





BANK OF GREECE

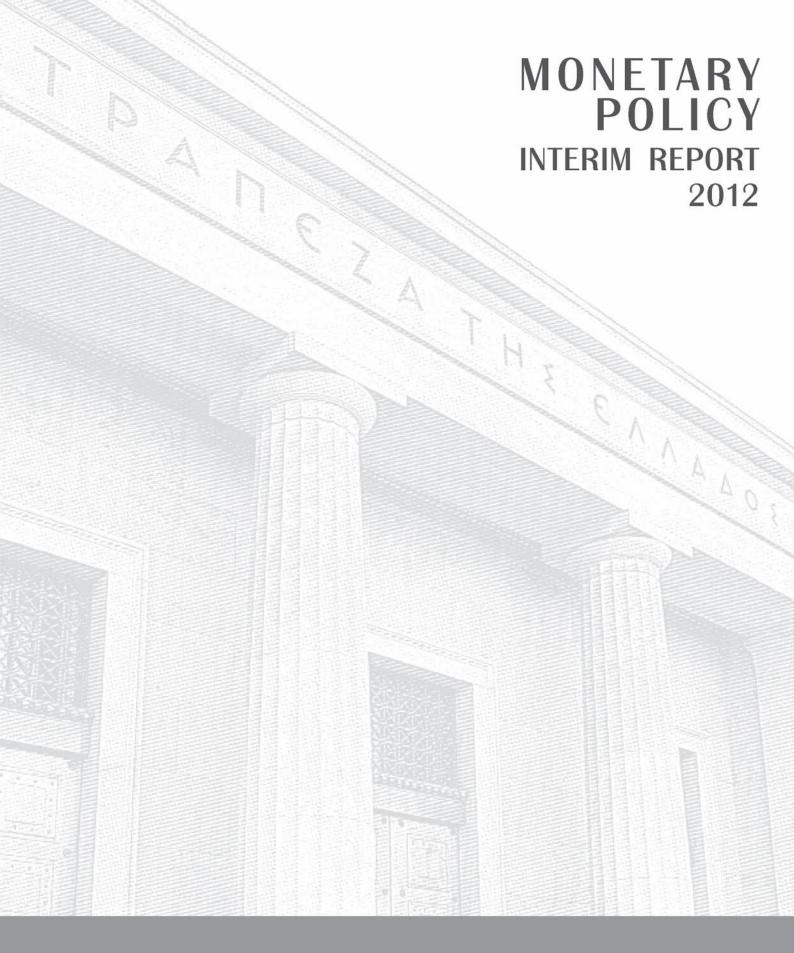
21, E. Venizelos Avenue GR-102 50 Athens

www.bank of greece.gr

Economic Research Department - Secretariat Tel. +30 210 320 2393 Fax +30 210 323 3025

Printed in Athens, Greece at the Bank of Greece Printing Works

ISSN 1108 - 2690







To the Greek Parliament and the Cabinet

After considerable delays and much uncertainty, Greece now faces fresh circumstances that allow a new start for the economy. In previous months, a drawn-out election period with two elections held up policy implementation already under way, sparked uncertainty and rekindled speculation about a Greek exit from the euro area. The coalition government that was formed after the elections undertook the task of turning this adverse climate around and getting the economic adjustment programme back on track.

A first substantial step in this direction was the adoption of Law 4093 on 7 November, whereby Greece fulfils commitments made under the Memorandum of Understanding of February 2012 (Law 4046/2012) – commitments which, in many cases, should have already been implemented. Law 4093 also introduces new measures envisaged in the Medium-Term Fiscal Strategy (MTFS) framework 2013-2016.

At the same time, the Budget for 2013, passed by Parliament on 11 November, incorporates a large part of the fiscal measures that cover the entire 2013-2016 period and provides for the attainment of a small primary surplus in 2013 at general government level.

Finally, the adoption of measures for the effective implementation of what had been decided was completed on 19 November, through Legislative Content Acts.

Thus, all the conditions of the loan agreement have been met, sending a clear message that Greece has fully delivered on its part of the agreement. This was expressly acknowledged by the Eurogroup on 20 November and again on 26-27 November, when procedures for the disbursement of €34.4 billion by mid-December 2012 and of an additional €9.3 billion within the first quarter of 2013 were set in motion and a decision was taken to adopt various measures that reduce Greece's debt burden. These measures aim to ensure that the debt-to-GDP ratio will fall to 175% by 2016, 124% by 2020 and to substantially below 110% by 2022.

These developments are positive and create plausible expectations of a recovery of the Greek economy, perhaps even earlier than currently projected. This outcome, however, hinges upon a consistent and rigorous implementation of all the measures legislated, together with policies that will speed up the onset of recovery, including a broader programme of structural reforms. Any delays like in the past will push the recovery back, with consequences that will be far more severe than anything that has so far happened.

The global economic environment is adverse. GDP growth across the world in 2012 has been slowing. In the euro area, GDP is expected to contract by 0.4% this year, while projections for 2013 point to only a marginal recovery in the euro area in the face of a very limited pick-up in global GDP growth. The estimated slowdown in Germany, from 3.0% in 2011 to 0.8% in 2012 and 2013, is a matter of concern. Heightened uncertainty in the European Union, the prospect of a "fiscal cliff" in the US and the weakening dynamics in emerging economies are far from ideal for the Greek economy to increase its openness – but they imply that Greece has to

At the same time, though, there are some positive developments. For two and a half years now, the institutional structure of the EU and the euro area is being reshaped. In addition, the Eurosystem's interventions in the context of the single monetary policy have mitigated the adverse impact of the crisis on the economies of euro area countries. The following should be mentioned as regards the Eurosystem's interventions:

persevere in its effort with increased vigour.

- The reduction in key interest rates has a favourable effect on the cost of Greek banks' refinancing by the Bank of Greece.
- Refinancing operations with full-allotment help in enhancing liquidity also of Greek banks.

– The establishment by the ECB in September 2012 of the possibility for the Eurosystem to conduct outright purchases of short-term government bonds of unlimited value from the secondary market shall contribute to ensuring similar financing conditions in all members, while Greece will be able to benefit directly when it gains access to the international markets of medium and long-term government bonds.

Among the changes at the EU level, it is particularly important to mention the steps towards the creation of a banking union, planned to incorporate banking supervision at European level and unified frameworks for deposit guarantees and bank resolution.

The changes underway in the EU call for Greece's active involvement. Decisions on the new architecture will be of relevance to Greece and will decisively deal with the problems brought to light by the crisis. Greece must therefore be actively involved in the process, on a par with its euro area partners, and participate in decision-making that will determine our own future as well. Nevertheless, Greece must fully meet its obligations and become, the soonest possible, part of the solution rather than the problem in Europe.

Macroeconomic developments in Greece over recent years have been particularly adverse and have largely contributed to the missing of the targets set in the economic adjustment programme and to the pessimistic projections for debt dynamics. The trough was in 2011, with GDP contracting by as much as 7.1%, after declines of 4.9% in 2010, 3.1% in 2009 and 0.2% in 2008. Based on plausible assumptions about the implementation of the adjustment programme, the Bank of Greece projects that GDP will decrease by slightly more than 6% in 2012 and by 4-4.5% in 2013. Positive growth will be witnessed in the course of 2014. This means that the cumulative decline in GDP over the past five years (2008-2012) will have

reached 20% and may come close to 23.5% in the six-year period 2008-2013. Meanwhile, the cumulative decline in total and dependent employment over the past four years (2009-2012) has exceeded 16% and 17.5%, respectively. The unemployment rate has shot up from 7.6% in 2008 to 17.7% in 2011 and to slightly above 23.5% in 2012 (year averages); it is estimated that it may rise further and exceed 26% in 2013 and 2014.

A recession of this intensity and duration is unprecedented in Greece's peacetime history and has taken a heavy toll not only on incomes, but also on potential output and social cohesion, as the lack of investment coupled with prolonged unemployment result in depreciation of physical and human capital. The recession hampers fiscal adjustment by reducing government revenue and increasing social spending; it also causes banks' deposit base to shrink (thereby reducing their capacity to extend credit) and creates a negative climate towards the acceptance of structural reforms and ultimately worsens the debt-to-GDP ratio.

The main causes of this deep and protracted recession are fiscal contraction, hesitance in undertaking reforms, heightened uncertainty and tight financial conditions. First and foremost, the recession reflects a slump in domestic demand, which was the main driver of growth up until 2008. This slump was a consequence of the imperative fiscal consolidation and its stronger-than-foreseen effect on output coupled with a severe deterioration in financial conditions and a contraction of credit to the private sector caused by the uncertainty perpetuated by the sovereign debt crisis. At the same time, the depth of the recession can also be explained by delays in legislating and, more importantly, implementing structural reforms, which -by improving market functioningwould have boosted business investment, thereby partly offsetting the contractionary effects of fiscal adjustment.

While the reduced ability of the banking system to finance real economic activity by extending credit to firms and households has compounded the recession, liquidity constraints also have longer-term repercussions. They are hampering the transfer of resources to exportoriented activities, which is key to achieving sustainable growth.

Liquidity constraints affecting the real economy and difficulties in accessing bank credit would have been far more severe without the recourse to Eurosystem monetary policy operations and without support from the Bank of Greece. The extensive liquidity support provided by the Bank of Greece and the Eurosystem has contributed to containing the rate of decline in credit to firms and households below that of nominal GDP and certainly well below that of the rate at which banks' deposit base has contracted. To this extent, the Bank of Greece, as a member of the Eurosystem, has helped to mitigate the adverse effects of the debt crisis and the fiscal adjustment on economic activity.

Furthermore, through its enhanced supervision of credit institutions, the Bank of Greece has succeeded in safeguarding financial stability, at a time when the undermining of financial stability could very well have triggered mass deposit withdrawals and a collapse of the economy.

Despite the significant shortcomings and problems pointed out in the present report, substantial progress has been made over the past few years. However, this progress has been uneven, as fiscal consolidation has been relatively rapid, whereas structural reforms have lagged behind. More specifically:

 The fiscal consolidation of the past few years has resulted in a significant reining-in of fiscal deficits. The general government deficit on a national accounts basis decreased from 15.6% of GDP in 2009 to 9.4% in 2011 and is expected to fall considerably further this year (to 6.6% of GDP) according to the Introductory Report of the 2013 Budget.

Even more remarkable is the decrease in the primary deficit, which — from 10.5% of GDP in 2009 — was reduced to 2.3% in 2011 and is expected to reach 1.2% of GDP (again according to the Introductory Report of the 2013 Budget).

Progress with fiscal consolidation would have been even faster, if the economy had not been in a deep and protracted recession. Indicatively, had nominal GDP remained at 2008 levels, the estimated public debt-to-GDP ratio in 2012 would have been some 30 percentage points lower.

- It is estimated that, in the three-year period 2010-2012, a large part (72%) of the loss in international cost competitiveness incurred during the nine years 2001-2009 has been recouped. This is already an important positive **development.** It is furthermore estimated that, in the course of 2013, all of the loss incurred in 2001-2009 will be recouped. Certainly, a sustainable improvement in competitiveness cannot - after a necessary initial phase of "correction" - be based on a combination of nominal wage reductions and falling or stagnant productivity, as the negative effects on domestic demand would more than offset the positive effects of external demand. The improvement in cost competitiveness must therefore also be based on productivity gains. The structural reforms directed at the more efficient functioning of product and labour markets are designed to produce precisely this result and will make possible both a higher rate of potential growth (inter alia by encouraging investment) and an improvement in structural competitiveness.

- Despite the delays, progress with structural reforms over the past two and a half years has



not been negligible. In the area of fiscal structural reforms, what stands out is the overhauling of the social security system. Other notable reforms include the introduction (in 2010) of medium-term fiscal planning, the drastic improvement in the quality of fiscal statistics, as well as the recent establishment of a structure to ensure the monitoring of compliance with fiscal targets by ministries and general government entities and automatic corrective mechanisms in case of target shortfalls. In the area of labour market structural reforms, there have been farreaching interventions, mainly concerning the decentralisation of collective bargaining and the introduction of more flexible provisions for employment and working time. Finally, product market structural reforms include the marked simplification of licensing for starting up and operating a business, advances in the deregulation of land freight transport, important steps towards the opening up of "closed" professions, the lifting of cabotage restrictions on cruise ships, while a new export strategy is currently being shaped.

 There are signs of a corrective adjustment of key aggregates, which constitutes the beginning of a process of rebalancing and restructuring the economy:

First, the current account deficit is declining. After peaking at 14.9% of GDP in 2008, the current account deficit gradually fell to 9.9% of GDP in 2011. The Bank of Greece expects it to come down further to 4.5-4.7% of GDP in 2012 and 2013 and below 3.5% in 2014.

This improvement was largely driven by the substantial decrease in imports, as a result of lower investment and consumption. However, non-oil exports, which began their rebound in mid-2010, also played their part, reflecting a strengthening in external demand as well as the gains in cost competitiveness mentioned previously.

At the same time, it is estimated that the improvement in the external balance also has

a structural component, related, first, to the reorientation of enterprises towards foreign markets and, second, to changes in consumption patterns which could help contain imports of consumer goods on a more permanent basis.

Thus, reliance of growth on domestic demand is declining. The changes in the external balance are gradually reversing an earlier trend of many years during which the growth of domestic demand was the main driver of GDP growth, whereas the change in external demand made a negative contribution. Since 2008, the change in net exports has made positive contributions to growth. Enhancing this trend and expanding exports of goods and services as a percentage of GDP will be pivotal to bringing about a permanent change in the growth model, which in the past had depended on domestic demand.

Second, unit labour costs have been declining since 2010, thereby contributing to competitiveness gains. Previously, unit labour cost growth in Greece had outpaced that of the euro area for many years, contributing to higher Greek inflation with respect to the euro area average and to a steady erosion of cost and price competitiveness.

Third, there are also signs of an adjustment in consumer prices and of a fall in inflation. In 2012, for the first time since Greece adopted the euro, Greek inflation is expected to fall below the euro area average (1.2%, compared with 2.4-2.6%), and is projected to decelerate further to 0.3% in 2013. Moreover, average annual core inflation (which excludes energy and unprocessed food prices) is expected to be 0% in 2012 and to turn negative (-0.5%) in 2013. Indeed, if the impact of indirect tax increases is excluded, average core inflation is expected to turn clearly negative (-0.6%) as early as this year. The present Report also examines why the decrease in consumer prices has not been even larger.

The banking system continues to face unprecedented challenges as regards both liquidity and capital adequacy, as a result of the sovereign debt crisis. Greek banks have been cut off from international markets for some time now, have faced a large outflow of deposits and incurred significant losses in the context of the Private Sector Involvement (PSI). Under these circumstances, it became apparent that not only the stability of the Greek banking system was at stake, but also that any false moves could trigger a banking crisis, with negative consequences that could extend beyond Greece.

Against this background, the contribution of the Bank of Greece to safeguarding financial stability has been decisive. Despite the very negative conjuncture, the Bank ensured that adverse developments did not threaten financial stability and that depositors were not affected. No depositor has incurred any losses.

At the same time, the Bank of Greece has fully met its primary obligation to ensure that demand for cash was met. This was achieved at a time when demand for cash was highly volatile and there were repeated incidents of increased cash outflows, caused by negative news reports and heightened concern among the public.

Since the onset of the crisis, the central bank has not only imposed enhanced and strict supervision; it has also established and implemented rules which safeguard financial stability and fully protect depositors.

More specifically, actions taken by the Bank of Greece have served to:

- meet banks' emergency liquidity needs, enabling them to satisfy depositors;
- design and set up, in collaboration with the government, a framework for the resolution of credit institutions. The procedures envisaged in this framework have already been successfully applied in the case of six banks,

without affecting financial stability and while fully protecting depositors;

- secure, through the support programme, the necessary funds for bank recapitalisation. Recapitalisation constitutes a crucial step towards improving confidence in the banking system, safeguarding deposits and increasing liquidity in the market. Part of these funds will be used for the restructuring and consolidation of the credit system;
- assess the viability of Greek banks and estimate their capital needs for the period 2012-2014.

Since the onset of the crisis, the Bank of Greece has considered it both necessary and inevitable that banks undergo internal restructuring to modify their business models and that the Greek banking system should restructure and consolidate.

It is encouraging that this necessary consolidation of the banking system has begun. Within a short time, we have seen (a) the resolution of ATE Bank and the transfer of its healthy assets to Piraeus Bank; (b) the conclusion of agreements for the acquisition of Geniki Bank by Piraeus Bank and of Emporiki Bank by Alpha Bank; and (c) a proposal from the National Bank of Greece to acquire Eurobank, which could lead to the creation of the largest financial group in South-Eastern Europe. Meanwhile, it is almost certain that there will be further consolidation down the road. As banks become stronger, this will facilitate their access to foreign markets and will provide incentives to private investors to take part in future share capital increases.

When this process is completed, it is estimated that three large and well-capitalised banks will remain, alongside a few smaller ones. The expected market shares of these smaller banks will ensure a competitive environment, while banks in general will be in a position to benefit from economies of scale and synergies resulting from the process of

consolidation. This situation is quite different from one year ago, when seven medium-tolarge banks and more than ten small banks existed.

The completion of the recapitalisation process and the restructuring of the Greek banking system are of pivotal importance, as the existence of well-capitalised banks will boost the confidence of domestic savers and international financial markets in Greek banks. Such a development would help relieve the liquidity constraints faced by banks, by favourably affecting the inflow of deposits and banks' ability to regain access to international money and capital markets. At the same time, the strengthening of banks' capital bases will increase their ability to supply credit to the economy and to thereby mitigate the contractionary effects of fiscal adjustment.

The Bank of Greece has already communicated to all banks estimates of their capital needs and the deadlines for submitting their recapitalisation plans and implementing them. Banks must complete the required capital increases by end-April 2013.

Recovery and the return to positive growth are now a priority. The adoption of the Medium-Term Fiscal Strategy and the Budget for 2013 signals the end of a series of delays; the adjustment programme is now back on track. At the same time, the Eurogroup statements of 20 and 26-27 November will ensure the financing of the programme in the current crucial phase. Future developments will now crucially depend on the Greek economy's ability to exit the recession as soon as possible and achieve positive GDP growth.

The preconditions for a return to positive growth are:

- The lifting of uncertainty about Greece's place in the euro area. As long as the issue remains open, this threat will hang over Greece,

undermining the effort for an orderly exit from the crisis. The Eurogroup statement of 26-27 November and the strong reassurances of our partners that Greece will remain in the euro area are a major step forward. However, regaining confidence fully will require a sustained and stronger effort to make up for lost ground and convince that the recession has a visible turning point and is not an endless cycle of burdens to no avail.

- Finalising a national plan for the transition to a new growth model. Aside from setting the conditions for continued financial support, the Memorandum of February 2012 and the additional measures under the Medium-Term Fiscal Strategy 2013-2016 and Law 4093 map out the policies that need to be implemented without delay. In no way do the provisions of the Memorandum waive Greece's responsibility to finalise a comprehensive action plan – a national strategy for radically changing the structures of the economy and in particular its structure of production.

The key aim of such a strategy is to promote structural reforms that will eliminate the twin deficits and ensure that all institutional and economic conditions for a modern, competitive economy are in place. A competitive economy does not mean a low-cost economy. The conditions for encouraging competitiveness are far more complex; they involve the quality and functioning of the state and other institutions, the adequacy of infrastructures, the quality of human resources, the existence of effective competition and an environment conducive to entrepreneurship.

A speeding-up of structural reforms is particularly necessary at the current unfavourable conjuncture. Conditions in the economy will quickly become even more adverse if the causes of the deficits are addressed by measures with only a temporary effect. Avoiding structural reforms would prolong the recession, stifle growth and undermine debt sustainability. Delays in completing structural reforms over the

previous years, despite the progress made, have prevented the beneficial effects of such reforms from becoming visible sooner and have led to pressures for additional spending cuts. Of course, the reform process takes time and in many cases positive results take long to manifest. Precisely because of this, delays simply exacerbate problems. Therefore, the need to promote reforms is all the more urgent.

As regards speeding up the onset of recovery, efforts need to focus on:

First, the immediate implementation of measures that will help restart the economy. These measures include the faster absorption of funds under the National Strategic Reference Framework, the establishment of the Hellenic Investment Fund, the use of all the financial tools made available by the European Investment Bank and a relaunching of major motorways projects.

Second, an improvement in financial conditions.

The lack of liquidity and the problem of undercapitalisation limit the ability of the Greek banking system to finance new business initiatives and support viable enterprises facing severe liquidity problems. Recapitalisation and restructuring of the banking system will contribute to a return of deposits and to an improvement of liquidity conditions, thereby allowing support for the export activity of enterprises and facilitating their reorientation to new markets and new products. The removal of uncertainty, especially as regards Greece's place in the euro area, will also contribute to a return of deposits.

Third, improved efficiency of public administration and simplification of the legal and regulatory framework. This condition is crucial for the effective implementation of all other reforms and policies, for improving relations between the state and its citizens as well as between the state and businesses, and for promoting a sense of equity.

Fourth, the establishment of a stable tax regime and a reduction in the tax burden. As the tax system is currently being redesigned, a primary concern should be to ensure that the provisions to be adopted will remain in place for a long time. Additionally, the new tax system must be simpler and rely extensively on information technology. It should focus on widening the tax base by curbing tax evasion; it would then be possible to lighten the burden of those who already pay taxes, which has increased excessively. Tax provisions should also aim at encouraging entrepreneurship and speeding up the onset of recovery.

Fifth, pressing ahead with privatisation. Apart from generating proceeds that will directly reduce public debt, privatisations also enhance growth and bring about sustainable job creation. On top of the immediate benefits of the initial investment resulting from a privatisation, the investment expenditure required to complete a project should be added. Up to now, the process of privatisation has seen huge delays. The establishment of the state asset management fund (TAIPED) was a positive first step and its active role since September 2012 is a promising development.

Sixth, the effective utilisation of EU funds.

Given the significant budget constraints at the national level, EU resources are currently a particularly important source of funding. Any remaining obstacles to a faster absorption and more effective use of funds under the National Strategic Reference Framework must be removed as soon as possible. In the next multiannual financial framework of the EU, Greece will probably be allocated significantly lower funds. Therefore, an effective negotiation strategy is needed, to ensure that the allocation of funds to be decided (most likely in January 2013) will be the most favourable. Irrespective, however, of the quantity of funds available, a strategy must be formulated for the optimal use of these resources. Up to now, although EU funds have made a positive quantitative contribution, their use has not averted the persistence of a distorted growth model that ultimately led to the current crisis. In the new environment, the NSRF and EU funds should function as powerful tools for growth; to this end, they have to be integrated into the national plan for the transition to a new growth model.

At the national level, two factors will ultimately determine the ability of the Greek economy to overcome the crisis: **First**, the design and the consistent and speedy implementation of a national strategy. This strategy needs to be broader in scope than the Memorandum and include the completion of fiscal consolidation, the policies needed to bring the recovery forward and the vital reforms that will generate sustainable gains in competitiveness and satisfactory growth rate in the future. **Second**, continued financing from our partnerscreditors.

Both factors are subject to considerable uncertainties, both domestic and external. With regard to the domestic uncertainties, note must be made of the following:

- that public administration might not be able to implement the reforms decided upon at the political level. It is for this reason that priority has to be given to improving the efficiency of public administration;
- that there could be strong social reaction, which could test political stability;
- that the targets set might not be fully met, resulting in the need for additional corrective measures.

Among the external factors, the main uncertainty relates to the materialisation of downside risks to the global economic outlook. This could weigh heavily on the outlook for the Greek economy as well. The institutional reforms to be decided at euro area level are another external uncertainty. This is

why Greece must be actively involved in the deliberations and in the EU decision-making process.

The latest developments in Greece and the EU send out strong positive signals.

Greece is mobilising both at home and abroad to make up for the long delays and has achieved a constructive agreement with the troika that ensures continued funding.

The EU and the IMF have given emphatic assurances concerning Greece's continued membership of the euro area. The Eurogroup has, in successive meetings, acknowledged the substantial progress achieved so far. The disbursement of the instalment of loans that had been put on hold was endorsed and the public debt burden will be alleviated, through a series of measures detailed in the Eurogroup statement of 26-27 November.

Effort must now focus on containing recession, speeding up the onset of recovery and establishing the conditions for sustainable growth.

Despite the delays, the progress that has been achieved in key sectors is tangible. Despite the risks and the ongoing recession, the economy is changing. As soon as the first clear indications emerge that past practices are being broken with and a new strategy for the future is being drawn up, the sentiment can rapidly turn around and the conviction take hold that the end of the recession is at hand. This would be the first step towards a new course of growth.

Athens, November 2012

George Provopoulos

Governor

MONETARY POLICY COUNCIL OF THE BANK OF GREECE

CHAIRMAN

George Provopoulos

MEMBERS

Helen Dendrinou-Louri
Ioannis Papadakis
George Demopoulos
George Economou

Charalampos Stamatopoulos



CONTENTS

CH	APTE	RI		1.1	Eco	nomic developments and	
THE ECONOMY IS IN THE PROCESS					prospects		
OF	CHAN	IGE – RECOVERY AND GROWTH		1.2		elopments and prospects in	
WI	LL CO	ME WITH THE RIGHT POLICIES				real estate market	82
ī	A nev	w start	17		1.2.	A Factors affecting demand and	
2	The e	external environment, the				supply in the real estate market	85
		ges under way in the European			1.2.	B Developments in the effort to	
		n and the participation of Greece	18			effectively use public property	87
3		nain determinants of macro-		2	Emi	ployment and unemployment:	
		omic developments in Greece	22	_		elopments and prospects	89
4	Despite important shortcomings,			3		ation, labour costs and	
	there has been substantial progress		25		competitiveness: developments		
	4.1	Fiscal consolidation	25			prospects	94
	4.2	Recouping cost competitiveness			3.1	Inflation	94
	1,2	losses	26			A Is inflation declining enough?	97
	4.3	Signs of adjustment, rebalancing	20		3.2	Wages and unit labour costs	100
	т.Э	and restructuring of the economy	26			A Earnings in the business economy:	100
	4.4	Delays and progress in structural	20		J. 4.1	how are they affected by recent	
	7.7	reforms	28			labour market reforms and the	
	4.5		20			recession?	101
	4.3	Safeguarding financial stability and restructuring the banking			2.2		
			28		3.3	International cost competitiveness	102
	D	system on solid ground	20		3.3.2	A Recovering cost competitiveness	
5		very and the return to positive	22			losses of 2001-2009: performance	104
	_	th are now a priority	32			and prospects	104
	5.1	Preconditions for a return to	22	4		ernal balance: developments	
		positive growth	33			prospects	104
	5.2	The aim of structural reforms:			4.1	Current account balance	104
		a modern competitive economy	34			4.1.1 Introduction	104
	5.3	The effort to speed up the				4.1.2 Trade balance	105
		onset of recovery	34			4.1.3 Services balance	107
6		rtainties and risks still exist	37			4.1.4 Income account balance	108
7	It is	possible to turn a new page	37			4.1.5 Current transfers balance	108
						4.1.5.A The medium-term prospects	
	APTE	• ••				of current transfers	108
		ERNAL ENVIRONMENT OF THE			4.2	Capital transfers balance	108
		CONOMY AND THE EUROSYSTEM'S				4.2.A The medium-term outlook for	
SIN		MONETARY POLICY				the utilisation of community	
L	Inter	national economic developments,				funds: recent developments	
	prosp	pects and policy responses	39			and policy suggestions	109
	1.1	Developments and prospects	39	5	Fina	ncial account balance	Ш
	1.2	EU and euro area: policy					
		responses	42	СН	APTI	ER IV	
2	The e	economies of South-Eastern		FIS	CAL	DEVELOPMENTS AND PROSPECTS	
	Euro	pe	50	- 1	Rev	iew of fiscal developments	113
3	The E	Eurosystem's single monetary			1.1	Introduction	113
	polic	у	53		1.2	Fiscal developments in January-	
						October 2012 based on	
CHAPTER III					administrative data	115	
MACROECONOMIC DEVELOPMENTS					1.3	Fiscal developments in January-	
IN	IN GREECE IN 2012 AND PROSPECTS					October 2012 based on cash data	117

	1.4	2013 Budget	117	TABLES		
	1.5	Medium-Term Fiscal Strategy Framework 2013-2016	110	TT 1	V	
2	Easts	prs-interventions that may affect	119	II.1	Key macroeconomic aggregates	40
_		ormance in 2012 and 2013	120	II.2	of the world economy	40
	perio	ormance in 2012 and 2013	120	11.2	Key macroeconomic indicators of South-Eastern European countries	F 1
СН	IAPTEI	R V		II.3	Key banking indicators in	31
		RY AND CREDIT AGGREGATES		11.3	selected South-Eastern European	
		ELOPMENTS IN FINANCIAL			countries	52
M	ARKET	S IN GREECE		II.4	Changes in key ECB interest	32
I	Intro	duction	129	11.1	rates	54
2	Mone	etary aggregates	130	II.5	Eurosystem's open market	
	2.A	Main factors behind the evolution			operations in 2012	55
		of deposits, signs and prospects			1	
		of stabilisation or increase	131	III.1A	Demand and gross domestic	
3		deposit rates	134		product (2005-2011)	69
4		lending rates and the interest		III.1B	Demand and gross domestic	
_		spread	137		product (Q1 2011-Q2 2012)	70
5		it aggregates	140	III.2	Indicators of consumer demand	7 I
	J.A	Key factors behind credit expansion, mainly to firms	144	III.3	Indicators of investment	
6	The	government bond market	147		demand	73
7	•	stock market	149	III.4A	Gross value added at basic prices	
8		view of developments in			and GDP at market prices	75
		panking sector	151	III.4B	Gross value added at basic prices	
	8.A	Financial results of Greek banks			and GDP at market prices	76
		and banking groups in 2011	153	111.5	(2011 and Q1 2011-Q2 2012)	
				III.5	Activity indicators in the services sector	77
	IAPTE	·- · -		III.6	Indicators of industrial activity	79
		JRAL REFORMS INCREASE		III.7	Summary table of key short-	" "
		AL OUTPUT AND IMPROVE		111./	term indicators for the real	
		STAINABILITY PROSPECTS			estate market	83
1 2		duction effects of structural reforms	155	III.8	Labour force participation,	
4		rowth	155		employment and unemployment	
3	_	ur market reforms	159		by age group	91
4		ctural reforms in product	137	III.9	Employment rate for people	
	mark		161		aged 30-49 by level of education	91
	4.1	Removal of administrative		III10	Harmonised index of consumer	
		barriers to economic activity	161		prices: Greece and the EU	95
	4.2	Structural reforms in retail trade	163	III.11	Contributions to the inflation	
	4.3	Structural reforms in the			differential between Greece	
		transport sector	163		and the euro area	97
	4.4	Opening up of "closed"		III.12		100
		professions	165	III.13	Average earnings and unit	
					labour costs in total economy:	
MONETARY POLICY MEASURES OF THE		170	TTT 4.4		101	
EU	ROSY	S I EM	179	III.14	Greece: revised nominal and	
C T	ATICT	ICAL ADDENDIV	187		real effective exchange rate (EER) indices	103
21	A 1 1 2 1 1	ATISTICAL APPENDIX			LEEK HIGICES	1 U.S



III.15	Breakdown of Greek imports of goods (excluding fuel and		CHARTS		
	ships) according to their use	106	II.1 II.2	Central bank policy rates Exchange rate of the euro	41
IV.1	State budget balance	114	11,2	against the US dollar and	
IV.2	State budget deficit on a			the Japanese yen	41
	cash basis	118	II.3	Exchange rate of the euro	
			1110	against the pound sterling and	
V.1	Greek contribution to the			the Swiss franc	41
	main monetary aggregates of		II.4	Euro area money market	
	the euro area	132		interest rates and spreads	63
V.2A	Bank interest rates on new				
	deposits by households in		III.1	Economic activity indicators	68
	the euro area and Greece	136	III.2	Manufacturing output and	
V.2B	Bank interest rates on new			business expectations	78
	deposits by households in		III.3	Purchasing Managers' Index	
	euro area countries	136		(PMI) in manufacturing	80
V.3A	Bank interest rates on new loans		III.4	Consumer demand indicators	80
	in the euro area and Greece	138	III.5	Productivity, gross value added	
V.3B	Bank interest rates on new loans			and employment	81
	in euro area countries	139	III.6	Volume of new buildings and	
V.4	Credit to the economy by			extensions on the basis of	
	domestic MFIs	142		permits issued	85
V.5	Credit to the domestic private		III.7	Employment	90
	sector by domestic MFIs	143	III.8	Employment expectations	92
V.6	Funds raised on the Athens		III.9	Total unemployment rate	92
	Exchange	150	III.10	Harmonised index of	
V.7	Financial results of Greek			consumer prices in Greece,	
	commercial banks and banking			the euro area and the	
	groups with shares listed on			European Union	94
	the Athens Exchange	151	III.11	Core inflation in Greece and	
V.8	Advance payment from the			the euro area on the basis of	
	Financial Stability Fund	152		the HICP excluding energy	
V.9	Financial results of Greek			and unprocessed food	94
	commercial banks and		III.12	Consumer Price Index and	
	banking groups	153		core inflation in Greece	96
			III.13	Evolution of CPI/PPI fuel	
VI.1	Global competitiveness			prices and of the euro price	
	indicators: Greece's rank			of Brent crude oil	96
	in total economies	156	III.14	Inflationary contribution of	
VI.2	Data on migration from			changes in fuel prices	96
	Greece to Germany and		III.15	Import price index in industry	
	the United Kingdom	157		and the inverse of the effective	
VI.3	Indicative estimates of the			exchange rate of the euro,	
	expected macroeconomic			weighted on the basis of	
	effects of reforms in advanced			Greece's external trade	96
	economies	158	III.16	Annual inflation differentials	
VI.4	Indicative estimates of the			between Greece and the euro	
	effects of the Services Directive	166		area	97

III.17	Inflation expectations of consumers and business firms	98	II.2	The Fiscal Compact and the prospect of economic and fiscal integration	47
IV.1	Net borrowing requirement of central government on a cash basis	117	II.3	What is the rationale behind and which are the prospects of the creation of a European	
V.1	Deposits, repurchase agreement and money market fund units	S		banking union?	56
V.2	in Greece Bank interest rates on new deposits by households	131	11.4	Financial conditions in Greece and the euro area CHART A Euro area financial	60
V.3	in Greece and the euro area Bank interest rates on	135		conditions index (FCI) CHART B Financial conditions	61
V.4	new loans in Greece Bank interest rates on new loans: differential between	137		index (FCI) for selected euro area countries	62
V.5	Greece and the euro area Average interest rate spread between new loans and	140	IV.I	Debt dynamics and the effects of structural reforms CHART Contributions to changes	123
	new deposits in Greece and the euro area	140		in general government debt	125
V.6	Sectoral contributions to total domestic MFI credit	141	VI.I	Fiscal impact and prospects of the social security reform	167
V.7 V.8	Credit to the domestic private sector by domestic MFIs Outcome of applications for	141		1 The need for social security reform	167
v.6 V.9	bank financing by SMEs 10-year Greek and German	145		2 The main aspects of the social security reform	168
V.10	government bond yields Greek government paper	148		3 Quantification of the fiscal impact	170
V.11	yield curves Athens Exchange:	148		4 Determinants of developments in pension expenditure between 2010 and 2060	171
	composite share price index and trading volume	149		5 Link between contributions and benefits, pension adequacy and the need to reinforce the second	
BOXES				and third pillars	171
II.I	Fiscal consolidation and	42		6 Constraints on tapping the second and third pillars	174
	EU policy for growth 1 Introduction	43 43		CHART A European Union:	1/4
	2 Fiscal multipliers	43		pension expenditure projections	
	3 Implications of the estimated	43		for 2010-2060	170
	higher fiscal multipliers	44		CHART B Euro area: Fiscal	
	4 Fiscal framework and fiscal	-1-1		sustainability gap (S2) and	
	consolidation in the EU and			its components	172
	the euro area	45		CHART C Decomposition of the	
	5 Growth policies in the EU and			public pension expenditure to GDP	
	the euro area	46		ratio over 2010-2060 in Greece	173

I THE ECONOMY IS IN THE PROCESS OF CHANGE - RECOVERY AND GROWTH WILL COME WITH THE RIGHT POLICIES

I A NEW START

In its Annual Report published in April 2012, the Bank of Greece pointed out that the new loan agreement and the adjustment programme created more favourable conditions for the restructuring efforts of the Greek economy to continue. It also stressed that what was necessary in order to take advantage of that new opportunity was to promptly implement the agreements and make up for previous delays. Developments have been overwhelming since then.

