to impairment, regardless of the holding intention, in accordance with an ECB Governing Council decision adopted in 2014. This change in the accounting treatment did not result in an adjustment of the comparable figures for 2013 as all such existing securities were already valued at amortised cost subject to impairment.
- Marketable securities, other than those classified as held for monetary policy purposes, are valued at the mid-market prices prevailing at the balance sheet date, on a security-by-security basis, using the ISIN code as the security identifier, provided they are not classified as held-to-maturity; for the year ending 31 December 2014, mid-market prices of 31 December 2014 were used. Marketable securities classified as held-to-maturity and non-marketable securities are valued at amortised cost subject to impairment.

#### **Income recognition**

- Realised gains and losses arising from the sale of foreign currency, gold and securities are taken to the Profit and Loss Account. Such realised gains and losses are calculated by reference to the average cost of the respective asset on the date they are realised.

- Unrealised gains (revaluation gains) are not recognised as income but are transferred directly to revaluation accounts.
- Unrealised losses (revaluation losses), when in excess of previous revaluation gains registered in the corresponding revaluation account, are taken at year-end to the Profit and Loss Account and are not netted against new revaluation gains in subsequent years. Such unrealised losses on any one security or currency or on gold holdings are not netted against unrealised gains on other securities or currencies or gold. The average cost of a financial asset giving rise to an unrealised loss at year-end is adjusted to the year-end exchange rate or market price.
- Premiums or discounts arising on purchased securities are calculated and presented as part of interest income and are amortised over the remaining contractual life of the securities.
- Impairment losses are taken to the Profit and Loss Account and are not reversed in subsequent years unless the impairment decreases and the decrease can be related to an observable event that occurred after the impairment was first recorded.

#### **Off-balance-sheet instruments**

Foreign exchange forward transactions, forward legs of foreign exchange swaps and other currency transactions involving an exchange of one currency for another at a future date are included in the net foreign currency positions for the purpose of calculating average purchase costs and foreign exchange gains and losses.

#### **Banknotes in circulation**

The ECB and the 17 euro area NCBs, which together comprise the Eurosystem, issue euro banknotes.<sup>1</sup> The total value of euro banknotes in circulation is allocated to the Eurosystem central banks on the last working day of each month according to their banknote allocation key.<sup>2</sup>

The ECB has been allocated a share of 8% in the total value of euro banknotes in circulation, while the remaining 92% is allocated to the NCBs according to their Eurosystem key. The share of banknotes in circulation that has been allocated to the Bank of Greece is disclosed under liability item 1 “Banknotes in circulation”.

The difference between the value of euro banknotes allocated to each NCB according to its banknote allocation key and the value of euro banknotes that the NCB actually puts into circulation produces “Intra-Eurosystem claims/liabilities”. These interest-bearing claims or liabilities<sup>3</sup> are disclosed under the sub-item “Net claims/liabilities related to the allocation of euro banknotes within the Eurosystem”.

For the year of the euro cash changeover and the following five years, intra-Eurosystem balances arising from the allocation of euro banknotes are adjusted in order to avoid significant changes in the monetary income of NCBs relative to previous years.

<sup>1</sup> Decision of the ECB of 13 December 2010 on the issue of euro banknotes (recast) (ECB/2010/29), OJ L 35, 9.2.2011, p. 26, as amended.

<sup>2</sup> “Banknote allocation key” means the percentages that result from taking into account the ECB’s share (8%) in the total euro banknote issue and applying the subscribed capital key to the NCB’s share in this total.

<sup>3</sup> Decision of the ECB of 25 November 2010 on the allocation of monetary income of the national central banks of Member States whose currency is the euro (recast) (ECB/2010/23), OJ L 35, 9.2.2011, p. 17, as amended.

The amounts of these adjustments were calculated taking into account the differences between the average value of banknotes in circulation of each NCB during the reference period (referring to the 24-month period beginning 30 months before the adoption of the single currency by the relevant Member State) and the average value of banknotes that would have been allocated to them in the same period according to their ECB capital key.

The small further adjustments of balances made henceforth reflect changes in the balances of NCBs joining the Eurosystem, which affect those of already participating NCBs. In 2014, adjustments arise from the entry of the NCBs of Slovakia (1 January 2009), Estonia (1 January 2011) and Latvia (1 January 2014).

Interest income and interest expenses on these claims/liabilities are cleared through the accounts of the ECB and are disclosed in the Profit and Loss Account of each Eurosystem NCB under “Net interest income”.

### **ECB profit distribution**

The Governing Council of the ECB has decided that the ECB’s income from its share (8%) of the total euro banknote issue and income arising from securities purchased for monetary policy purposes under the Securities Markets Programme (SMP), the Asset-Backed Securities Purchase Programme (ABSPP) and the third Covered Bond Purchase Programme (CBBP3) is due in full to the NCBs and must be recorded in the financial year in which it accrues. Unless otherwise decided by the Governing Council, the ECB distributes this income in January of the following year by means of an interim profit distribution.<sup>4</sup> It is distributed in full to the NCBs, unless the ECB’s net profit for the year is less than its income earned from such sources, and subject to any decisions by the Governing Council to make transfers to the ECB’s provision for foreign exchange rate, interest rate, credit and gold price risks. The Governing Council may also decide to charge costs incurred by the ECB in connection with the issue and handling of euro banknotes against income earned on euro banknotes in circulation.

The amounts distributed to the NCBs are disclosed under “income from equity shares and participating interests” in the Profit and Loss Account.

### **Intra-ESCB balances/intra-Eurosystem balances**

Intra-Eurosystem balances result from cross-border payments between EU central banks (for the most part initiated by private entities). They are mostly effected through the TARGET2 system<sup>5</sup> and give rise to bilateral balances in the TARGET2 accounts of EU central banks. These bilateral balances are netted out and then assigned to the ECB on a daily basis, leaving each NCB with a single net bilateral position vis-à-vis the ECB only. Euro-denominated intra-Eurosystem balances of the Bank of Greece vis-à-vis the ECB arising from TARGET2 are presented on the balance sheet as a single net asset or liability position and disclosed under “Net claims/liabilities arising from balances of TARGET2 accounts”.

Intra-ESCB balances vis-à-vis non-euro area NCBs, arising from payments not effected through

<sup>4</sup> Decision (EU) 2015/298 of the ECB of 15 December 2014 on the interim distribution of the income of the European Central Bank (recast) (ECB/2014/57), OJ L 53, 25.2.2015, p. 24.

<sup>5</sup> TARGET2: Trans-European Automated Real-time Gross settlement Express Transfer system.

the TARGET2 system, are disclosed either as “Claims on non-euro area residents denominated in euro” or as “Liabilities to non-euro area residents denominated in euro”.

Various other intra-Eurosystem balances denominated in euro (such as the ECB interim profit distribution and the redistribution of monetary income) are recorded on the balance sheet of the Bank of Greece as a single net asset or liability position under “Other claims within the Eurosystem (net)” or “Other liabilities within the Eurosystem (net)”.

Intra-Eurosystem claims arising from the Bank’s share in the capital of the ECB and its contribution to the reserves and provisions of the ECB are disclosed under “Participating interest in the ECB”.

Intra-Eurosystem balances arising from the allocation of euro banknotes in circulation among the NCBs are included as a single net asset or liability position under “Net claims related to the allocation of euro banknotes within the Eurosystem” or “Net liabilities related to the allocation of euro banknotes within the Eurosystem”.

Intra-Eurosystem balances arising from the transfer of foreign reserve assets to the ECB by NCBs joining the Eurosystem are denominated in euro and reported under “Claims equivalent to the transfer of foreign reserves to the ECB”.

### **European System of Central Banks (ESCB)**

The European System of Central Banks (ESCB) comprises the ECB and the national central banks of all EU Member States regardless of whether or not they have adopted the euro.

### **Eurosystem**

The Eurosystem comprises the ECB and the national central banks of the EU Member States whose currency is the euro. The Eurosystem and the ESCB will co-exist for as long as there are EU Member States outside the euro area.

### **Euro area**

The euro area consists of those Member States of the European Union that have adopted the euro as their currency.

### **Key for subscriptions to the ECB’s capital**

The NCBs’ shares in the capital of the ECB are calculated using a key which reflects the respective country’s share in the total population and gross domestic product of the EU.

The euro area NCBs have paid up their subscriptions to the ECB’s capital in full according to their capital keys and are allocated the profits and losses of the ECB.

The non-euro area NCBs pay up only 3.75% of their subscribed capital as a contribution to the operational costs of the ECB.

### The NCBs' capital keys

National Central Banks Capital key as at	31 December 2014	31 December 2013
	<i>(in percentages)</i>	
Nationale Bank van België/ Banque Nationale de Belgique	2.4778	2.4176
Deutsche Bundesbank	17.9973	18.7603
Eesti Pank	0.1928	0.1780
Central Bank of Ireland	1.1607	1.1111
Bank of Greece	2.0332	1.9483
Banco de España	8.8409	8.2533
Banque de France	14.1792	14.1342
Banca d'Italia	12.3108	12.4570
Central Bank of Cyprus	0.1513	0.1333
Latvijas Banka	0.2821	--
Banque centrale du Luxembourg	0.2030	0.1739
Central Bank of Malta	0.0648	0.0635
De Nederlandsche Bank	4.0035	3.9663
Oesterreichische Nationalbank	1.9631	1.9370
Banco de Portugal	1.7434	1.7636
Banka Slovenije	0.3455	0.3270
Národná banka Slovenska	0.7725	0.6881
Suomen Pankki – Finlands Bank	1.2564	1.2456
<b>Total of euro area NCBs</b>	<b>69.9783</b>	<b>69.5581</b>
Българска народна банка (Bulgarian National Bank)	0.8590	0.8644
Česká národní banka	1.6075	1.4539
Danmarks Nationalbank	1.4873	1.4754
Hrvatska narodna banka	0.6023	0.5945
Latvijas Banka	-	0.2742
Lietuvos bankas	0.4132	0.4093
Magyar Nemzeti Bank	1.3798	1.3740
Narodowy Bank Polski	5.1230	4.8581
Banca Națională a României	2.6024	2.4449
Sveriges Riksbank	2.2729	2.2612
Bank of England	13.6743	14.4320
<b>Total of non-euro area NCBs</b>	<b>30.0217</b>	<b>30.4419</b>
<b>Total</b>	<b>100.0000</b>	<b>100.0000</b>

# NOTES ON THE BALANCE SHEET

## ASSETS

### 1. Gold and gold receivables

Gold and gold receivables	31.12.2014	31.12.2013	Change
Volume in fine troy ounces (thousands)	4,779.0	4,758.0	21.0
Volume in tonnes	148.6	148.0	0.6
Value (millions)	4,720.5	4,145.3	575.2

The amounts reported above comprise the Bank's holdings of gold and gold sovereigns (3,615.3 thousand ounces), gold receivables from the Greek State (985.6 thousand ounces) corresponding to Greece's participation in the IMF (the gold component of Greece's quota has been paid by the Bank of Greece on behalf of the Greek State) and non-international standard gold and gold coins (178.1 thousand ounces). A significant part of the gold holdings is kept with banks abroad.

Gold and gold receivables increased slightly (by 21 thousand ounces), reflecting increased holdings of gold sovereigns (by 9.4 thousand ounces) and non-international standard gold and gold coins (by 11.6 thousand ounces). The €575.2 million increase in their euro-denominated value is attributed to the valuation of gold.

Gold is valued on the basis of the euro price per fine troy ounce as at year-end, which is derived by converting into euro the year-end USD price of gold on the London market using the euro/USD exchange rate of the same date, as listed in the ECB euro foreign exchange reference rates. The price of gold as at 31.12.2014 was €987.769 per ounce, up from €871.220 as at 31.12.2013.

The valuation result of gold (value as at 31 December 2014, compared with the average acquisition cost) came to €2,916.5 million and is disclosed under liability item 13 "Revaluation accounts". This amount represents unrealised profit and serves as a buffer against potential losses from gold price movements.

### 2. Claims on non-euro area residents denominated in foreign currency

This item includes receivables from the IMF (in SDRs), current account balances with correspondent banks abroad, fixed-term deposits, securities holdings, and the value of foreign banknotes held in the Bank's vaults.

#### 2.1 Receivables from the International Monetary Fund (IMF)

These arise from Greece's participation in the IMF and include the following:

- The Bank's holdings of special drawing rights (SDRs);
- The SDR component of Greece's quota in the IMF.



<b>Receivables from the IMF</b> <i>(in millions)</i>	<b>31.12.2014</b>		<b>31.12.2013</b>		<b>Change</b>	
	<i>SDR</i>	<i>Euro</i>	<i>SDR</i>	<i>Euro</i>	<i>SDR</i>	<i>Euro</i>
SDR holdings	554.0	660.6	554.7	620.3	-0.7	-40.3
SDR component of Greece's quota in the IMF	241.0	287.3	240.9	269.4	0.1	17.9
<b>Total</b>	<b>795.0</b>	<b>947.9</b>	<b>795.6</b>	<b>889.7</b>	<b>-0.6</b>	<b>-58.2</b>

#### • SDR holdings

The largest part of Greece's SDR holdings with the IMF comes from SDR allocations to Greece in 2009 in the context of IMF's general SDR allocation, equivalent to USD 250 billion, to all its member countries, which was approved by the IMF Board of Governors on 7 August 2009 and entered into force on 28 August 2009.

This allocation aimed to provide liquidity to the global economic system by boosting the foreign reserve assets of the IMF member countries according to their quotas.

The SDR holdings are used for the payment of commissions, interest, various expenses and other liabilities arising from IMF loan payments to Greece under the IMF/EU Support Mechanism for Greece. These expenses were paid out of the aforementioned holdings, in debit of the euro account of the Greek State with the IMF. Most of these holdings were replaced by SDR purchases made by the Bank of Greece.

#### • Greece's SDR quota in the IMF

The Bank of Greece has lent the Greek State in order to fulfil its quota in the IMF and manages the relevant claims. The euro component of Greece's quota in the IMF (€1,027.2 million) is reported under liability item 5 "Liabilities to non-euro area residents denominated in euro". Greece's total quota as at 31 December 2014 amounted to SDR 1,101.8 million.

The increases in the euro equivalent of these claims reflected year-end adjustments on account of the depreciation of the euro vis-à-vis the SDR. Valuation was based on the SDR/euro exchange rate as at 31 December 2014, as derived from the ECB euro foreign exchange reference rates, i.e. SDR 1 = €1.1924, compared with €1.1183 as at 31 December 2013.

#### 2.2 Balances with banks and security investments, external loans and other external assets

This item consists of claims on non-euro area residents denominated in foreign currency, e.g. fixed-term deposits, current account balances with correspondents abroad, bonds, Treasury bills and foreign banknotes in the Bank's vaults.

Categories of claims	31.12.2014	31.12.2013	Change
	(in € millions)		
Fixed-term deposits with banks abroad	578.4	114.4	464.0
Current account balances with correspondents abroad	16.5	18.3	-1.8
Marketable securities (bonds, Treasury bills)	8.2	16.5	-8.3
Cash holdings of foreign currency	19.9	20.1	-0.2
<b>Total</b>	<b>623.03</b>	<b>169.3</b>	<b>453.7</b>

As at 31 December 2014, most of these claims were denominated in US dollars.

### 3. Claims on euro area residents denominated in foreign currency

This item includes claims on general government arising from long-term loans and fixed-term deposits with correspondent banks abroad.

#### 3.1 General government

These claims include:

- loans in SDRs granted by the Bank of Greece to the Greek State to finance the SDR component of its quota in the IMF;
- loans in US dollars and a gold-linked loan to the Greek State to finance its participation in international organisations.

These claims as at 31 December 2014 rose to €288.3 million, from €269.7 million as at 31 December 2013. The increase mainly reflected year-end revaluation adjustments due to exchange rate variations and gold price movements in 2014 (the depreciation of the euro vis-à-vis the SDR and the US dollar also led to an increase in the price of gold).

#### 3.2 Other claims

The balance as at 31 December 2014 represents foreign currency (USD)-denominated fixed-term deposits with euro area counterparties. These amounted to €311.2 million as at 31 December 2014, compared with €54.1 million as at 31 December 2013.

### 4. Claims on non-euro area residents denominated in euro

#### 4.1 Balances with banks, security investments and loans

This item includes interest-bearing current account balances with banks abroad totalling €24 thousand as at 31 December 2014.

### 5. Lending to euro area credit institutions related to monetary policy operations denominated in euro

This item consists of the outstanding balances of loans granted by the Bank of Greece to domestic credit institutions in the context of the euro area single monetary policy.

Categories of operations	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
Main refinancing operations (MROs)	47,149.4	61,780.8	-14,631.4
Longer-term refinancing operations (LTROs)	8,890.0	1,385.0	-7,505.0
Marginal lending facility	0.0	60.0	-60.0
<b>Total</b>	<b>56,039.4</b>	<b>63,225.8</b>	<b>-7,186.4</b>

Liquidity is provided to counterparties via refinancing operations (main and longer-term) and under the marginal lending facility against adequate collateral in the form of marketable and non-marketable assets that meet the Eurosystem's collateral eligibility criteria.

It should be noted that, under Article 32.4 of the Statute of the ESCB and of the ECB, income and losses arising from Eurosystem monetary policy operations are allocated among the NCBs according to their respective Eurosystem keys.

Losses can only materialise if both the counterparty fails and the proceeds from the realisation of the collateral provided by the counterparty are not sufficient. When specific assets are not eligible as Eurosystem collateral but are accepted as eligible collateral by an NCB, the risk is borne by the NCB accepting the collateral concerned and is not shared among the Eurosystem.

In particular, the following should also be noted:

#### ***5.1 Main refinancing operations***

The main refinancing operations are executed through reverse liquidity-providing transactions with a maturity of one week, usually through regular weekly tenders. These operations play a key role in achieving the objectives of the monetary policy pursued. Since October 2008, these operations have been conducted as fixed rate tenders with full allotment.

#### ***5.2 Longer-term refinancing operations***

These operations aim to provide counterparties with additional longer-term refinancing. They are executed as reverse transactions with a maturity of one reserve maintenance period (up to 35 days), but also with maturities of 3, 6, 12 and 36 and 48 months. Since October 2008, they have been conducted as fixed rate tenders with full allotment.

In June 2014, the Governing Council of the ECB decided to conduct a series of targeted longer-term refinancing operations (TLTROs). Two of these operations took place in 2014, allowing domestic credit institutions to raise €7.7 billion. All TLTROs will mature in September 2018.

The outstanding amount of longer-term financing operations includes €1.2 billion raised through the Very Long-Term Refinancing Operations (VLTROs) conducted in 2011 and 2012 with a maturity of 36 months.

#### ***5.3 Fine-tuning reverse operations***

Fine-tuning operations are executed on an ad hoc basis with the aim of managing the liquidity situation in the market and steering interest rates, in particular in order to smooth the effects on interest rates caused by unexpected liquidity fluctuations in the market. Their frequency and maturity are not standardised.

#### ***5.4 Structural reverse operations***

These are open market transactions executed on the basis of standard tenders to adjust the structural position of the Eurosystem vis-à-vis the financial sector.

#### ***5.5 Marginal lending facility***

Through these operations, NCBs provide overnight liquidity to the counterparties at a pre-specified interest rate against eligible collateral.

### 5.6 Credits related to margin calls

This item shows cash paid to counterparties when the market value of assets pledged as collateral in Eurosystem credit operations exceeds an established trigger point.

## 6. Other claims on euro area credit institutions denominated in euro

Categories of claims	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
Current account balances with correspondents abroad	1.1	1.6	-0.5
Emergency Liquidity Assistance (ELA)	0.0	9,789.0 -	9,789.0
<b>Total</b>	<b>1.1</b>	<b>9,790.6</b>	<b>-9,789.5</b>

In addition to current account balances with banks other than those related to monetary policy, this item includes Emergency Liquidity Assistance (ELA) to credit institutions.

ELA operations provide emergency liquidity to solvent domestic credit institutions facing temporary liquidity problems. They are not part of the single monetary policy of the Eurosystem, but are conducted by NCBs on the basis of the applicable institutional framework of the Eurosystem with the approval of the Governing Council of the European Central Bank.