Domestically, a long pre-election period with two elections delayed the implementation of measures that had already been decided by the Greek parliament. The forming of a coalition government markedly reduced uncertainty in Greece. This halted and reversed the decline in households' and firms' deposits with the Greek banking system.

The coalition government undertook the responsibility to:

- First, ensure that financing under the loan agreement would continue.
- Second, complete fiscal consolidation by adopting measures to further reduce public expenditure and increase public revenue.
- Third, promote policy measures (with no fiscal cost, e.g. reducing red tape for businesses and improving the absorption rate of funds under the NSRF) to bring the recovery forward and, at the same time, facilitate and accelerate the process of economic transformation through radical and bold structural changes, which is a prerequisite for rapid growth in the future.

Bringing the adjustment programme back on track

By virtue of Law 4093, which was adopted by Parliament on 7 November 2012, Greece fulfils commitments made under the Memorandum of Understanding of February 2012 (Law 4046/2012) – commitments which, in many cases, should have already been implemented. Law 4093 also introduces new measures envisaged in the Medium-Term Fiscal Strategy (MTFS) framework 2013-2016.

Law 4093/2012 sets fiscal targets for 2013-2016 and introduces measures to support fiscal adjustment, including: a further reduction of pensions and other social expenditure, a reduction of the civil service wage bill by eliminating the Christmas and Easter bonuses and the holiday allowance and limiting "special wage regimes", a reduction of pharmaceutical expenditure, the amendment of various tax provisions and the establishment of a Secretary General for Public Revenue. It also includes important provisions aimed at increasing flexibility in the labour market and opening up closed professions.

At the same time, the 2013 Budget, adopted on 11 November 2012, incorporates a large part of the fiscal measures provided for the entire 2013-16 period. According to the Introductory Report on the Budget, a general government primary surplus of 0.4% of GDP is expected to be achieved in 2013 for the first time since 2002 (compared to a primary deficit of 1.2% in 2012). Besides, the Medium-Term Fiscal Strategy (MTFS) Framework sets the target of building up a general government primary surplus of 4.5% of GDP in 2016 and states that additional measures will be required equal to €4.64 billion in 2015-2016 (but they have not been specified yet).

The new programme will have a positive impact only if it is implemented thoroughly and without deviations

These decisions are positive as they unblock financing flows, which had been suspended due to delays in previous months. This, in turn, will allow economic policy to focus on the major objective, i.e. creating the conditions that would contribute to halting recession and achieving recovery. However, there is one problem that still persists and has to do with the consistent and strict implementation of the legislated measures, along with measures that will speed up the beginning of recovery, including a broader programme of structural reforms. Otherwise, new delays or target shortfalls will have severe negative consequences: a provision has now been made for an automatic correction mechanism that should trigger direct cuts to budgeted expenditure (according to the Act of legislative content of 18 November 2012 on fiscal rules).

2 THE EXTERNAL ENVIRONMENT, THE CHANGES UNDER WAY IN THE EUROPEAN UNION AND THE PARTICIPATION OF GREECE

The global economic environment is adverse

The overall international economic environment today is adverse, as global GDP has declined (to 3.1%-3.3%, down from 3.8% in 2011) both in developed and in emerging economies. Euro area GDP is estimated to have declined by 0.4% this year, following a 1.4% increase in 2011. Moreover, for 2013, the International Monetary Fund and the European Commission anticipate a very moderate increase in global GDP growth (3.3%-3.6%) and a marginal (and therefore uncertain) recovery of the euro area GDP (0.1% to 0.2%). The slowdown in Germany, from 3.0% in 2011 to 0.8% in 2012 and 2013 according to the European Commission, is a matter of concern. Heightened uncertainty in the European Union (mainly because of the debt crisis in Member States, the operation of crisis management mechanisms and, in general, the setting up of a new operating framework for the euro area), the prospect of an abrupt fiscal adjustment in the United States (the so-called fiscal cliff) and the weakening dynamism of emerging economies are far from ideal conditions for the Greek economy to increase its openness. They are, however, all the more reason for Greece to persevere in its effort with increased vigour.

Positive steps towards completing the institutional structure of the EU and the euro area

At the same time, though, there are some positive developments. In particular, for two and a half years now, work on the institutional architecture of the EU and the euro area is progressing towards:

- improving economic governance, enhancing fiscal and macroeconomic surveillance and coordinating economic policies,
- enhancing the institutional framework for the supervision of financial markets (establishment of the European Systemic Risk Board and the European supervisory authorities for banking, securities markets and private insurance),
- setting up and activating the European financial support mechanisms (i.e. the EFSF and, as of 27 September 2012, the ESM), which were gradually endowed with more flexibility and effectiveness, and
- promoting the banking, fiscal and economic union envisaged by the President of the European Council, H. Van Rompuy.

The positive role of the single monetary policy and the Eurosystem's responses

Positive developments also include the single monetary policy and the Eurosystem's responses, which mitigate the adverse impact of the crisis on euro area economies.

In particular, on July 2012 the Governing Council of the ECB lowered key interest rates (which had remained unchanged in the first half of the year) by 25 basis points, based on its assessment that the outlook for economic activity in the euro area had been adversely affected, thereby dampening inflationary pressures, mainly because of tensions in some government bond markets. Thus, the interest rate on the main refinancing operations has now come to 0.75%. Lowering this rate has a

favourable effect on the cost of refinancing of Greek banks by the Bank of Greece.

Earlier, in late December 2011 and early March 2012, the Eurosystem had boosted the liquidity of the banking system by conducting two open market operations to provide financing with a maturity of 36 months. The subsequent decline in Euribor rates exerts downward pressures on bank lending rates in Greece, since Euribor rates are used as benchmark rates in many loan agreements in Greece. More generally, refinancing operations with full-allotment (which is the main non-standard monetary policy measure in the euro area) helps in strengthening liquidity also of Greek banks. However, as seen below, the amount of credit that Greek banks can draw is limited by the fact that the value of the collateral they hold has been declining for long. Indeed, from time to time the main marketable instruments in the portfolios of Greek banks (Greek government bonds) were not eligible as collateral by the Eurosystem. However, given that credit institutions in other Member States faced similar problems, in December 2011 and in June and September 2012 it was decided to extend the set of eligible assets.

The fact that government bond yields in some euro area countries incorporate extremely high risk premia is a source of concern for the Governing Council of the ECB, which sees this as reflecting assessments of investors for a possible collapse of the euro and a return to national currencies. In order to ease conditions in financial markets, the Governing Council introduced in September 2012 the Outright Monetary Transactions (OMTs). Securities purchased in the context of OMTs must be issued by Member States having recourse to the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM) for financial support and adhering to the conditions of the agreed economic adjustment programme.

The crucial issue currently facing the single monetary policy is that the levels, inter alia, of

bank lending rates (as well as bond yields) vary significantly from one Member State to another. Thus, financing costs for businesses and households are very high in some Member States and low in others, without this spread being justified by differences in local supply and demand conditions for financial resources. This means that financial markets (even money markets) that were largely integrated until recently are now fragmented along national borders. Outright Monetary Transactions will prevent excessive increases in government bond yields in some Member States, which in turn will contain increases in bank lending rates in those Member States and rates will be more or less aligned throughout the euro area. Thus, financing conditions will be similar in all Member States and therefore the Eurosystem's monetary policy transmission mechanism will be operating smoothly. When Greece starts to regain access to international medium to longterm government bond markets, it will be able to benefit also directly from the support offered by Outright Monetary Transactions.

Towards a banking union

In order to permanently minimise the chances of significant divergence between financing conditions in Member States, the ECB has put forward its view that it is necessary to fill some gaps in the institutional design of the Monetary Union. Relevant proposals are made in the report entitled "Towards a Genuine Economic and Monetary Union" drafted by the President of the European Council in cooperation with the Presidents of the European Commission, the Eurogroup and the President the ECB and submitted to the European Council of 28 and 29 June 2012. This report outlines fundamental institutional reforms, including the creation of a banking union, with three main components: single European banking supervision and a common deposit insurance and bank resolution framework. On 18 and 19 October 2012 the European Council set the goal of reaching an agreement on the legislative framework for the single banking supervision by 1 January 2013 and confirmed that the European Commission would make a proposal on the establishment of a Single Resolution Mechanism for banks. The banking union is desirable in order to address inter alia the following difficulties:

Recently, the governments of some euro area members had to provide large-scale financing to their national banking system, which had been up against serious difficulties, thus creating fiscal problems. In order to break the link between the fiscal situation of Member States and developments in their banking system, the European Stability Mechanism (ESM) will directly recapitalise banks in difficulty. This implies that banks in the euro area will be subject to prudential supervision by a supranational body, composed by those Member States that contribute to the capital of the European Stability Mechanism (ESM).

More generally, the increasing integration of financial markets in the euro area in the period prior to 2009 and the emergence of large banking groups with multinational presence implies that shocks in the financial system of a Member State may be transmitted to other Member States. Only a supranational banking supervision authority would be able to ensure financial stability throughout the euro area by fully taking into account that supervision in one Member State has an impact on other Member States.

The changes underway in the EU call for Greece's active involvement

Despite some setbacks, Europe is making progress towards banking and fiscal union – two significant processes that will take time to complete.

The new architecture being created will comprise not only decisions that concern Greece but that also deal in a definitive manner with problems brought to light by the crisis. Greece must therefore be actively involved in the process, on a par with its euro area partners,

and participate in decision-making that will determine our future. Nevertheless, Greece must fully meet its obligations and become, the soonest possible, part of the solution rather than the problem in Europe.

Until very recently, however, and despite the important progress it has made, Greece continued to be treated with reserve and distrust. In particular, the pre-election period saw a proliferation of reports, papers, proposals and ambiguous statements by officials abroad, which largely put in question Greece's ability to stay in the euro. Although they became less frequent after the new government was formed, such assessments maintain and aggravate the climate of distrust both abroad and domestically, where they are reproduced in various forms, thus feeding back to the circle of pessimistic projections. More recently, Greece's relations with its partners in the EU and the IMF seem to gradually normalise.

This is illustrated by the Eurogroup statement on Greece (12 November 2012), whereby the Eurogroup acknowledged the considerable steps made to bring the programme back on track, approved the revised fiscal targets agreed upon with the Troika and called Greece to accelerate the implementation of the remaining prior actions. This actually happened on 19 November 2012, when two Acts of Legislative Content were adopted on fiscal rules and the regulation of urgent issues arising from Laws 4046/2012 and 4093/2012.

In its extraordinary meeting of 20 November 2012, the Eurogroup welcomed the agreement between the Troika and the Greek authorities on updated programme conditionality, including a wide range of measures in the areas of fiscal consolidation, structural reforms, privatisation and financial sector stabilisation. It also noted with satisfaction that all prior actions had been met through a set of reforms, as well as the budget for 2013 and an ambitious medium term fiscal strategy for 2013-2016. It considered that these efforts demonstrated the authorities' strong commitment to the adjust-

ment programme. At the same time, the Eurogroup had an extensive discussion and made progress in "identifying a consistent package of credible initiatives aimed at making a further substantial contribution to the sustainability of Greek government debt". Subsequently, the Eurogroup interrupted its meeting to allow for further technical work on some elements of the package and decided to reconvene on 26 November.

On 26-27 November, after repeating the conclusions of 20 November, the Eurogroup pointed out that Greece would transfer all privatisation revenues, the targeted primary surpluses, as well as 30% of the excess primary surplus to a segregated account, to meet debt service payment on a quarterly forward-looking basis.

The Eurogroup took into account that the necessary revision in the fiscal targets and the implied postponement of a primary surplus target of 4.5% of GDP from 2014 to 2016 calls for a broader concept of debt sustainability; it was also informed that Greece is considering certain debt reduction measures in the near future, which may involve public debt tender purchases of various categories of sovereign obligations. Any tender or exchange prices are expected to be no higher than those at the close on 23 November 2012.

Against this background and after having been reassured of the Greek authorities' resolve to carry the fiscal and structural reform momentum forward and with a positive outcome of the debt buy-back operation, the euro area members would be prepared to consider the following initiatives:

- (a) A lowering by 100 basis points of the interest rates under the first programme (Member States under a full financial assistance programme are not required to participate).
- (b) A lowering by 10 basis points of the guarantee fee costs paid by Greece on the EFSF loans.

- (c) An extension of the maturities of the bilateral and EFSF loans by 15 years and a deferral of interest payments on EFSF loans by 10 years.
- (d) A commitment by Member States to pass on to Greece's segregated account an amount equivalent to the income on the Securities Markets Programme (SMP) portfolio accruing to their national central banks as from budget year 2013 (Member States under a full financial assistance programme shall not participate in this scheme).

Member States will consider further measures, including lower Greek contribution to projects co-financed by EU's structural funds and/or further interest rate reduction of the Greek Loan Facility, for achieving a further credible reduction of the Greek debt. The target now is to achieve a debt-to-GDP ratio of 175% in 2016, 124% in 2020 and well below 110% in 2022.

As already agreed on 21 February 2012, the euro area is committed to providing adequate support to Greece during the life of the programme and beyond until it has regained market access, provided that Greece fully complies with the requirements and objectives of the adjustment programme.

The Eurogroup concluded that the necessary elements were in place for launching the relevant national procedures required for the approval of the next EFSF disbursement, which amounts to €43.7 billion, of which €34.4 billion (€10.6 billion for budgetary financing and €23.8 billion in EFSF bonds earmarked for bank recapitalisation) will be paid out in December: the Eurogroup expects to be in a position to formally decide on the disbursement by 13 December 2012, subject to the completion of these national procedures and following a review of the outcome of a possible debt buy-back operation by Greece. The disbursement of the remaining amount of €9.3 billion will be made in three sub-tranches during the first quarter of 2013, linked to the implementation of the MoU milestones (including the implementation of the tax reform by January).

3 THE MAIN DETERMINANTS OF MACROECO-NOMIC DEVELOPMENTS IN GREECE

Adverse developments and the outlook for output and employment

Macroeconomic developments over recent years have been particularly adverse and have largely contributed to missing the targets set in the economic adjustment programme and to the pessimistic projections for debt dynamics. In particular, according to the latest ELSTAT assessments, the trough occurred in 2011, with GDP contracting by as much as 7.1%, after declines of 4.9% in 2010, 3.1% in 2009 and 0.2% in 2008. The Bank of Greece projects that GDP will decrease by slightly more than 6% in 2012 and by 4%-4.5% in 2013, while positive growth will be witnessed in the course of 2014 (these projections are based on the plausible assumptions that Greece's place in the euro area will no longer be in question, that the privatisation programme will perform better and that the absorption rate of funds under the NSRF will improve). This means that the cumulative decline in GDP over the past five years (2008-2012) will have reached 20% and may come close to 23.5% in the sixyear period 2008-2013. Meanwhile, the cumulative decline in total and dependent employment over the past four years (2009-2012) has exceeded 16% and 17.5%, respectively. The unemployment rate has shot up from 7.6% in 2008 to 17.7% in 2011 and to slightly above 23.5% in 2012 (annual averages); it is estimated that it may rise further and exceed 26% in 2013 and 2014. A recession of this intensity and duration is unprecedented in Greece's peacetime history and has taken a heavy toll not only on incomes, but also on potential output and social cohesion, as the lack of investment coupled with prolonged unemployment result in a depreciation of physical and human capital.

Besides, the recession not only hampers fiscal adjustment by reducing government revenues and increasing social spending, it also causes banks' deposit base to shrink (thereby reducing their capacity to extend credit), creates a negative climate of opinion towards the acceptance of structural reforms and ultimately worsens the debt-to-GDP ratio. Moreover, the benefits of the reforms that have already been realised or are under way are not felt immediately or fully, first because reforms take time to yield results and these results are extended over the medium-to-long term and second because some essential conditions are not in place, including a smooth operation of the financial system and an adequate level of demand and growth. Unless the intensity of recession is harnessed and a shift towards recovery emerges soon, the great effort of the past 2½ years to restructure the economy shall be put at stake.

Fiscal contraction, hesitance in undertaking reforms, heightened uncertainty and tight financial conditions – the main causes of the recession

Greece's effort to tackle its fiscal problem does not bring full results – there are deviations from the targets because the recession turns out to be deeper than anticipated. This deep recession reflects mostly a slump in domestic demand, which was the main driver of growth up until 2008. To the extent that domestic demand was sustained by a deficit-building expansion of government expenditure and by a fast credit expansion to households and businesses, it is not surprising that it is affected by the consequences of fiscal contraction. The fact that the size of the recession had not been anticipated, possibly reflects erroneous projections (e.g. the "fiscal multipliers" turned out to be higher than projected, particularly during crises). Nevertheless, the factors that can explain recession include fiscal contraction

1 Similar projections are made in the Introductory Report to the Budget and in the Medium-Term Fiscal Strategy (MTFS) framework (2012: -6,5%, 2013: -4,5%, 2014: 0.2%), by the European Commission (2012: -6,0%, 2013: -4,2%, 2014: 0.6%) and the IMF (2012: -6,0%, 2013: -4,0%).

coupled with a serious worsening of financing conditions — as a result of heightened uncertainty sustained by the debt crisis— and the decline of credit expansion to the private sector. At the same time, the depth of the recession can also be explained by delays in legislating and, more importantly, implementing structural reforms, which — by improving market functioning— would have boosted business investment, thereby partly offsetting the contractionary effects of fiscal adjustment.

More specifically:

• Structural changes would mitigate the size of the recession

It is estimated that the recession would have been milder if measures with no budgetary cost that yield quick results had been taken to speed up the onset of recovery. All the more so if structural reforms had progressed, as this could help restoring confidence immediately, triggering a progressive mobilisation of productive potential and improving competitiveness, thereby attracting foreign direct investments. Shortcomings and delays include:

- Inadequate efforts to open up closed protected markets.
- Delays in privatisations.
- With regard to the functioning of the State, institutional measures have not yet borne fruit. As a result, quality in public administration is still low or has possibly worsened (due to the side effects of the horizontal cuts). Delays in improving the efficiency of the justice system are of particular importance.
- Only minor improvements in the business environment.
- The increasing tax burden of honest taxpayers, in an effort to compensate for the longstanding shortcomings of the tax-collection mechanism in combating tax evasion and collecting indirect taxes and tax arrears.

• Uncertainty feeds back into a vicious circle

Delays, hesitance and piecemeal implementation of the Memoranda of Understanding, combined with ambiguous statements and projections from abroad, have affected Greece's credibility, thus creating uncertainty over the future of the Greek economy. The lack of confidence in the final outcome has negatively influenced decisions on investment and consumption, and caused a deeper recession than what contractionary policies would have warranted, partly because it contributed to limiting the ability of banks to extend new credit.

• Tight liquidity conditions are a setback for businesses and investment

While the necessary fiscal adjustment in Greece entails a drop in total demand, the limited structural reforms that have been implemented up to now have not been able to create a strong growth momentum that would mitigate or bring to a halt the decline in economic activity. Moreover, for several months already, net monthly flows and the corresponding annual growth of credit to non-financial corporations and households have been negative, which further hinders recovery.

The dynamics of the debt crisis itself has contributed to the reduced ability of the banking system to provide credit to the real economy. The uncertainty created by the debt crisis has almost blocked the access of domestic credit institutions to international markets, from where they obtained liquidity to finance their credit expansion before the crisis. In addition, the climate of uncertainty in combination with the economic recession brought about an almost uninterrupted decline in bank deposits; banks were unable to halt this decline, despite increasingly higher interest rates offered on time deposits in the period from the peak of the crisis, at end-2009, to mid-2012.

Prolonged economic recession in Greece, caused primarily by the fiscal crisis, also led

to an increase in non-performing loans granted by banks to the private sector, while the restructuring of the public debt in early 2012 contributed to a significant reduction in the value of banks' capital base. These developments in banks' own funds could not support an expansion of their credit operations, which could mitigate to a certain extent the contractionary effects of fiscal adjustment.

Higher credit risk, implied by increased NPLs, had a dual impact on the interest rates on new bank loans. Initially, interest rates on new bank loans rose from end-2009 through to the third quarter of 2011, because, inter alia, they incorporated a higher credit risk premium. On the other hand, the massive loan restructurings necessitated by the need to improve the prospects for an ordinary servicing of private debt to banks (given the adverse impact of macroeconomic conditions on the financial situation of borrowers) led over time to a decline in bank lending rates, which was also the result of other factors, as analysed in Chapter V.

Significant liquidity support from the Eurosystem and the Bank of Greece

The liquidity constraints of domestic banks have been largely mitigated by the recourse to Eurosystem monetary policy operations and the extraordinary funding provided by the Bank of Greece. The extensive liquidity support provided by the central bank contributed to containing the rate of decline in credit to firms and households² below that of nominal GDP³ and certainly well below that of the rate at which banks' deposit base has contracted.4 To this extent, the Bank of Greece, as a member of the Eurosystem, has helped to mitigate the adverse effects of the debt crisis and the fiscal adjustment on economic activity. Without support from the central bank, the liquidity constraints affecting the real economy and the difficulties reported by businesses and households in accessing bank credit would have been far more severe.

The deterioration in bank credit to businesses: main effects

As discussed in Chapter V, the deterioration of the creditworthiness of businesses and households (evidenced by the increase in nonperforming loans) justifies to a certain extent the reluctance of banks to grant new loans. Nevertheless, constraints in bank lending (given their inability to raise funds from the capital market, particularly in the current conjuncture) lead to a decline in current output and investment and thus feed a vicious circle of credit contraction, economic recession and further deterioration of the solvency of borrowers. A feedback relationship also exists between the adverse economic conditions, the climate of uncertainty and the contraction of the deposit and capital base of banks, which, in turn, limits their credit activity. Adverse economic conditions, on the one hand, entail additional NPLs – and to this extent they affect the capital base of banks – and, on the other hand, heighten uncertainty, which causes deposit outflows. In turn, a decrease in banks' own funds and deposits limits their ability to provide credit, thereby narrowing the room for economic recovery.

The most important risk is that credit constraints hamper the transfer of resources towards export-oriented activities, which is key to achieving sustainable growth.

Another issue, also known from literature on the transmission of the effects of monetary policy through the "credit channel", is that credit contraction mainly affects smaller businesses. These businesses usually present a higher credit risk, partly because they hold less assets that can be used as collateral to secure bank loans. Therefore, smaller businesses are the first to suffer from a contraction or discontin-

- 2 Cumulative decline by 5% in the period October 2009-September 2012
- 3 Cumulative decline by 15.5% between the third quarter of 2009 and the third quarter of 2012.
- 4 Cumulative decline by 38% in the period October 2009-September 2012.

uance of bank credit, while they do not have access to alternative sources of external financing (e.g. through bonds or shares) even under normal circumstances. By contrast, larger enterprises, also because they are better placed to exert pressure on banks, are not cut off from credit even in periods of credit shortage. Besides, the fact that the access of small and medium enterprises to bank credit is challenging forms an essential part of the reasoning of measures undertaken by the European Investment Bank and the European Investment Fund to support real economy in Greece.

*

Finally, it should be noted that through its enhanced supervision of credit institutions, the Bank of Greece has succeeded in safeguarding financial stability, at a time when the undermining of financial stability could very well have triggered mass deposit withdrawals and a collapse of the economy.

4 DESPITE IMPORTANT SHORTCOMINGS, THERE HAS BEEN SUBSTANTIAL PROGRESS

The shortcomings in the implementation of the stabilisation programme pointed out above have not allowed a proper evaluation of the progress made in the past three years. In fact, progress has been substantial. This has been repeatedly pointed out in successive reviews by the Troika and it is this progress that enabled the conclusion of the new loan agreement, which would have been impossible if there had not been any visible improvement.

The progress made up to now has been substantial but uneven. Fiscal consolidation has been rapid, whereas structural reforms have lagged behind.

4.1 FISCAL CONSOLIDATION

The fiscal adjustment in the past few years, still ongoing, has resulted in significant progress as regards the reduction of fiscal deficits.

- The general government deficit on a national accounts basis decreased from 15.6% of GDP in 2009 to 9.4% in 2011 and is expected to fall considerably further this year (to 6.6% of GDP) according to the Introductory Report of the 2013 Budget.
- Even more remarkable is the decrease in the primary deficit, which from 10.5% of GDP in 2009 was reduced to 2.3% of GDP in 2011 and is expected to reach 1.2% of GDP this year (again according to the Introductory Report of the 2013 Budget).
- If account is taken of the fact that fiscal adjustment takes place amid a very deep economic recession, the improvement in the cyclically adjusted primary balance is even larger. According to Bank of Greece estimates, the cyclically adjusted primary deficit has fallen from about 14.0% of potential GDP in 2009 to 2.5% of potential GDP in 2011 and it is estimated that in 2012 there will be a small cyclically adjusted surplus. Similar estimates have been made by the IMF,5 according to which Greece will have achieved an improvement in the cyclically adjusted primary balance in the order of 13.2% of potential GDP in 2010-2012, which is something that has never been achieved by any other advanced country. During the same period, in Portugal, Spain and Ireland the improvement in the cyclically adjusted primary balance is estimated at 8.5%, 6.9% and 6.8% of potential GDP, respectively. Moreover, according to a recent study of the Central Bank of Ireland,6 Greece has made the largest fiscal consolidation effort among all countries with similar problems (Ireland, Portugal, Cyprus and Spain). In particular, it is estimated that in 2010-2011, measures of about 20% of GDP have been taken, while by the end of 2014 it is estimated that cumulative measures would reach 40% of GDP.
- The fiscal consolidation measures would have been even more effective if the economy

⁵ See IMF, Fiscal Monitor, April 2012, Statistical Table 4.

Weymes, L. (2012), "Fiscal Consolidation – Does it deliver?", Central Bank of Ireland, Economic Letters Series, No.7.

was not in a deep and protracted recession, which was exacerbated, as already mentioned, by the fiscal consolidation itself, the uncertainty created by the debt crisis and the resulting deterioration in financing conditions. In particular, the debt-to-GDP ratio has not fallen yet mostly because of the decline in GDP.⁷ Indicatively, if nominal GDP had remained at 2008 levels, the estimated public debt-to-GDP ratio in 2012 would have been some 30 percentage points lower.

- Fiscal adjustment continued to be on the right track during 2012, despite the loss of valuable time due to two elections. According to available data on a cash basis⁸ for January-September 2012, the *general government* deficit is estimated at 5.0% of GDP (€9,689 million), compared to 9.0% of GDP (€18,744 million) in the corresponding 2011 period. In addition, a *primary surplus* of 0.6% of GDP was achieved, compared to a primary deficit of 2.0% of GDP in the corresponding period of 2011.

4.2 RECOUPING COST COMPETITIVENESS LOSSES

The real effective exchange rate based on unit labour costs in total economy vis-à-vis Greece's 28 main trading partners had risen by 31.5% in the nine-years after the introduction of the euro (2001-2009), according to Bank of Greece estimates, which suggests an equal loss of cost competitiveness. In 2010-2011, this indicator fell by 7.2%, suggesting an improvement in competitiveness. Taking into account estimates and projections on the path of unit labour costs in 2012 and 2013, it can be calculated that competitiveness based on relative labour costs vis-à-vis the 28 main trading partners will improve by 10.9% in 2012 and 8.8% in 2013. These estimates imply that 30% of the cost competitiveness losses vis-à-vis Greece's 28 trading partners was recouped in 2010-2011 and 72% will be recouped in 2010-2012. It is furthermore estimated that, in the course of 2013, all of the loss incurred in 2001-2009 will have been recouped. The finding of improved competitiveness in 2010-2012 is also corroborated by similar estimates of the ECB and the European Commission (see Chapter III, Sections 3.3 and 3.3.A).