For ELA operations providing Emergency Liquidity Assistance (ELA) to credit institutions the Bank of Greece receives adequate collateral.

The Bank of Greece fully assumes the risks arising from ELA operations.

There was no ELA outstanding as at 31 December 2014.

## 7. Securities of euro area residents denominated in euro

### 7.1 Securities held for monetary policy purposes

This item includes securities purchased under the Eurosystem's first and third Covered Bond Purchase Programmes<sup>6</sup> and public debt securities purchased under the Securities Markets Programme.<sup>7</sup>

<sup>6</sup> Decision of the ECB of 2 July 2009 on the implementation of the covered bond purchase programme (ECB/2009/16) (2009/522/EC), OJ L 175, 4.7.2009, p.18; Decision of the ECB of 3.11.2011 on the implementation of the Second Covered Bond Purchase Programme (ECB/2011/17) (2011/744/EU), OJ L 297, 16.11.2011, p. 70; and Decision of the ECB of 15 October 2014 on the implementation of the third covered bond purchase programme (ECB/2014/40) (2014/828/EU), OJ L 335, 22.11.2014, p. 22.

<sup>7</sup> Decision of the ECB of 14 May 2010 establishing a securities markets programme (ECB/2010/5) (2010/281/EU), OJ L 124, 20 May 2010, p. 8.

Categories of securities	31.12.2014		31.12.2013		Change	
	Book Value	Market Value	Book Value	Market Value	Book Value	Market Value
<i>(in € millions)</i>						
CBPP	11,013.0	1,070.4	1,193.4	1,220.3	-180.3	-149.9
CBPP3	808.9	810.6	0.0	0.0	808.9	810.6
SMP	3,964.6	4,315.6	4,876.9	5,154.5	-912.3	-838.9
<b>Total</b>	<b>5,786.5</b>	<b>6,196.6</b>	<b>6,070.2</b>	<b>6,374.8</b>	<b>-283.7</b>	<b>-178.2</b>

#### – Securities purchased under CBPP1

This item includes covered bank bonds issued in the euro area and purchased by the Bank of Greece under CBPP1.

This programme ended on 30 June 2010. The Eurosystem's holdings of CBPP1 bonds as at 31 December 2014 amounted to €28.8 billion.

#### – Securities purchased under CBPP2

On 3 November 2011, the ECB decided to launch a second Covered Bond Purchase Programme (CBPP2), in which the Bank of Greece did not take part. This programme ended on 31 October 2012. The Eurosystem's holdings of CBPP2 bonds as at 31 December 2014 amounted to €12.8 billion.

#### – Securities purchased under CBPP3

On 2 October 2014, the Governing Council of the ECB announced the details of the Eurosystem's third Covered Bond Purchase Programme (CBPP3), under which the ECB and the NCBs purchase euro-denominated covered bonds in order to improve liquidity conditions in the real economy. The programme will last two years.

The Eurosystem's holdings of CBPP3 bonds as at 31 December 2014 amounted to €29.6 billion.

#### – Securities purchased under the Eurosystem's Securities Markets Programme – SMP

Under the Eurosystem's Securities Markets Programme (SMP), established in May 2010, the ECB and the NCBs were able to purchase euro area public and private debt securities to address the malfunctioning of certain segments of the euro area debt securities market and restore the proper functioning of the monetary policy transmission mechanism across the euro area. In September 2012, the ECB Governing Council decided to discontinue this programme.

Under the SMP, the Eurosystem NCBs and the ECB purchased euro area government bonds totalling €144.3 billion as at 31 December 2014.

– **Securities purchased under the Eurosystem’s Asset-backed Securities Purchase Programme – ABSPP<sup>8</sup>**

Under the Asset-backed Securities Purchase Programme (ABSPP), established in October 2014, the Eurosystem may purchase senior and guaranteed mezzanine tranches of asset-backed securities (ABSs) in both primary and secondary markets in order to boost the provision of credit to the euro area economy. Currently, the ECB is the only participant in this programme. The ABSPP will last at least two years.

Under Article 32.4 of the Statute of the ECB, losses from security holdings acquired under the SMP and the CBPP3, if they were to materialise, are shared in full by the Eurosystem NCBs, according to their Eurosystem keys.

The Governing Council of the ECB assesses, on a regular basis, the financial risks associated with securities purchased under the Securities Markets Programme (SMP), the three Covered Bond Purchase Programmes (CBPP1 and CBPP2 and CBPP3) and the Asset-backed Securities Purchase Programme (ABSPP).

Securities held for monetary policy purposes are valued at amortised cost subject to impairment.

In the CBPP impairment test carried out at end-2014, the Governing Council of the ECB identified one impairment indicator related to the restructuring of former Banco Espírito Santo. The ECB Governing Council considered that the occurrence of this impairment indicator did not warrant an impairment of the CBPP portfolio since, on the basis of information available as at 31 December 2014, there was no evidence of changes in the estimated future cash flows. Consequently, no impairment losses relating to these monetary portfolios were identified at end-2014.

**7.2 Other securities of euro area residents denominated in euro**

This item includes euro-denominated bonds and Treasury bills issued by euro area governments, including the Greek State, as well as mutual fund shares/units. These portfolios are part of the Bank’s own fund investment.

Categories of securities	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
<b>A. Marketable securities issued by euro area governments (other than those classified as held-to-maturity)</b>			
<b>Euro area securities, other than Greek government securities</b>			
Bonds	864.1	1,261.0	-396.9
Treasury bills	13,283.4	3,312.8	9,970.6
<b>Greek government securities</b>			
Bonds	11.1	11.5	-0.4
Treasury bills	1,490.4	810.6	679.8
<b>Total A</b>	<b>15,649.0</b>	<b>5,395.9</b>	<b>10,253.1</b>

<sup>8</sup> Decision of the ECB of 19 November 2014 on the implementation of the asset-backed securities purchase programme (ECB/2014/45).

Categories of securities	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
<b>B. Marketable securities classified as held-to-maturity</b>			
Greek government bonds	3,305.3	3,553.1	-247.8
Bonds issued by other euro area governments	6,313.1	6,341.4	-28.3
<b>Total B</b>	<b>9,618.4</b>	<b>9,894.5</b>	<b>-276.1</b>
<b>C. Mutual fund shares/units</b>	<b>2.9</b>	<b>3.2</b>	<b>-0.3</b>
<b>Grand total</b>	<b>25,270.3</b>	<b>15,293.6</b>	<b>9,976.7</b>

Category A securities were valued at the mid-market prices prevailing on 31 December 2014 on a security-by-security basis, using the ISIN code as security identifier. Revaluation gains were transferred to revaluation accounts, whereas €1.7 million of losses were covered by the provision established for this purpose.

Securities which are to be held to maturity were valued at amortised cost subject to impairment. The impairment test carried out at end-2014 found no evidence warranting an impairment of these assets.

Mutual fund shares/units were valued at the closing price prevailing on 31 December 2014 and revaluation gains were transferred to revaluation accounts.

In 2014, it was decided to adopt a uniform presentation of debt security assets held by the staff's former social security funds in compliance with the law. Thus, as of 2014, these securities (formerly disclosed under asset item 11.6 "Sundry") will be disclosed under asset item "Other securities of euro area residents denominated in euro". For comparability reasons, the relevant balances as at 31 December 2013 have been adjusted accordingly.

#### 8. General government long-term debt denominated in euro

This item refers to long-term loans in euro granted by the Bank of Greece to the Greek State.

Specifically, it consists of:

- interest-bearing loans granted to the Greek State until 31 December 1993;
- interest-bearing loans granted by the Bank of Greece to the Greek State on 31 December 1993, in settlement of the balance of the account "Exchange rate valuation differences – Law 1083/80";
- interest-free loans in euro granted by the Bank to the Greek State for the purpose of financing the euro component of Greece's quota in the IMF. The part of this quota which is deposited by the IMF with the Bank is disclosed under liability item 5 "Liabilities to non-euro area residents denominated in euro".



Outstanding balance as at 31.12.2014 .....	€5,249.2 million
Outstanding balance as at 31.12.2013 .....	€5,657.7 million
Decrease	€408.5 million

The decrease was mainly driven by the gradual repayment of the interest-bearing loans.

## 9. Intra-Eurosystem claims

### 9.1 Participating interest in the ECB

The data presented in the table below relate to the Bank's share in the ECB's capital and its contribution to its reserves and provisions.

As at 31.12.2014	(%)	(in € millions)
<b>ECB's subscribed capital (applying to all 28 EU Member States)</b>		<b>10,825.0</b>
Bank of Greece's key for subscription to the ECB's capital (capital key)	2.0332	
<b>ECB capital paid up by the 18 Eurosystem NCBs</b>		<b>7,575.2</b>
Eurosystem key	2.90547	
Bank of Greece's share in the capital of the ECB		220.1
Bank of Greece's contribution to the ECB's reserves and provisions		344.7
<b>Total participating interest in the ECB as at 31.12.2014</b>		<b>564.8</b>

Pursuant to Article 28 of the Statute of the European System of Central Banks (ESCB) and of the ECB, the national central banks of the ESCB are the sole subscribers to and holders of the capital of the ECB.

Subscription to the ECB capital is based on a key assigned to each NCB and is equal to the sum of 50% of the share of its respective Member State in the gross domestic product of the European Union and 50% of the share of its respective Member State in the population of the European Union (Article 29.1 of the ESCB Statute).

The Bank's share in the capital of the ECB is €220.1 million and has been paid up in full. It corresponds to 2.90547% (Eurosystem key) of the ECB capital paid up by the 18 Eurosystem NCBs, which, following the adjustments made in 2014, stands at €7,575.2 million.

The remaining amount (€344.7 million) relates to the Bank's contribution to the ECB's "reserves" and "provisions equivalent to reserves".

Pursuant to Article 29.3 of the Statute of the ESCB, the weightings of the NCBs' keys for subscription to the ECB's capital are adjusted every five years after the establishment of the ESCB

(latest adjustment: 1 January 2014). Also, according to Article 48.3 of the ESCB Statute, the subscribed capital of the ECB is automatically increased whenever a new Member State accedes to the EU and its respective NCB joins the ESCB. The increase is determined by multiplying the prevailing amount of the subscribed capital by the ratio, within the expanded capital key, between the weighting of the entering NCB and the weighting of those NCBs that are already members of the ESCB.