• Certainly, as the Bank of Greece has pointed out in recent reports, a sustainable improvement in competitiveness cannot – after a necessary initial phase of "correction" - be based on a combination of nominal wage reductions and falling or stagnant productivity; this is because the negative effects of continuous wage decreases on domestic demand would more than offset the positive effects on external demand. Therefore, the improvement in cost competitiveness must also be based on productivity gains. The structural reforms aimed at a more efficient functioning of product and labour markets are designed to produce precisely this result and will make possible both a higher rate of potential growth (also by encouraging investment) and an improvement in structural competitiveness. It seems that higher productivity since the third quarter of 2011 (according to detailed national accounts data currently under review) resulted from a decline in employment that was larger than the decline in output; what is needed is an increase in both these aggregates and, at the same time, an improvement in productivity.

4.3 SIGNS OF ADJUSTMENT, REBALANCING AND RESTRUCTURING OF THE ECONOMY

Under the pressure of the crisis, and together with the restructuring of the economy, the policies pursued gradually adjust the basic economic aggregates to levels that could be more sustainable under normal circumstances. More specifically:

• The current account deficit, after peaking at a historic 14.9% of GDP in 2008, gradually declined to 9.9% of GDP in 2011, while the Bank of Greece expects it to drop further to

⁷ See Box IV.1

⁸ Cash data collected by the State General Accounting Office. These data include payments for accrued interest (amounting to €4,751 million) effected in 2012, when the public debt restructuring took

4.5-4.7% of GDP in 2012 and 2013 and to below 3.5% in 2014. Furthermore, excluding the net payments of the general government sector for oil and interest, the current account recorded a slight surplus for the first time in 2011 (0.2%), which rose further to 4.1% of annual GDP in the nine months from January to September 2012. Excluding oil and ships, a surplus of €1.8 billion was recorded in 2011 in the goods and services account, while in the nine months from January to September this surplus reached €6.0 billion.

This improvement was largely driven by the substantial decrease in imports as a result of the fall in investment and consumption. However, non-oil exports, which began their rebound in mid-2010, also played their part, reflecting a strengthening in external demand as well as the gains in cost competitiveness mentioned previously. The recovery of exports continues, although at a slow and uneven pace; this is related, on the one hand, to the deterioration in the external environment and, on the other hand, to the financing difficulties encountered by exporting companies, which entail reduced supply of exportable goods.

At the same time, it is estimated that the improvement in the external balance also has a structural component, related, first, to the reorientation of enterprises towards foreign markets and, second, to changes in consumption patterns which could help contain imports of consumer goods on a more permanent basis. The changes in the external balance are gradually reversing an earlier trend of many years during which the growth of domestic demand was the main driver of GDP growth, whereas the change in external demand (net exports) made a negative contribution. Since 2008, the change in net exports has made positive contributions to growth. Enhancing this trend and expanding exports of goods and services as a percentage of GDP⁹ will be pivotal to bringing about a permanent change in the growth model, which in the past had depended on domestic demand. For this to continue after the recession, it is necessary to achieve sustainable improvement in cost competitiveness and —most importantly—substantial improvement in *structural competitiveness*, i.e. the ability of the domestic productive base to supply at competitive prices and quality *the products with the highest demand in the domestic and foreign markets*.

• For many years, unit labour cost growth in Greece had outpaced that of EU-15 (old Member States) or the euro area, contributing to higher Greek inflation with respect to the euro area average and to a steady erosion of cost and price competitiveness. This situation changed in 2010, due to the reduction of wages both in the public sector in the context of the fiscal adjustment and in the business sector in the context of the effort made by enterprises to adjust to reduced demand. The new legislation adopted in October 2011 and February 2012 (Law 4024/2011 and Law 4046/2012) contributed to a further downward adjustment of labour costs in the business sector. Indeed, the cumulative decrease in unit labour costs over 2010-2012 is estimated at 9.9% in total economy and 14.5% in the business sector, while, when projections for 2013 are also taken into account, the cumulative decrease over 2010-2013 reaches 16.6% for total economy and 21.3% for the business sector. Moreover, it is estimated that the objective set in the Memorandum of Understanding of February 2012 (15% reduction in unit labour costs over 2012-2014) will be overhauled, as the cumulative reduction over this period would reach 16%.

There are also signs of an adjustment, although not sufficient, in **consumer prices** and **inflation**. In 2012, for the first time after the introduction of the euro, Greek inflation is expected to fall below the euro area average (1.2%, compared with 2.4-2.6%), and is projected to decelerate further to 0.3% in 2013. Moreover, average annual core inflation (which excludes energy

⁹ According to national accounts, exports of goods accounted for 12.6% of GDP and exports of services for 12.4% at current prices in 2011. However, the former increased as a percentage of GDP compared to 2008 (10.7%), while the latter decreased (2008: 13.4%). Taken together, they have increased.

and unprocessed food prices) is expected to be 0% in 2012 and turn negative (-0.5%) in 2013. Indeed, if the impact of indirect tax increases is excluded, average core inflation is expected to turn clearly negative (-0.6%) already this year. Still, the question arises as to why the fall in consumer prices has not been even more marked, against a backdrop of prolonged decline in consumer demand and increasingly lower unit labour costs. This is mainly due to two factors:

- (a) The absence of effective competition in sectors crucial to consumer prices, such as distributive trades or the food sector. Some distortions of competition are related to intragroup transactions of multinational enterprises, their pricing policies and the restrictions they impose on their subsidiaries concerning procurement (see Chapter VI and Chapter III, Section 3.1.A).
- (b) The increased burden on enterprises as a result of increased taxes and higher financing costs is also of special importance in the current juncture. It seems that businesses rely on reduced labour costs to address their tax obligations and manage the tight credit conditions and the increased cost of energy.

There are also other reasons, as it will be explained in Chapter III, Section 3.1.A.

4.4 DELAYS AND PROGRESS IN STRUCTURAL REFORMS

Despite the delays already mentioned, progress with structural reforms over the past two and a half years has not been negligible (see also Chapter VI).

• In the area of fiscal structural reforms, what stands out is the overhauling of the social security system (Law 3863/2010), which supports the sustainability of public finances. However, as a result of this reform, replacement rates, which have been among the highest in OECD countries, will be reduced for first-pillar pensions (statutory pension schemes). This is why

it is essential to develop the still weak second pillar (occupational pension schemes) in order to enhance the total pension income (see Box VI.1). Other notable reforms include the introduction of medium-term fiscal planning (Law 3871/2010), the drastic improvement in the quality of fiscal statistics, as well as the recent establishment of a structure to ensure the monitoring of compliance with fiscal targets by all ministries and general government entities (Act of Legislative Content of 18.11.2012), while the process of eliminating or merging entities of the wider public sector and rationalising pharmaceutical expenses is ongoing.

- In the area of labour market structural reforms, there have been far-reaching interventions (through a series of legislative measures adopted between July 2010 and November 2012), concerning the decentralisation of collective bargaining, cuts in the minimum wage (i.e. wage at entry into employment) and the introduction of more flexible provisions for the protection of employment and working time.
- Finally, structural reforms in the product market include the marked simplification of licensing for starting up and operating a business, advances in the deregulation of land freight transport, important steps (after the initial delays) towards the opening up of many "closed" professions, the lifting of cabotage restrictions on cruise ships, while an export strategy is being developed with three components: facilitating external trade (the roadmap on the relevant actions has already been presented), expanding Greece's exporting base (i.e. the number of exporting companies and exported products) and promoting exports (reapproaching traditional markets and penetrating into new emerging markets).

4.5 SAFEGUARDING FINANCIAL STABILITY AND RESTRUCTURING THE BANKING SYSTEM ON SOLID GROUND

The banking system continues to face unprecedented challenges in terms of liquidity

and capital adequacy, as a result of the sovereign debt crisis. Greek banks have been cut off from international markets for some time now, have faced a large outflow of deposits and incurred significant losses from the haircut on public debt in the context of the private sector involvement (PSI+). Under these circumstances, it became apparent that not only the stability of the Greek banking system was at stake, but also that any false move could trigger a banking crisis, with negative repercussions possibly beyond Greece.

Against this background, the Bank of Greece in association with the Troika and the government set the objective of turning a new page in the Greek banking system, with a view to ensuring a sustainable, restructured and well capitalised banking sector. Upon completion, this process will lead to larger and adequately capitalised banks, increased confidence on the part of depositors and a new ability to reach out to capital markets. Thus, banks will be able to play more actively their role in providing credit to the economy.

The role of the Bank of Greece

Despite the very negative conjuncture, the banking system continued to fulfill its important role with the support of the Greek government and the Eurosystem and under the supervision and with the assistance of the Bank of Greece. This is reflected in the fact that no depositor has incurred any losses.

At the same time, the Bank of Greece has fully met its primary obligation to ensure that the public's demand for cash was covered. This was achieved at a time when demand for cash was highly volatile and there were repeated incidents of increased cash outflows, caused by negative news reports and heightened concern among the public.

The Bank of Greece had estimated that the large macroeconomic imbalances entail risks that were bound to lead to serious impasses. This is why since the onset of the crisis, the

central bank had not only imposed enhanced and strict supervision; it had also established and implemented rules which safeguard financial stability and fully protect depositors.

More specifically, actions taken by the Bank of Greece have served to:

- meet banks' emergency liquidity needs, enabling them to satisfy depositors;
- design and set up, in collaboration with the government, a framework for the resolution of credit institutions. The procedures envisaged in this framework have already been successfully applied in the case of six banks, without affecting financial stability and whilst fully protecting depositors;
- secure, through the support programme, the necessary funds for bank recapitalisation. Recapitalisation constitutes a crucial step towards improving confidence in the banking system, safeguarding deposits and increasing liquidity in the market. Part of these funds will be used for the restructuring and consolidation of the credit system;
- assess the viability of Greek banks and estimate their capital needs for the period 2012-2014.

In particular, the recapitalisation exercise took account of the lower face value of Greek government bonds held by banks, arising from the private sector involvement (PSI+), the expected losses in banks' loan portfolios as a result of the deep economic recession (as estimated by BlackRock and the Bank of Greece), the provisions already set aside to cover these losses, as well as banks' business plans showing, *inter alia*, their estimated future operating profitability (before provisions).

To estimate capitalisation needs more accurately, conservative assumptions were made and projections were dynamic, reflecting the estimated macroeconomic conditions and banks' business plans.

At the same time, as envisaged in the March 2012 Memorandum, the Bank of Greece carried out an assessment of the viability of each Greek bank. This assessment was based on a multitude of criteria, which had to include (under the March 2012 Memorandum), in nonexclusive terms: "shareholders' soundness and willingness to inject new capital; quality of management and risk management systems; capital, liquidity, and profitability metrics (both forward and backward looking); quality of Bank of Greece's assigned ratings to bank risks; and a sustainable business model". Based on the results of the above two exercises, the Hellenic Financial Stability Fund approved and disbursed a capital advance of €18 billion to four core banks.

The reform of the banking system

Maintaining the stability of the banking system is a primary objective of the Bank of Greece. To this end, an attempt to reform the banking system is under way, so as to ensure that it faces up to the new economic environment. In this regard, the first steps can be assessed positively.

Since the onset of the crisis, the Bank of Greece considered that sound financial aggregates, effective and transparent risk management and prudent business models are key to enhancing bank resilience to shocks and ensuring the access of Greek banks to sound sources of financing abroad. This is why it is necessary and inevitable that banks undergo internal restructuring to modify their business models, while a restructuring and consolidation of the Greek banking system is also needed.

The Greek banking system will not be able to walk into the new era with its former structure nor will it be able to rely perpetually on extraordinary support provided by the government and/or the Eurosystem to ensure its viability. Banks must use rationally the various forms of support provided by authorities with a view to gradually returning to self-reliance. Thus, they will be able to support real economy and fulfil their role in growth.

It is encouraging that this necessary consolidation of the banking system has begun, although with a certain delay. Within a short time we have seen (a) the resolution of Agrotiki Bank and the transfer of its healthy assets to Piraeus Bank; (b) the conclusion of agreements for the acquisition of Geniki Bank by Piraeus Bank and of Emporiki Bank by Alpha Bank; and (c) a proposal from the National Bank of Greece to acquire Eurobank, which could lead to the creation of the largest financial group in South-Eastern Europe. Meanwhile, it is almost certain that there will be further consolidation down the road. As banks become stronger, this will facilitate their access to foreign markets and will provide incentives to private investors to take part in future share capital increases.

When this process is completed, it is estimated that three large and well-capitalised banks will remain, alongside a few smaller ones. The expected market shares of smaller banks will ensure a competitive environment, while banks in general will be in a position to benefit from the economies of scale and synergies resulting from the process of consolidation. This situation is quite different from one year ago, when seven medium-to-large banks and more than ten small banks existed.

The reform of the Greek banking system is also in line with the nature of the wider financial system in the euro area, which is bankbased, as private sector financing comes from banks by two thirds. Therefore, the banking system in the euro area must be stable and have the required liquidity to ensure sufficient financing for households and businesses. This requires stronger banks that are more resilient to economic shocks. ¹⁰ International experience also shows that the fragmentation of the banking system, into a relatively small

10 It should be noted that EU countries with similar population and economy size demonstrate a relatively high degree of concentration in the banking sector. For instance, the combined market share of the five largest banks as a percentage of total assets is as follows: Finland 84%, Netherlands: 84%, Belgium: 75%, Portugal: 71% and Denmark: 64%, compared with 71% in Greece (according to ECB data for 2010).

and vulnerable to external influences economy, can only negatively affect banks, while it also has a direct impact on the cost and number of services for the end consumer. This is also corroborated by international literature. Empirical studies have shown that banking systems composed by a smaller number of relatively larger banks are less vulnerable.¹¹ In addition, the high degree of concentration in some banking systems also results from the efforts made by more efficiently operating banks to take advantage of economies of scale and scope.¹²

Larger banks: (a) are more differentiated and, as a result, are able to offset sector- or country-specific losses through alternative activities (as illustrated in the past few years when large Greek banks partly offset their domestic losses with profits generated by their activities abroad); (b) due to their higher effectiveness and profitability they are less motivated to resort to high-risk investments; (c) are better placed to access international money and capital markets.

The recapitalisation of banks

The Bank of Greece has already communicated to all banks estimates of their capital needs and the deadlines for submitting their recapitalisation plans and implementing them. ¹³ Banks must complete the required capital increases by end-April 2013. ¹⁴

The recapitalisation of the four core banks will be carried out in three phases:

- First, by end-December 2012, the Hellenic Financial Stability Fund will have received €23.8 billion under the financial assistance programme in the form of EFSF notes and will provide additional capital advances to these banks so that they meet the minimum Core Tier 1 ratio of 9%.
- Second, by end-January 2013, the HFSF will fully subscribe the issuance of contingent convertible bonds by these banks.

- Third, by April 2013, core banks will complete their share capital increases by offering shares to private investors, and, if necessary, any additional funds will come from the HFSF, according to Law 4051/2012.

Current or new shareholders of core banks will have control of these banks, provided they are deemed fit and proper (as already envisaged in the regulatory framework) and have subscribed no less than 10% of newly issued shares. As an incentive to attract private investors, new shareholders received warrants to acquire the remaining shares from the HFSF within five years.

At the same time, the recapitalisation process will continue for the remaining non-core banks, which will have to complete the necessary share capital increases by April 2013. Banks that fail to increase their share capital and develop a credible business plan that would ensure their viability will be subject to resolution measures. With regard to cooperative banks, the Bank of Greece will conduct a study on overhauling this sector, proposing possible ways of addressing its problems.

The completion of the recapitalisation process and the restructuring of the Greek banking system are reforms of pivotal importance, as the existence of well-capitalised banks will boost the confidence of domestic savers and international financial markets in Greek banks. Such a development would help relieve the liquidity constraints faced by banks, by favourably affecting the inflow of deposits and banks' abil-

- 11 See for example Uhde A., and Heimeshoff, U. (2009), "Consolidation in Banking and Financial Stability in Europe: Empirical Evidence", Journal of Banking & Finance, 33 (7), 1299-1311 and Beck, T., Demirguc-Kunt, A., Levine, R. (2006), "Bank Concentration, Competition, and Crises: First Results", Journal of Banking & Finance, 30 (5), 1581-1603.
- 12 See for example Claessens, S. and Laeven, L. (2004), "What drives bank competition? Some international evidence", Journal of Money, Credit and Banking, 36 (3), 563-583 and Bikker, J.A. and Haaf, K. (2002), "Competition, concentration and their relationship: An empirical analysis of the banking industry", Journal of Banking & Finance, 26 (11), 2191-2214.
- 13 It should be noted that taking into account the results and the actions of banks in the first half of 2012, the Bank of Greece has already updated the assessment of their capital needs.
- 14 For more details on the tools and modalities of the recapitalisation, see Cabinet Act No 38/9.11.2012.

ity to regain access to international money and capital markets. At the same time, the strengthening of banks' capital bases will increase their ability to supply credit to the economy and to thereby mitigate the contractionary effects of fiscal adjustment.

The shock from the debt crisis has set in motion forces that are reshaping the credit system towards ensuring its long-term viability. The process of consolidation either through mergers or as a result of the resolution of domestic credit institutions leads to the emergence of larger banking groups; this entails economies of scale and synergies, and reduces new threats to financial stability in the future, given that, as mentioned above, larger banks are normally more resilient. Thus, the banking sector takes the lead in the general effort to restructure the Greek economy, which is a precondition for sustainable development.

The actions of the Bank of Greece with regard to the supervision of the private insurance market

The private insurance sector became also under pressure in 2012. In the first half of 2012, total insurance premium turnover declined by 10% in comparison with the corresponding period of 2011.

In the course of 2012, through a series of measures and in close cooperation with all market participants, the Bank of Greece continued to contribute to gradually addressing the long-standing weaknesses of the private insurance sector and to establishing sound competition, both of which are prerequisites to attract the necessary funds for the development of the market.

Particular attention was given to: the control of pricing policies; practices to attract customers; measures aimed at reducing operating costs and compensations (e.g. with regard to car repair costs and hospital treatment expenses paid to private hospitals); the timely payment of amounts due to insurance mediators; and, in general, improved profitability as a primary, if not the only, means of strengthening the capital of insurance companies.

As regards supervision, among the first priorities are: the consolidation of the Insurance Guarantee Fund of Liability from Car Accidents; a control procedure for uninsured vehicles; improved quality of services provided by insurance mediation; organising and effectively operating the handling of complaints by insurance companies; and in general improved level of protection of insured consumers.

In the upcoming period, private insurance companies will have to take important strategic decisions related to both the requirements of the imminent "Solvency II" framework and the possibility of entering the market of second pillar pensions, i.e. the management of occupational funds. Insurance companies should plan their way forward by determining their optimal size: they should consider if they would operate as small, highly specialised companies or if they would form larger and better organised entities that would benefit from synergies and economies of scale.

The ongoing efforts by some companies to increase their share capital are positive. By the end of 2012, share capital increases of €1.5 billion are expected to be finalised (the bulk of them has already been completed).

5 RECOVERY AND THE RETURN TO POSITIVE GROWTH ARE NOW A PRIORITY

The adoption of the Medium-Term Fiscal Strategy and the Budget for 2013 signals the end of a series of delays; the adjustment programme is now back on track. At the same time, the expected disbursement of €34.4 billion by mid-December 2012 and of another €9.3 billion in the first quarter of 2013 will ensure the financing of the programme at this critical phase. Future developments will now

crucially depend on the Greek economy's ability to exit the recession as soon as possible and achieve positive GDP growth, which is extremely important in order to:

- 1. Meet the debt and fiscal adjustment targets, which are expressed as GDP ratios and are thus decisively influenced by GDP *levels*.
- 2. Break the vicious circle of recession-missing fiscal targets-enforcing new measures.
- **3.** Contain the rise in unemployment, which, if continued, risks causing a severe social crisis.
- 4. Drastically improve confidence of the domestic and global markets in the Greek economy.

Speeding up the onset of recovery and establishing the conditions for growth constitute national priorities. Return to growth is conditional upon effectively addressing the weaknesses identified. At the same time, it is essential to take full advantage of the important achievements made so far.

5.1 PRECONDITIONS FOR A RETURN TO POSITIVE GROWTH

The preconditions for a return to positive growth are:

• The lifting of uncertainty about Greece's place in the euro area.

The experience gained so far from implementing adjustment programmes, the deviations from targets, the failures and the stronger than expected impact on economic activity, all bring to the fore the significance of the loss of confidence in the future of the Greek economy – a loss that has an impact on both domestic and global markets. The loss of confidence culminated in projections and scenarios about Greece's exit from the euro area. As long as the issue remains open, this threat will hang over Greece, undermining the effort for an orderly exit from the crisis.

Therefore, lifting all uncertainties about Greece's place in the euro area is top priority. Regaining confidence will require stronger efforts to make up for lost ground and convince that the adjustment programme has a visible turning point and is not an endless cycle of burdens to no avail. The adopted medium-term framework must be strictly implemented this time, without concessions, backtracking and delays. However, distributing costs over a longer period of time is believed to facilitate a faster onset of the recovery.

• A national plan for the transition to a new growth model

Aside from setting the minimum conditions for continued financial support, the Memorandum of February 2012 and the additional measures under the Medium-Term Fiscal Strategy 2013-2016 and Law 4093, adopted on 7 November 2012, map out the policies that need to be implemented without delay. In no way do the provisions of the Memorandum waive Greece's responsibility to finalise a comprehensive action plan – a national strategy for radically changing the structures of the economy and in particular its structure of production.

Today, economic policy makers are faced with a deep recession together with the need to eliminate the twin deficits (fiscal and current account deficit) and to eradicate their root causes. Certainly, the immediate restart of the economy is a priority and in this regard measures have been taken to ensure a faster absorption of funds under the National Strategic Reference Framework, the establishment of the Hellenic Investment Fund, the use of all the financial tools made available by the European Investment Bank and restarting construction in the major motorways.

At the same time, this situation calls for the promotion of structural reforms in order to achieve satisfactory and sustainable growth. Addressing the twin deficits by structural reforms would ensure their effective and permanent elimination. Conditions in the econ-

omy will quickly become even more adverse if the causes of the deficits are addressed by measures with only a temporary effect. It should also be noted that avoiding structural reforms would prolong uncertainty and the recession, stifle growth and undermine debt sustainability. Delays in completing structural reforms over the previous years, despite the progress made, have prevented the beneficial effects of such reforms from becoming visible sooner and have led to pressures for additional spending cuts.

Of course, the reform process takes time and in many cases positive results take long to manifest themselves. Precisely because of this, delays simply exacerbate problems. Therefore, the need to promote reforms is all the more urgent.

The implementation of economic policy poses three major *challenges*:

- First, to design measures with a long-term horizon, while taking into account short-term constraints.
- Second, to adequately justify the need to implement the measures and the expected benefits.
- Third, to compensate for the short-term cost of the measures to the most vulnerable groups, so as to ensure social justice.

5.2 THE AIM OF STRUCTURAL REFORMS: A MODERN COMPETITIVE ECONOMY

A competitive economy does not necessarily mean a low-cost economy. The mechanisms that render a modern economy competitive are far more complex. The factors influencing competitiveness can be distinguished into institutional and economic.

- The major institutional factors are:
- A flexible public sector that supports citizens and ensures the provision of security, health

and education services in the most effective manner.

- A flexible public sector, business-friendly, with clear and transparent laws that are enforced.
- Modern institutions that promote the public's sense of fairness and trust between social partners.
- Political stability.
- The major **economic factors** are the following:
- Macroeconomic stability.
- Adequate infrastructure.
- Access to the financial system.
- Skilled human capital.
- Effective competition both domestically and abroad.
- Developing synergies between enterprises (e.g. through business clusters) to facilitate innovation and the diffusion of technology.
- Sound business management.
- Rational motivation policy at enterprise level (corporate governance, linking pay to productivity, etc.).

The aim of structural reforms is precisely to help ensure that these institutional and economic conditions are met.

5.3 THE EFFORT TO SPEED UP THE ONSET OF RECOVERY

In particular with regard to *speeding up the* onset of recovery, the main objectives of the effort that must be launched immediately are:

• Restoring normal financial conditions

As already mentioned, financial stability has been safeguarded, despite adverse conditions. However, the lack of liquidity and the problem of undercapitalisation limit the ability of the Greek banking system to finance new business initiatives and support viable enterprises facing severe liquidity problems. As analysed above, recapitalisation and restructuring of the banking system will contribute to an improvement of liquidity conditions, thereby allowing support for the export activity of enterprises and facilitating their reorientation to new markets and new products. Also, uncertainty needs to be reduced, especially as regards Greece's place in the euro area, so that deposits can return. Enhanced confidence will result from progress in the implementation of the Memorandum and the improvement of macroeconomic conditions; at the same time, speculations by international stakeholders about a Greek exit from the euro area should be avoided, as they often disregard the progress achieved.

EU funds are being used (e.g. actions under the National Fund for Entrepreneurship and Development (ETEAN), JEREMIE initiative) in channelling credit to Greek enterprises through the domestic banking system, while in the future additional EU financial instruments will be used, including the SME Guarantee Facility, which will provide loan guarantees to small and medium-sized enterprises using funds from the European Investment Bank, the planned Risk Sharing Instrument, which will finance infrastructure projects and productive investment, and the financing facility for imports of raw materials, planned by the European Investment Fund.

• Immediate improvement of the efficiency of public administration and simplification of the legal and regulatory framework

This is crucial for the effective implementation of all other reforms and policies, for a better relationship between the state and its citizens and between the state and businesses, also promoting a sense of equity.

• Stable tax regime, reduced tax burden

The adjustment programmes implemented so far have largely focused on increasing public revenue by introducing a series of tax measures that overturned business plans and acted as a disincentive to investment.

As the tax system is currently being redesigned, a primary concern should be to ensure that the provisions to be adopted will remain in place for a long time. Additionally, the new tax system must be simpler and rely extensively on information technology. Finally, it should focus on widening the tax base by curbing tax evasion; it would then be possible to lighten the burden of those who already pay taxes, which has increased excessively. Tax provisions should also aim at encouraging entrepreneurship and speeding up the onset of recovery.

Establishing a stable tax system that would raise sufficient revenue for fiscal consolidation, drastically fight tax evasion and reduce the tax burden on sincere tax payers could be the most effective tool in reversing the adverse climate.

• Pressing ahead with privatisation

Privatisation proceeds will help to directly reduce public debt and their collection constitutes a significant obligation under the loan agreement. However, the major benefit of privatisation is that it can boost growth and create new and sustainable jobs. On top of the immediate benefits of the initial investment resulting from a privatisation, the multiple expenses required to complete an investment project should be added (e.g. in the case of the old airport site at Ellinikon). Positive past experience (e.g. in the sector of mobile telephony) should not be disregarded.

Up to now, the process of privatisation has seen huge delays, which reflects domestic weaknesses and the lack of confidence, which is nothing but encouraging to foreign investors. Thus, short-term targets have been repeatedly revised downwards, while the initial target for €50 billion of total revenue has not changed but has been deferred (see Chapter IV, Section 2 and Chapter III, Section 1.2.B). The establishment of the state asset management fund (TAIPED) was a positive first step and its active role since September 2012 is a promising development.

• Effective use of EU funds for recovery and growth

Given the significant budget constraints at the national level, EU resources are currently a particularly important source of funding. Any remaining obstacles to a faster absorption and more effective use of funds under the National Strategic Reference Framework must be removed as soon as possible. In this regard, the European Commission and the Greek authorities promoted a series of measures over the past two years (see Chapter III.4). It should be pointed out that the remaining NSRF funds to be absorbed by 2015 (n+2 rule), including funds for rural development, amount to some €13 billion. Taking full advantage of the interventions made so far by Greek and EU authorities to enhance liquidity, combined with the elimination of administrative burdens that do not allow financial support to reach the real economy, is expected to lead to a faster and more effective use of EU funds. In this context, the targeted technical assistance provided by the EU Task Force for Greece is very important for the structural reforms and the growth targets envisaged in the Memorandum.

The following can contribute to maximising benefits in terms of growth:

- First, both in the context of the revised NSRF and during the *preparation* of the new programming period 2014-2020, account should be taken of the economic and social effects of the recession and the austerity measures on the labour and product markets. Links should exist between projects, so as to achieve

the maximum multiplier effect. For example, it would be useful to combine (in production and operation terms) projects in areas such as youth unemployment and enterpreneurship, rural development and tourism, innovation and trade, etc., or to include new programmes such as in-house and vocational training.

- Second, synergies between EU funds and structural measures under the Memorandum should be identified and fully exploited. Specific actions such as conducting studies and developing information systems, electronic data bases and tools at micro-level for exporters and small and medium-sized enterprises, counselling services, etc. can be financed by EU funds under the NSRF in the new programming period 2014-2020. Furthermore, in some cases EU Structural Funds can contribute to the preparation of the sale of State assets by improving their functions and enhancing their potential value, thereby supporting the privatisation programme.
- Third, it is urgent to reassess projects as far as their direct effect on productivity is concerned. The resulting cost savings should be redistributed in a way that places more emphasis on mobilising private productive investment, also tapping into the possibility of public-private partnerships (PPPs).
- Fourth, it is essential to *fully implement* the principle of a single operational centre (the relevant Ministry, which is the Ministry of Development and Competitiveness), which ensures the management and control of projects and addresses the issue of unclear responsibilities of the parties involved (also witnessed by the European Union) due to joint responsibilities shared between the central administration and regional/local authorities. This would ensure a better coordination of actions, a common assessment of the results of each project (compared with supplementary projects) and a stable implementation framework.

In the EU's next multiannual programming period, Greece will be allocated significantly

lower funds. First, in 2014-2020, €12 to €13 billion are expected to be received from the Structural Funds, compared with €20.4 billion in 2007-2013. Therefore, an effective negotiation strategy is needed to ensure that the allocation of funds to be decided (most likely in January 2013) will be the most favourable. Irrespective, however, of the quantity of funds available, a strategy must be formulated for the optimal use of these resources. Up to now, although EU funds have made a positive quantitative contribution, their use has not averted the persistence of a distorted growth model that ultimately led to the current crisis. In the new environment, the NSRF and EU funds should function as powerful tools for growth; to this end, they have to be integrated into the national plan for the transition to a new growth model, as mentioned above, which will be in line with the obligations that Greece has undertaken.

In particular with regard to the **negotiation** for the new programming period, as well as the relevant **preparation**, Chapter III (Section 2.A) presents some fundamental guidelines that could be followed to maximise benefits for Greece.¹⁵

6 UNCERTAINTIES AND RISKS STILL EXIST

Two factors will ultimately determine the ability of the Greek economy to overcome the crisis and ensure the sustainability of public debt:

First, the elaboration and the consistent and speedy implementation of a national strategy. This strategy needs to be broader in scope than the Memorandum and include the completion of fiscal consolidation, the policies needed to bring the recovery forward and the vital reforms that will generate sustainable gains in competitiveness and satisfactory growth rates in the future.

Second, continued financing from our partnerscreditors. Both factors are subject to considerable uncertainties, both domestic and external. With regard to the domestic uncertainties, note must be made of the following:

- that public administration might not be able to implement the reforms decided upon at the political level. It is for this reason that priority has to be given to improving the efficiency of public administration, so that it is friendly to citizens and businesses;
- that there could be strong social reactions, which could test political stability;
- that the targets set might not be fully met, resulting in the need for additional corrective measures that would be hard to be decided upon.

Among the external factors, the main uncertainty relates to the materialisation of downside risks to the global economic outlook. Such a materialisation would weigh heavily on the outlook for the Greek economy as well. The institutional reforms to be decided at the euro area level are another external uncertainty. This is why, as already mentioned, Greece must be actively involved in the deliberations and in the EU decision-making process.

7 IT IS POSSIBLE TO TURN A NEW PAGE

Despite the delays, the progress that has been achieved in key sectors is tangible. Despite the risks and the ongoing recession, the economy is changing. It is primarily up to Greece to design and implement the right policies to speed up the onset of recovery and establish the conditions for satisfactory and sustainable growth thereafter.

¹⁵ These guidelines result from a study commissioned by the Bank of Greece to ELIAMEP, which was presented in a public event on 29 October 2012.

II THE EXTERNAL ENVIRONMENT OF THE GREEK ECONOMY AND THE EUROSYSTEM'S SINGLE MONETARY POLICY

I INTERNATIONAL ECONOMIC DEVELOPMENTS, PROSPECTS AND POLICY RESPONSES

I.I DEVELOPMENTS AND PROSPECTS¹

- The growth rate of the world economy is expected to decline in 2012, reflecting (i) unusually high uncertainty fuelled by the reintensification of the debt crisis in the euro area and concerns about its sustainability, (ii) the wider implications of fiscal adjustment policies implemented in most advanced economies and (iii) new record highs in international commodity prices. Negative effects, primarily for advanced economies but also for the global economy as a whole, spill over through global trade and subdued consumer and investor confidence as regards the economic outlook, and are at the same time worsened by weaknesses in the financial sector.
- According to estimates, world GDP (see Table II.1) will rise by 3.3% in 2012, from 3.8% in 2011. In advanced economies, the projected deceleration of GDP in 2012 (1.3% from 1.6% in 2011), which is considerably affected by the continuing implementation of fiscal adjustment programmes against a background of already extremely low interest rates, reflects highly divergent developments across economic areas and countries. In the US, the growth rate is expected to slightly accelerate to 2.2% from 1.8% in 2011, while Japan seems to come out of the 2011 recession, with its GDP projected to rise by 2.2% (-0.8% in 2011).

In the euro area, the rate of change in GDP is projected to be slightly negative (-0.4%) in 2012 (from -0.6% to -0.2% according to the ECB staff projections), due to the negative contribution of domestic demand, which is expected to more than offset the positive contribution of net exports. The current account balance improved and its surplus is estimated to have widened to 1.1% of GDP, an evolution linked to the fall in the effective exchange rate of the euro (i.e. improvement of competitiveness) from 2010 onwards. However, as from

- August, a strengthening of the euro is observed, owing to the gradual elimination of uncertainty as regards the euro area outlook. Nevertheless, GDP is projected to be slightly positive (0.2%) in 2013 (from -0.4% to +1.4% according to the ECB staff projections). The European Commission forecasts a slightly lower growth rate in 2012 (0.1%).
- In emerging and developing economies, despite the deceleration of GDP (except for Middle Eastern and North African countries where GDP growth is expected to accelerate) mainly because of weaker demand from advanced economies, growth rates remain relatively high. In this group of countries, GDP growth is expected to decelerate to 5.3% in 2012 from 6.2% in 2011. In emerging Asia, which continues to register relatively better performance, the growth rate will decelerate to 6.7% in 2012 from 7.8% in 2011.
- Unemployment rates are expected to decline in the US (8.2% from 9.0% in 2011), remain at low levels in Japan (4.5% from 4.6% in 2011) and rise in the euro area (11.2% from 10.2%). According to the OECD, the rise in unemployment in some countries in 2012, due to weaker economic activity, will be lower than anticipated. Nevertheless, given the forecasts for low or even negative growth, the risk of a sudden increase in unemployment should not be ruled out, a development that would negatively affect disposable income, confidence and economic activity.
- Inflation is declining because of the economic slowdown and the stabilisation of world commodity prices (after their strong increase in 2011) at high levels. In advanced economies, CPI inflation is expected to decline to 1.9% from 2.7% in 2011, while in developing economies it is expected to come
- 1 The analysis that follows is based on macroeconomic developments up to early November and takes into account recent forecasts by the IMF (World Economic Outlook and Fiscal Monitor, October 2012), the European Commission (7 November 2012), the OECD (Economic Outlook, No. 91, May 2012 and Interim Assessment, 6 September 2012), the ECB staff projections (6 September 2012) and other available data.

Table II.1 Key macroeconomic aggregates of the world economy

	Number		Output (s	Output (annual percentage changes in real GDP)	centage (DP)	I (annual pe	Inflation ² (annual percentage changes)	nanges)	Fisc	Fiscal balance (% of GDP)		Gross (%	Gross public debt (% of GDP)	1 4	Current 8	Current account balance (% of GDP)	ance
	countries	GDP ¹ (%)	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013	2011	2012	2013
World total	186	100.0	3.8	3.3	3.6				-4.6	-4.2	-3.5	79.9	81.3	81.5			
I. Advanced economies	35	51.1	1.6	1.3	1.5	2.7	1.9	1.6	-6.5	-5.9	-4.9	105.5	110.7	113.6	-0.2	-0.4	-0.3
United States		19.1	1.8	2.2	2.1	3.1	2.0	1.8	-10.1	-8.7	-7.3	102.9	107.2	111.7	-3.1	-3.1	-3.1
Japan		5.6	-0.8	2.2	1.2	-0.3	0	-0.2	8.6-	-10.0	-9.1	229.6	236.6	245.0	2.0	1.6	2.3
United Kingdom		2.9	0.8	-0.4	1.1	4.5	2.7	1.9	-8.5	-8.2	-7.3	81.8	88.7	93.3	-1.9	-3.3	-2.7
Euro area	17	14.3	1.4	-0.4	0.2	2.7	2.3	1.6	-4.1	-3.3	-2.6	88.0	93.6	94.9	0.4	1.1	1.3
2. Emerging and developing economies	151	48.9	6.2	5.3	5.6	7.2	6.1	5.8	-1.2	-1.4	-1.4	37.0	34.8	33.1	1.9	1.3	1.1
China		14.3	9.2	7.8	8.2	5.4	3.0	3.0	-1.2	-1.3	-1.0	25.8	22.2	19.6	2.8	2.3	2.5
Russia		3.0	4.3	3.7	3.8	8.4	5.1	9.9	1.6	0.5	0.2	12.0	11.0	6:6	5.3	5.2	3.8

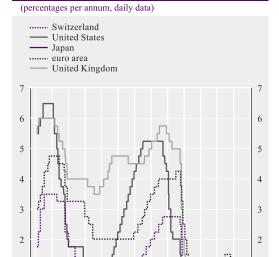
Sources: IMF, World Economic Outlook, October 2012 and Fiscal Monitor, October 2012.

Notes: Estimates for 2012 and projections for 2013. According to IMF classification: Advanced economies: Euro area-17, the four newly industrialised Asian economies (Korea, Singapore, Taiwan Province of China and Hong Kong SAR), United States, Japan, United Kingdom, Canada, San Marino, Australia, Demmark, Switzerland, Israel, Norway, New Zealand, Sweden and the Czech Republic. Emerging and developing economies: Pub-valaran Africa (45), Central and Eastern Europe (14), Commonwealth of Independent States (13 incl. Georgia and Mongolia), Developing Asia (27), Middle East (20) and Latin America (32).

Percentage share in world GDP in 2011, on the basis of purchasing power partities (PPPs).

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

Chart II.1 Central bank policy rates (January 2000 - October 2012)



Sources: Euro area: European Central Bank (ECB), interest rate on main refinancing operations; United States: Federal Reserve, federal funds target rate; Japan: Bank of Japan, official discount rate; United Kingdom: Bank of England, reporate; Switzerland: Swiss National Bank, operational target range for the three-month Libor.

2006

2008

2002

2004

down to 6.1% from 7.2% in 2011. In the euro area, the ECB staff project that average annual inflation will remain above 2% until the end of the year and fluctuate between 2.4% and 2.6% in average annual terms, primarily on account of high international fuel prices, the weakening in the exchange rate of the euro and the increase in indirect taxes in some euro area countries.

• The volume of world trade in goods and services declined considerably in 2012 (for the second consecutive year) and its growth is estimated to come down to 3.2% in 2012 (from 5.8% in 2011). The average international price of crude oil, which registered a steep increase in 2010 and 2011, is expected to rise further in 2012 (by 2.1%, reaching 106.2 US dollars per barrel) and exceed the high levels of 2008 in average annual terms. International non-oil commodity prices are estimated to fall by 9.5%

Chart II.2 Exchange rate of the euro against the US dollar and the Japanese yen (January 2010-October 2012)

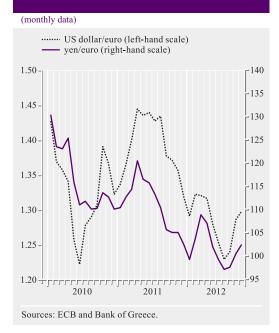
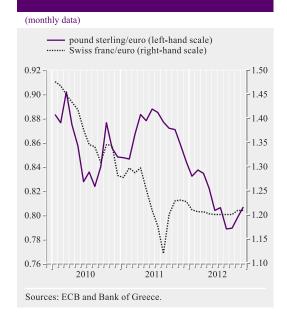


Chart II.3 Exchange rate of the euro against the pound sterling and the Swiss franc (January 2010 - October 2012)



in 2012, with the exception of food prices that will remain high due to adverse weather conditions (drought, etc.).

- Fiscal policy in advanced economies maintained its restrictive stance (as mirrored by the reduction in the structural deficit), especially in the euro area, aiming to limit the risks originating from the sovereign debt crisis. The procyclical fiscal policy is undoubtedly holding back growth. However, negative developments in financial markets, together with the fact that the financial sector is still vulnerable, do not leave room to many governments to postpone the necessary adjustment. The fiscal deficit is estimated to fall to 8.7% of GDP in 2012 from 10.1% in 2011 in the US² and to 3.3% from 4.1% in the euro area, while in Japan it will increase slightly to 10.0% from 9.8%. The gross public debt will increase further to 107.2% of GDP in the US, to 236.6% in Japan and to 93.6% in the euro area.
- The fiscal and macroeconomic imbalances have diminished over the past three years in the euro area, especially in the countries that implement fiscal adjustment and structural reform programmes. In these countries, the fiscal deficit has decreased considerably and is projected to decrease further, while a significant decline is also recorded in the current account deficit. The shrinking of external imbalances is, to a large extent, attributable to the economic recession and also reflects a considerable narrowing of the competitiveness gap between countries with deficits and countries with surpluses.
- Monetary policy remained very accommodative in advanced economies, thus facilitating the effort for fiscal adjustment that would entail the smallest possible cost for growth. In Japan and the United Kingdom, the central bank expanded in 2012 the bond purchase programmes by a total of JPY 36 trillion and GBP 100 billion, respectively. The ECB, after four consecutive cuts in its key interest rate in 2011, proceeded to a new reduction in July 2012, while at the end of 2011 it decided

to conduct two longer-term refinancing operations (LTROs), which provided considerable support to liquidity and had a positive impact on financial markets. In addition, the ECB purchased government bonds in the secondary market, improved the conditions of long-term refinancing and broadened the eligibility criteria for securities used as collateral in the Eurosystem's liquidity-providing operations. Moreover, in early September, the ECB announced the terms of the new government bond purchase programme with a maturity of up to three years (for more details, see Section 3 of this chapter).

1.2 EU AND EURO AREA: POLICY RESPONSES

- EU institutions are stepping up the effort to cover the gaps in the EMU economic governance framework and to address the debt crisis (also by enhancing banking supervision). At the same time, financial markets are often impatient for quick results in reducing public debt and improving the economic outlook.
- Significant decisions were taken during the euro area and the European Council summits last June. They concerned a more efficient functioning of the support mechanisms and a single banking supervision mechanism, as well as the promotion of economic integration. Also, the ECB's decision of 6 September 2012 to intervene, under strict conditionality, in the secondary sovereign bond market and carry out purchases of bonds (with a maturity of one to three years) from member countries that implement EU/IMF economic adjustment programmes was considered very positive for the financial stability in the euro area.
- 2 In the US, the estimated fiscal tightening (or "fiscal cliff") owing to the expiration, at the end of 2012, of the non-standard measures to boost demand after the crisis of 2008-2009, amount to 4% of

Box II.I

FISCAL CONSOLIDATION AND EU POLICY FOR GROWTH

I Introduction

In the past two years, most EU Member States have been implementing cyclical tight fiscal policies in order either to correct accumulated fiscal imbalances or balance their state budgets after the expansionary interventions they had proceeded with in their efforts to address the 2008 crisis.

Strong fiscal consolidation in several EU Member States led to a larger than expected decline in economic activity and higher unemployment, fuelling the debate over fiscal multipliers and the possibility of having underestimated them. The higher the fiscal multipliers, the more far-reaching the short-term, negative effects of fiscal consolidation on real economy, thus raising concerns about: a) the appropriate size, mix and pace of fiscal consolidation and (b) the need to promote "countervailing measures" in order to boost demand and support growth and employment. Recent discussions on the size of fiscal multipliers directly concern the sustainability of public debt. Specifically, for a given size of fiscal effort, a high multiplier leads to a comparatively larger burdening of public debt-to-GDP ratio. This implies that in countries with high public debt and in which it is estimated that fiscal multipliers are high, the necessary decrease in primary deficit should be accompanied by policies which, on the one hand, directly reduce public debt (e.g. privatisations), and on the other hand, mimimise the adverse effects of fiscal consolidation on economic growth. Besides, it has recently been questioned whether, in countries falling in this category, the attainment of the deficit targets is compatible with the sustainability of public debt.

This box summarises the current debate on the size of fiscal multipliers and analyses the implications of their re-assessment on the conduct of fiscal and economic policy. Moreover, it describes the initiatives undertaken at EU and euro area level in order to achieve fiscal consolidation at the lowest possible cost in terms of economic growth and employment.

2 Fiscal multipliers

The effect of fiscal consolidation on economic activity depends on the phase of the business cycle, the composition and the reliability of fiscal consolidation measures, as well as the monetary policy pursued. Specifically, fiscal multipliers tend to be larger during recession and when: (a) measures focus on the side of public expenditure rather than public revenue, (b) fiscal policy is not deemed reliable by investors and consumers or fiscal measures are of a provisional nature² (affecting confidence and expectations) and (c) interest rates are exceptionally low and there is little room for monetary easing through main refinancing rates. Moreover, fiscal multipliers tend to increase with the size of fiscal consolidation,³ the size of the negative output gap (which is widened due to the credit crunch, the repair of balance sheets and high precautionary savings) and when other countries are also under fiscal consolidation (because of lower external demand).

¹ See Jonathan Portes and Dawn Holland, "Self Defeating Austerity?", presented by the National Institute of Economic and Social Research on 1 November 2012.

² See European Commission, Autumn Forecasts, Box 1.5 "Forecast errors and multiplier uncertainty", 7 November 2012.

³ IMF, Selected Issues on the euro area, Chapter III, "Fiscal consolidation under the SGP: some illustrative simulations", July 2012.

A number of recent empirical studies estimate that the combination of these factors in the period of the "Great Recession" from 2010 onwards has led to higher than usual fiscal multipliers, namely close to or above 1 for advanced economies, thus intensifying the negative effects of fiscal consolidation on economic growth.⁴

The IMF estimates that, in the current juncture, the real size of fiscal multipliers⁵ for advanced economies varies between 0.9-1.7, up by 0.4 to 1.2 against those used in macroeconomic projections until 2009 (of about 0.5 on average).⁶ Similarly, the European Commission notes that **special circumstances**, such as the lack of credibility of fiscal consolidation programmes and limitations in conventional monetary policy, more than doubled the size of fiscal multipliers in EU-27 and the euro area to about 0.6-0.7 in the first year of fiscal consolidation.⁷

The impact of fiscal consolidation on unemployment ("unemployment impact multipliers") has been studied less than its impact on GDP. A recent report by the European Commission points out that fiscal consolidation (emphasising on the reduction of public expenditure) has a stronger impact on countries in which the labour market is more subject to protectionism. This is explained by the fact that in these markets the benefits of fewer dismissals are more than offset by the large reduction in job creation, exacerbating long-term unemployment.⁸

Generally, estimates of the size of fiscal multipliers vary greatly and are subject to theoretical, technical⁹ and other limitations. For this reason, they should be interpreted with caution, always taking into account other economic data as well.

3 Implications of the estimated higher fiscal multipliers

The finding that fiscal multipliers are currently higher in advanced economies does not imply an automatic change in the position or the stance of the fiscal policy pursued. To this end, factors such as financial constraints, market confidence and social conditions in each country should also be taken into consideration.

However, the analysis of these higher fiscal multipliers reveals certain **key conclusions** — where views seem to converge — which should be evaluated and **duly taken into account** in planning fiscal and economic policy in EU and euro area countries. These conclusions lead to the following proposals:

- 4 See e.g. Auerbach, A.J. and Y. Gorodnichenko (2012), "Measuring the Output Responses to Fiscal Policy", American Economic Journal: Economic Policy, 4(2): 1-27, IMF, Fiscal Monitor Balancing Fiscal Policy Risks, Chapter 3, "Easy does it: the appropriate pace of fiscal consolidation", April 2012, Batini N., Callegari G. and G. Melina (2012), "Successful austerity in the United States, Europe and Japan", IMF Working Paper No. 190, Canzoneri M., F. Collard, H. Dellas and H. Diba (2012) "Fiscal Multipliers in Recessions," Diskussionsschriften dp1204, Universitaet Bern, DeLong B. and L. Summers (2012), "Fiscal Policy in a depressed economy", The Brookings Institution.
- 5 The effect of a change in structural fiscal deficit as a percent of GDP on real growth.
- 6 IMF, World Economic Outlook, Box 1.1 "Are we underestimating short-term fiscal multipliers?", October 2012. The IMF finds that fiscal multipliers have been underestimated in recent years, and this applies also after controlling for other factors that may have had an impact on the lower than expected economic growth, such as the initial level of public debt, the banking crisis and the ex post implementation of additional fiscal consolidation measures. Furthermore, as shown by the analysis, omitting from the sample those countries that are under a fiscal consolidation programme does not change the results qualitatively.
- 7 European Commission, European Economic Forecast, 11 May 2012, Box 1.4 "Fiscal consolidation and the economic outlook".
- 8 European Commission, "Fiscal consolidation in reformed and unreformed labour markets", *Quarterly report on the euro area*, 12 October 2012.
- 9 For instance, empirical models should separate the fiscal impact of other factors associated with the sovereign debt crisis, that weigh on economic activity, such as the sovereign-risk perception. See European Commission, *Autumn Forecasts*, Box 1.5 "Forecast errors and multiplier uncertainty", 7 November 2012.

- Growth- and employment-friendly fiscal policy mix. Measures such as increasing taxes on consumption, real estate and financial transactions, as well as reducing transfer payments¹⁰ and public consumption considerably reduce households' current disposable income, but have a smaller impact on supply and potential output in the long run. By contrast, higher income tax and lower public investment spending substantially limit the economy's growth potential and employment.¹¹
- Country-specific pace of fiscal consolidation. ¹² In countries without serious market strains (financing constraints) and with greater fiscal flexibility, automatic fiscal stabilisers should operate uninterruptedly and fiscal consolidation should be gradual. ¹³ In euro area countries which are under a fiscal consolidation programme, a further correction of fiscal deficits is deemed absolutely necessary. In the short run, annual fiscal targets as a percentage of GDP may have to be redefined in countries where recession is deeper than expected. This is warranted by the fact that the effects of protracted recession, limited liquidity and the fear of a euro area collapse have led to such a high deleveraging of the private sector that render an aggressive and frontloaded fiscal consolidation less effective.
- Swift implementation of country-specific structural reforms and observation of a medium-term fiscal policy plan. Launching structural changes that improve market efficiency and the institutional framework in general could strengthen the positive outcome of fiscal consolidation in the long run and create the conditions necessary for economic recovery in the EU and the euro area. At the same time, the reliable implementation of a medium-term fiscal programme in all Member States, in conjunction with a tighter economic and fiscal coordination at EU and euro area level, will allow a timely identification of problems and a detailed recording and quantification of all alternative policy options. This will ensure fairer and higher quality measures, together with the stabilisation of consumer and investor expectations as regards the sustainability of public finances and the growth prospects of the EU and the euro area.

In conclusion, the sovereign debt crisis in several EU Member States and the consequent loss in market confidence require that fiscal consolidation must be continued and the causes generating fiscal imbalances be addressed. At the same time, the higher fiscal multipliers reveal to a large extent the difficulty to offset (or mitigate) short-term implications of fiscal consolidation from other policies, such as monetary policy and lending to the real economy. In this special economic conjuncture, the need for policies boosting demand and supporting employment becomes urgent and imperative, so as to restore the sustainability of public finances at the lowest possible cost for each country's growth and production capacity.

4 Fiscal framework and fiscal consolidation in the EU and the euro area

European leaders and EU institutions, acknowledging both the need for fiscal consolidation and its significant short-term implications on economic activity, introduced amendments in the EU fiscal framework, so that it becomes more timely, prudential, reliable and effective.

¹⁰ Taking into account the social role of transfer payments, at this time of recession and abrupt loss in welfare, their rationalisation and better targeting is more meaningful than a net reduction.

¹¹ Empirical studies show that corporate taxation is the most economically distortive of all measures aimed at increasing public revenue. See OECD (2010), "Tax policy reform and economic growth", OECD Tax Policy Studies, No 20.

¹² See intervention by the Commissioner for Economic and Financial Affairs of the European Commission, "The foundations for growth in Europe", 16 October 2012.

¹³ IMF, Fiscal Monitor-Balancing Fiscal Policy Risks, Chapter 3 "Easy does it: the appropriate pace of fiscal consolidation", April 2012.

On the one hand, significant efforts were made to enhance the credibility of fiscal policy pursued by EU Member States, euro area countries in particular, through the implementation of stricter rules. Emphasis was placed on better coordination and planning, but also on better monitoring and execution of state budgets. Decisions to this direction include the introduction of the European Semester (January 2012), the adoption of the "six-pack" for the enhancement of economic and fiscal governance in the EU (December 2011), as well as the proposal for an additional "two-pack" aimed at strengthening euro area supervision mechanisms (November 2011). Furthermore, national fiscal planning should from now on adopt a multiannual, medium-term approach.

In order to ensure stability in the euro area, 25 Member States signed in March 2012 the "Treaty on Stability, Coordination and Governance in the EMU". The Treaty also includes the "European Fiscal Compact", which requires signatories to introduce in their national legislation a fiscal rule on balanced or surplus budget, as well as a corrective mechanism, which is automatically activated in case of major deviations from the medium-term target or path of adjustment.¹⁴

On the other hand, it has been realistically acknowledged that the application of rules must take into account the exceptionally difficult economic conjuncture. Thus, in the context of the reinforced Stability and Growth Pact (after the adoption of the "six-pack"), the fiscal consolidation agreed upon by Member States may be modified in the presence of serious economic reasons. Moreover, the medium-term fiscal target concerns the structural deficit and is different across Member States, while the pace of convergence towards it may be altered depending on the economic conditions. In this light, Spain and Portugal have already been granted an extension until 2014 in order to correct their excessive fiscal deficits.¹⁵

5 Growth policies in the EU and the euro area

The need to support demand was stressed in the Summit Meeting of 28-29 June 2012, with the approval of the "Compact for Growth and Jobs"; its aim is to promote fiscal consolidation through measures supporting growth and employment, by effectively using available financing instruments. Furthermore, it was decided to deepen the Single Market of goods and services and support workers' mobility within the EU.

The recapitalisation of banks and the restoration of credit flows to the private sector are also deemed indispensable for growth (Van Rompuy report) and employment. The International Labour Organisation estimates that, if credit to enterprises is restored and the investment-to-GDP ratio increases by about 2 percentage points (i.e. if it returns to the pre-crisis level of 21.5% of GDP for the euro area), about 2/3 of the jobs lost since the onset of the crisis will be recouped.¹⁶

In spite of all these, EU policies for growth, investment and employment seem to proceed rather slowly. The European Council meeting of 18-19 October 2012 pointed out that stronger effort

¹⁴ According to the time-schedule, the European Fiscal Compact will be transposed into national legislations by 1 January 2014. Also, the aim is for the Treaty on the Stability, Coordination and Governance in the EMU to be transposed into EU law within 5 years.

¹⁵ See also the intervention by the Commissioner for Economic and Monetary Affairs of the European Commission, "The foundations for growth in Europe", 16 October 2012.

¹⁶ International Labour Organisation, Eurozone job crisis: trends and policy responses, 10 July 2012.

is required for the implementation of the "Europe 2020 strategy" and the "Growth and Employment Pact". Greater progress should be made in (a) using the financial support package of €120 billion for investment and growth, as envisaged in the Pact, (b) absorbing the remaining €55 billion from structural funds for 2007-2013, (c) fully mobilising the EU-EIB project bonds amounting to €230 billion which are still at a pilot stage and (d) deepening the Single Market.

Growth and employment constitute also the focal point of the new, under deliberation, **EU** financial framework for 2014-2020, which is expected to prove an important (and in certain Member States the main) source of investment financing. Projects aimed at developing network services in transport, energy, digital telecommunications, as well as promoting research and innovation, supporting competitiveness and addressing unemployment are expected to be financed by community resources.

In order for such development efforts to yield the most, all Member States must keep up with **structural reforms**, particularly on the supply side. This will shield the economy against the long-run effects of fiscal restraint and recession (e.g. structural unemployment, obsolescence of human and physical capital and technology gaps).

- The need for fiscal adjustment to be properly planned and accompanied by structural reforms, so as to enhance an economy's growth potential and ensure its sustainability, was rigorously acknowledged by EU institutions, in particular by recent European Council meetings, the conclusions of which make reference to an "economic strategy that pursues both continued fiscal consolidation and determined action to boost growth and jobs" (1-2 March 2012 and 29 June 2012). However, the transition from general principles to specific policy measures at national level remains a major challenge. (Box II.1 discusses fiscal adjustment and growth issues in the EU and the euro area.)
- A deeper banking, fiscal and economic integration in the EU and especially in the euro area was the subject of the report submitted to the European Council of 29 June 2012 by its President, H. Van Rompuy, in cooperation

with the Presidents of the European Commission, the Eurogroup and the ECB. (Box II.2 summarises the recent steps towards fiscal integration and the key points of the current public debate on eurobonds.)

Decisions of the euro area and the European Council summits on 29 June 2012 and on 18-19 October 2012: Direct recapitalisation of banks by support mechanisms and greater flexibility

• According to the summit's decisions on 29 June, when an effective single supervisory mechanism is established, with the involvement of the ECB, the European Stability Mechanism (ESM) could have the possibility to recapitalise banks directly, following a relevant decision. In order to implement this decision, the European Council asked the Eurogroup to specify the criteria for the direct recapitalisation of banks by the ESM.

Box II.2

THE FISCAL COMPACT AND THE PROSPECT OF ECONOMIC AND FISCAL INTEGRATION

The Fiscal Compact (FC) complements the reinforced Stability and Growth Pact (reinforced SGP) as well as the new provisions on the redressing of macroeconomic imbalances, which

entered into force in December 2011.¹ The FC's central point is the adoption of a new fiscal rule which requires that general government budgets are in balance or in surplus. This fiscal rule is deemed to be respected if, as a whole, the structural fiscal deficit does not exceed 0.5% of GDP annually. It will be transposed into national law at constitutional or equivalent level and include an automatic correction mechanism, triggered in the event of deviations. Furthermore, jurisdiction is conferred on the European Court of Justice to verify the rule's transposition into the national legislation of Member States.

The FC and the reinforced SGP are important elements of a path towards fiscal integration in the euro area and the EU. According to the report of the European Council President, Herman Van Rompuy ("Towards a Genuine Economic and Monetary Union"), the course towards a genuine Economic and Monetary Union is based on four essential building blocks: an integrated financial framework, an integrated budgetary framework, an integrated economic policy framework, as well as strengthening democratic legitimacy and accountability.

From a fiscal perspective, the report highlights the need for a more qualitative move towards fiscal union through additional measures, on top of those agreed upon under the reinforced SGP and the FC. According to this report, such a qualitative leap could include, in the medium term, the common issuance of sovereign bonds, provided that significant progress is made towards fiscal consolidation and budgetary discipline in order to minimise moral hazard. What follows is a brief discussion on Eurobonds.

Joint issuance of government bonds by euro area Member States: objectives, preconditions and alternative proposals

The ongoing debt crisis in the euro area and its impact on financial stability brought to the fore the need to effectively address the impact of cyclicality on economic activity, in the direction of stabilisation and further convergence.

As a result, reforms have been adopted or put forward with respect to the conduct of economic policy in the euro area.² In this context, there is a debate on the possibility of the Member States to issue bonds jointly, while observing fiscal stability rules. This is a point of convergence between (i) proposals that make fiscal consolidation a condition for avoiding moral hazard due to a departure from FC benchmarks and (ii) other proposals that prioritise addressing investor uncertainty. However, proposed forms of jointly issued bonds vary depending on the proposed degree of substitution of joint for national issuance, as well as on the nature of the underlying guarantee, i.e. joint and several, for the entire amount to be financed by joint issuance, or several (but not joint), under which each guaranteeing Member State would be liable for its own share of Stability Bond issuance.

The European Commission, in its communication on "Stability Bonds",³ sets out three different options: (a) the full substitution of Stability Bond issuance for national issuance,

¹ The Fiscal Compact has taken the form of the "Treaty on Stability, Coordination and Governance in the Economic and Monetary Union" (TSCG), which was signed on 2 March 2012 by the Heads of State or Government of the euro area countries and another eight EU Member States – apart from the United Kingdom and the Czech Republic – and is already in the process of ratification.

² Reforms that have been adopted include the creation of a European Stability Mechanism and those that have been put forward, involve a fiscal and banking union.

³ See "Green Paper on the feasibility of introducing stability bonds", COM(2011) 818, European Commission, Brussels, 23 November 2011. The public consultation procedure has been completed at this stage.

(b) the partial substitution of Stability Bond issuance for national issuance, and (c) the partial substitution for national issuance, under which Stability Bonds would be underpinned by pro-rata guarantees of euro area Member States.

Partial financing of Member States' public debt through the joint issuance of bonds – a common point between many different proposals – would reduce funding costs for euro area Member States thanks to the expected lower yields on jointly issued bonds. Of course, the issuance of Stability Bonds would occur only up to certain predefined limits and thereby not necessarily cover the full refinancing needs of all Member States. The remainder of the issuance required to finance Member State budgets would be issued at the national level under national guarantees.

Finally, proposals on partial substitution along with pro-rata guarantees include a paper by the German Council of Economic Experts on issuing (separate) sovereign bonds to cover debt liabilities not exceeding 60% of GDP and refinancing the remainder (of the debt) through a European Redemption Fund (ERF). This proposal focuses on fiscal discipline and its benefits involve cutting servicing costs and extending maturities for the existing debt of Member States.

- 4 See "The European redemption pact: an illustrative guide", German Council of Economic Experts, Working Paper 02/2012, available at: http://www.sachverstaendigenrat-wirtschaft.de/fileadmin/dateiablage/download/publikationen/working_paper_02_2012.pdf.
- It was also decided to use the existing support mechanisms the temporary EFSF and the ESM— in a flexible and efficient manner in order to stabilise markets for Member States respecting their country-specific recommendations and their other commitments under the "European Semester", the Stability and Growth Pact and the Macroeconomic Imbalances Procedure (which aims at averting the occurrence or widening of such imbalances, or at mitigating them, e.g. at the crucial area of competitiveness). The ECB has agreed to serve as an agent to EFSF/ESM in conducting market operations in an effective and efficient manner.
- On 18-19 October 2012, the European Council, on the basis of the Van Rompuy interim report on the EMU, called for work to proceed on the legislative proposals for the Single Supervisory Mechanism as a matter of priority, with the objective of agreeing on the legislative framework by 1 January 2013 and completing the procedures for its implementation in the course of 2013. In addition, the European Council stressed the significance of

a swift adoption of provisions relating to the harmonisation of national resolution and deposit guarantee frameworks, as well as of the rules on bank capital requirements.

Eurogroup decisions on 27 June and 20 July 2012: Cyprus requests financial assistance and support to Spain's banking sector is approved

• On 25 June, Cyprus submitted a request for financial assistance, which was approved by the Ministers of Finance of the euro area on 27 June. The Eurogroup acknowledged the need to grant financial assistance to Cyprus with a view to addressing the problems both in its banking sector and in its fiscal aggregates. The financial assistance, which will be granted jointly with the IMF, will be accompanied by an economic adjustment programme and appropriate action to safeguard financial stability. The Cypriot programme will include measures to ensure the soundness of financial institutions and measures to implement the required fiscal adjustment, together with structural reforms to increase competitiveness and achieve sustainable growth through the

unwinding of macroeconomic imbalances. Consultations are underway to finalise the programme.

• After announcing its intention to respond favourably to Spain's request for financial assistance on 27 June, the Eurogroup formally endorsed on 20 July a financial assistance programme aiming at the recapitalisation of Spanish banks through financing of up to €100 billion provided by the European Financial Stability Facility (EFSF), in liaison with the IMF. The specific amount for the Spanish programme will de determined upon completion of the assessment of Spanish banks' capital needs by the European Commission, the ECB and the IMF. On 28 September, the President of the Eurogroup J.C. Juncker announced that, after the completion of the stress test, the capital shortfall of Spanish banks was estimated at slightly less than €60 billion and that the financial assistance provided by the support mechanisms would be lower, given that a part of the capital needs would be covered by banks themselves.