As a result of the five-yearly adjustments to the capital key weightings and Latvijas Banka's entry into the Eurosystem on 1 January 2014, the Bank of Greece's key for subscription to the ECB's capital rose to 2.0332% from 1.9483% and its Eurosystem key to 2.90547% from 2.80097%, bringing its share in the ECB's capital from €210.9 million to €320.4 million and its contribution to the ECB's reserves and provisions from €320.4 million to €344.7 million.

### ***9.2 Claims equivalent to the transfer of foreign reserves to the ECB***

<b>As at 31.12.2014</b>	<b>(%)</b>	<b>(in € millions)</b>
Total foreign reserves transferred to the ECB by the 18 NCBs of the Eurosystem		40,553.2
Eurosystem key	2.90547	
<b>Claims equivalent to the transfer of foreign reserves to the ECB as at 31.12.2014</b>		<b>1,178.3</b>

This item represents the Bank's claims arising from the transfer of foreign reserve assets to the ECB in accordance with the Treaty establishing the European Community (Article 30 of the Statute of the ESCB).

Out of these foreign reserve assets, determined on the basis of the Bank's share in the paid-up capital of the ECB, 85% were transferred in the form of assets denominated in USD and JPY and 15% in the form of gold.

These euro-denominated claims are remunerated on a daily basis at 85% of the latest available marginal rate for the Eurosystem's main refinancing operations (MROs), the 15% difference reflecting a zero return on the gold component.<sup>9</sup>

The adjustments to the keys for subscription to the ECB's capital on 1 January 2014 led to an adjustment of the Bank's claims equivalent to the transfer of foreign reserve assets to the ECB. Due to the increase in the Bank's capital key, this item rose by €49.2 million (from €1,129.1 million to €1,178.3 million).

### ***9.3 Net claims related to the allocation of euro banknotes within the Eurosystem***

The net balance arising from the allocation of euro banknotes in circulation within the Eurosystem as at 31 December 2014 was a liability of the Bank of Greece and is therefore disclosed

<sup>9</sup> Guideline of the ECB of 3 November 1998 as amended by the Guideline of 16 November 2000 on the composition, valuation and modalities for the initial transfer of foreign-reserve assets, and the denomination and remuneration of equivalent claims (ECB/2000/15), OJ L 336, 30.12.2000, p. 114.

under liability item 9.2 “Net liabilities related to the allocation of euro banknotes within the Eurosystem”.

#### **9.4 Net claims arising from balances of TARGET2 accounts**

The net balance related to the ESCB balance (TARGET2) as at 31 December 2014 was a liability of the Bank and is therefore disclosed under liability item 9.3 “Net liabilities arising from balances of TARGET2 accounts”.

#### **9.5 Other claims within the Eurosystem (net)**

Other claims within the Eurosystem (totalling €30.7 million) stemmed from:

- The Bank’s net result (an expense of €11.7 million) from the allocation of the Eurosystem’s monetary income for 2014.<sup>10</sup> The monetary income pooled by the Bank of Greece was higher than its share according to its Eurosystem key, namely:

Monetary income pooled by the Bank of Greece .....	€300.7 million
Monetary income allocated to the Bank according to its Eurosystem key..	€289.0 million
Negative net result	€11.7 million

- €18.0 million received by the Bank due to corrections to monetary income reallocation of previous years.

- €24.4 million received by the Bank from the ECB’s interim profit distribution for 2014.

### **10. Items in course of settlement**

As at 31 December 2014, the outstanding balance of this item was zero.

### **11. Other assets**

#### **11.1 Coins of euro area**

This item represents the Bank’s holdings of euro coins issued by euro area countries.

Value as at 31.12.2014 .....	€56.1 million
Value as at 31.12.2013 .....	€66.4 million
Decrease	€10.3 million

#### **11.2 Tangible and intangible fixed assets**

Fixed assets comprise real estate (land, buildings and fixtures, buildings under construction), furniture, machinery, hardware and software, and are valued at acquisition cost, adjusted for depreciation and impairment.

The value of fixed assets as at 31 December 2014, less accumulated depreciation, is reported.

Depreciation is calculated on a straight-line basis over the expected useful life of the asset.

<sup>10</sup> The amount of monetary income to be allocated to the Bank of Greece has been calculated on the basis of the latest available provisional ECB data as at the date of preparation of this balance sheet and its approval by the General Council of the Bank.

Net book value of fixed assets				
Asset category	31.12.2014 (in € millions)	31.12.2013	Change	Depreciation rate (%)
Land	542.3	542.3	0.0	0
Buildings and fixtures	225.9	231.7	-5.8	2.5
Buildings under construction and advance payments of asset acquisitions	16.1	16.0	0.1	0
Other equipment	23.3	23.8	-0.5	8-24
Capitalised expenses (software costs, etc.)	1.7	1.5	0.2	20-24
<b>Total</b>	<b>809.3</b>	<b>815.3</b>	<b>-6.0</b>	

### 11.3 Other financial assets

This item comprises the Bank's participating interests in DIAS Interbanking Systems SA, the Hellenic Deposit and Investment Guarantee Fund (HDIGF), the Hellenic Exchanges – Athens Exchange SA, the Society for Worldwide Interbank Financial Telecommunication (SWIFT), as well as a participating interest, denominated in SDRs, in the Bank for International Settlements (BIS).

As at 31 December 2014, the value of these assets, which are valued at acquisition cost, was €29.1 million.

Also included here are debt security assets earmarked for the Bank's pension and related benefit plans (defined contribution plans with assets amounting to €60.2 million as at 31.12.2014), which in 2013 were disclosed under asset item 11.6 "Sundry". For comparability reasons, the relevant balances as at 31.12.2013 have been adjusted accordingly.

### 11.4 Off-balance-sheet instruments revaluation differences

Outstanding balance as at 31.12.2014 .....	€230 thousand
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This item represents the result of the year-end revaluation of outstanding balances in foreign currencies recorded in off-balance-sheet (memorandum) accounts.

It also includes €143 thousand of unrealised revaluation gains on Greek government securities (warrants) recorded in revaluation accounts. These security positions are disclosed in off-balance-sheet accounts at par value.

### 11.5 Accruals and prepaid expenses

This item includes purchased accrued interest on securities and also interest and other income accrued but not collected until 31 December 2014. The latter are to be collected in the next finan-

cial year and relate mainly to interest income on loans granted by the Bank in the context of the Eurosystem's single monetary policy, securities holdings and deposits with banks, as well as to interest receivable on claims equivalent to the transfer of foreign reserve assets to the ECB.

Outstanding balance as at 31.12.2014 .....	€614.1 million
Outstanding balance as at 31.12.2013 .....	<u>€645.9 million</u>
D e c r e a s e	€31.8 million

### **11.6 Sundry**

This item consists of the year-end inventories of the Printing Works Department (IETA), balances on the Bank's suspense debit accounts, the outstanding balances of loans to the Bank's staff and other sundry assets.

Outstanding balance as at 31.12.2014. ....	€575.2 million
Outstanding balance as at 31.12.2013 .....	<u>€573.2 million</u>
I n c r e a s e	€2.0 million



## LIABILITIES

### 1. Banknotes in circulation

Outstanding balance as at 31.12.2014 .....	€27,172.1 million
Outstanding balance as at 31.12.2013 .....	€24,640.9 million
Increase	€2,531.2 million

This item consists of the Bank's share of the total euro banknotes in circulation at Eurosystem level, calculated on the basis of its banknote allocation key (2.6730%).

	31.12.2014 (in € millions)	31.12.2013	Change
Value of euro banknotes put into circulation by the Bank of Greece	32,355.5	35,480.2	-3,124.7
<b>Less:</b>			
Liability resulting from the ECB's share in the total euro banknotes in circulation (8% of the total value of euro banknotes in circulation multiplied by the Eurosystem key)	-2,362.8	-2,142.6	-220.2
<b>Less:</b>			
Liability resulting from the allocation of euro banknotes within the Eurosystem <sup>11</sup>	-2,820.6	-8,696.7	5,876.1
<b>Value of euro banknotes put into circulation by the Bank of Greece according to the banknote allocation key</b>	<b>27,172.1</b>	<b>24,640.9</b>	<b>2,531.2</b>

The total value of euro banknotes put into circulation by the Eurosystem in 2014 rose by 6.3% (31 December 2014: €1,016.5 billion, 31 December 2013: €956.2 billion). As at end-2014, the value of euro banknotes in circulation that corresponds to the Bank of Greece on the basis of its banknote allocation key was €27,172.1 million, compared with €24,640.9 million as at end-2013. The value of euro banknotes actually put into circulation by the Bank of Greece dropped by 8.8%, from €35,480.2 million in 2013 to €32,355.5 million in 2014. As the value of euro banknotes actually put into circulation by the Bank was higher than the value of euro banknotes that would have been allocated to it according to its banknote allocation key, the difference (€5,183.4 million) (2013: €10,839.3 million) is disclosed under liability item 9.2 "Net liabilities related to the allocation of euro banknotes within the Eurosystem" (see "Banknotes in circulation" under "Accounting policies").

<sup>11</sup> Disclosed under liability item 9.2 "Net liabilities related to the allocation of euro banknotes within the Eurosystem".



## 2. Liabilities to euro area credit institutions related to monetary policy operations denominated in euro

### 2.1 Current accounts (covering the minimum reserve system)

These accounts include reserves held by domestic credit institutions in current accounts with the Bank of Greece serving to fulfil reserve requirements and also used for settlement purposes. Current account holdings of credit institutions with the Bank of Greece are remunerated on a daily basis at the prevailing main refinancing operation (MRO) rate of the Eurosystem. From June 2014, excess reserves are remunerated at the lower of zero per cent or the deposit facility rate, which is currently negative.

Outstanding balance as at 31.12.2014 .....	€2,926.3 million
Outstanding balance as at 31.12.2013 .....	€748.6 million
Increase	€2,177.7 million

The average balance of these accounts stood at €1.9 billion in 2014, unchanged from 2013.

### 2.2 Deposit facility

This item relates to the deposit facility offered by the Eurosystem in the context of the euro area single monetary policy.

In particular, it consists of overnight deposits placed by credit institutions with the Bank of Greece at a pre-specified interest rate.

Outstanding balance as at 31.12.2014 .....	€150.0 million
Outstanding balance as at 31.12.2013 .....	€1,150.0 million
Decrease	€1,000.0 million

### 2.3 Fixed-term deposits

Liquidity absorbing fine-tuning operations in the form of collection of fixed-term deposits.

### 2.4 Fine-tuning reverse operations

Operations serving to counter large liquidity imbalances.

### 2.5 Deposits related to margin calls

This item refers to deposits made by counterparties in those instances when the market value of the assets pledged as collateral in Eurosystem credit operations falls short of an established trigger point (asset item 5).

Outstanding balance as at 31.12.2014 .....	€0.0 million
Outstanding balance as at 31.12.2013 .....	€60.0 million
Decrease	€60.0 million

## 4. Liabilities to other euro area residents denominated in euro

### 4.1 General government

This item comprises deposits by the Greek State (central government), public entities and the Consignment Deposits and Loans Fund.

Outstanding balance as at 31.12.2014 .....	€3,520.5 million
Outstanding balance as at 31.12.2013 .....	€6,943.2 million
D e c r e a s e	€3,422.7 million

The average balance of these deposits increased in the course of 2014 to €6.4 billion, from €6.2 billion in 2013.

#### 4.2 Other liabilities

Outstanding balance as at 31.12.2014 .....	€1,267.1 million
Outstanding balance as at 31.12.2013 .....	€1,042.8 million
I n c r e a s e	€224.3 million

This item comprises deposits by various entities.

It includes a €670.1 million deposit by the Hellenic Financial Stability Fund (HFSF), funds from the European Investment Fund and the European Investment Bank totalling €410.1 million, outstanding balances of mainly deposit accounts of various entities and the total outstanding balances of securities companies.

The HFSF deposit consists in funds from the EU/IMF Support Mechanism for Greece and is remunerated at the EONIA rate. It should be noted that, throughout 2014, the interest rate on this deposit was close to zero.

The European Investment Fund and the European Investment Bank deposits are also interest-bearing (average annual rate: 0.12%) and are intended to provide support to Greece in the fields of agricultural economy and enterprises.

#### 5. Liabilities to non-euro area residents denominated in euro

Outstanding balance as at 31.12.2014 .....	€1,028.3 million
Outstanding balance as at 31.12.2013 .....	€990.4 million
I n c r e a s e	€37.9 million

This item includes deposits by various entities.

The bulk of these liabilities (€1,027.2 million) pertains to a deposit account in euro held by the IMF with the Bank and corresponds to the euro component of Greece's quota in the Fund. Through this account, the Bank effects financial transactions with third countries, according to IMF instructions.

The decrease reflects adjustments for exchange rate variations due to the depreciation of the euro against the SDR in 2014.

#### 6. Liabilities to euro area residents denominated in foreign currency

These liabilities stem mainly from deposits of public entities denominated in foreign currency.

Outstanding balance as at 31.12.2014 .....	€15.1 million
Outstanding balance as at 31.12.2013 .....	<u>€76.6 million</u>
D e c r e a s e	€61.5 million

## 7. Liabilities to non-euro area residents denominated in foreign currency

### 7.1 Deposits and other liabilities

This item includes €2.4 thousand of deposits by various entities.

## 8. Counterpart of special drawing rights allocated by the IMF

This item consists of a liability to the IMF stemming from the cumulative allocation of special drawing rights (SDR 782.3 million) to Greece. This amount was allocated by the IMF to Greece gradually. An amount of SDR 103.5 million was allocated between 1970 and 1981 and the remaining SDR 678.8 million in 2009. The latter allocation was effected in the context of IMF's general SDR allocation, equivalent to USD 250 billion, to all its member countries, which was approved by the IMF Board of Governors on 7 August 2009 and entered into force on 28 August 2009.

This allocation aimed to provide liquidity to the world economy by boosting the foreign reserve assets of the IMF member countries according to their quotas.

Outstanding balance as at 31.12.2014 .....	€932.9 million
Outstanding balance as at 31.12.2013 .....	<u>€874.9 million</u>
I n c r e a s e	€58.0 million

The increase reflected adjustments for exchange rate variations due to the depreciation of the euro against the SDR. Valuation was based on the SDR/euro exchange rate as at 31 December 2014, as listed in the ECB euro foreign exchange reference rates, i.e. SDR 1 = €1.1924, compared with €1.1183 as at 31 December 2013.

## 9. Intra-Eurosystem liabilities

### 9.2 Net liabilities related to the allocation of euro banknotes within the Eurosystem

This item includes liabilities resulting from the allocation of euro banknotes within the Eurosystem (see "Banknotes in circulation" under "Accounting policies").

Outstanding balance as at 31.12.2014 .....	€5,183.4 million
Outstanding balance as at 31.12.2013 .....	<u>€10,839.3 million</u>
D e c r e a s e	€5,655.9 million

The balance as at 31.12.2014 includes:

- €2,362.8 million relating to the value of euro banknotes issued by the Bank of Greece on behalf of the ECB (8% of the total value of banknotes in circulation is deemed to be issued on behalf of the ECB). The Bank's share in this amount is calculated on the basis of its Eurosystem key. As at 31 December 2014, this figure was up €220.2 million from the previous year (31 December 2013: €2,142.6 million) on account of the general increase in euro banknotes in circulation at Eurosystem level.

- €2,820.6 million relating to the amount by which the value of euro banknotes actually put into circulation by the Bank of Greece was adjusted (reduced) after deducting 8% in favour of the ECB. The purpose of this adjustment is to equalise the Bank's share in total euro banknotes in circulation (liability item 1) with its share according to the banknote allocation key. In 2014, this figure decreased by €5,876.1 million due to the decline in the value of euro banknotes actually put into circulation by the Bank in the same year (see liability item 1 "Banknotes in circulation").

### 9.3 Net liabilities arising from balances of TARGET2 accounts

This item represents the Bank's net liabilities vis-a-vis the ECB, arising from domestic credit institutions' transactions with European counterparties and the Bank's transactions with the other Eurosystem NCBs, the ECB and non-Eurosystem ESCB central banks participating in the TARGET2 system (Trans-European Automated Real-time Gross settlement Express Transfer system).

This balance is remunerated on a daily basis at the prevailing Eurosystem MRO rate.

TARGET2 account, year-end balances (in € millions)						
31.12.2008	31.12.2009	31.12.2010	31.12.2011	31.12.2012	31.12.2013	31.12.2014
35,348.3	49,036.1	87,088.1	104,750.0	98,355.2	51,115.9	49,318.9

TARGET2 account, average annual balances (in € millions)						
2008	2009	2010	2011	2012	2013	2014
14,650	37,647	77,022	93,090	105,084	63,893	40,476

These liabilities were originally created on 1 January 2001, when the Bank of Greece joined the Eurosystem.

### 9.4 Other liabilities within the Eurosystem (net)

The net balance of other transactions of the Bank of Greece with the Eurosystem as at 31 December 2014 was a claim of the Bank and is therefore disclosed under asset item 9.5 "Other claims within the Eurosystem (net)".

## 10. Items in course of settlement

This item consists mainly of the float of cheques, payment orders whose settlement is pending and interim account balances under settlement, totalling €2.6 million.

## 11. Other liabilities

### 11.1 Off-balance-sheet instruments revaluation differences

Balance as at 31.12.2014 .....	€523.6 thousand
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This item represents the result of the year-end revaluation of outstanding balances in foreign currencies recorded in off-balance-sheet (memorandum) accounts according to the economic approach.

### 11.2 Accruals and income collected in advance

This item represents interest expenses accrued up to 31 December 2014 and other expenses. Such expenses will be paid within the new financial year and mainly involve various categories of interest payable (on the outstanding balance of the TARGET2 account, on credit institutions' reserve holdings and on other liabilities).

Balance as at 31.12.2014. ....	€14.0 million
Balance as at 31.12.2013. ....	€32.6 million
D e c r e a s e	€18.6 million

### 11.3 Sundry

Sundry liabilities	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
– Dividends to be distributed	9.9	9.9	0.0
– Tax on dividends	3.5	3.5	0.0
– Profit to be transferred to the Greek State	641.2	817.8	-176.6
– Liability to the Greek State (SDR component of Greece's quota in the IMF)	287.3	269.4	17.9
– Other liabilities	35.1	34.5	0.6
<b>Total</b>	<b>977.0</b>	<b>1,134.1</b>	<b>-158.10</b>

This item comprises the distributable profit for the year, tax on dividends, profit to be transferred to the Greek State, the Bank's liability towards the Greek State regarding the SDR component of Greece's quota in the IMF (the corresponding claim of the Bank on the IMF is recorded under asset item 2.1 "Receivables from the IMF"), other taxes to be paid, the balances of credit suspense accounts and other accounts on behalf of third parties (suppliers, etc.), as well as other liabilities.

## 12. Provisions

Category of provision	31.12.2014	31.12.2013	Change
	<i>(in € millions)</i>		
a. Special provisions against operational risk, unexpected losses and doubtful claims	127.8	126.0	1.8
b. Provision for pension benefits	2,112.4	2,099.8	12.6
c. Provision against financial risks (including risks associated with the Bank's investment activities and risks arising from Eurosystem monetary policy operations)	3,229.3	3,231.0	-1.7
d. Provision against general risks under Article 71 of the Statute	1,319.2	1,195.0	124.2
<b>Total</b>	<b>6,788.7</b>	<b>6,651.8</b>	<b>136.9</b>

Total provisions amounted to €6,788.7 million.

The practice of establishing adequate provisions and reserves is followed in the context of the principle of prudence also followed by the ECB and the other Eurosystem NCBs. It aims to strengthen the Bank's financial position to enable it to best fulfil its mandate and live up to the risks it assumes.

The Bank reviews these provisions annually and adjusts them according to a risk assessment. Several factors are taken into account in this risk assessment, including but not limited to:

- the amount of risky assets;
- risk exposure;
- financial risk assessments and valuations;
- money market developments and general economic conditions in the euro area and Greece;
- current reserves and provisions;
- the outstanding balances of revaluation accounts.