ECOFIN and Eurogroup decisions on 8-9 October 2012 for Portugal

On 8 October, the Ministers of Finance of the euro area approved the relaxation of the fiscal targets of Portugal's economic policy programme and agreed on the disbursement of €4.3 billion (including the amount granted by the IMF). Afterwards, taking into account the Eurogroup's decision, the ECOFIN Council issued a revised recommendation for Portugal in the context of the excessive deficit procedure, setting the year 2014, instead of 2013, as a deadline for bringing the deficit below 3%.

Eurogroup discussions and decisions on Greece (12, 20 and 26 November 2012)

On 12 November 2012, and following a proposal by the troika, the Ministers of Finance of the euro area decided to give Greece a two-year extension for achieving the fiscal targets set in the adjustment programme. They also

postponed for 20 November 2012 the assessment of the Greek programme, the review of the sustainability of Greek government debt and of the coverage of additional financing needs, as well as the decision on the disbursement of the next tranche of the loan to Greece through the EFSF. According to an announcement by J.C. Juncker on 20 November 2012, the Eurogroup welcomes the fact that all required prior actions had been met in a satisfactory manner by the Greek authorities and that progress has been made in determining a package of measures aimed at ensuring the sustainability of the Greek debt. However, the technical review of certain elements of this package requires more time and it was therefore deemed necessary for the Eurogroup to reconvene on 26 November 2012 (see Chapter I).

2 THE ECONOMIES OF SOUTH-EASTERN EUROPE³

- The rate of growth of South-East European economies started slowing down in the second half of 2011 and looks set to further deteriorate in 2012. According to data available so far, the weighted average growth rate of countries in the region (except Turkey) is expected to decline significantly and stand close to 0.4% in 2012, from 2.2% in 2011.⁴ The relatively mild recession in which euro area countries seem to enter, combined with pressures for deleveraging exerted on European banks —i.e. developments linked with the ongoing debt crisis in advanced European economies— constitutes the main cause of the weaker short-term growth prospects of countries in this region.
- More specifically, in the first two quarters of 2012, three countries, Croatia, Serbia and FYROM, recorded negative rates of change in GDP.⁵ In the other South-East European

- 4 On the basis of the October 2012 forecasts by the European Bank for Reconstruction and Development (EBRD).
- 5 Albania and Montenegro registered negative rates of growth only in the first quarter of 2012.

³ The analysis focuses on Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, the Former Yugoslav Republic of Macedonia (FYROM), Romania, Serbia and Turkey.

Table II.2 Key macroeconomic indicators of South-Eastern European countries1

A. GDP and inflation

(annual percentage changes)

(I		0 /												
				GDP							Inflation			
Country	2008	2009	2010	2011 (estimate)	Q1 2012	Q2 2012	2012 (forecast)	2008	2009	2010	2011 (estimate)	H1 2012	Jan Sept. 2012	2012 (forecast)
Albania	7.5	3.3	3.5	3.0	-0.2	2.0	0.5	3.4	2.2	3.6	3.5	2.2	2.6	2.1
Bosnia- Herzegovina	5.6	-2.9	0.7	1.3	-	-	0.1	7.4	-0.4	2.1	3.7	1.6	2.5	1.9
Bulgaria	6.2	-5.5	0.4	1.7	0.9	1.0	0.8	12.0	2.5	3.0	3.4	1.6	3.4	2.8
Croatia	2.1	-6.9	-1.4	0.0	-1.3	-2.1	-1.9	6.1	2.4	1.0	2.3	3.8	5.0	3.0
FYROM	5.0	-0.9	2.9	2.8	-1.3	-0.9	0.8	8.4	-0.8	1.5	3.9	2.1	5.3	3.5
Montenegro	6.9	-5.7	2.5	3.2	-2.4	0.3	0.2	9.0	3.6	0.7	2.9	3.9	4.4	3.2
Romania	7.3	-6.6	-1.6	2.5	0.3	1.2	0.8	7.8	5.6	6.1	5.8	2.0	5.3	3.5
Serbia	3.8	-3.5	1.0	1.6	-1.3	-0.6	-0.5	12.4	8.1	6.2	11.1	5.5	10.3	7.1
Turkey	0.7	-4.8	9.2	8.5	3.3	2.9	3.0	10.4	6.3	8.6	6.5	9.4	9.2	9.1

B. Current account and fiscal balance

(as percentage of GDP)

			Cui	rrent accou	ınt					Fiscal l	balance		
Country	2008	2009	2010	2011 (estimate)	Q1 2012	H1 2012	2012 (forecast)	2008	2009	2010	2011 (estimate)	H1 2012	2012 (forecast)
Albania	-15.1	-14.0	-11.4	-12.3	-12.4	-10.9	-11.8	-5.5	-7.0	-3.1	-3.5	-1.6	-3.9
Bosnia- Herzegovina	-14.1	-6.3	-5.7	-8.8	-15.0	-14.7	-8.0	-2.2	-4.4	-2.5	-3.1	-	-2.5
Bulgaria	-23.0	-9.0	-0.4	1.7	-1.1	-1.2	-1.6	1.7	-4.3	-3.1	-2.0	0.5	-1.5
Croatia	-9.0	-5.2	-1.1	-0.9	-0.9	-0.5	-1.2	-1.4	-4.2	-5.0	-5.1	-	-4.4
FYROM	-12.8	-6.8	-2.1	-2.7	-1.6	-2.0	-3.6	-1.0	-2.7	-2.5	-2.5	-2.2	-3.5
Montenegro	-50.6	-29.6	-24.6	-19.6	-20.6	-20.7	-20.1	-0.4	-5.7	-4.9	-5.4	-3.7	-4.0
Romania	-11.6	-4.2	-3.9	-4.1	0.5	-	-4.1	-4.8	-9.0	-6.8	-5.5	-	-2.8
Serbia	-21.5	-7.1	-7.4	-9.5	-16.8	-10.3	-11.5	-2.6	-4.5	-4.7	-4.2	-7.1	-5.3
Turkey	-5.7	-2.2	-6.4	-10.0	-9.3	-8.3	-8.0	-2.2	-6.9	-2.6	-2.0	-	-2.4

Sources: National central banks, European Commission, EU Candidate and Pre-accession Countries Economic Quarterly - CCEQ March 2012 and European Economic Forecast - Autumn 2012, European Bank for Reconstruction and Development – EBRD, Regional Economic Prospects, October 2012, and IMF, World Economic Outlook, October 2012.

1 Estimates for 2011 and forecasts for 2012 are expected to be revised.

countries, growth rates remained positive, though registering significant deceleration, with the exception of Romania, whose growth rate improved considerably in the second quarter of 2012 against the first quarter. However, it is not considered sustainable, mainly because of the adverse external environment. The growth rate in Turkey, which slowed down significantly compared to last year mainly because of weaker domestic demand, remains the highest in the region (see Table II.2).

• The decline in inflation, which began at around mid-2011, seems to be drawing to an end, as there is clear evidence of a rekindling of inflationary pressures in most countries, especially in the third quarter of 2012. This development was primarily the result of the increase in food and energy prices in international markets, while in certain countries it also reflects the scant harvest in summer (mainly in Romania and Serbia). In Serbia, the weakening of the domestic currency further intensified infla-

Table II.3 Key banking indicators in selected South-Eastern European countries

		(CAR (%)				Loans	s/deposit	s (%)			NP	L ratio (%)	
Country	2008	2009	2010	2011	Jan Aug. 2012	2008	2009	2010	2011	Jan Aug. 2012	2008	2009	2010	2011	Jan Aug. 2012
Albania	17.5	-	16.2	15.6	15.7	61.5	64.8	60.1	61.3	57.7	6.6	10.5	14.0	18.8	22.4
Bulgaria ¹	14.9	17.0	17.5	17.5	15.4	117.1	118.0	111.2	102.4	98.8	11.5	13.6	11.9	14.9	16.9
FYROM	15.9	16.4	16.4	16.7	14.7	100.7	98.2	89.5	89.0	91.0	7.2	8.8	9.3	9.7	9.3
Romania ¹	13.8	14.7	14.7	14.9	14.7	130.8	119.2	118.0	119.1	117.7	6.5	7.9	11.9	14.3	16.8
Serbia ²	21.9	21.4	19.9	19.1	19.1	115.8	116.5	131.3	129.8	133.9	11.3	15.7	16.9	19.0	19.0
Turkey	18.0	20.6	19.0	16.5	16.3	80.8	76.0	84.8	98.2	103.3	3.7	5.3	3.7	2.7	2.8

Source: National central banks.

1 The latest available published data on CARs and NPL ratios refer to June 2012.

tionary pressures, while inflation shows a declining trend in Turkey, mainly due to the restrictive stance of monetary policy (see Table II.2).

- Developments in the external sector are mixed. In some countries, e.g. Albania and Romania, the current account balance has improved while in others it is set to deteriorate, mainly because of a worsening of the trade balance. Especially in Turkey, the external deficit, in spite of its decrease, remains large and constitutes a main source of vulnerability (see Table II.2). Finally, higher risk aversion by foreign investors is significantly limiting the inflow of capital, thus negatively affecting growth prospects and the financing of current account deficits.
- The results of the fiscal adjustment effort are mixed. Bulgaria has a particularly sound fiscal position, as the state budget is in surplus, while public deficit has diminished considerably in Romania. On the other hand, deficits are widening in Turkey and Serbia (see Table II.2).
- The significant slowdown in the growth rate in most countries allowed monetary easing (a policy that began in the second half of 2011) also during the first half of 2012, with the exception of Serbia, where downward pressures on the domestic currency forced the monetary authority to raise interest rates.

• The banking system of South-East European countries is relatively sound. Nonetheless, problems still exist as regards the quality of banks' assets, while the non-performing loan ratio has been increasing (it reached 14.5% on average in August 2012). Turkey is an exception due to the robust economic recovery (see Table II.3).

As mentioned above, the persistent debt crisis in euro area countries and signs of a mild economic downturn create a highly adverse external environment for the short-term growth prospects of South-East European countries. The greatest risk however arises from the financial system, primarily due to banks' high degree of dependency on large European banking groups. The dependency ratios of the banking systems in these countries (with the exception of Turkey) range between 40% and 90%. The capital pressures exerted on euro area parent banks are also felt by their subsidiaries in South-East Europe, because of the growing tendency of parent banks to withdraw a part of their funds from their subsidiaries.⁶ Even though this tendency appeared particularly strong after the second half of 2011, it

6 According to the IMF (Global Financial Stability Report, April 2012), by the end of 2013 the balance sheets of large European banking groups are expected to shrink by about 7%. In spite of the fact that most of the reduction is expected to result from a withdrawal of their funds from "other activities", their subsidiaries in SE Europe will not remain unaffected.

² The latest available published data on CARs and NPL ratios refer to December 2012.

subsequently weakened, as liquidity conditions in the euro area improved following the 3-year longer-term refinancing operations in December and March. In addition, it should be noted that a considerable part of this withdrawal of funds is offset by the observed tendency of bank deposits to increase. Finally, a particularly positive development is the recent decision by the European Central Bank regarding the possibility – under strict conditionality – of unlimited purchase of short-term sovereign bonds from euro area countries that face problems in obtaining credit. To the extent that this initiative will reassure markets and will help defuse the debt crisis, it could contribute to the resumption of inflows for foreign investment and the improvement of growth prospects in the South-East European countries from 2013 onwards.

3 THE EUROSYSTEM'S SINGLE MONETARY POLICY

- In the first half of 2012, the Eurosystem key interest rates remained unchanged, following the 25 basis points decreases in November and December 2011 (see Table II.4). The Governing Council of the ECB decided to keep the key interest rates unchanged, as price stability was expected to prevail in the medium term, despite the emergence of short-term inflationary pressures stemming mainly from the increases in energy prices and indirect taxes.
- In July 2012, the key rates were cut by 25 basis points and, as a result, the interest rate on the main refinancing operations came to 0.75%.⁷ The Governing Council of the ECB opted for this reduction in policy rates based on its assessment that the economic activity outlook in the euro area had been adversely affected, resulting in a moderation of inflationary pressures, mainly due to renewed tensions in some sovereign bond markets. Of particular importance for the decision to cut interest rates was the fact that, in its monetary analysis, the Governing Council of the ECB identified that the underlying pace of monetary expansion⁸ remained subdued.
- Euro area GDP declined in the second and the third quarter of 2012. Ongoing tensions in financial markets and heightened uncertainty contributed to the weakening of consumer and business confidence and, in some Member States, to reduced credit supply, while economic activity was adversely affected also by the conduct of restrictive fiscal policies in many EMU countries. Despite the fact that the single monetary policy and the non-standard measures support economic activity, the Governing Council expects that recovery will be slow and start after the end of the year. In fact there exist various factors with a dampening effect on economic activity in the euro area. These include: a) tensions in certain sovereign bond markets, which cause financing conditions to deteriorate not just for governments but for the private sector as well, b) the process of balance sheet adjustment in the financial and non-financial sectors, which leads to a decline in both supply and demand for bank loans (in an attempt to improve banks' capital ratios and reduce private sector's over-indebtedness respectively) and, consequently, to a lower level of total expenditure that can be financed, c) high unemployment in the euro area, which has a negative effect primarily on private consumption, and d) the fact that the major trading partners of the euro area are not expected to recover fast.
- Inflation decelerated moderately from 2.7% in December 2011 to 2.5% in October 2012. The Governing Council of the ECB expects that inflation will remain above 2% until the end of the year, before declining to below 2% during 2013. Over the medium term, inflation is expected to remain at levels consistent with price stability. Indeed, inflationary pressures are expected to remain weak, given the stability of long-term inflation expectations and the slug-

⁷ The interest rate on the deposit facility was reduced to zero – i.e. credit institutions' deposits with the Eurosystem do not bear any interest under this facility.

⁸ The underlying pace of monetary expansion is calculated by the ECB using various alternative methods (see ECB, Monthly Bulletin, May 2008, Box 1, p. 15) and is not published. This measure is considered to be more closely linked with the evolution of inflation than the change in M3, taking into consideration the time lags.

Table II.4 Changes in key ECB interest rates

(percentages per annum)

			Mai	n refinancing operations	
With 6	effect from:1	Deposit facility	Fixed rate tenders (fixed rate)	Variable rate tenders (minimum bid rate)	Marginal lending facility
2000	6 October	3.75	-	4.75	5.75
2001	11 May	3.50	-	4.50	5.50
	31 August	3.25	-	4.25	5.25
	18 September	2.75	-	3.75	4.75
	9 November	2.25	-	3.25	4.25
2002	6 December	1.75	-	2.75	3.75
2003	7 March	1.50	-	2.50	3.50
	6 June	1.00	-	2.00	3.00
2005	6 December	1.25	-	2.25	3.25
2006	8 March	1.50	-	2.50	3.50
	15 June	1.75	-	2.75	3.75
	9 August	2.00	-	3.00	4.00
	11 October	2.25	-	3.25	4.25
	13 December	2.50	-	3.50	4.50
2007	14 March	2.75	-	3.75	4.75
	13 June	3.00	-	4.00	5.00
2008	9 July	3.25	-	4.25	5.25
	8 October	2.75	-	-	4.75
	9 October	3.25	-	-	4.25
	15 October	3.25	3.75	-	4.25
	12 November	2.75	3.25	-	3.75
	10 December	2.00	2.50	-	3.00
2009	21 January	1.00	2.00	-	3.00
	11 March	0.50	1.50	-	2.50
	8 April	0.25	1.25	-	2.25
	13 May	0.25	1.00	-	1.75
2011	13 April	0.50	1.25	-	2.00
	13 July	0.75	1.50	-	2.25
	9 November	0.50	1.25	-	2.00
	14 December	0.25	1.00	-	1.75
2012	11 July	0.00	0.75	_	1.50

Source: ECB.

1 From 10 March 2004 onwards, with the exception of the interest rate changes of 8 and 9 October 2008, changes in all three key ECB interest rates are effective from the first main refinancing operation following the Governing Council decision, not the date of the Governing Council meeting on which this decision is made.

gish economic activity in the euro area. Besides, these conditions are unlikely to favour the emergence of second-round effects. Moreover, in the event of renewed financial market tensions, a development that could possibly occur unless all European economic policy makers take appropriate action, a further weakening of

economic activity and, hence, of inflationary pressures cannot be ruled out. According to the

⁹ Namely, widening of profit margins or wage increases in an attempt to offset the negative effect of price hikes on the purchasing power of firms and workers.

¹⁰ For instance, if governments do not take appropriate measures to contain fiscal imbalances.

Table II.5 Eurosystem's open market operations in 2012*

1. Main and longer-term refinancing operations:

1.1	Main refinancing operations
	(MRO): provision of liquidity
	with a maturity of one week

Frequency: Once a week. Procedure: At least until 15 January 2013, fixed-rate tender with full

1.2 Longer-term refinancing operations (LTRO):

1.2.1 Provision of liquidity with a
maturity of one mainte-
nance period

Frequency: Once at the beginning of each maintenance period. These operations will continue to be conducted for as long as needed. Procedure: Fixed-rate tender (at a rate equal to the MRO rate) with full allotment.

1.2.2 Provision of liquidity with a maturity of three months

Frequency: Once a month (usually at end-month). Procedure: At least until December 2012, a fixed-rate tender was conducted with full allotment and an interest rate set ex post equal to the average value of the fixed rate of the MROs conducted during the life of the respective LTRO.

1.2.3 Provision of liquidity with a maturity of thirty-six months One LTRO was conducted with a maturity of 36 months on 1 March 2012 (settlement date). Procedure: Fixed-rate tender with full allotment and an interest rate set ex post equal to the average value of the fixed rate in the MROs conducted over the life of the respective LTRO. Credit institutions are given the option of an early partial or total repayment of the funds they will raise a year later.

2. Outright purchases of securities:

2.1 Securities Markets Programme

The Governing Council of the ECB decided on 9 May 2010 to launch the Programme and on 6 September 2012 to discontinue it. By the end of the Programme, the Eurosystem had purchased securities of a total value of €209 billion.** The Eurosystem will hold these securities to maturity.

2.2 Outright Monetary Transactions

On 6 September 2012, the Governing Council of the ECB announced that the Eurosystem may purchase sovereign bonds with a maturity of 1-3 years on secondary markets, without pre-defined quantitative limits. A prerequisite is that the issuing Member State is subject to an economic adjustment programme by the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM) and complies with the terms and conditions of the programme, provided that this includes the possibility of EFSF/ESM primary market purchases.

2.3 New covered bond purchase programme

The Governing Council of the ECB decided on 6 October 2011 to implement this programme from November 2011 to end-October 2012. By the end of the programme, the Eurosystem had purchased covered bonds to a total value of €16 billion. The Eurosystem will hold these bonds to maturity.

3. Fine-tuning operations:

overall liquidity of the banking sys-Securities Markets Programme

3.1 Liquidity absorption on a weekly basis to sterilise the effect, on the discontinuation of the SMP (following which new purchases are no longer possible). Procedure: Collection of weekly deposits from credit institutions through variable-rate tenders with a tem, of purchases made under the maximum bid rate equal to the MRO fixed rate.

February 2012 (settlement date)

3.2 Provision of overnight liquidity on 29 The purpose of this operation was to avert liquidity fluctuations as on 29 February 2012 credit institutions had to repay the amounts raised through the MRO of the previous week, while raising new liquidity through LTROs with a maturity of 36 months was only possible a day later.

4. US dollar liquidity-providing operations:

4.1 Operations with a maturity of one

Procedure: Fixed-rate tender with full allotment against collateral eligible for the Eurosystem's credit operations in euro

4.2 Operations with a maturity of three

months

The table was compiled on the basis of data and information available until early November 2012.

** Excluding repayment.

ECB staff macroeconomic projections published in September 2012, annual inflation will range between 2.4% and 2.6% in 2012 and between 1.3% and 2.5% in 2013.

• The Governing Council of the ECB finds the exceptionally high risk premia (related to fears of the reversibility of the euro) observed in

government bond prices in several countries unacceptable. The Governing Council of the ECB stresses that the euro is irreversible and that the phenomenon of incorporating excessive risk premia in yields must be eradicated. More specifically, addressing excessive risk premia is necessary, since the effective functioning of monetary policy is hampered by the

fragmentation of financial markets. An aspect of fragmentation is the considerably lower supply of interbank loans especially across member countries, as well as the ensuing significant and unjustified divergence¹¹ of interest rates on bank loans to enterprises and households. The fragmentation of financial markets is generated by tensions fuelled by the abovementioned unfounded fears of an impending reintroduction of national currencies.

- The primary objective of the ECB is to maintain price stability in the euro area over the medium term. In order to fulfill this obligation, the Governing Council must ensure the transmission of monetary policy impulses throughout the euro area, which is, however, undermined by the abovementioned financial market fragmentation. With a view to addressing dysfunctions that impair the monetary policy transmission mechanism, the Governing Council of the ECB introduced in September 2012 the possibility to conduct outright purchases of government bonds (Outright Monetary Transactions - OMTs) of an amount adequate to restore the smooth functioning of financial markets. The introduction of Outright Monetary Transactions (as opposed to their activation, which has not taken place yet, since the required conditions are not fulfilled) contributed to the attenuation of tensions in sovereign bond markets in September-October 2012.
- Securities issued by Member States having recourse to the European Financial Stability Facility (EFSF) for financial support will be eligible for purchase by the Eurosystem. ¹² In view of the upcoming mobilisation of the European Stability Mechanism (ESM), securities

that will be (or have already been) issued by Member States having recourse to this mechanism for financial support will also become eligible. A necessary condition is the compliance of the Member State with the terms of the economic adjustment programme¹³ to which it is subject. Correspondingly, full compliance will also be required in the case of Member States receiving precautionary financial assistance via an enhanced conditions credit line from the European Stability Mechanism (ESM).14 In order for the Eurosystem to conduct OMTs, the economic adjustment programme should explicitly stipulate that the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM) may purchase sovereign bonds on the primary market of the Member State concerned. In the context of OMTs, the Eurosystem will be able to carry out outright purchases of securities issued by a given Member State in addition to any purchases of securities of the same Member State by the European Financial Stability Facility (EFSF) or the European Stability Mechanism (ESM).

- 11 Namely, interest rate differentials cannot be exclusively attributed to cross-country differences in the determinants of credit supply or demand.
- 12 Securities issued by Member States already under joint EU/IMF adjustment programmes may become eligible for Outright Monetary Transactions as soon as these Member States start regaining access to the international markets for medium- and long-term funds.
- 13 Outright purchases will be suspended over the assessment of the Member State's compliance with the terms of the economic adjustment programme.
- 14 According to the Treaty establishing the European Stability Mechanism (ESM), this mechanism uses the following financial assistance instruments: a) precautionary financial assistance, b) financial assistance for the recapitalisation of financial institutions, c) loans to ESM members, d) support to the government bond primary market of ESM members, e) support to the government bond secondary market of ESM members. In particular, precautionary financial assistance takes the form of a precautionary conditioned credit line, or the form of an enhanced conditions credit line, detailed in the Memorandum of Understanding.

Box II.3

WHAT IS THE RATIONALE BEHIND AND WHICH ARE THE PROSPECTS OF THE CREATION OF A EURO-PEAN BANKING UNION?

One of the key underlying causes of the sovereign debt crisis, as evidenced by Ireland and Spain, was the need for large-scale government bailouts to address financial system failures.

In order to prevent any future vicious circles between banks and vulnerable sovereigns in the EU, a European Stability Mechanism (ESM) should act as a financial backstop to directly recapitalise ailing banks. But this would require an ongoing assessment of individual bank soundness by European rather than national authorities, given that the ESM is partly financed by euro area country contributions.

An analysis of recent experience¹ leads to the conclusion that banking supervision by certain national authorities (Ireland and Spain are often cited as examples) could not prevent an excessive expansion of domestic bank credit in certain Member States, sometimes underpinned by relaxed credit standards and a generally inadequate assessment of borrowers' creditworthiness. Actually, actions taken by certain supervisory authorities supported the expansion of business growth for domestic credit institutions considered to be of national significance.

The ensuing acceleration of total credit expansion in these economies initially triggered unjustified hikes in real estate prices, followed, as usual, by abrupt price corrections, severe financial distress for borrowers and a multitude of loan defaults. At the same time, this rapid credit expansion resulted in a widening of current account deficits in these countries because it contributed to a surge in the private sector's import bill while also fuelling domestic inflation and, hence, losses in international competitiveness. A more efficient prudential supervision would help prevent the accumulation of such macroeconomic imbalances, which negatively affected the operation of the Monetary Union as a whole. Chances of recurrence of such phenomena could be minimised with the establishment of a supranational mechanism that would perform stricter and more consistent prudential supervision of banks than national mechanisms and that would implement commonly applicable rules in a more uniform way across Member States.

Given that for years, banks in Member States at the heart of the sovereign debt crisis had been raising funds through the inter-Member State interbank and bank bond markets or through intra-group transactions, supranational banking supervision is also necessary in order to bolster banking system discipline and overall control by supervisory authorities in core euro area countries.

In the context of the Monetary Union there is increased interconnectedness² between individual euro area financial markets. It also is well-known that over the past decades, a large number of banks have grown significantly in size and expanded their business across several countries. Interconnected domestic markets and larger banks foster economic prosperity: market interconnectedness is a typical feature of financial integration and bank size growth improves financial system efficiency through economies of scale and scope. Nevertheless, close interconnectedness between financial markets (mainly money markets) and the operation of banking groups across national borders also result in financial contagion.

When prudential supervision is exercised from a strictly national perspective, aiming at purely national objectives, it may not take sufficient account of the risk of adverse developments in domestic banks affecting the financial systems of other Member States. In this sense, the finan-

¹ See speech delivered by the Vice-President of the ECB, 7.9.2012 (http://www.ecb.int/press/key/date/2012/html/sp120907.en.html).

² However, this interconnectedness is slowly declining (see below).

cial stability of the euro area - or, more generally, the EU- will be more effectively safe-guarded by assigning prudential supervisory competence to a pan-European authority. Such an authority will not only put objectives and priorities in the right order but will also have an information advantage, as it will be in a position to correlate every piece of information (currently simultaneously notified to some, rather than all, euro area supervisory authorities).

Similarly, the resolution of very large banks active at a cross-border level, when they cease to be viable, is sometimes hampered by a lack of communication and coordination between competent national authorities. This will become easier and faster through a supranational mechanism, which could also help reduce total resolution costs. But also in the case of credit institutions with no cross-border activities, the transfer of competence to the supranational level will help overcome difficulties often caused by local interests opposed to bank liquidation.

As mentioned above, euro area financial market integration boosts economic prosperity because it facilitates optimal resource allocation among alternative investment opportunities in different member countries and multiplies opportunities for a diversification of assets held by economic agents, hence significantly minimising risk. It also enables uniform transmission of the single monetary policy in all euro area member countries, i.e. it allows similar levels of capital costs for banks, enterprises and households and, more generally, uniform financing conditions across the euro area.

As mentioned above, the sovereign debt crisis has fragmented euro area financial markets, resulting in (i) fewer cross-border bank transactions between member countries, (ii) fewer branch and subsidiary establishments in non-home countries and (iii) a reversal of banks' practice to hold debt securities issued by various euro area sovereigns.⁴

A serious disruption in the monetary policy transmission mechanism can be seen in interest rate differentials between money markets (which are now, to some extent, local), significant bond yield spreads and high deposit and lending rate differentials between Member States. These differences among countries are unacceptable, insofar as they cannot be fully explained by differences in credit risk (and in the case of retail markets, other local parameters), but are rather fuelled by speculation about a return to national currencies. The introduction of a single supervisory mechanism, a single recovery and resolution framework and a common deposit guarantee scheme is regarded as a means to effectively tackle undesirable developments in the long run.⁵ Such institutional reforms would indeed ease market concerns about the solvency of certain banks, given that consolidated supervision would be more reliable.

On the other hand, strengthening the protection offered by national deposit guarantee schemes through some form of integration would limit mass migration of deposits from the periphery to the core of the euro area. More generally, the creation of a European deposit guarantee scheme would step up financial integration, as it would lead to further convergence of the features of bank deposits across member countries. Of particular importance is the

³ In the past few years, information exchange has been established between national prudential supervisory authorities, but information will be communicated more effectively within the framework of a single supervisory mechanism.

⁴ By contrast, over the past two years, bank holdings of domestic sovereign debt rose as part of efforts to support governments faced with fiscal problems. This development results in stronger interdependence between public finances and bank robustness, thus aggravating the impact of fiscal problems on the domestic financial system.

⁵ In the short run, the consequences of the fragmentation of euro area financial markets will be mitigated through the Eurosystem's Outright Monetary Transactions.

fact that integrated national deposit guarantee schemes would dispel concerns about the actual ability to reimburse depositors in the event of simultaneous bank failures in sovereigns under severe stress and with limited capacity to fund national guarantee schemes through the state budget.⁶

For all these reasons, the ECB has argued that it is necessary to address certain structural weaknesses in the initial design of the Monetary Union. To this end, the ECB President, together with the Presidents of the European Commission and the Eurogroup, participated in the elaboration of the European Council President's report "Towards a genuine Economic and Monetary Union". This report was submitted to the European Council of 28-29 June 2012 (see also Box II.1) and outlines key institutional reforms aimed at strengthening the Monetary Union, including the creation of an integrated financial framework, namely a banking union.

On the basis of this report, an integrated financial framework should have two central elements: single European banking supervision and a common deposit insurance and resolution framework. Banking supervision should be conducted not only at national, but also at European level, which should have ultimate responsibility. Such a system would ensure that the supervision of banks in all EU Member States is equally effective in reducing the probability of bank failures and preventing the need for intervention by joint deposit guarantees or resolution funds.

The European level should be given pre-emptive intervention powers applicable to all banks, but its direct involvement would vary depending on the size and nature of banks.

More particularly, the Treaty on the Functioning of the European Union already provides for specific tasks relating to prudential supervision of credit institutions to be conferred upon the European Central Bank. These tasks will be performed independently, strictly separate from the ECB's functions relating to monetary policy, and they will be accompanied by greater democratic accountability for the ECB. At the Euro Summit on 29 June, it was decided that when an effective single supervisory mechanism is established for banks in the euro area, the ESM could have the possibility to recapitalise banks directly, provided that it would rely on appropriate conditionality, formalised in a Memorandum of Understanding, which should be institution-specific, sector-specific or economy-wide.

In accordance with the report "Towards a genuine Economic and Monetary Union", a European dimension could be introduced to national deposit guarantee schemes for banks overseen by the European supervision. The introduction of a European dimension will bolster the reliability of existing deposit guarantee schemes in terms of their practical ability to cover insured deposits in all credit institutions.

The European bank resolution scheme, to be created alongside, will be primarily funded by contributions of banks. It will provide assistance in the orderly winding-down of non-viable institutions under European supervision and thereby protect taxpayer funds. The deposit guarantee scheme and the resolution fund could be set up under the control of a common resolution authority. Finally, the report "Towards a genuine Economic and Monetary Union"

 $6 \quad See \ speech \ delivered \ by \ the \ Vice-President \ of \ the \ ECB, \ 7.9.2012 \ (http://www.ecb.int/press/key/date/2012/html/sp120907.en.html).$

points out that the credibility of any deposit guarantee scheme requires access to a solid financial backstop and proposes that the European Stability Mechanism (ESM) could act as the fiscal backstop to the resolution and deposit guarantee authority in the euro area.

The European Council of 18-19 October 2012 called upon competent European institutions to proceed with work on the legislative proposals on the Single Supervisory Mechanism (SSM) as a matter of priority, with the objective of agreeing on the legislative framework by 1 January 2013 and of clarifying the operational implementation framework in the course of 2013. In particular, it stressed that it is of paramount importance to establish a single rulebook underpinning the centralised supervision. The European Council of 18-19 October 2012 also looked into ensuring a level playing field between those Member States which take part in the SSM and those which do not (Member States outside the euro area). It called for the rapid adoption of the provisions relating to the harmonisation of national resolution and deposit guarantee frameworks, and noted the Commission's intention to propose a single resolution mechanism for Member States participating in the SSM. Finally, it confirmed that the ESM could recapitalise banks directly.