In greater detail:

***a. Special provisions against operational risk, extraordinary losses and doubtful claims***

These are special provisions directly associated with the Bank's operation that cover, inter alia:

- administrative deficits;
- doubtful claims;
- compensation paid to employees upon retirement.

These provisions are established on the basis of actual needs and obligations and their level is determined following an estimation of the amounts likely to be required for covering risks and possible losses and any unrecoverable part of doubtful claims.

***b. Provision for pension benefits***

Pursuant to Article 64 of Law 3863/2010, the Bank has undertaken and provides social insurance for its staff in the main and supplementary pension plans.

The provision for pension benefits has been established to cover this obligation and to meet the staff's social insurance needs in general. Its level is subject to annual actuarial remeasurement.

***c. Provision against financial risks (including risks from the Bank's investment activities and risks arising from Eurosystem monetary policy operations)***

In 2014 the Bank, following its standard practice, which is in line with that of the ECB and of the other central banks of the euro area, and taking into account both the results of the relevant risk assessments by its own Risk Management Unit and by the ECB and the results of the impairment tests on its held-to-maturity portfolios of debt securities (SMP, CBPP1, and CBPP3), determined the appropriate level of this provision. This is a marginal €1.7 million down from the previous year's figure, due to the coverage of unrealised losses arising from the year-end revaluation of securities and foreign currency positions.

Specifically, this provision is intended to cover:

- Credit risks arising from the provision of liquidity to the credit system and from securities purchased under the Securities Market Programme (SMP) and the Covered Bond Purchase Programmes CBPP1 and CBPP3;
- Credit and market risks (interest rate risk, exchange rate risk) associated with securities and foreign exchange portfolios managed by the Bank.

It should be noted that income arising from Eurosystem monetary policy operations is allocated among all NCBs (including the Bank of Greece). In turn, each NCB makes a contribution to the risk provisions according to its Eurosystem key.

The current institutional framework governing the provision of sufficient eligible assets by credit institutions as collateral for Eurosystem liquidity and the control of risks is adequate.

Against this background and in order to protect against all possible risks, provisions are established as required by the prudence principle.

The extent to which these provisions will be used will depend on future money market developments.

#### *d. Provision against general risks under Article 71 of the Statute*

This provision is intended to cover potential general risks and obligations of the Bank of Greece arising from the performance of its functions as the country's central bank and under international agreements, as stated in Article 71 of its Statute.

### **13. Revaluation accounts**

In accordance with the accounting rules and principles set out by the European Central Bank for the ESCB NCBs, and in particular the principle of prudence, unrealised valuation gains on gold, financial instruments in foreign currency and securities are not recognised as income in the Profit and Loss Account, but are transferred directly to revaluation accounts (serving as reserves for these particular assets only). By contrast, unrealised valuation losses at year-end are recognised as expenditure and are taken to the Profit and Loss Account (see "Income recognition" under "Accounting policies").

Valuation at end-2014 resulted in unrealised gains of €3,042.6 million (mostly on gold), which were transferred to the corresponding revaluation accounts (see breakdown in the table below).

<b>Unrealised valuation gains</b>	<b>31.12.2014</b>	<b>31.12.2013</b>	<b>Change</b>
	<i>(in € millions)</i>		
– on gold	2,916.5	2,359.4	557.1
– on foreign currency positions	100.6	0.0	100.6
– on securities	24.3	14.6	9.7
– on fund units	1.1	1.4	-0.3
– on warrants	0.1	0.3	-0.2
<b>Total</b>	<b>3,042.6</b>	<b>2,357.7</b>	<b>666.9</b>



## **14. Capital and reserves**

The Bank's capital and reserves amount to €815.5 million.

The Bank's capital and its ordinary reserve stand at €111.2 million each.

In more detail, capital and reserves are as follows:

### ***14.1 Capital***

The Bank's capital, after having been increased by Legislative Decrees 413/1970 and 889/1971, Laws 542/1977 and 1249/1982, Ministerial Decision E. 2665/1988, Law 2065/1992, Ministerial Decision 1281/30 October 1996 and Cabinet Acts 8/4 February 2000, 32/23 May 2002, 17/4 July 2005 and 8/10 June 2008, now stands at €111,243,362 and is divided into 19,864,886 shares of a par value of €5.60 each.

### ***14.2 Ordinary reserve***

The ordinary reserve amounts to €111,243,362, after reaching the level of the Bank's capital.

### ***14.3 Extraordinary reserve***

The extraordinary reserve amounts to €84.5 million, unchanged from the previous year.

### ***14.4 Special reserve from the revaluation of land and buildings***

This special reserve was established during financial years 2004 and 2007 with the capital gains from the restatement of land and buildings of the Bank at fair (market) value (as determined by an independent assessor).

In 2005 and 2008, part of these gains were capitalised through the allotment of bonus shares to shareholders, while a small part resulting from the sale of land and buildings was transferred to profit in 2008, 2009 and 2010.

As at 31 December 2014, the outstanding balance of this item was €507.2 million.

### ***14.5 Other special reserves***

These amount to €1.3 million and represent the value of artworks and fixed assets (mostly buildings) transferred gratis to the Bank.

## OFF-BALANCE-SHEET (MEMORANDUM) ITEMS

	31.12.2014 (in € millions)	31.12.2013	Change
1. Greek government securities relating to the management of the “Common Capital of Legal Entities in Public Law and Social Security Funds” according to Law 2469/97	24,816.7	20,844.6	3,972.1
2. Greek government securities and other debt securities relating to the management and custody of assets of public entities, social security funds and private agents and EFSF securities owned by the Hellenic Financial Stability Fund	16,239.5	16,546.7	-307.2
3. Assets eligible as collateral for Eurosystem monetary policy operations and intraday credit	72,152.5	84,630.1	-12,477.6
4. Assets accepted by the Bank of Greece as eligible collateral for emergency liquidity assistance to credit institutions	22,703.4	58,286.1	-35,582.7
5. Other off-balance-sheet items*	27,799.9	26,495.2	1,304.7
<b>Total</b>	<b>163,712.0</b>	<b>206,802.7</b>	<b>-43,090.7</b>

- \* “Other off-balance-sheet items” include:
- a non-interest bearing, non-negotiable promissory note of SDR 20 billion (the equivalent of €23.9 billion) issued by the Greek government for the total outstanding loan amount received from the IMF until 31 December 2014 under the EU/IMF support package for Greece. The Greek government is solely responsible for repaying this loan. The note is kept at the Bank of Greece, which acts as fiscal agent for the Hellenic Republic vis-à-vis the IMF;
  - outstanding transactions related to the Bank’s portfolios;
  - government-owned securities held for custody;
  - documentary credits to be executed, third-party guarantees for good performance, out-of-circulation coins, etc.

# GENERAL NOTES ON THE PROFIT AND LOSS ACCOUNT FOR 2014

*The Bank's profit* in 2014 amounted to €654.5 million, from €831.1 million in 2013.

## ANALYSIS OF THE PROFIT AND LOSS ACCOUNT FOR 2014

### INCOME

*The Bank's net income* from Eurosystem monetary policy operations and its net income from interest, commission fees and other revenue from domestic and foreign activities totalled €1,118.2 million, compared with €1,610.9 million in 2013, a decrease of 30.6%.

Specifically:

- *Net income from interest, financial operations and the reallocation of Eurosystem monetary income* was €1,003.5 million, down 31.9% from €1,473.9 million in 2013.
- *Net income from fees and commissions* was €73.5 million, up by 4.7% from €70.2 million in 2013.
- *Income from equity shares and participating interests* fell by €25.2 million to €29.0 million, compared with €54.2 million in 2013.
- *Finally, other income* came to €12.1 million, down 4.0% from €12.6 million in 2013.

### EXPENSES

*Total expenses* fell by €316.0 million to €463.7 million in 2014, from €779.7 million in 2013, largely on account of lower provisioning.

Specifically:

- *The Bank's general operating expenses excluding provisions* (staff costs, pension benefits, depreciation and other expenses) rose by €22.7 million or 7.3% to €333.6 million, from €310.9 million in 2013. The €14.0 million extraordinary expenditure for auditing the banking system accounted for a significant part of these expenses.
- *Provisions* in 2014 declined considerably year-on-year to €130.1 million (see notes on liability item 12).

## NOTES ON NET OPERATING INCOME ACCOUNTS

The Bank's net income in 2014 from Eurosystem monetary policy operations and its net income from interest, commission fees and other revenue from domestic and foreign activities totalled €1,118.2 million, compared with €1,610.9 million in 2013, a decrease of 30.6%.

Net income (as compared with last year's figures) breaks down as follows:

### 1. Net interest income

Net interest income (interest income less interest expense) was €957.7 million, down 31.3% from €1,394.9 million in 2013.

Net interest income includes:

#### 1.1 Interest income

Interest income decreased by €823.2 million to €1,049.1 million, compared with €1,872.3 million in 2013, mainly owing to a decline in interest income on emergency liquidity assistance (ELA) and lending to credit institutions related to monetary policy operations.

Interest income	2014 (in € millions)	2013	Change
a. Interest on lending to credit institutions related to monetary policy operations	90.9	364.3	-273.4
b. Interest on securities held for monetary policy purposes	306.7	365.6	-58.9
c. Interest on special funding to credit institutions against collateral of Greek government securities and guarantee by the Greek government	40.5	484.9	-444.4
d. Interest on investment portfolios (excluding Greek government debt securities)	284.7	277.2	7.5
e. Interest on the investment portfolio of Greek government debt securities	279.5	309.3	-29.8
f. Remuneration of long-term euro-denominated claims equivalent to the transfer of foreign reserve assets to the ECB	1.7	5.4	-3.7
g. Interest on long-term claims on the Greek State	42.2	62.2	-20.0
h. Interest on the IMF reserve tranche position and SDR holdings	0.7	0.7	0.0
i. Interest on loans to the personnel of the Bank of Greece	2.2	2.6	-0.4
j. Other interest income	0.0	0.1	-0.1
<b>Total</b>	<b>1,049.1</b>	<b>1,872.3</b>	<b>-823.2</b>

In particular:

*a) Interest on lending to credit institutions related to monetary policy operations*

This item represents interest income on lending to domestic credit institutions through the Eurosystem's liquidity-providing open market operations and under the marginal lending facility.

In 2014, this item fell to €90.9 million, from €364.3 million in 2013, mainly on account of a cut in the main refinancing operation (MRO) rate from an average of 0.55% in 2013 to an average of 0.16% in 2014.

Interest by type of operation is as follows:

<b>Interest on lending to credit institutions</b>	<b>2014</b>	<b>2013</b>	<b>Change</b>
	<i>(in € millions)</i>		
– main refinancing operations (MROs)	85.7	352.1	-266.4
– longer-term refinancing operations (LTROs)	2.2	8.9	-6.7
– targeted longer-term refinancing operations (TLTROs)	2.3	0.0	2.3
– marginal lending facility	0.7	3.3	-2.6
<b>Total</b>	<b>90.9</b>	<b>364.3</b>	<b>-273.4</b>

*b) Interest on securities held for monetary policy purposes*

This item amounted to €306.7 million (2013: €365.6 million) and refers to interest on securities purchased by the Bank under the Eurosystem's Covered Bond Purchase Programme CBPP1, the Securities Markets Programme (SMP) and the Covered Bond Purchase Programme CBPP3. All three of the above-mentioned programmes were launched as part of Eurosystem interventions in the euro area debt securities markets to ensure liquidity, address the malfunctioning of certain market segments and restore the proper functioning of the monetary policy transmission mechanism.

The amortised cost value of the Bank's holdings of CBPP1, SMP and CBPP3 securities as at 31 December 2014 was €5.8 billion, down from €6.1 billion as at 31 December 2013.

*c) Interest on special funding to credit institutions against collateral of debt securities and guarantee by the Greek government*

This item amounted to €40.5 million (2013: €484.9 million) and refers to interest on emergency liquidity made available to solvent credit institutions facing temporary liquidity problems mainly through emergency liquidity assistance (ELA) operations (see note on asset item 6 "Other claims on euro area credit institutions denominated in euro").

*d) Interest on investment portfolios (excluding Greek government debt securities)*

This item consists mainly of interest on euro-denominated debt securities issued by euro area governments.

Interest by type of asset	2014	2013	Change
	<i>(in € millions)</i>		
– on debt securities	283.8	272.8	11.0
– on fixed-term deposits and current accounts	0.9	4.4	-3.5
<b>Total</b>	<b>284.7</b>	<b>277.2</b>	<b>7.5</b>

The €7.5 million increase in this item relative to the previous year was driven by higher investment in foreign debt securities.

*e) Interest on the investment portfolio of Greek government debt securities*

Interest on the Bank's portfolio of Greek government securities decreased by €29.8 million to €279.5 million, from €309.3 million in 2013, mainly due to the reinvestment of funds from maturing lower-yielding Treasury bills.

*f) Remuneration of long-term euro-denominated claims equivalent to the transfer of foreign reserve assets to the ECB*

This item concerns interest on euro-denominated claims equivalent to the transfer of foreign reserve assets to the ECB, in accordance with Article 30 of the Statute of the ESCB. In 2014, this interest, which is calculated on the basis of 85% of the latest available marginal rate for the Eurosystem's main refinancing operations, fell by €3.7 million to €1.7 million (2013: €5.4 million), mainly on account of a cut in the MRO rate (from an average of 0.55% in 2013 to an average of 0.16% in 2014).

*g) Interest on long-term claims on the Greek State*

This item comprises interest on loans granted by the Bank of Greece to the Greek State up to 31 December 1993.

In 2014, this interest was €42.2 million, down €20.0 million from the previous year's figure (€62.2 million), owing to a decrease in the 12-month euro LIBOR and LIBID rates applicable to all loans granted to the Greek State and resulting from the conversion of the debit balances of the account "Foreign exchange valuation differences under Law 1083/80" and to the gradual repayment of all loans.

*h) Interest on the IMF reserve tranche position and SDR holdings*

This item remained unchanged in 2014 from 2013's €0.7 million and consists mainly of interest on Greece's SDR quota in the IMF and on SDR holdings with the Fund which derive from the IMF's SDR allocation that took place in 2009 in the context of the general SDR allocation to all IMF member countries.

*i) Interest on loans to the personnel of the Bank of Greece*

Interest on (housing or personal) loans granted by the Bank of Greece to its staff amounted to €2.2 million (2013: €2.6 million).

j) *Other interest income*

This item totalled €57 thousand, compared with €154 thousand in 2013.

**1.2 Interest expense**

Interest expense dropped by 80.9% to €91.4 million in 2014, from €477.4 million in 2013.

<b>Interest expense</b>	<b>2014</b>	<b>2013</b>	<b>Change</b>
	<i>(in € millions)</i>		
a. Interest on intra-ESCB balances (TARGET2)	69.5	378.1	-308.6
b. Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem	13.5	69.9	-56.4
c. Interest on banks' current accounts in the context of monetary policy operations (including minimum reserves)	2.7	9.8	-7.1
d. Interest on deposits of the Greek State	4.1 1	7.2	-13.1
e. Interest on euro- and foreign currency-denominated deposits of various entities	0.5	1.7	-1.2
f. Interest on SDR allocations of the IMF	0.8	0.7	0.1
g. Interest on deposits of the Hellenic Financial Stability Fund	0.3	0.0	0.3
<b>Total</b>	<b>91.4</b>	<b>477.4</b>	<b>-386.0</b>

Specifically:

a) *Interest on intra-ESCB balances (TARGET2)*

<b>Interest expense on the TARGET2 account</b>						
<i>(in € millions)</i>						
<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
545.2	477.1	779.8	1,186.8	937.8	378.1	69.5

This interest expense is calculated on the basis of the daily net balance of the TARGET2 account dedicated to euro-denominated transactions with the ECB and the other ESCB NCBs.

The decrease in 2014 was driven by a drop in the average daily balance of the TARGET2 account (2014: €40.5 billion, 2013: €63.9 billion) and a decline in the key ECB interest rate on TARGET2 balances from an average of 0.55% in 2013 to an average of 0.16% in 2014.



*b) Interest on net liabilities related to the allocation of euro banknotes within the Eurosystem*

This item fell to €13.5 million, from €69.9 million in 2013, given that the value of euro banknotes actually put into circulation by the Bank in 2013 was higher than the value of euro banknotes that would have been allocated to it according to its banknote allocation key. Interest calculated on the basis of the key ECB interest rate and amounting to €13.5 million was paid on the resulting difference, which represents a liability of the Bank to the Eurosystem.

In greater detail, this interest expense is calculated on the basis of:

- the intra-Eurosystem claim/liability corresponding to the value of euro banknotes put into circulation by the Bank of Greece, adjusted to ensure that the Bank's share in total euro banknotes in circulation (after the deduction of the 8% share allocated to the ECB) corresponds to its share according to the Bank's banknote allocation key;
- the Bank's liability from the issue of euro banknotes on behalf of the ECB (a share of 8% of the total value of euro banknotes in circulation is allocated to the ECB);
- a compensatory amount corresponding to adjustments to the intra-Eurosystem balances on euro banknotes in circulation, calculated in order to compensate for any significant changes in the NCBs' income positions as a consequence of the introduction of euro banknotes and the subsequent allocation of monetary income. Each new entry to the Eurosystem gives rise to new compensatory amounts for a six-year period immediately following the relevant cash changeover year.

See section "Banknotes in circulation" under "Accounting Policies" and note on liability item 9.2 "Net liabilities related to the allocation of euro banknotes within the Eurosystem".

*c) Interest on banks' current accounts in the context of monetary policy operations (including minimum reserves)*

This item consists mainly of interest paid on banks' minimum reserves.

Pursuant to Decision ECB/2014/23, excess reserve holdings are remunerated at a negative interest rate as from 11 June 2014.

In 2014, this item fell by €7.1 million to €2.7 million, from €9.8 million in 2013, mainly on account of a cut in the key ECB interest rate to an annual average of 0.16% (2013: 0.55%) and the imposition of a negative interest rate on excess reserve holdings.

*d) Interest on deposits of the Greek State*

This item fell to €4.1 million, from €17.2 million in 2013, mainly as a result of the cut in the interest rate. The negative deposit facility interest will also apply to State deposits in excess of certain thresholds as from 11 June 2014.

The interest rate of the Greek State cash management account fell to a daily average of 0.13% (2013: 0.51%).

*e) Interest on euro- and foreign currency-denominated deposits of various entities*

This item decreased to €0.5 million from €1.7 million in 2013, due to a decline in the deposits of the European Investment Fund and the European Investment Bank and the reduction of the interest rate from an average of 0.34% in 2013 to an average of 0.12% in 2014.

*f) Interest on SDR allocations of the IMF*

Interest on the Bank's liabilities from the allocation of IMF special drawing rights (SDRs) increased to €0.8 million, from €0.7 million in 2013.

*g) Interest on deposits of the Hellenic Financial Stability Fund*

This item showed a year-on-year rise to €0.3 million in 2014, due to an interest rate increase from an average of 0% in 2013 to an average of 0.051% in 2014.

## 2. Net result of financial operations, write-downs and risk provisions

The net result of financial operations rose by €12.9 million to €39.6 million in 2014, up from €26.7 million in 2013.

This outcome was a result of:

<b>2.1 Net realised gains arising from financial operations</b>	<b>2014</b>	<b>2013</b> <i>(in € millions)</i>	<b>Change</b>
– foreign exchange operations	24.3	6.4	17.9
– transactions in securities	15.2	13.9	1.3
– foreign exchange valuation differences due to changes in the €/SDR parity	-1.8	1.1	-2.9
– purchases and sales of gold coins	1.9	5.4	-3.5
<b>Total</b>	<b>39.6</b>	<b>26.8</b>	<b>12.8</b>
<b>2.2 Write-downs on financial assets and positions (unrealised losses)</b>			
– from the revaluation of securities and foreign currency positions	-1.7	-10.2	8.5
<b>Total</b>	<b>-1.7</b>	<b>-10.2</b>	<b>8.5</b>
<b>2.3 Transfer from the provision for foreign exchange rate, interest rate, credit and gold price risks</b>	<b>1.7</b>	<b>10.1</b>	<b>-8.4</b>
<b>Grand total</b>	<b>39.6</b>	<b>26.7</b>	<b>12.9</b>

As shown in the table, the €12.9 million increase in the net result of financial operations was due to higher gains on foreign exchange operations.