• The impact of OMTs on liquidity will be fully sterilised. This means that, as was the case with the Securities Markets Programme, an increase in liquidity owing to the outright purchases of securities by the Eurosystem will be offset through other open market operations that will result in an equal decrease in the liquidity of the banking system. Sovereign bonds purchased by the Eurosystem under OMTs will have a residual maturity of between one and three years. OMTs will be conducted in the secondary market and, contrary to the practice followed in the context of the Securities Markets Programme, the amount of purchases and the Member States whose debt securities will be purchased by the Eurosystem will be made known to the public. Concerns have occasionally arisen that in the event of restructuring of a Member State's sovereign debt -all the more so in the event of default - losses will not

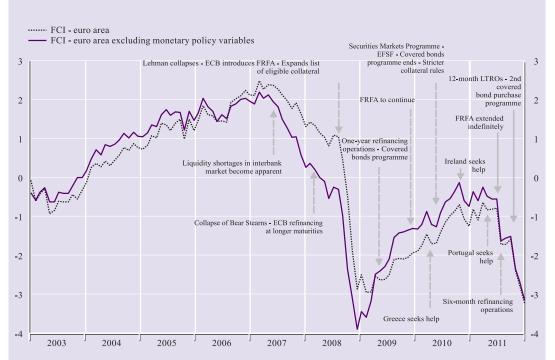
be equally distributed between individuals that have invested in the bonds of the Member State concerned, on the one hand, and the Eurosystem which also holds a portfolio of sovereign bonds, on the other. Until recently, there was a market perception that, in case of a credit event, the losses of the Eurosystem would be minimised and, as a result, individuals holding government bonds involved in the credit event would suffer relatively greater losses than if these losses had been equally distributed between private investors and the Eurosystem. Aiming at dissipating these concerns, the Governing Council of the ECB announced that the Eurosystem will not have priority over the other bondholders in the repayment of the government bonds it acquires through OMTs but, on the contrary, it will accept the same (pari passu) treatment as other bondholders.

Box II.4

FINANCIAL CONDITIONS IN GREECE AND THE EURO AREA

The single monetary policy aims at maintaining similar financial conditions across the euro area and is based on the assumption that, under normal circumstances, financial markets facilitate the transmission of monetary policy to the real economy. After the collapse of the

Chart A Euro area financial conditions index (FCI)



Source: Bank of Greece.

Lehman Brothers, central banks around the world cut interest rates and increased the provision of liquidity to the financial system. The European Central Bank acted likewise. However, the ensuing debt crisis in the euro area led to a divergence in the financial conditions across euro area countries. Thus, the ECB rationale for the recently announced interventions through the Outright Monetary Transactions programme was to maintain the integrity of monetary policy and ensure the proper functioning of the transmission mechanism to the real economy.¹

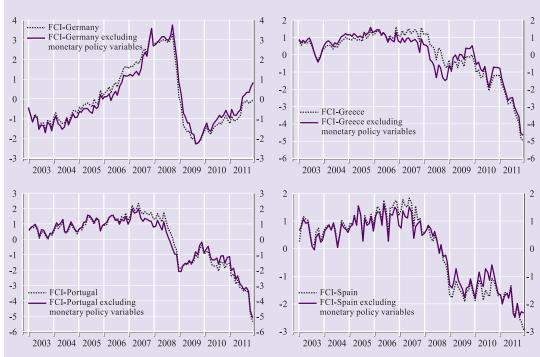
Recent research at the Bank of Greece demonstrates the heterogeneity of financial conditions in the countries of the euro area.² Chart A shows a financial conditions index³ for the euro area as a whole and Chart B illustrates corresponding indices for selected member countries including Greece. It seems that the financial conditions deteriorated sharply in the euro area and Germany, immediately after the collapse of Lehman Brothers. By contrast, the deterioration in the countries of the "South" under review was less pronounced. Then, financial conditions in the euro area and Germany recovered, while there was significant deterioration in southern countries due to the outbreak of the debt crisis.

¹ See introductory statement after the meeting of the Governing Council of the ECB on 6 September, 2012. (http://www.ecb.int/press/pressconf/2012/html/is120906.en.html).

² See Eleni Angelopoulou, Hiona Balfoussia and Heather D. Gibson, "Building a Financial Conditions Index for the Euro Area and Selected Euro Area Countries: what does it tell us about the crisis?", Bank of Greece Working Paper no. 147, 2012.

³ Financial conditions indices are compiled according to the Principal Components Analysis. The variables incorporated include – among other things – interest rates, spreads, volatility in financial markets, developments in credit aggregates and qualitative information from the Bank Lending Survey for the period 2003- 2011, which is published by the ECB.

Chart B Financial conditions index (FCI) for selected euro area countries (clockwise, up left: Germany, Greece, Spain, Portugal)



Source: Bank of Greece.

Banks in Greece, Portugal and, to a lesser extent —at least until the end of 2011— Spain were under considerable strain, as they were excluded from the international money markets and/or experienced a slow but steady outflow of deposits. Banks were also under the pressure of reducing the loan-to-deposit ratio which was increasing due to the fact that deposits decreased faster than loans. ECB monetary policy operations, conducted as fixed rate tender procedures with full allotment, should support liquidity in the regional markets. Banks would have been able to replace the liquidity they used to raise through the money market with liquidity raised through the Eurosystem. However, the favourable effect was limited by the fact that some banks were faced with distinct lack of collaterals and thus could not participate in monetary policy operations, as the surge in bond yields and the successive downgrades in the credit ratings of Member States and their banks led to a tightening of the collateral eligibility rules of the Eurosystem and to the exclusion of certain types of collateral.

This research shows that ever since the establishment of the euro area, the monetary policy acted mainly countercyclically (leaning against the wind). Until 2007, financial conditions, including the impact of monetary policy, were tighter than what they would be without monetary policy. Namely, the Eurosystem with its policy prevented a further easing of the already relaxed financial conditions. Similarly, in the crisis that followed the collapse of Lehman Brothers, monetary policy supported economic recovery, as financial conditions had deteriorated sharply. However, the countercyclicality of monetary policy appears con-

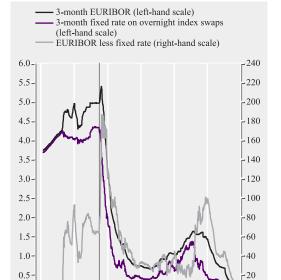
siderably weaker in Greece, Portugal and Spain from 2009 onwards. The recent easing of the single monetary policy does not appear to have led to an equivalent economic recovery in these three countries, in contrast to what happened in the euro area as a whole and the core economies.

With respect to developments in the single money market, Euribor interbank rates registered a significant decline over January-October 2012 (see Chart II.4). This decline in interbank rates was initially fuelled by expectations about key interest rate cuts and was maintained after the reduction in Eurosystem interest rates in July 2012; thereafter, expectations of further key interest rate cuts supported a continuation of the downward trend of interbank rates.

- Of course, a much more significant contribution to the decrease in interbank interest rates was that of the decline in the premium for counterparty risk in the interbank market (incorporated into the Euribor rates) since end-December 2011. The decline in the premium was primarily the result of the additional non-standard monetary policy measures adopted by the Eurosystem in December 2011 and implemented thereafter, in particular, of the two liquidity-providing open market operations with a maturity of 36 months, which were conducted on 22 December 2011 and 1 March 2012.¹⁵
- All main and longer-term refinancing operations -i.e. except for the above-mentioned operations with a maturity of 36 months - with a maturity of one maintenance period, as well as three-month operations over the period of January-October 2012 were conducted as fixed-rate tenders with full allotment. The Eurosystem obtained securities under the Securities Markets Programme during part of the period under review (up to the first quarter of 2012, afterwards the programme became inactive). Finally, on 6 September 2012, the programme was terminated following the introduction of the Outright Monetary Transactions, as discussed above. The new Covered Bond Purchase Programme¹⁶ continued up to

Chart II.4 Euro area money market interest rates and spreads (January 2007-October 2012)

(percentages per annum and basis points; daily data)



Sources: ECB and European Banking Federation. * The vertical line marks the date of the Lehman Brothers bankruptcy (15 September 2008).

2010

2009

2007

2008

The Euribor and fixed overnight swap rate curves refer to the left-hand axis and the curve illustrating developments in the spread between the two rates is shown on the right-hand axis. The presentation of the three curves in a single chart helps the reader to form a qualitative view about whether changes in Euribor are due to changes in the "spread" (which can be explained as the counterparty risk premium) or to changes in the fixed swap rate (reflecting expectations for the overnight rate and, ultimately, for the Eurosystem key rates).

the end of October 2012. Although it was initially announced that the Eurosystem would purchase covered bonds amounting to €40 billion under this programme, in practice a nominal amount of just €16 billion was purchased, in response both to investors' increasing

¹⁵ Taking into account the settlement date, i.e. the date on which the operation directly affects liquidity in the banking system.

¹⁶ The programme was launched in November 2011 and ended in October 2012; the first Covered Bond Purchase Programme was conducted in the period July 2009-June 2010.

demand for these bonds and to the decline in the supply of securities in the covered bond market.

- In mid-January 2012, the reserve ratio ¹⁷ was temporarily reduced from 2% to 1%, in order to increase transactions in the money market and limit the need of credit institutions to raise funds from the Eurosystem and thereby hold eligible collateral. ¹⁸
- Besides, as was also the case in 2011, in June 2012 it was decided to expand the set of collateral eligible for liquidity supply by the Eurosystem. This was effected with a reduction in the minimum credit rating threshold¹⁹ for asset-backed securities (ABS) e.g. (i) residential or commercial mortgage-backed securities, (ii) securities backed by bank loans to small- and medium-sized enterprises, by consumer finance and leasing.
- Moreover, in September 2012, it was announced that the application of the lowest acceptable credit rating threshold would be suspended in the case of debt securities issued or guaranteed by central governments (i) of Member States that are subject to an economic adjustment programme under the guidance and with the financial support of the European Union and the IMF, as long as these Member States comply with the terms agreed under the adjustment programme, and (ii) of Member States eligible for conducting Outright Monetary Transactions.²⁰ In addition, instruments denominated in major currencies (US dollar, pound sterling, Japanese yen), which had been issued and held in the euro area, were temporarily added in the list of eligible collateral.
- As regards marketable debt instruments issued or fully guaranteed by the Hellenic Republic, on 28 February 2012 the Governing Council of the ECB decided to temporarily suspend their eligibility as collateral in Eurosystem monetary policy operations. Subsequently, on 8 March 2012 it was decided that these instruments will once again be accepted as collateral by the Eurosystem, given the acti-

vation of the buy-back scheme, provided to underpin their quality. Upon termination of these measures on 25 July 2012, these debt instruments ceased again to be accepted as collateral temporarily, as they did not meet the lowest acceptable credit rating threshold set by the Eurosystem. The Governing Council of the ECB will review their inclusion in the list of eligible collateral after an assessment by the European Commission, in cooperation with the ECB and the IMF, of the progress of the Greek economy in the context of its second adjustment programme. In the meantime, liquidity needs of Eurosystem counterparties that have been affected by the exclusion of the

- 17 In the context of reserve requirements, credit institutions must hold an interest-bearing deposit with the Eurosystem (other than their deposits under the deposit facility). More specifically, the interest rate on the reserve requirements is equal to the (fixed) rate of main refinancing operations. The relevant maintenance periods are set in advance and do not coincide with calendar months but last approximately 30 days. The level of each credit institution's reserve requirement held with the respective NCB must not fall short of the minimum reserve ratio (0.01 since 18 January 2012) multiplied by the sum of a subset of that credit institution's liabilities (e.g. excluding liabilities against other credit institutions and the Eurosystem) as it was on the last day of the month before last. In case a credit institution's average reserve requirement during a maintenance period falls short of the required level, the ECB may impose sanctions. The credit institution's ability to maintain its reserve requirements on average during a maintenance period (allowing for daily fluctuations of the reserve requirement level) normally contributes to the stabilisation of money market interest rates. Moreover, under normal conditions, the reserve requirement facilitates the central bank in influencing money market interest rates, as it helps create a shortage of liquidity, which means that commercial banks necessarily rely on the central bank for raising funds, and thus bear the cost entailed by the liquidity supply rates the central bank has set - see "The monetary policy of the ECB", ECB, 2011, pp. 101-104. It should however be noted that the conditions currently prevailing in the single money market are rather atypical, a fact that urges the Eurosystem to supply unlimited liquidity to the credit institutions, and therefore curbs the usefulness of the reserve requirement; hence, room was allowed for reducing
- 18 Indeed, many credit institutions satisfy their minimum reserve requirements by raising funds from the Eurosystem mainly through open market operations. In order to receive funding, they are required to pledge eligible collateral. Therefore, a lower level of reserve requirements releases eligible collateral (a shortage of which is observed in the euro area as a whole), so that it can be used by credit institutions for other purposes. On the other hand, the underlying rationale of the decision to reduce the reserve ratio was that some credit institutions would allocate the liquid assets no longer earmarked for reserve requirements to interbank loans and this would boost transactions in the interbank market.
- 19 The Eurosystem sets the lowest acceptable credit rating and does not accept assets with a credit rating lower than the minimum rating threshold.
- 20 Consequently, the Eurosystem accepts these debt securities as collateral irrespective of the credit rating assigned to them by rating agencies. A key aspect for the acceptance or not of these assets by the Eurosystem is the compliance of the issuing Member State with the terms of the adjustment programme (or, in the future, with the enhanced conditions of the precautionary financial assistance granted by the European Stability Mechanism ESM).

above debt instruments²¹ from the list of eligible collateral can be satisfied by the relevant national central banks in line with relevant Eurosystem arrangements.²²

- In general, with the implementation of nonstandard monetary policy measures, and in particular the conduct of the two longer-term refinancing operations with a maturity of 36 months, the supply of liquidity rose considerably. In January-October 2012, liquidity²³ followed an upward trend: the total average daily supply of liquidity in October 2012 (about €1,210 billion, on the basis of published data) seems to be almost double than in December 2011.
- At the same time, in the first half of 2012, credit institutions' deposits with the Eurosystem (under the deposit facility)²⁴ kept rising. In particular, these deposits increased from an average of about €320 billion in December 2011 to an average of about €770 billion in June 2012. As a result of the cut in Eurosystem key interest rates in early July 2012, these

deposits ceased to bear interest and, consequently, their daily balance registered a sharp decline to about €500 billion on average in July 2012. They did not pick up even in the months that followed – in October they were close to €270 billion on average.

- 21 Namely credit institutions holding Greek government bonds, or Greek bank bonds guaranteed by the Greek government.
- 22 In particular, these debt securities can be used as collateral for the provision of emergency funding by the national central bank of the Member State where the counterparty-credit institution is established.
- 23 Comprising the outstanding amounts of the marginal lending facility, the main refinancing operations, and the longer-term refinancing operations (with a maturity of one maintenance period, 3 months, 12 months and 36 months), plus the total amount of covered bonds purchased under the CBPP and the CBPP2, excluding the purchases of debt securities under the Securities Markets Programme (SMP), as they are not aimed at enhancing liquidity. On the contrary, their effect on liquidity is fully sterilised by means of the weekly collection of deposits by credit institutions of an amount corresponding to the total amount of securities purchased by the Eurosystem since the launch of the Programme (minus the value of matured securities).
- 24 The Eurosystem accepts deposits from credit institutions: a) optional and of an unlimited amount under the deposit facility, and b) compulsory (in the context of the minimum reserve system), the amount of which allows for daily fluctuations but, on average over a maintenance period, is predetermined (see footnote 17), although, in principle, credit institutions can exceed this predetermined amount (excess reserves). The Eurosystem continues to remunerate reserve holdings but only up to the level of the abovementioned compulsory amount.

III MACROECONOMIC DEVELOPMENTS IN GREECE IN 2012 AND PROSPECTS

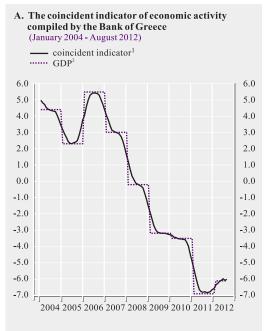
I.I ECONOMIC DEVELOPMENTS AND PROSPECTS

- Recession in 2012 was deeper than what was expected six months ago; it was fuelled, inter alia, by the expansion of the fiscal adjustment programme, the occasional uncertainty triggered by the Grexit scenario, limited liquidity and political uncertainty in Greece during the prolonged dual pre-election period until a government was formed.
- While economic sentiment and consumer confidence indicators recorded small fluctuations and a marginal rise for the largest part of the year including the autumn of 2012, the recently heightened uncertainty about the disbursement of the loan instalment is not conducive to further improvements of economic sentiment or consumer confidence.
- Private consumption is expected to decline by more than 7% in 2012, due to the continuing strong decline in employment, wage cuts in the public and private sectors and the increase in the tax burden that squeezes disposable income. Investment is expected to decline by more than 19% this year, as in 2011.
- The change in net exports is the only factor that has been making a positive contribution to GDP since 2008. Although the main cause is the decline in imports, exports of goods and services (at constant prices) have been increasing almost every quarter since 2010, except for the fourth quarter of 2011, mainly because of the decline in goods exports, and the second quarter of 2012, mainly due to the drop in services exports. For 2012 as a whole, exports of goods and services (at constant prices) are expected to remain roughly at 2011 levels. On the other hand, in the second half of 2012 the decline in imports is estimated to continue at about the same rate. Therefore, the contribution of the external sector will be positive and significant for the entire year.
- Developments on the supply side are characterised by a constant decline in services, and even more so in construction and industry.

- The decline stems both from the decreased activity of enterprises that have managed to survive and from company closures in all sectors
- Business survey data show that, in services, the factors that have caused the position of operating businesses to deteriorate over the past year mainly relate to insufficient working capital and weak demand. In industry, the percentage of businesses facing difficulties (mainly due to the lack of demand, capital equipment and labour force, and insufficient working capital) has increased between 2011 and 2012, but in 2012 the percentage of businesses that are hampered on account of weak demand is lower than in 2011, while the opposite is true for the percentage of businesses faced with insufficient working capital.
- Labour productivity has remained rather unchanged in the first half of 2012, as the marginal improvement in the secondary sector was offset by a decline in the tertiary sector. The level of productivity in total economy continues to be lower than in the second quarter of 2008. This is attributed both to the fact that, in most sectors, productivity is lower than in 2008 and that economic restructuring towards sectors of higher productivity is not yet under way.
- The recovery of consumption and investment will depend on the uncontested confirmation that the country will remain in the euro area and on the normalisation of the financial system. Only if these two conditions are met, will confidence in the future of the economy be restored. Recession will continue, albeit at a milder pace, in 2013. Economic recovery is now expected in 2014.
- Product supply is expected to be also boosted by structural reforms that will contribute to more modern product and labour markets and to a more extrovert economy. Although it is difficult to estimate the effect of

¹ It is difficult to isolate only one factor as the main cause of worsened activity, as all factors interact.

Chart III.I Economic activity indicators



B. The coincident indicator of economic activity compiled by the Bank of Greece and the European Commission's economic sentiment indicator for Greece

(January 2004 - October 2012)

coincident indicator (left-hand scale)¹
 economic sentiment indicator (right-hand scale)²



Sources: Bank of Greece (coincident indicator, as well as GDP for 2012), ELSTAT (GDP 2004-2011) and European Commission (economic sentiment indicator).

- 1 Annualised monthly percentage changes.
- 2 Annual rate of change.
- 3 Monthly data.

reforms during such a deep recession, they are expected to support growth rates in the

medium term (see Chapter VI for the effects of structural reforms on growth).

* * *

Developments in supply

The economic sentiment indicator continues to stand at very low levels, but since the end of 2011 it appears to be on a slightly upward path, which was interrupted in May and June, probably because of the political uncertainty prevailing at the time, and again in September and October due to delays in finalising the new agreement with the Troika. Despite its recent decline, in October 2012 the economic sentiment indicator was about 3 points higher than its 2011 trough.² The coincident indicator of economic activity, compiled by the Bank of Greece (see Chart III.1), confirms this estimate.

• According to available national accounts data, GDP continued to fall in the first half of 2012 (Q1 2012: -6.7%, Q2 2012: -6.3%), albeit at a declining rate.³ However, according to ELSTAT's first estimation (14 November 2012) for the third quarter (-7.2%), the fall seems to have come to a halt,⁴ although this estimation partly reflects relatively strong base effects (revised GDP for Q3 2011).

Disaggregated data show that the fall in GDP in the first half of the year was mainly driven by the 8.4% decline in private consumption (by 6.4 percentage points) and the 20.3% decline in investment (by 3.2 percentage points) (see Table III.1B). On the contrary, net exports had a positive contribution (4.2 percentage points). Compared with 2011 as a whole, the negative contribution of private consumption is higher in 2012, but the negative contribution of public consumption is much lower.

- Seasonally adjusted data.
- 3 ELSTAT has published only the aggregate quarterly data, which correspond to the revision of year-on-year data released in October 2012, and not GDP components. Thus, year-on-year changes in these components (on a quarterly basis) correspond to data before the October 2012 revision.
- 4 ELSTAT data were not adjusted seasonally or for the number of business days.

Table III. IA Demand and gross domestic product (2005-2011)

(2005 constant market prices)

(2005 constant market prices)							
	Value in million euro		Ann	ual percenta	age change		
	2005	2006	2007	2008	2009	2010	2011
1. Private consumption	134,725	4.4	3.6	4.3	-1.6	-6.2	-7.7
2. Public consumption	34,937	3.1	7.1	-2.6	4.9	-8.7	-5.2
3. Gross fixed capital investment	40,020	14.9	22.8	-14.3	-13.7	-15.0	-19.6
3.1 Houses	18,120	14.8	25.6	-33.6	-20.7	-21.6	-18.0
3.2 Other construction	7,036	8.0	4.3	19.5	1.6	-15.7	-25.1
3.3 Equipment	13,043	20.9	27.4	-4.8	-18.4	-8.2	-18.1
3.4 Other	1,821	0.2	29.6	6.0	10.2	-18.6	-16.7
4. Final domestic demand ¹	209,682	6.2	8.1	-1.2	-3.0	-8.3	-7.0
5. Inventories and statistical discrepancy (% of GDP)	1,302	2.0	0.0	1.1	-1.8	-0.3	0.3
6. Final demand	210,984	7.4	6.2	-0.2	-5.5	-7.0	-8.7
7. Exports of goods and services	44,807	4.3	7.1	1.7	-19.4	5.2	0.3
7.1 Exports of goods	20,490	7.8	4.5	-3.0	-15.6	7.6	4.0
7.2 Exports of services	24,317	1.4	9.5	5.7	-22.5	3.2	-3.0
8. Imports of goods and services	62,741	11.1	14.5	0.9	-20.2	-6.2	-7.3
8.1 Imports of goods	51,875	11.4	15.1	-1.3	-21.0	-9.3	-6.4
8.2 Imports of services	10,866	9.8	11.5	12.1	-16.4	6.9	-10.9
9. Balance of goods and services	-17,934						
GDP at market prices	193,050	5.5	3.5	-0,2	-3,1	-4,9	-7.1
	1	Contributio		inge in gros ntage point		product	
1. Private consumption		3.0	2.5	2.9	-1.1	-4.6	-5.6
2. Public consumption		0.6	1.3	-0.5	0.9	-1.7	-1.0
3. Gross fixed capital investment		3.1	5.1	-3.8	-3.2	-3.1	-3.6
3.1 Houses		1.4	2.6	-4.2	-1.7	-1.5	-1.0
3.2 Other construction		0.3	0.2	0.7	0.1	-0.7	-1.1
3.3 Equipment		1.4	2.1	-0.5	-1.7	-0.6	-1.3
3.4 Other		0.0	0.3	0.1	0.1	-0.3	-0.2
4. Final domestic demand ¹		6.7	8.9	-1.3	-3.4	-9.4	-10.1
5. Inventories and statistical discrepancy		1.4	-2.0	1.1	-2.9	1.5	0.6
6. Final demand		8.1	6.9	-0.3	-6.3	-7.8	-9.5
7. Exports of goods and services		1.0	1.6	0.4	-4.7	1.0	0.1
7.1 Exports of goods		0.8	0.5	-0.3	-1.7	0.7	0.4
7.2 Exports of services		0.2	1.1	0.7	-3.1	0.3	-0.4
8. Imports of goods and services		3.6	5.0	0.3	-7.7	-1.9	-2.3
8.1 Imports of goods		3.1	4.3	-0.4	-6.6	-2.4	-1.5
8.2 Imports of services		0.6	0.7	0.8	-1.2	0.4	-0.8
9. Balance of goods and services (net exports)		-2.6	-3.3	0.1	3.0	3.0	2.4
GDP at market prices		5.5	3.5	-0.2	-3.1	-4.9	-7.1

Source: ELSTAT, National accounts, 5 October 2012. Final data for 2005-2007; Provisional data for 2008-2011. 1 Excluding inventories and statistical discrepancy.

The decline in private consumption in the first half of the year is attributable to (i) the drop in household disposable income, as a result of wage cuts (see Section 3 of this chapter), the significantly reduced number of employed persons (see Section 2 of this chapter) and the

Table III.IB Demand and gross domestic product (QI 2011-Q2 2012)

(2005 constant market prices)

(2003 constant market prices)			Ann	ual percenta	ge changes ¹			
			2011	•			2012	
	2011	Q1	Q2	Q3	Q4	Q1	Q2	JanJune
Private consumption	-7.1	-8.6	-7.4	-5.2	-7.0	-8.7	-8.0	-8.4
2. Public consumption	-9.1	-10.6	-11.8	-3.4	-10.5	0.2	-3.7	-1.75
3. Gross fixed capital investment	-20.7	-24.2	-19.6	-16.4	-22.2	-21.3	-19.4	-20.3
3.1 Houses	-23.6	-20.2	-22.1	-23.5	-28.7	-30.9	-30.0	-30.5
3.2 Other construction	-19.1	-21.0	-20.5	-19.4	-16.3	-10.0	-7.4	-8.4
3.3 Equipment	-22.1	-30.3	-18.4	-10.0	-25.7	-22.5	-24.3	-23.4
3.4 Other	-7.0	-6.7	-11.2	-6.2	-4.1	-4.4	-5.1	-4.8
4. Final domestic demand ²	-9.6	-11.3	-10.2	-6.6	-10.2	-9.0	-9.0	-9.0
5. Inventories and statistical discrepancy (% of GDP)	-0.1	-1.4	-0.5	-0.9	2.7	-3.6	0.2	-1.6
6. Domestic demand	-8.6	-9.3	-8.1	-7.1	-9.7	-10.8	-8.4	-9.6
7. Exports of goods and services	-0.3	-2.4	0.8	4.5	-6.1	1.5	-4.1	-1.7
7.1 Exports of goods	3.6	4.8	9.0	12.6	-10.7	3.3	-2.0	0.3
7.2 Exports of services	-3.8	-9.4	-6.2	-0.4	-1.3	-0.9	-6.5	-4.1
8. Imports of goods and services	-8.1	-9.8	-4.5	-3.8	-14.2	-16.9	-12.3	-14.6
8.1 Imports of goods	-7.1	-10.5	-2.7	-1.5	-13.5	-18.1	-13.6	-15.9
8.2 Imports of services	-11.6	-7.3	-10.5	-11.8	-16.4	-12.1	-7.3	-9.7
GDP at market prices	-6.9	-8.0	-7.3	-5.0	-7.5	-6.5	-6.3	-6.4
Contribution to the change in gross domes (percentage points)								
Private consumption	-5.27	-6.97	-5.48	-3.69	-4.95	-6.99	-5.88	-6.44
2. Public consumption	-1.72	-2.05	-2.19	-0.60	-2.03	0.04	-0.65	-0.31
3. Gross fixed capital investment	-3.65	-4.58	-3.56	-2.50	-3.95	-3.31	-3.06	-3.18
3.1 Houses	-1.18	-1.11	-1.06	-1.06	-1.49	-1.48	-1.21	-1.34
3.2 Other construction	-0.94	-0.80	-1.14	-0.86	-0.96	-0.33	-0.35	-0.34
3.3 Equipment	-1.45	-2.60	-1.25	-0.51	-1.46	-1.46	-1.45	-1.46
3.4 Other	-0.07	-0.07	-0.11	-0.07	-0.04	-0.05	-0.05	-0.05
4. Final domestic demand ²	-10.6	-13.5	-11.2	-6.8	-11.0	-10.3	-9.6	-10.0
5. Inventories and statistical discrepancy	1.3	2.8	2.5	-0.5	0.4	-1.9	0.7	-0.6
6. Domestic demand	-9.3	-10.7	-8.7	-7.3	-10.7	-12.2	-8.9	-10.6
7. Exports of goods and services	-0.10	-0.43	0.17	1.19	-1.31	0.29	-0.96	-0.33
7.1 Exports of goods	0.34	0.42	0.88	1.32	-1.24	0.33	-0.24	0.05
7.2 Exports of services	-0.44	-0.87	-0.71	-0.07	-0.13	-0.08	-0.75	-0.42
8. Imports of goods and services	-2.51	-3.21	-1.28	-1.11	-4.43	-5.41	-3.63	-4.52
8.1 Imports of goods	-1.72	-2.75	-0.59	-0.34	-3.21	-4.58	-3.13	-3.85
8.2 Imports of services	-0.80	-0.48	-0.70	-0.79	-1.22	-0.80	-0.47	-0.64
9. Balance of goods and services	2.41	2.78	1.45	2.29	3.12	5.70	2.68	4.19
GDP at market prices	-6.9	-8.0	-7.3	-5.0	-7.5	-6.5	-6.3	-6.4

increased tax burden, (ii) reduced bank financing to households for consumption (see Chapter V.3 and Table III.2) and (iii) widespread uncertainty. The consumer confidence indicator

Source: ELSTAT, quarterly national accounts, non-seasonally adjusted data, 7 September 2012.

1 According to new ELSTAT estimates published on 14 November, annual GDP rates are revised as follows: 2011 Q1 = -8.8%, Q2 = -7.9%, Q3 = -4.0%, Q4 = -7.9%; 2012 Q1 = -6.7%, Q2 = -6.3%, Q3 = -7.2%.

2 Excluding inventories and statistical discrepancy.

Table III.2 Indicators of consumer demand (2009-2012)

(annual percentage changes)

	2009	2010	2011	2012 (available period)
Volume of retail trade (total)	-11.4	-6.2	-10.2	-11.5 (JanAug.)
Volume of retail trade (excluding fuel and lubricants)	-9.3	-6.9	-8.7	-11.0 (» »)
Food-beverages-tobacco ¹	-6.1	-5.5	-6.0	-8.1 (» »)
Clothing-footwear	1.4	-11.4	-18.8	-21.6 (» »)
Furniture-electrical appliances-household equipment	-15.3	-12.7	-15.7	-16.7 (» »)
Books-stationery-other	-24.0	-4.3	-5.2	-12.1 (» »)
Revenue from VAT (at constant prices)	-10.2	0.1	-5.9	-13.0 (JanSept.)
Retail trade business expectations index	-21.4	-26.4	-0.5	-4.0 (JanOct.)
New private passenger car registrations	-17.4	-37.2	-29.8	-41.6 (» »)
Tax revenue from mobile telephony ²	13.2	37.1	-16.8	-7.2 (JanSept.)
Outstanding balance of consumer credit ³	1.8 (Dec.)	-4.2 (Dec.)	-6.4 (Dec.)	-5.3 (Sept.)

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

- 1 Comprising big food stores and specialised food-beverages-tobacco stores.
- 2 Monthly service fee per subscription until July 2009. As of August 2009, new progressive rates apply to mobile telephony contracts and different fees to prepaid mobile telephony.
- 3 Comprising bank loans and securitised loans. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences and a transfer of loans by one bank to a domestic subsidiary finance company in 2009.

seems to have changed direction and improved since the end of 2011 (in October 2012 it was more than 6 points higher than its 2011 trough); this is explained by the less pessimistic estimation of households for the next 12 months (prices, economic status, unemployment), but does not reflect any intention to purchase consumer durables now or in the coming year. According to data on outstanding consumer loans, the annual rate of credit expansion was negative throughout the nine-month period.