Moreover, the results for 2014 include €1.7 million of unrealised losses (2013: €10.2 million) on the year-end revaluation of securities and foreign currency positions (item 2.2). These were fully covered by the provision established for this purpose.

### 3. Net income from fees and commissions

Net income from fees and commissions rose by 4.7% to €73.5 million in 2014, from €70.2 million in 2013.

A breakdown is provided in the table below.

Net income from fees and commissions	2014	2013	Change
	<i>(in € millions)</i>		
<b>3.1 Fees and commissions income</b>			
– from the management of Greek government securities	13.1	9.9	3.2
– from payments and receipts on behalf of the Greek State	34.1	36.9	-2.8
– from the management of the “Common Capital of Legal Entities in Public Law and Social Security Funds according to Law 2469/97	19.1	16.8	2.3
– from private insurance supervision	3.9	4.3	-0.4
–other	4.7	5.0	-0.3
<b>Total</b>	<b>74.9</b>	<b>72.9</b>	<b>2.0</b>
<b>3.2 Fees and commissions expense</b>	<b>-1.4</b>	<b>-2.7</b>	<b>1.3</b>
<b>Total net income from fees and commissions</b>	<b>73.5</b>	<b>70.2</b>	<b>3.3</b>

### 4. Income from equity shares and participating interests

Income from equity shares and participating interests fell to €29.0 million in 2014, down from €54.2 million in 2013.

Income from equity shares and participating interests	2014	2013	Change
	<i>(in € millions)</i>		
• income from the ECB			
– share in the interim profit distribution	24.4	38.4	-14.0
– share in the net profit distribution	1.7	11.9	-10.2
• other income from equity shares and participating interests	2.9	3.9	-1.0
<b>Total</b>	<b>29.0</b>	<b>54.2</b>	<b>-25.2</b>

- **Income from the ECB**

In 2014, the Bank received an amount of €24.4 million corresponding to its allocated share in the ECB's interim profit distribution. The Bank's share in the remaining distributable ECB income earned in 2013 benefited financial year 2014 and amounted to €1.7 million.

- **Other income from equity shares and participating interests**

This item amounts to €2.9 million and consists mostly of receipts from payments of dividends for financial year 2013 in respect of the Bank's participating interests in the Bank for International Settlements (BIS), DIAS Interbanking Systems SA and the Hellenic Exchanges – Athens Exchange SA.

## 5. Net result of pooling of monetary income

	2014 (in € millions)	2013	Change
Net monetary income pooled by the Bank of Greece	300.7	424.0	-123.3
Monetary income allocated to the Bank according to its capital key	<u>289.0</u>	<u>467.8</u>	<u>-178.8</u>
– Monetary income reallocation for this year <sup>12</sup>	-11.7	43.8	-55.5
– Corrections to monetary income reallocation of previous years	18.0	0.3	17.7
– Transfer to income from the provision against counterparty risks arising from Eurosystem monetary policy operations	0.0	8.1	-8.1
<b>Total</b>	<b>6.3</b>	<b>52.2</b>	<b>-45.9</b>

The net result of monetary income reallocation turned positive due to corrections to monetary income reallocation of years 2008-2013, mostly as a result of the liquidation of Lehman Brothers Germany.

### In greater detail:

#### Net result of pooling and reallocation of Eurosystem monetary income

Monetary income is the income pooled by the NCBs in the performance of their monetary policy function.

The amount of each NCB's monetary income is equal to its annual income (actual and imputed) derived from its assets held against the "liability base".

<sup>12</sup> The amount of monetary income to be allocated to the Bank of Greece has been calculated on the basis of the latest available provisional ECB data as at the date of preparation of this balance sheet and its approval by the General Council of the Bank.

The liability base is composed of the following items:

- banknotes in circulation;
- liabilities to euro area credit institutions related to monetary policy operations denominated in euro;
- net intra-Eurosystem liabilities arising from balances of TARGET2 accounts;
- net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem.

Any interest paid by an NCB on liabilities included within the liability base is to be deducted from the monetary income to be pooled by the NCB.

The assets that are held against the liability base (“ earmarkable assets”) are the following:

- lending to euro area credit institutions related to monetary policy operations denominated in euro;
- securities held for monetary policy purposes. These include securities issued by euro area credit institutions which have been purchased under the Covered Bond Purchase Programmes CBPP1 and CBPP3 and securities purchased under the Securities Markets Programme (SMP). Yields on covered bonds purchased under the CBPP1 are calculated daily on the basis of the latest available marginal rate for the Eurosystem’s main refinancing operations, while for SMP and CBPP3 securities, real yields are calculated.
- intra-Eurosystem claims equivalent to the transfer of foreign reserves to the ECB;
- net intra-Eurosystem claims arising from balances of TARGET2 accounts;
- net claims related to the allocation of euro banknotes within the Eurosystem;
- a limited amount of gold holdings according to each NCB’s paid-up share in the capital of the ECB. Gold is considered to generate no income.

Where the value of an NCB’s earmarkable assets exceeds or falls short of the value of its liability base, the return on the difference (gap) is calculated daily on the basis of the latest available marginal rate for the Eurosystem’s main refinancing operations.

At the end of each financial year, the monetary income pooled by the Eurosystem is reallocated to the NCBs according to their paid-up shares in the capital of the ECB. Pooling and reallocating monetary income brings about net reallocation effects, owing to different yields earned by NCBs from earmarked assets and different debit interest paid on the liability base. Moreover, the level of the liability base and the level of the NCBs’ earmarked assets usually differ from their corresponding levels on the basis of their Eurosystem key.

The negative result (€11.7 million) recorded in 2014 was due to the fact that the monetary income actually pooled by the Bank in 2014 (€300.7 million) was higher than the €289.0 million calcu-

lated on the basis of the Bank's capital key in the share capital of the ECB (see footnote 12). It also reflected €18.0 million of income from corrections to monetary income reallocation of previous years.

This method of allocation of the Eurosystem's monetary income was established by Decision ECB/2010/23 (as amended) of the Governing Council of the ECB.

#### **Transfer to income from the provision against counterparty risks arising from Eurosystem monetary policy operations**

The Bank's income in 2013 includes a transfer of a further €8.1 million (in addition to the €45 million transferred in 2009, the €47 million transferred in 2010, the €32.8 million transferred in 2011 and the €16.6 million transferred in 2012) from the initial €149.5 million provision against counterparty risks arising from monetary policy operations.

### **6. Other income**

Other income decreased by €0.5 million to €12.1 million, from €12.6 million in 2013.

Other income includes revenue of €10.1 million from the activities of the Bank's Printing Works Department (IETA), derived from the production of items on behalf of the Greek State (coins, lottery tickets, passports, forms), as well as other revenue, amounting to €2.0 million, from accreditation fees, revenue from land and buildings, etc.





## OPERATING COSTS, DEPRECIATION AND PROVISIONS

	2014 <i>(in € millions)</i>	2013	Change
• Staff costs and pension benefit expenses	258.7	255.2	3.5
• Other administrative expenses	47.0	36.9	10.1
• Depreciation of tangible and intangible fixed assets	13.9	14.5	-0.6
<b>Total expenses excluding consultancy fees for the auditing of the banking system and provisions</b>	<b>319.6</b>	<b>306.6</b>	<b>13.0</b>
• Consultancy fees for the auditing of the banking system	14.0	4.3	9.7
<b>Total expenses excluding provisions</b>	<b>333.6</b>	<b>310.9</b>	<b>22.7</b>
• Provisions	130.1	468.8	-338.7
<b>TOTAL EXPENSES</b>	<b>463.7</b>	<b>779.7</b>	<b>-316.0</b>

## NOTES ON THE EXPENDITURE ACCOUNTS

*Total expenses in 2014* fell by €316.0 million to €463.7 million, from €779.7 million in 2013, mainly on account of lower provisioning.

In particular:

- **Operating costs excluding provisions (staff costs and pension benefit expenses, depreciation and other costs)** increased by €22.7 million or 7.3% to €333.6 million, from €310.9 million in 2013, mainly due to consultancy fees for the auditing of the banking system.

In greater detail:

- *Staff costs and pension benefit expenses* rose by a modest €3.5 million or 1.4% to €258.7 million, from €255.2 million in 2013. The increase was due to the actuarial remeasurement of the Bank's total pension benefit liability according to the applicable accounting principles.

- *Other administrative expenses* rose by €10.1 million to €47.0 million, from €36.9 million in 2013. These include the expenditure of the Printing Works Department (IETA) for raw materials for the production of banknotes and other items on behalf of the Greek State (coins, lottery tickets, passports, forms), repair and maintenance costs for buildings and other equipment, insurance premiums, overhead costs, etc.

- *Depreciation of fixed assets* dropped by €0.6 million or 4.1% to €13.9 million, from €14.5 million in 2013.

- *Extraordinary consultancy fees for the auditing of the banking system* amounted to €14.0 million in 2014.

- **In 2014, provisions for operating risks and other obligations** of the Bank amounted to €130.1 million (see notes on liability item 12 "Provisions").

As at 31.12.2014, the total staff numbered 1,854.

## DISTRIBUTION OF PROFIT

(Article 71 of the Statute)

Bank of Greece's profit amounted to €654.5 million in 2014, compared with €831.1 million in 2013.

The General Council proposes to the General Meeting of Shareholders that the profit be distributed as follows:

	2014	2013
	(in euro)	
Dividend to be distributed: €0.49728 per share on 19,864,886 shares	9,878,410	9,878,410
Tax on dividends (tax rate: 26%, Articles 47 and 58 of Law 4172/2013)	3,470,793	3,470,793
To the Government	641,200,00	817,800,000
	<b>654,549,203</b>	<b>831,149,203</b>

The gross dividend for financial year 2014 amounts to €0.6720 per share. Dividend to be distributed (€0.49728 per share) is subject to withholding tax at a rate of 10% in accordance with Law 4172/2013, Article 64 paragraph 1.

Athens, 19 January 2015

For the General Council  
THE CHAIRMAN

YANNIS STOURNARAS  
GOVERNOR OF THE BANK OF GREECE