According to national accounts data, wages in the first half of 2012 (at current prices) were cut by 14.6% on an annual basis, reflecting both a 5.8% cut in the compensation per employee and a 9.3% decrease in the number of employees. In the first half of 2012 the gross operating surplus of the economy also fell by 1.8%. Cuts in the average compensation per employee would have been higher, if the structure of employment had not changed to the disadvantage of unskilled work. In more detail, if the sectoral structure of salaried employment was the same in the second quarter of 2012 as

in the second quarter of 2009, then the change in the compensation per employee between 2009 and 2012 would have been 14.2%, instead of the current 12.5%.

Reduced private consumption in the first half of the year reflects the decline in the volume of **retail sales** and in the demand for consumer services (for details, see the section on the developments in supply).

Available short-term indicators of private consumption after the first half of the year remained strongly negative, but imply that the annual rate of decline in consumption in the third quarter was probably not much worse than that of the second quarter. In the fourth quarter of 2012 and in 2013 however, developments in consumption will be decisively affected by fiscal measures and the disbursement of the instalment. In any event, consumers' intentions for purchases in the next 12

⁵ The gap between the rate of decline in real income and the corresponding rate of change in private consumption (at constant prices) is widening, possibly implying reduced savings.

months (IOBE-European Commission survey), which are still very subdued, continue to point to declines in consumption.

According to national accounts data, the drop in gross fixed capital formation recorded in 2011 (-19.6%) continued at a similar rate (-20.3%) in the first quarter of 2012.6 The share of fixed capital investment in GDP (at current prices) is very small (12.6% in the first half of 2012, against 14.8% in the first half of 2011 and 22.8% in 2000-2007), but does not show any clear downward trend over July 2011-June 2012. The decline in investment in the first half of the year mainly reflects the continuing large fall in investment in transport equipment (-23.4%, 9.3 percentage points contribution to the overall decline in investment) and housing (-30.5%, 8.6 percentage points contribution to the overall decline in investment).

Investment is also negatively affected by further declines in the **Public Investment Programme (PIP)**, the disbursements of which declined in January-October 2012 by 13.4% year-on-year. The importance of the PIP for growth is also evident in OECD estimates,⁷ according to which the higher fiscal multiplier relates to public investment expenditure (0.8 in the first year and 1 in the second year).

Moreover, the response of the private sector to the development law is rather subdued up to now, although it is increasing. In more detail, in the April 2011, October 2011 and April 2012 rounds, plans with a total budget of $\[\in \]$ 725, $\[\in \]$ 854 and $\[\in \]$ 1,100 million, respectively, were submitted.

No substantial change in the rate of decline in investment is expected in the second half of the year, as also evidenced by data on the financing of firms, outstanding housing loans, cement production and the volume of private construction activity based on building permits (see Table III.3). Investment is also hampered by the lack of access to financing. According to a National Bank survey among SMEs, about 1/3 of the growth-oriented busi-

nesses (i.e. 1/4 of the businesses in the sample) reported lack of financing as the most important obstacle they are facing (see Section 5.A of Chapter V).^{8,9}

A stabilisation of the political and economic situation could put the decline in investment under control in 2013. This could be brought about, inter alia, by the activation of Public-Private Partnerships (PPPs), the use of financing instruments to enhance synergies between the European Investment Bank (EIB) and the European Union Funds (e.g. establishment of a Fund by the Hellenic Republic and the European Commission for the provision of guarantees, up to €1 billion, for EIB loans to SMEs, EIB's risk sharing instrument, etc.). In mid-November, the EIB committed to disburse €850 million, to be channelled not only to SMEs from all sectors, but also to education, energy and transports as well. These tools, coupled with structural reforms, will contribute to the re-launching of projects that were discontinued due to the financial crisis and due to delays in expropriations. It is very important to relaunch construction of the four major highways¹⁰ which, according to the competent ministry, is expected to create 30,000 jobs directly and another 60,000 indirectly at the region. Moreover, initiatives to eliminate impediments to major private investment projects, such as the delayed tourism investment in the prefecture of Lasithi (worth €267 million) and three other projects under the fast track law and the development law (worth over €240 million), are expected to help revive interest in business investment over the medium term. Such interest is expected to be enhanced, provided that improving investment will be taken up, with the concession of 22 regional high-traffic airports

⁶ Annual data are based on the revised ELSTAT national accounts data for 2006-2011, which were released on 5 October 2012. For quarterly data see footnote 3.

⁷ OECD, *Economic Surveys – Greece*, 2009 and 2011.

⁸ National Bank, Department of Strategic Planning and Research, Survey of Greek SMEs, July 2012.

⁹ Similar concerns were also raised recently by firms involved in wind farms – see the statements of the President of the Hellenic Wind Energy Association (ELETAEN).

¹⁰ Aegean Motorway, Central Greece Motorway, Olympia Odos and Ionia Odos, the construction firms of which are negotiating with the State for the immediate resumption of works.

Table III.3 Indicators of investment demand (2009-2012)

(annual percentage changes1)

	2009	2010	2011	2012 (available period)
Capital goods output	-22.5	-22.1	-9.7	-15.9 (JanSept.)
Capacity utilisation rate in the capital goods industry	(73.4)	(66.1)	(62.7)	(58.4) (JanOct.)
Bank credit to domestic enterprises ²	5.1 (Dec.)	1.1 (Dec.)	-2.0 (Dec.)	-4.9 (Sept.)
Disbursements under the Public Investment Programme ³	-2.8	-11.3	-17.1	-13.4 (JanOct)
Production index in construction (at constant prices)	-17.5	-29.2	-28.7	-20.5 (JanJune)
Volume of private construction activity (on the basis of permits issued)	-26.5	-23.3	-37.7	-23.0 (JanAug.)
Cement production	-21.4	-14.3	-37.8	-16.2 (JanSept.)
Business expectations index in construction	-31.4	-27.4	-27.8	29.5 (JanOct.)
Outstanding balance of total bank credit to housing ⁴	3.7 (Dec.)	-0.3 (Dec.)	-2.9 (Dec.)	-3.7 (Sept.)

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

- 1 Except for the capacity utilisation rate in the capital goods industry, which is measured in percentages.
- 2 Comprising loans and corporate bonds, securitised loans and securitised corporate bonds but excluding (as of June 2010) loans to sole proprietors and unincorporated partnerships. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences, as well as loans and corporate bonds transferred by domestic MFIs to their subsidiaries operating abroad and to one domestic subsidiary finance company in 2009.
- 3 As of January 2012 actual cash payments and not appropriations under the public investment budget.
- 4 Comprising loans and securitised loans. The rates of change are adjusted for loan write-offs, foreign exchange valuation differences and the transfer of loans by one bank to a domestic subsidiary finance company in 2009.

by means of an international tender, which is scheduled to take place by the end of the year. A positive contribution is also expected to come from the decentralisation of PIP processes through the delegation of powers from the Ministry of Development to the bodies entrusted with the implementation of the PIP. All these could offset the negative development from the zero change in the PIP for $2013 \ (\le 6.85 \ \text{billion})$ and its decline over 2014- $16 \ (\text{to } \le 6.7 \ \text{billion})$.

In the first half of 2012, as a result of the fiscal consolidation measures detailed in Chapter IV, **public consumption** declined by 1.8% year-on-year (Q1: +0.2%, Q2: -3.7%).

The fall in consumption and investment led to the decline in **imports of goods and services**, which in the first half of 2012 were by 14.6% lower year-on-year (Q1: -16.9%, Q2: -12.3%). This decline stemmed both from the 15.9% decrease in imports of goods (3.8 percentage points contribution to the overall decline in imports) and the 9.7% fall in imports of serv-

ices (0.6% percentage point contribution to the overall decline in imports).¹¹

Exports of goods, having increased by about 4% in 2011 and 3.3% in the first quarter of 2012, declined in the second quarter by 2.0%. Thus, in the first half of 2012 exports of goods were (at constant prices) only 0.3% higher than in the corresponding period of 2011. Exports of services (that had started declining in the first quarter of 2011) continued to fall, thereby standing in the first half of 2012 4.1% lower than in the first half of 2011 (Q1: -0.9%, Q2: -6.5%). The decline is attributable to the drop in travel receipts (see Section 4 of this chapter). Overall, exports of goods and services declined by 1.7% in the first half of the year. 12

¹¹ The decline in imports is coupled with a shift to Greek products. According to press releases, a recent study by Boston Consulting Group (BCG) shows that 2 out of 3 Greeks buy domestic products more than they used to.

¹² Differences in the rates of change of exports (imports), as reflected in the national accounts, from those of the external balance compiled by the Bank of Greece (see Section 4 of this chapter for a breakdown at current prices) are partly explained by changes in prices (this breakdown here is at constant prices) and differences in methodology, which are usually normalised after annual data are recorded.

Because of the significant drop in imports, the **external sector** made a 4.2 percentage points contribution to the change in GDP in the first half of 2012, i.e. higher than in all previous years.

Developments in supply

In the first half of 2012, gross value added fell by 6.5%. Its decline in the secondary sector (-10.7%) was more marked than in the tertiary sector (-6.1%). However, the rate of decline in value added in the tertiary sector picked up after the fourth quarter of 2011, while in the secondary sector it became milder (see Table III.4B). In the primary sector, value added has been increasing at a slow but steady pace over the past six quarters.

In the tertiary sector, a significant decline was recorded in **trade**, hotels-restaurants and transport-communications (-11.7%), financial and insurance activities (-6.6%)¹³ and arts-entertainment-recreation (-12.3%). Turnover figures — which show changes in sales at current prices — provide a more detailed picture of the activities within each sector.

It seems that in the first half of 2012 developments in trade have been particularly negative for car sales (-43.5% up to June, -41.6% up to October) despite the fact that, for every year in the 2008-2011 period, the sector has been experiencing declines; especially after 2009, at very high rates. The retail trade turnover declined by 10.1% between January and August 2012 and the volume of retail sales by 11.5% in the same period, while both of them kept falling during 2009-2012. According to a survey by the National Confederation of Hellenic Commerce (ESEE), during the summer sales (July-August) turnover fell by 20.1% compared with the corresponding period of 2011 while, compared with the corresponding period of 2010, the decline was 36.4%.

Tourism-related activities (hotels and restaurants, travel agencies and other activities) recorded a very large decline in turnover in the

first half of 2012, which is not the result of price cuts. 2012 is the third consecutive year in which travel agencies record a decline in turnover that exceeds 20%. A survey of the National Bank on SMEs¹⁴ shows that restaurants are in a worse condition than hotels, because their problems also include excessive borrowing and lack of liquidity.

The fact that turnover in **transport** did not record such extensive declines in 2011 and 2012, despite the fall in travel agencies' commercial activity and turnover, may be on the grounds that changes in transport (e.g. land transport) were largely recorded in 2009 and 2010 (see Table III.5).^{15,16}

In industry, including energy, the value added fell by 7.5% on average (Q1: -10.1%, Q2: -5.0%) in the first half of 2012, compared with a larger decline (-9.2%) in the first half of 2011. A drop, albeit smaller, was also recorded by the industrial output index (total industry: -5.0%, manufacturing: -6.8%; see Chart III.2) over the same period. During January-September 2012, the fall in total industrial and manufacturing output was contained to -4.5% and -6.0%, respectively, as August witnessed a non-negligible increase in industrial and manufacturing output compared with 2011, by 2.7% and 2.3% respectively, which did not however continue in September (-7.3% and -6.9% respectively).¹⁷

- 13 According to data from the Hellenic Association of Insurance Companies, total insurance premium in the Greek market fell by 7.1% in January-August 2012 (http://www.eaee.gr/cms/uploads/oikmel-premium8months2012gr.pdf).
- **14** See footnote 8 above.
- 15 According to IKA data, land transport is one of the few sectors in which the number of "large" businesses (employing more than 10 persons) increased between 2010 and 2011.
- 16 Another possible explanation is that Greek transport companies started conducting business abroad (see Eurostat, Statistics in Focus 38/2012, Decline in European road freight transport in 2011 reflecting economic climate).
- 17 At sectoral level, the decline in manufacturing output over January-September 2012 is mainly due to the continuing fall in the output of the main sectors of food-beverages, textiles and clothing-footwear, as well as of construction-related sectors (non-metallic minerals). The production of basic metals also declined (due to a long strike in one of the five firms of the sector) following an 18.9% cumulative increase in the past two years, as did the production of basic pharmaceutical products, after its upward path in 2006-2010 (45.5% cumulative increase). On the contrary, a significant recovery was recorded in oil and carbon products (+17.9%).

Table III.4A Gross value added at basic prices and GDP at market prices (2005-2011)¹

(at constant market prices of 2005)

(at co	nstant market prices of 2005)							
		Value in million euro		A	nnual percei	ntage change	es	
		2005	2006	2007	2008	2009	2010	2011
1. Agr	iculture, forestry and fishing	8,428	-13.4	-10.3	2.0	5.2	5.5	-5.4
2. Seco	ondary sector	34,007	11.8	-2.1	-10.2	-8.5	-9.9	-12.6
2.1	Industry including energy	21,957	-0.6	2.4	-9.7	2.0	0.9	-7.4
2.2	Construction	12,050	34.5	-8.1	-11.0	-24.6	-32.3	-28.4
3. Terr	iary sector	130,159	3.2	5.1	2.8	-1.2	-4.9	-5.7
3.1	Trade, hotels and restaurants, transport and communications	46,043	3.5	5.3	-1.5	-9.2	-3.8	-10.9
3.2	Information and communication	6,833	15.4	0.1	17.2	7.6	-10.3	-8.1
3.3	Financial and insurance activities	8,463	2.3	7.7	11.6	-2.5	-1.0	-8.0
3.4	Real estate activities	19,870	-5.3	16.8	7.8	2.3	-8.1	2.4
3.5	Professional, scientific and technical activities	9,801	11.6	-0.3	-3.6	7.4	-14.1	-18.1
3.6	Public administration and defence	31,547	2.8	3.2	3.8	1.1	-1.5	-0.8
3.7	Arts, entertainment and recreation	7,603	4.8	-7.4	-4.1	8.8	-0.7	-0.2
4. Gro	ss value added at basic prices	172,595	4.1	3.0	0.0	-2.2	-5.2	-6.6
5. Taxe	es less subsidies on products	20,455	17.4	7.6	-1.9	-9.7	-2.7	-10.9
6. Gro	ss domestic product at market prices	193,050	5.5	3.5	-0.2	-3.1	-4.9	-7.1
			Contrib		e annual ch entage poin	_	ie added	
1. Agr	iculture, forestry and fishing		-0.65	-0.42	0.07	0.19	0.21	-0.23
2. Seco	ondary sector		2.32	-0.44	-2.05	-1.54	-1.68	-2.02
2.1	Industry including energy		-0.08	0.29	-1.17	0.22	0.10	-0.90
2.2	Construction		2.41	-0.73	-0.88	-1.76	-1.78	-1.12
3. Terr	iary sector		2.43	3.78	2.13	-0.97	-3.84	-4.52
3.1	Trade, hotels and restaurants, transport and communications		0.94	1.42	-0.42	-2.47	-0.95	-2.75
3.2	Information and communication		0.61	0.00	0.73	0.38	-0.56	-0.42
3.3	Financial and insurance activities		0.11	0.37	0.59	-0.14	-0.05	-0.47
3.4	Real estate activities		-0.61	1.76	0.92	0.29	-1.08	0.31
3.5	Professional, scientific and technical activities		0.66	-0.02	-0.21	0.42	-0.88	-1.02
3.6	Public administration and defence		0.51	0.58	0.68	0.21	-0.30	-0.16
3.7	Arts, entertainment and recreation		0.21	-0.33	-0.16	0.33	-0.03	-0.01
4. Gro	ss value added at basic prices		4.1	3.0	0.0	-2.2	-5.2	-6.6
0		11.6.6				2011		

 $Source: ELSTAT, National\ accounts, 5\ October\ 2012.\ Final\ data\ for\ 2005-2007;\ provisional\ data\ for\ 2008-2011.$

Table III.4B Gross value added at basic prices and GDP at market prices (2011 and Q1 2011-Q2 2012)

(at constant market prices of 2005)

(at co	onstant market prices of 2005)								
				Ann	ual percen	tage chang	ges¹		
		2011		201	1			2012	
			Q1	Q2	Q3	Q4	Q1	Q2	Jan June
1. Agri	iculture, forestry and fishing	2.5	2.5	4.6	1.3	1.3	2.4	4.2	3.3
2. Seco	ondary sector	-12.0	-10.3	-12.6	-10.8	-14.4	-13.1	-8.3	-10.7
2.1	Industry including energy	-9.1	-8.2	-10.1	-7.0	-11.0	-10.1	-5.0	-7.5
2.2	Construction	-17.9	-14.6	-17.4	-18.9	-20.1	-20.1	-15.3	-17.5
3. Tert	tiary sector	-5.9	-8.2	-5.7	-4.4	-5.6	-5.8	-6.4	-6.1
3.1	Trade, hotels and restaurants, transport and communications	-7.7	-14.0	-6.9	-4.0	-7.1	-9.8	-13.3	-11.7
3.2	Information and communication	-9.5	-9.1	-10.7	-12.0	-6.3	-8.8	3.8	-2.4
3.3	Financial and insurance activities	-9.0	-13.4	-9.6	-7.4	-4.3	-6.6	-6.7	-6.6
3.4	Real estate activities	0.4	0.0	0.4	0.6	0.7	0.1	0.1	0.1
3.5	Professional, scientific and technical activities	-5.8	-7.4	-2.7	-8.6	-5.4	-6.6	2.8	-1.4
3.6	Public administration and defence	-5.7	-5.8	-6.7	-3.3	-7.2	-2.6	-4.4	-3.5
3.7	Arts, entertainment and recreation	-6.1	-3.3	-4.0	-8.4	-8.5	-9.8	-14.7	-12.3
4. Gro	ss value added at basic prices	-6.7	-8.1	-6.5	-5.1	-7.1	-6.7	-6.3	-6.5
5. Taxe	es on products	-8.7	-6.1	-12.8	-3.2	-11.7	-5.3	-5.7	-5.5
6. Subs	sidies on products	-8.6	-10.1	-9.1	-6.6	-9.0	-6.8	-6.4	-6.6
7. Gro	ss domestic product at market prices	-6.9	-8.0	-7.3	-5.0	-7.5	-6.5	-6.3	-6.4
			Contr		o the anni percentage		e in value a	added	
1. Agri	iculture, forestry and fishing	0.09	0.10	0.18	0.05	0.04	0.11	0.18	0.15
2. Seco	ondary sector	-2.17	-1.82	-2.30	-1.85	-2.72	-2.27	-1.42	-1.84
2.1	Industry including energy	-1.09	-0.99	-1.22	-0.81	-1.32	-1.21	-0.58	-0.89
2.2	Construction	-1.09	-0.83	-1.09	-1.04	-1.40	-1.06	-0.84	-0.95
3. Tert	tiary sector	-4.65	-6.39	-4.41	-3.45	-4.34	-4.49	-5.05	-4.77
3.1	Trade, hotels and restaurants, transport and communications	-2.10	-3.57	-1.86	-1.22	-1.73	-2.35	-3.54	-2.94
3.2	Information and communication	-0.49	-0.47	-0.56	-0.58	-0.36	-0.45	0.19	-0.13
3.3	Financial and insurance activities	-0.40	-0.67	-0.46	-0.31	-0.17	-0.31	-0.31	-0.31
3.4	Real estate activities	0.05	0.00	0.05	0.07	0.09	0.02	0.01	0.01
3.5	Professional, scientific and technical activities	-0.32	-0.38	-0.16	-0.39	-0.36	-0.34	0.17	-0.09
3.6	Public administration and defence	-1.07	-1.12	-1.22	-0.58	-1.35	-0.53	-0.81	-0.67
3.7	Arts, entertainment and recreation	-0.31	-0.17	-0.20	-0.43	-0.45	-0.53	-0.76	-0.64
4. Gro	ss value added at basic prices	-6.7	-8.1	-6.5	-5.1	-7.1	-6.7	-6.3	-6.5

Source: ELSTAT, quaterly national accounts, 7 September 2012, non-seasonaly adjusted data. 1 For the revised GDP growth rates published on 14 November, see footnote 1, Table III.1B.

Table III.5 Activity indicators in the services sector (2009-2012)

(annual percentage changes)

(annual percentage changes)				
	2009	2010	2011	2012 (available period)
A. Services turnover indicators				
1.Trade				
Wholesale trade	-8.9	-5.9	-13.5	-16.3 (JanJune)
Retail trade	-10.2	-1.1	-7.2	-10.1 (JanAug.)
Motor trade	-15.7	-36.5	-26.5	-34.5 (JanJune)
2. Transport				
Land transport	-31.5	-18.1	-1.7	2.4 (» »)
Sea transport	-22.8	-8.5	-2.7	-14.2 (» »)
Air transport	-11.7	-7.0	-0.9	-7.6 (» »)
Storage and supporting transport activities	-32.2	-10.8	-7.9	-7.3 (» »)
3. Hotels and restaurants				
Accommodation and food service activities	-9.1	-8.2	-7.4	-21.9 (» »)
4. Information and communication				
Telecommunications	-8.9	-11.3	-8.9	-1.6 (» »)
Film, video, and TV programme production, recordings and music products	1.4	-6.6	-28.4	-5.9 (» »)
Programming and broadcasting activities	-6.7	-2.1	-27.1	-18.7 (» »)
5. Professional-scientific-technical activities				
Legal, accounting and management consulting services	-12.4	-7.3	-0.3	-3.6 (» »)
Architectural and engineering services	-18.6	-20.4	-19.6	-2.4 (» »)
Advertising and market research	-18.4	-23.8	-21.2	-17.6 (» »)
Travel agencies and related activities	-9.9	-24.5	-35.3	-38.9 (» »)
B. Passenger traffic				
Athens International Airport	-1.5	-5.0	-6.3	-11.2 (JanSept.)
Aegean Airlines ¹	9.9	-5.1	4.2	-8.2 (JanJune)
Piraeus port (OLP)	-3.8	-6.0	-0.8	-19.8 (JanJuly)
C. Business expectations index in the services sector	-28.3	-9.3	-2.9	-12.7 (JanOct.)

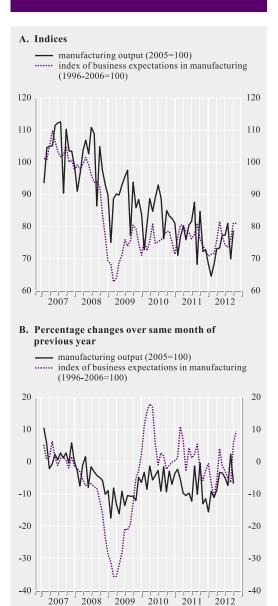
Sources: ELSTAT (services turnover), Athens International Airport, Aegean Airlines, Piraeus Port Authority (OLP) and IOBE (expectations). 1 Including charter flights.

Output declined in most industrial sectors except energy¹⁸ (see Table III.6). The decline in industrial output is also reflected in the capacity utilisation rate which, despite its slight improvement in the second quarter of 2012 (64.6%) compared with the first quarter of 2012 (63.5%), fell again in the third quarter (63.8%). As a result, in the January-September period, it declined by 4.0 points compared with the same period of 2011, although it improved in October (65.8%). Turnover in industry increased, albeit at a decreasing rate, in the

January-August 2012 period (+1.9%); this is attributed solely to increased demand from the

18 According to ELSTAT data, the rise in energy production in January-September 2012 is attributable to increased lignite and carbon extraction (+7.6%) and, as aforesaid, to the recovery in the production of oil and carbon products. On the contrary, electricity generation continued to fall (-2.0%). According to Independent Power Transmission Operator (ADMHE) data, which however do not include the islands, in January-October 2012 total demand for power declined by 1.81% (October: -6.15%, 2011: -0.94%), mainly due to the fact that demand from eligible high voltage customers (i.e. metallurgies and large industries) fell by 2.29% (October 2012: +2.03%, 2011: +4.17%). The demand for power by households and by commercial and small industrial firms also declined (January-October 2012: -1.78%, October: -7.03%, 2011: -2.06%).

Chart III.2 Manufacturing output and business expectations (January 2007 - October 2012)



Sources: ELSTAT (output) and IOBE (expectations). The index of business expectations is based on business firms' estimates of total demand and stocks, and on output forecasts for the next 3-4 months.

external market (+10.4%), while demand from the internal market fell (-2.8%).

Reduced activity in industrial firms operating both in 2011 and 2012 is confirmed by the Purchasing Manager's Index (PMI), which continues to record values under 50. In the first quarter of 2012, it reached a trough of 40 points on average; it then improved slightly in the second and third quarters of 2012 (to 41.3 and 42.0 points) and fell again in October (see Chart III.3).

As regards the prospects of industrial output, the new orders index, as well as IOBE data and the PMI sub-index on new export orders forecast a further decline, as new orders are fewer, both from the domestic and the external market. The new orders index of ELSTAT fell in January-August 2012 by 10.6% on average compared with the same period of 2011 (domestic market: -14.6%, external market: -7.3%). New orders from the external market, after the strongly upward rates recorded in the past two years, have been declining since January 2012, with the exception of June. In any event, the index continued to stand at high levels compared with previous years (it stood at 121.3 on average in January-August 2012, compared with 130.9 in the same period of 2011, 100.7 in 2010 and 79.4 in 2009).19

The decline in value added and in activity was accompanied by a substantial drop in business profits: 69% of the listed companies (150 out of 218) that have announced their results for the first half of 2012 posted losses (also see Section 3.1.A of this chapter).

The business expectations index in retail trade stood at 51.1 points in October 2012 (see Chart III.4). This has been the worse performance of the index since July 2010, although its levels in

19 As regards individual manufacturing branches, it should be noted that in January-August 2012, among a total of 22, 14 increased their turnover from abroad, mainly non-metallic minerals (+56.0%), electrical equipment (+32.8%), oil-carbon products (+26.8%), tobacco (+18.4%) and printing (+12.7%). As regards new orders from abroad, despite the decline recorded in the manufacturing sector as a whole, 4 out of the 12 monitored manufacturing branches recorded an increase. These sectors are: electrical equipment (+31.8%), computers and products (+12.4%), pharmaceuticals (+8.6%) and metallic products (1.6%). The main branches that recorded declines in terms of order value were textiles (-20.3%) and clothing (-14.3%). A large decline, despite their marked upward course in the past two years, was recorded in new orders for basic metals (-12.8%), machinery and equipment (-12.1%) and chemical products (-10.9%).

Table III.6 Indicators of industrial activity (2009-2012)

(annual percentage changes)1

(annual percentage changes)				
	2009	2010	2011	2012 (available period)
1. Industrial production index (overall)	-9.4	-5.9	-7.8	-4.5 (JanSept.)
Manufacturing	-11.2	-5.1	-8.5	-6.0 (» »)
Mining-quarrying	-11.8	-6.5	0.6	0.0 (» »)
Electricity	-4.2	-9.2	-8.8	- 2.0 (» »)
Main industrial groupings				
Energy	-2.9	-4.9	-8.4	4.1 (» »)
Intermediate goods	-18.4	-0.9	-8.8	-11.4 (» »)
Capital goods	-22.5	-22.1	-9.7	-15.9 (» »)
Consumer durables	-20.7	-13.4	-15.6	-19.8 (» »)
Consumer non-durables	-4.1	-7.2	-4.8	-7.4 (» »)
2. Industrial turnover index ²	-23.1	5.9	7.1	1.9 (JanAug.)
Domestic market	-22.1	-0.8	-2.3	-2.8 (» »)
External market	-25.6	29.3	21.6	10.4 (» »)
3. Industrial new orders index ³	-27.7	3.7	1.8	-10.6 (» »)
Domestic market	-23.0	-3.9	-23.7	-14.6 (» »)
External market	-34.4	27.6	22.3	-7.3 (» »)
4. Index of business expectations in industry	-21.5	5.1	1.4	-2.1 (JanOct.)
5. Industrial capacity utilisation rate	70.5	68.5	67.6	64.1 (JanOct.)
6. Manufacturing Purchasing Managers' Index (PMI) ⁴	45.3	43.8	43.6	41.0 (Oct.)

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

- 1 Excluding industrial capacity utilisation rate (%) and PMI manufacturing.
- 2 The index refers to the sales of industrial goods and services in value terms
- 3 The index reflects developments in demand for industrial goods in value terms.
- 4 Seasonally adjusted index; values above 50 indicate expansion.

July and August 2012 were much higher than the ones in October. According to data of the Small Enterprises' Institute (IME) of the Hellenic Confederation of Professionals, Craftsmen and Merchants (GSEVEE), the situation is quite troublesome for the smaller businesses of the sector, which recorded zero improvement in July.

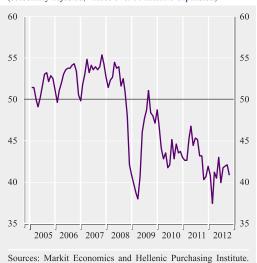
The business expectations index in services (excluding retail trade and banks) fell to historically low levels and stood at 54.9 points in January-October 2012 (2011 average: 61.7 points). Estimates about the current situation of enterprises and about demand are worsening, while forecasts for the evolution of demand in the forthcoming period are also pessimistic.

In August 2012 expectations in tourism enterprises improved, but worsened again in September and October, while business expectations in hotels-restaurants remained at low levels. International arrivals at the country's 13 major airports over January-October 2012 declined by 3.4% (the largest decline was recorded in international arrivals at the Athens airport: -12.1% over the same period).

The fall in investment in 2012, for fifth consecutive year, the drop in employment and the rise in the percentage of the long-term unemployed had a negative impact on the potential rate of economic growth, which declined substantially, entering into negative territory in 2012 (from 1.75% in 2005-2008).

Chart III.3 Purchasing Managers' Index (PMI) in manufacturing (January 2005 - October 2012)

(seasonally adjusted; values over 50 indicate expansion)



Despite these adverse developments, there are signs of economic rebalancing: first, labour productivity has probably stopped falling (see below) and, second, although domestic demand is still higher than GDP, the gap —i.e. the real external deficit — has narrowed.

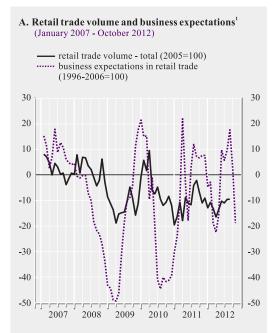
Labour productivity

Labour productivity (value added per employee) has been decreasing every year since 2008. The seeming rise in productivity in the second half of 2011, which would imply a marginal increase for 2011 as a whole, was not confirmed by revised annual national accounts data.

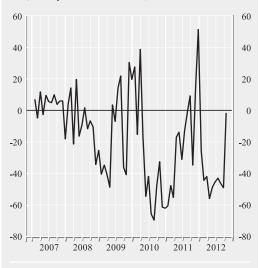
Labour productivity fell by 1% in 2011 year-onyear and stands to just 95% of its 2008 level, while it will probably remain unchanged in 2012, as the annual decline in employment is expected to be similar to that of output.

Productivity developments to date are more or less expected: in times of recession, output declines first and then, if it becomes clear that the recession is not temporary, employment falls too (see e.g. Bernanke and Parkinson, 1991).²⁰ In the 2001-2012 period, the correla-

Chart III.4 Consumer demand indicators



B. New private passenger car registrations (January 2007 - October 2012)



Sources: ELSTAT (retail trade and cars) and IOBE (expectations). The index of business expectations is based on firms' estimates of sales and stocks as well as on their forecasts on business activity over the next three months.

1 Percentage changes over same month of previous year.

20 Bernanke, B.S. and M.L. Parkinson (1991), "Procyclical labor productivity and competing theories of the business cycle: some evidence from interwar US manufacturing industries", *Journal of Political Economy* 99:3, pp. 439-59.

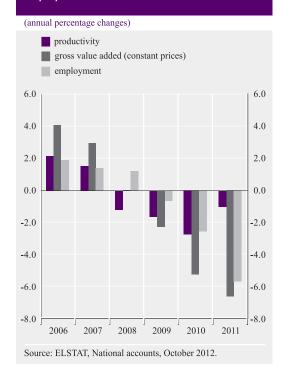
tion between the change in output (gross value added) and labour productivity (total or salaried) is high (0.8 if productivity is based on total employment and 0.6 if it is based on salaried employment) – see Chart III.5 for the 2006-2011 period.

From 2008 to 2011, value added fell by about 13.5% and employment by about 9%. The decline in employment is significant and much greater than the one recorded both in previous periods of recession in Greece and in other countries during the latest financial crisis with the exception of the United States.²¹ However, the percentage decline in employment is less than that in output, despite the fact that employed persons are most likely underemployed, as shown by working hours, which have declined more than the number of employees. This corroborates the view that labour productivity will probably increase in the coming years, since any rise in output will not immediately be accompanied by equal recruitment, as there is non-utilised productive capacity. The reason why firms do not reduce their personnel more at this stage (despite the fact that working hours have declined) is because they do not want to lose the human resources in which they have invested.

As a rule, when exiting a crisis, output recovers first and employment follows. This means that the rise in productivity is to be expected after the exit from recession. Although an improvement in productivity will also be recorded due to the fact that recession hit the less productive firms more, the problem for the Greek economy at this stage is that, even if employment falls further, this will not necessarily lead to a significant rise in productivity, unless demand increases along with investment, and businesses reorganise.

These annual changes in productivity reflect developments within sectors – productivity declined in most but not all sectors and there has not yet been any change in the composition of output in order to attach greater weight to sectors with higher productivity.

Chart III.5 Productivity, gross value added and employment



It is noted, however, that there are substantial differences in sectoral developments. In some sectors (e.g. network services – electricity, natural gas, water), productivity has increased since 2011. In other sectors with high self-employment (e.g. trade, professional activities and transport), productivity declined by two-digit rates in 2011, because employment has fallen much less than output. In these sectors, recovery of productivity may come later.

Given that employment in large firms has declined less than in total firms (see Labour Force Survey and IKA data), it is possible that productivity in large firms has fallen more than in small firms. We cannot therefore rule out the possibility of further personnel cuts in large firms, unless the business climate begins to improve.

²¹ Krugman and DeLong recently maintained that labour productivity may have stopped moving along with the business cycle. They were led to this conclusion on the basis of the experience of the United States, where productivity increased rather than decreased in the recent recession.

1.2 DEVELOPMENTS AND PROSPECTS IN THE REAL ESTATE MARKET

- The Greek real estate market has entered in recession since end-2008 and continues to shrink, as medium-term expectations remain negative.²² The substantial increase in the tax burden on real estate in the past few years and, above all, the unstable economic environment of the country, together with restricted bank financing, had a significant impact on the Greek real estate market, intensifying the crisis and hampering its recovery even more.
- Throughout the current crisis, the real estate market has been characterised by excessive supply, very low demand and a substantial stock of properties for sale (estimated at around 180,000).
- The decline in residential prices continued stronger in the first nine months of 2012. In more detail, on the basis of data collected from credit institutions, apartment prices fell by 9.3%, 10.2% and 11.7% in the first, second and third quarters of 2012, respectively (revised data), from 3.7% in 2009, 4.7% in 2010 and 5.4% in 2011. On the basis of information collected from real estate agencies, the decline in house prices in the past few years is larger. Indeed, in accordance with data collected by Bank of Greece branches mainly from real estate agencies, house prices in urban areas (except Athens) fell by 2.9% in 2009, 6.7% in 2010, 7.5% in 2011, 10.3% in the first quarter of 2012 and 11.5% in the second quarter of 2012.
- From the onset of the crisis until end-2011, this fall in prices has been stronger for "old" apartments (over 5 years old: -4.8%, -5.0% and -5.7% in 2009, 2010 and 2011, respectively) than for "new" apartments (up to 5 years old: -2.0%, -4.2% and -4.9% in 2009, 2010 and 2011, respectively). This reflects the relatively stronger resilience of the prices of newly-built apartments that are normally sold by constructors, which however seems to decline on the basis of more recent data for

the first, second and third quarters of 2012 (see Table III.7).²³

- The geographical breakdown shows that nominal apartment prices during the crisis (from the third quarter of 2008 to the third quarter of 2012) fell more in Thessaloniki (28.2%) than in Athens (23.9%) and other large cities (22.0%). Moreover, the greatest declines in asking prices were observed both in the relatively expensive areas and in areas with large properties.
- During the crisis, households' purchasing interests shifted towards smaller, older and, mainly, more affordable properties in medium-cost areas. Moreover, the percentage of cash transactions and the share of cash in total financing for real estate purchase have increased.
- Downward pressures on prices are likely to continue in the coming quarters, but the risk of an abrupt change will be reduced. It is estimated however that, with the continuing decline in prices over the past few years, the Greek real estate market most probably does not show signs of significant overpricing.²⁴
- Private construction activity continues to show high rates of decline (-26.5% in 2009, -23.7% in 2010 and -37.7% in 2011, with an
- 22 Recession in the commercial real estate market began about two years before the recession in housing properties, where the price index has been falling since the last quarter of 2008. In addition, the improvement mainly in the summer months of 2012— in the business expectations index in constructions compiled by IOBE stems from the rise in expectations in the construction of public works, following the government's announcements about the re-launching of major infrastructure works. This improvement was also driven by renewed expectations in housing construction, which however are not confirmed by other data (real estate agencies survey etc.).
- 23 By the end of 2011, apartment prices, mainly for newly-built ones, were rather resilient, probably driven by the high percentage of private ownership, the large number of very small family businesses involved in residential construction, the high profitability of such businesses before the current crisis and their low dependence on bank borrowing, the low frequency of property resale, high transaction costs (transfer tax, notarial and legal fees etc.), the increased costs of construction that hamper the replacement of the available stock of residences, the high confidence of Greek households in real estate etc.
- 24 It should also be noted that a significant decline was observed in the past five years in the house price-to-rent ratio (71.4 in Q3 2012; 2007=100), which is usually examined in conjunction with other factors (e.g. interest rates, yields of alternative investment, phase of the economic cycle etc.) to assess whether the current property value is overestimated.

Table III.7 Summary table of key short-term indicators for the real estate market

		Aver	age ann	ual perc	entage	changes
Indicators	2007	2008	2009	2010	2011	2012
1. Indices of prices of dwellings (BoG) and rents (ELSTAT)						
1.1Indices of apartment prices ¹						
a. All apartments (Greece)	5.9	1.7	-3.7	-4.7	-5.4	-11.7 (Q3)
a1. By age						
a. New (up to 5 years)	7.2	2.3	-2.0	-4.2	-4.9	-13.5 (Q3)
b. Old (over 5 years)	5.2	1.3	-4.8	-5.0	-5.7	-10.5 (Q3)
a2. By geographical area: Total						
a. Athens	6.2	0.9	-4.6	-3.2	-6.4	-12.3 (Q3)
b. Thessaloniki	7.0	1.5	-6.0	-7.4	-6.9	-10.6 (Q3)
c. Other cities	6.3	1.8	-2.7	-5.3	-4.0	-10.1 (Q3)
d. Other areas	4.6	3.3	-1.9	-5.8	-4.2	-12.4 (Q3)
a2.1 By geographical area: New (up to 5 years)						
a. Athens	9.6	0.0	-3.5	-2.7	-6.6	-14.8 (Q3)
b. Thessaloniki	3.7	3.5	-5.3	-6.8	-8.1	-15.4 (Q3)
c. Other cities	7.8	2.4	-2.1	-4.3	-3.0	-12.1 (Q3)
d. Other areas	4.1	5.4	1.0	-5.7	-3.4	-12.4 (Q3)
a2.2 By geographical area: Old (over 5 years)						
a. Athens	4.5	1.4	-5.2	-3.5	-6.3	-11.0 (Q3)
b. Thessaloniki	8.4	0.6	-6.3	-7.6	-6.3	-8.5 (Q3)
c. Other cities	5.3	1.4	-3.2	-6.1	-4.8	-8.5 (Q3)
d. Other areas	5.0	1.4	-4.4	-5.9	-5.0	-12.4 (Q3)
1.2 Indices of prices of dwellings in urban areas excluding Athens ²	3.8	2.6	-2.9	-6.7	-7.5	-11.3 (Q2)
1.3 Price index of rents	4.5	3.9	3.6	2.4	0.8	-1.7 (JanOct.)
1.4 House price-to-rent ratio (2007=100) ³	100.0	97.9	91.0	84.7	79.4	71.4 (Q3)
2. Indices of residential property transactions						
$2.1\ Indices\ of\ residential\ property\ transactions\ with\ MFI\ intermediation\ (BoG)^{1}$						
a. Number of transactions	36.8	-21.7	-35.7	-0.2	-42.9	-48.7 (Q3)
b. Volume of transactions (in square metres)	36.6	-23.5	-38.9	-0.1	-40.0	-46.9 (Q3)
c. Value of transactions	41.1	-20.0	-40.0	-6.2	-39.8	-52.3 (Q3)
2.2 Indices of contracts of real estate transactions signed in the presence of a lawyer: Athens (DSA)						
a. Number of contracts	1.4	-10.0	-18.0	-16.3	-34.1	-43.2 (JanSept.)
b. Value of contracts	12.5	-2.3	-28.3	-20.8	-43.0	-43.9 (JanSept.)
2.3 Number of residential property transfers recorded at the Land Registry of Athens	-	-	-	-15.5	-30.5	-43.0 (JanSept.)

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, IOBE: Foundation for Economic and Industrial Research, Land Registry of Athens.

The indices of residential property transactions are based on appraisal reports by banks' engineers regarding the value and qualitative characteristics of the residential properties underlying loan agreements. It cannot be excluded that part of such appraisals are not connected with transactions in residential property, but concern renegotiation of existing loans, registration of a mortgage to back non-housing loans, debt transfers from one bank to another, etc.

² Data collected by Bank of Greece branches, mainly from real estate agencies.

³ In absolute terms.

Table III.7 Summary table of key short-term indicators for the real estate market (continue)

		Aver	age ann	ual perc	centage	changes
Indicators	2007	2008	2009	2010	2011	2012
3. Other indices						
3.1 Construction cost indices of (new) residential buildings (ELSTAT)	4.6	5.1	-0.3	1.8	1.0	-0.1 (Q3)
3.2 Volume of private building construction activity (ELSTAT, in cubic metres)	-5.8	-17.3	-26.5	-23.7	-37.7	-23.0 (JanAug.)
3.3 Production indices in construction (ELSTAT)	14.3	7.8	-17.5	-29.2	-28.7	-28.6 (Q2)
3.4 Cement production (ELSTAT)	-9.2	-3.1	-21.4	-14.3	-37.8	-16.2 (Q2)
3.5 Number of persons employed in construction (ELSTAT)	8.9	0.1	-6.6	-12.7	-22.5	-18.6 (Q2)
3.6 Investment in construction (ELSTAT) ⁴						
a. Total construction	19.9	-21.2	-12.8	-19.2	-21.0	-17.7 (Q2)
b. Residences	25.6	-33.6	-20.7	-21.6	-18.0	-30.0 (Q2)
3.7 Index of business expectations in construction (IOBE)						
a. Total private construction	1.9	-8.4	-43.2	9.3	-18.1	-38.3 (JanOct.)
b. Months of assured production ³	16.8	17.3	15.9	12.9	11.1	9.9 (Oct.)
c. Activity relative to previous quarter ⁵	10.2	10.0	-16.1	-39.0	-52.7	-10.6 (Oct.)
d. Planned future activity ⁵	-33.2	-28.8	-42.8	-63.2	-80.9	-75.8 (Oct.)
e. Prospects of employment over the next 3-4 months ⁵	9.6	10.4	-32.1	-46.4	-53.8	-13.1 (Oct.)
3.8 Outstanding balances of loans from domestic MFIs (BoG) ⁶						
a. Outstanding balances of loans to households	22.2	12.6	3.1	-1.2	-3.9	-4.2 (Sept.)
b. Outstanding balances of housing loans to households	21.5	11.2	3.7	-0.3	-2.9	-3.7 (Sept.)
3.9 Non-performing housing loan ratio (BoG) ⁶						
a. Total	4.5	5.0	7.7	10.4	15.9	21.4 (Q2)
b. Residential	3.6	5.3	7.4	10.0	15.0	19.9 (Q2)

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, IOBE: Foundation for Economic and Industrial Research, Land Registry of Athens.

average annual rate of -23.0% in the first eight months of 2012), similar to those of investment in residential properties (-20.7%, -21.6%, -18.0% and -30.5% in 2009, 2010, 2011 and the first half of 2012, respectively).

• The number of persons employed in the construction sector declined dramatically in the past three years. On the basis of the Labour Force Survey conducted by ELSTAT, the total number of persons employed in construction fell from 399.3 thousand in the second quarter of 2008 to 213.5 thousand in the second quarter of 2012 (declining by 6.6% in 2009, 12.7%

in 2010, 22.5% in 2011 and 18.3% in the first half of 2012).

• In the commercial real estate market (offices, retail stores, industrial buildings, warehouses, etc.), the decline continued in the first two quarters of 2012, with significant pressures to renegotiate and reduce rents, especially for uptown commercial properties, warehouses and non-competitive office buildings.²⁵

³ In absolute terms.

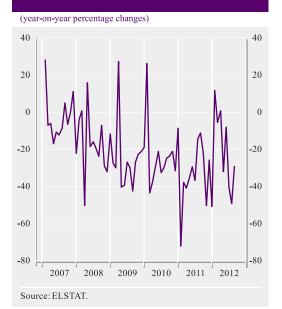
⁴ In constant terms.

⁵ Weighted percentage balances of positive and negative answers.

⁶ End-of-period balances.

²⁵ Real Estate Investment Companies are also involved in the commercial real estate market, whose real estate portfolio declined substantially in the first half of 2012 (by 8.2% for Athex-listed companies), leading most of them to negative operating results (losses).

Chart III.6 Volume of new buildings and extensions on the basis of permits issued (January 2007-August 2012)



Throughout the crisis, there has been:

- reduced demand for properties for commercial use, with businesses shifting towards cheaper premises;
- excessive supply and increased number of vacant commercial stores and offices; and
- a downward trend in prices.

Transactions in this market have been substantially reduced, while properties offered for sale or lease have increased. Moreover, restricted financing, coupled with the overall uncertainty about the economic environment, fuel the relative reluctance to develop new investment plans.

• The fall in rent prices and the renegotiation of lease contracts for commercial properties have contributed to the decrease in rent paid by the State for the accommodation of its departments. According to Ministry of Finance estimates, a total of €155.8 million was spent in 2011 for 2,639 lease contracts, while this expenditure was €169.7 million in

2010 and €178.1 million in 2009 (it declined by 8.2% in 2011 and 4.7% in 2010). The is estimated however that there is still enough room for the State to reduce expenditure for rents by relocating some of its departments from leased properties to currently unused properties owned by the State. The interval is a still enough room that the interval is a still enough room to the state of the interval in the interval is a still enough room to the state of the interval interval in the interval is a still enough room to the interval interval in the interval interval in the interval inte

• The prospects for recovery in the real estate market depend, inter alia, on improving business and household expectations, improving bank financing conditions and containing uncertainty, boosting the recovery prospects of the Greek economy and reducing the tax burden on real estate.

I.2.A FACTORS AFFECTING DEMAND AND SUPPLY IN THE REAL ESTATE MARKET

Reduced demand in the Greek real estate market mainly reflects uncertainty about the general prospects of the Greek economy and its fiscal and structural problems. It is also associated with households' expectations for further easing of residential property prices and primarily with increased uncertainty about employment and future incomes. It is estimated that the more cautious and selective stance of banks in granting new loans has also contributed to the decline in demand.²⁸

The additional tax burden on real estate during the current crisis has intensified the downturn in the real estate market and has

- 26 This decline was also driven by the legislative intervention (article 21 of Law 4002/2011), stipulating that the rent paid by the Greek State and public-sector bodies for the lease of properties to accommodate their services is reduced by 20% (against the level of rent in July 2010). A further reduction of this expenditure is provided for 2012 and the following years, since a provision of Law 4081/2012 reduced again the rent paid by the State for the lease of properties. This reduction amounts to 10% for properties with a monthly rent of less than €1,000, 15% for properties with monthly rent of €1,000-€2,000, 20% for properties with monthly rent of €2,000-€3,000 and 25% for properties with monthly rent of over €3,000.
- 27 For instance, the 45,000 m² property at 196-198 Thivon Avenue (Keranis), which was purchased by the State in 1998 and, although substantial amounts have been paid for its reconstruction, has not been used to date.
- 28 Indeed, the outstanding balance of housing loans declined at an annual rate of 3.7% in September 2012, against a decrease of 2.9% in December 2011 and 0.3% in December 2010, having grown by 3.7% in December 2009 and 11.2% in December 2008.

significantly deteriorated relative demand.²⁹ Apart from this burden, frequent references to additional tax measures (e.g. introduction of real estate tax levy on building plots outside town planning, and on land and rural plots that are not cultivated, etc.) prolong uncertainty about the real estate tax regime and make the future recovery of demand for residential and commercial property even more difficult.³⁰ As regards commercial property in particular, the volatility of the taxation framework makes it difficult to develop longterm financial investment appraisal models for real estate development. At the same time, excessive taxation leads to a contraction of current and expected business performance, often at unsustainable levels. It should be noted that taxes on property transfers and parental donations in Greece are very high compared with other EU countries, while it is estimated that their reduction would increase the very low frequency of transactions in the domestic real estate market.

Moreover, bureaucracy prevailing on the Greek real estate market (building permits issuance, etc.), the large number of statutory procedures and charges (lawyer fees, notary fees, engineer's certificates, energy efficiency certificate, etc.), combined with the ambiguity of urban planning regulations and their multiple breaches, the lack of a clear and unambiguous framework for spatial planning and land uses are among the many factors discouraging demand and often hindering the conclusion of investment agreements with interested investors from abroad.31 The relevant indices regarding the ease of doing business in the Greek construction industry are low, transaction costs are particularly high, while construction cost indices, especially for building materials, maintain positive rates of change even in the current period of severe recession, hindering the pickup of demand and the recovery of the real estate market.

Strengthening demand requires a set of interventions in terms of bureaucracy, real estate

transaction costs and the existing complex regulatory framework. The key parameter is to establish and safeguard a constant real estate taxation system. The level of taxes should be adjusted to the owners' tax-paying ability, while broadening the tax base and reducing current tax rates, especially on small and medium properties, would eventually be the most fiscal-efficient approach.

The complexity of the system can be eased by introducing a single, uniform tax on real estate, which may vary depending on the use of the property. It would be appropriate to distinguish between properties that could generate income and might be taxed at higher rates and those that form an integral part of production activities and the provision of services (industrial properties, warehouses, hotels, etc.).

Finally, as regards the issue of simplifying real estate transactions, it is estimated that both the reduction of compulsory charges, which act as disincentives without adding to

- 29 The most important taxes during the current crisis include the special levy on real estate paid through electricity bills, the significant reduction in the tax-free limits for real estate tax levy and the increase in VAT on newly-built property purchases and land exchange. These measures have significantly burdened the possession of real estate, while in the past the tax burden fell almost exclusively on transactions and revenue from real estate.
- 30 However, the recent decision to postpone the adjustment of objective values at the level of market prices is estimated to have temporarily reduced this uncertainty. The eventual increase in objective real estate property values (which determine real estate property value for taxation purposes) would lead to significant adjustments to taxable real estate property values (especially in areas where the difference between objective and market value is high), which will lead to increases in many taxes, thereby accentuating the heightened uncertainty and recession in the Greek real estate market. Indeed, objective values are used to calculate the level of various taxes, charges, contributions and fines relating to real estate, such as taxes on transfers, acquisitive prescription, exchange, distribution, inheritance, parental donations and gifts, the recently imposed special levy on real estate for residential or commercial use, the real estate tax, the real estate charge (TAP) imposed by local authorities etc. The objective value is also associated with the costs of property transfer contracts (notary fees, lawyer's fees, registration fees etc.) and the charges and contributions paid on building permits, while it is also used to determine presumed revenues from real estate and presumed minimum income derived from selfowned or leased houses.
- 31 In regards to the frequent breaches of urban planning laws observed in the Greek real estate market, it should be noted that data from the competent ministry raise the number of these breaches to around 5 million. Under the recent Law 4014/2011 on the settlement of various building violations, 415,000 claims for settlement had been submitted and €625 million had been collected until early September 2012.

state revenue, and the cutting of taxes on transfers and parental donations will boost the very low frequency of transactions in the domestic real estate market. It would also be appropriate to replace objective values with the commercial value of real estate property, especially under the current conjuncture, so as to reduce tax evasion from purchases and sales of real estate on the one hand and monitor the significant changes in value observed in the real estate market on the other.

On the supply side, the Greek real estate market continues to show excessive supply, combined with a large stock of unsold property. The decline in private construction activity and investment in the real estate market during the current crisis has been almost proportional to the reduction in the number of real estate transactions; it is therefore estimated that the excess stock of property at end-2008 remained roughly unchanged or increased only slightly.³²

It is noted that the stock of unsold houses is attributed to the prohibition (until the end of 2012) of auctioning households' main residences (with an objective value of up to €200,000) and the reluctance of commercial banks to auction off properties that secure bad loans at this stage of severe recession, despite the significant increase in non-performing loans. Real estate market experts estimate that this prohibition should probably be extended because, in the event that a large number of public properties are put up for sale in the current conjuncture of marked recession and reduced investor interest (due to the uncertainty and limited liquidity of the market) this would intensify the crisis in the real estate market and make its recovery even more difficult.

It is also noted that the surface area and volume of private construction activity and particularly the value of the properties transferred during the current financial crisis decreased faster than the number of new permits and real estate purchases and sales. This is explained by the results of the real estate agencies survey on the shift of households' buying interest towards older, smaller and mostly lower value residencies.³³ This, to some extent, explains the fact that the number of larger properties (over 200 m²) put up for sale is relatively higher, as they have also been burdened most by the recent tax changes.

1.2.B DEVELOPMENTS IN THE EFFORT TO EFFEC-TIVELY USE PUBLIC PROPERTY

Despite frequent announcements and the recent intensification of the effort made for the effective use of public property, the long-standing problems of the Greek administration undermine any remarkable outcome in terms of increasing public revenue. Considering the inhibitors to the implementation of the overall public property utilisation programme, the management of the Hellenic Republic Asset Development Fund (HRADF), which has taken up the privatisation programme since August 2011, had initially estimated that around €3.2 billion could be collected in 2012. In the 2nd Economic Adjustment Programme (February 2012), the target for overall revenue from privatisations and public property utilisation was adjusted from €50 billion to €19 billion by the end of 2015.³⁴ However, according

- 32 Indeed, the number of new building permits decreased by 16.1% in 2009, 10.9% in 2010 and 28.4% in 2011, while the total number of residential properties that were the subject of notarial acts declined by 13.9% in 2009 and 13.3% in 2010, based on available data. In particular, according to ELSTAT data collected by notaries throughout the country, the number of notarial acts for the purchase and sale of real estate fell from 158 thousand in 2008 to 136 thousand in 2009 and 117.9 thousand in 2010. According to National Cadastre data, a similar decline is recorded in the number of real estate transactions (by 16.3%, 9.8% and 28.1% in 2009, 2010 and 2011, respectively).
- 33 Similar conclusions are drawn on the basis of residential property transactions conducted through the banking system over the past three years (data collected from credit institutions). In the period 2009-2011 the average annual reduction in the number of transactions was 26.3%, against a decrease of 28.6% in their total value.
- 34 Approximately 50% of expected revenue shall derive from the development of real estate, 30% from infrastructure concessions and less than 20% from the sale of corporate shares. However, in the first two years of the programme, the highest share of revenue is expected to come from the utilisation of corporate portfolios. In this direction, a Legislative Content Act was signed by recent decision of the Cabinet for the abolition of the minimum participation of the Greek State in several state enterprises (ELPE, DEH, OPAP, ODIE, EYDAP, EYATH, ELTA, the Port Authorities of Piraeus, Thessaloniki, Alexandroupoli, Volos, Elefsina, Igoumenitsa, Heraklio, Kavala, Corfu, Lavrio, Patras and Rafina).

to the Medium-Term Fiscal Strategy Framework 2013-2016 (November 2012), it is estimated that around €9.5 billion shall be collected in 2013-2016, while the target for 2013 is €2.586 million. The overall target for collecting €50 billion is now estimated to be achieved after 2020. The privatisations completed in 2011 have yielded total revenue of €1.6 billion.³⁵

There still remain many problems in the way to develop public property, as there have been delays in the issuance of the necessary administrative decisions until recently.³⁶ These problems include the deficient recording of public property, the lack of a complete and accurate cadastre, pending matters relating to the redetermination of land uses and the delineation of seashores and beaches, the large number of required building, environmental and land use permits, continuous violations of land use and long-standing litigations relating to a substantial part of public property, as well as multiple commitments and restrictions (e.g. protection of the environment or local architectural identity, archaeological restrictions, legislation on bequests). It is also a fact that the deep recession of the Greek real estate market in recent years does not facilitate any attempt to make use of public property, due to limited interest on the part of investors.³⁷

It has now become imperative to intensify the necessary actions and accelerate the resolution of legal and technical issues relating to urban planning and permits issuance for the development of public property.³⁸ Resolving these problems will certainly create significant surplus values for public property and, above all, contribute to attracting foreign investors to the Greek real estate market, with additional growth benefits for local communities and economies. The utilisation strategy should be developed and completed by identifying the properties available for development, resolving any legal, urban planning and other problems, integrating these properties into the overall state planning and, finally, implementing fair procedures for their effective use, by means of objective and transparent evaluation criteria for the tenders submitted. In the current conjuncture of marked recession in the real estate market, concession and long-term lease contracts are estimated to be very effective tools for the rapid development of public property and will activate direct foreign and other private investment, thereby supporting economic recovery and improving market sentiment and public revenues.³⁹

It is noted, however, that after many years of delays, the process of utilising significant

- 35 Specifically 10% of OTE was sold (generating proceeds of €392 million), licences for game machines were sold to OPAP (€555 million) and its current licence was extended (€475 million), as were mobile telephony licences (€380 million).
- 36 However, on 11 September 2012, at the first Board meeting of the HRADF since 15 May 2012, significant decisions were taken about State property. Specifically, the Board selected the companies that will participate in Phase B of the tender for the sale of up to 70% of "Hellinikon SA" shares (4 companies) and the utilisation of land in Kassiopi, Corfu (1 association) and Afantou, Rhodes (6 companies); it also approved the final version of the contract on the basis of which potential investors submitted their final bids for the International Broadcasting Centre (IBC) and the final version of the Memorandum of Understanding between the HRADF and the National Bank of Greece on the use of the "Mikro Kavouri" peninsula in Vouliagmeni. On 19 September, the Board approved the Documents of Phase B of the tender procedure for the development of land in Kassiopi (Corfu) and decided that the participants will be called to submit binding bids within 60 days. On 28 September the HRADF announced the completion of the international tender for the 90-year concession of exploitation of the International Broadcasting Centre. The highest bidder was Lamda DOMI SA and the direct financial consideration has been agreed to €81 million (the Greek government may receive up to an additional €32.4 million, depending on the improvement of macroeconomic conditions in Greece over the next 50 years). During the past two months, important decisions have also been taken on the privatisation of public corporations (OPAP, DEPA, etc.).
- 37 Similar problems in the effort to implement the privatisations and real estate development programme are identified by HRADF. In particular, the main inhibitors to this effort are the required substantial preparation of assets in order to resolve various legal and technical problems, the coordination of the authorities involved in order to develop a strategy and implement policies, the required multiple inspection procedures (by the European Commission and the European Court of Auditors), the lack of active market for land rights, limited interest on the part of investors, problems in financing etc. See also Bank of Greece, Annual Report for 2011, section V.2 and Monetary Policy Interim Report 2010. Special Feature 3.
- 38 Additional actions and legislative arrangements are required for the utilisation of assets in the sector of infrastructure, energy, transport (airports, ports, motorways) and public utility companies e.g. the establishment of new regulatory authorities for the transfer of monopolies from the public to the private sector. Indeed, monitoring of privitisation processes can be ensured by the government through the operation of Independent Regulatory Authorities, which will safeguard public interests.
- 39 Such concession and long-term lease contracts have been used in the past for the development of major State properties such as the Flisvos marina, Zea marina, and the Athens International Airport, while Hellinikon airport is on a similar path.

state-owned land and properties has begun (see the relevant decisions of the Board of Directors of the Hellenic Republic Asset Development Fund in its meetings of 11, 19 and 28 September 2012). The acceleration of initiated individual development procedures and their successful completion are of outmost importance, as the latter is expected to become the benchmark for the utilisation of all public properties. The appropriate message is thus sent out to potential investors and markets that the Greek State convincingly proceeds with privatisations and the effective use of its property.

2 EMPLOYMENT AND UNEMPLOYMENT: DEVELOPMENTS AND PROSPECTS

- In the first half of 2012 employment kept on declining and unemployment kept on rising. The rate of employment for those aged 20-64 dropped to 56% against 66.4% in the first half of 2008 and a national target of 70% by 2020 (against 75% for EU-27).
- The rise in unemployment turned out to be stronger than what would have been expected on the basis of the **correlation of unemployment** and growth in the period prior to 2008. This was basically due to: (i) an increase in the labour force (with the inflow of mainly young people and women without previous work experience); (ii) a decrease in jobs (with many firms deciding to discontinue business); (iii) lower capacity for job creation on the back of recession; (iv) extensive layoffs; (v) contraction of the public sector; and (vi) withdrawal of the self-employed from the labour market (though at a lower rate).
- Because of the continued, very anaemic job creation, those who lost their jobs at the onset of the crisis are unable to find a new one, a development that significantly prolongs unemployment.
- Data from May to September show signs of some moderation in the rate of decrease in

employment and the rate of increase in unemployment. Underlying that could be a number of legislative changes in the labour market that have apparently contained layoffs.

• The crisis seems to have highlighted differences in the rates of employment and unemployment across **geographical regions**, with the relevant indicators deteriorating much more in urban and semi-urban areas than in rural areas of the country.

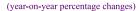
* * *

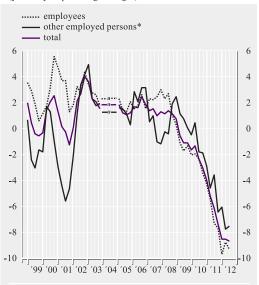
According to Labour Force Survey (LFS) data, the average number of the employed dropped by 360,000 (or 8.6%) in the first half of 2012 compared with the same period a year earlier (when the corresponding decrease had amounted to 251,000 or 5.7%, see Chart III.7). It was a quite large annual decrease and reflected the significant slump in employment in 2011, whereas in 2012 the drop in employment started to slow down. In greater detail, on the basis of seasonally adjusted data, employment declined in quarter-on-quarter terms in all four quarters of 2011: by 97,500 (-2.3%) in the first quarter, 59,900 (-1.4%) in the second quarter, 78,700 (-1.9%) in the third quarter and 128,700 (-3.2%) in the fourth quarter. From the first quarter of 2012 onwards, the pace of this decline started to slow: 83,900 (-2.1%) in the first quarter, 62,200 (-1.6%) in the second quarter and 38,100 (-1.0%) in July-August against the second quarter of 2012.

During the first half of 2012, the rate of employment for those aged 20-64⁴⁰ was 56%, down from 61.1% in the first half of 2011, 64.6% in 2010 and 65.8% in 2009. In order for Greece to return to its level of employment of the first half of 2008 (66.4%), the number of the employed would need to increase by 692,000 (or 18.5%). Moreover, if the national employment target

⁴⁰ This is the age group used in the target set by the European Commission for 2020. The adoption of a 20-year (instead of a 15-year) age threshold is warranted by the increasing participation of the young in education.

Chart III.7 Employment (1999-2012)





Source: ELSTAT, Labour Force Survey.
New revised data for 1998-2003, published in January 2005.
No changes are shown for 2004, as data are not fully comparable due to a change in the survey sample.
* Other employed persons = self-employed with employees (employers) + self-employed without employees + unpaid

family workers.

under the Europe 2020 growth strategy is to be met (i.e. an employment rate of 70% by 2020⁴¹), the number of the employed would need to increase by more than 800,000.⁴²

Measured in percentage points, the rate of employment declined more for the age group 25-29, as it decreased by about 19 percentage points, from 73.3% to 54.5%, between the first half of 2008 and the first half of 2012 (see Table III.8). In all age groups, the rate of employment declined more for men than for women, narrowing the gap between the two sexes.

Moreover, the amount of decline varied significantly with education level and place of residence.

For instance, at ages 30-49, the rate of employment fell more for those with a lower education level, despite the fact that they already had a low rate of employment (see Table III.9).

Turning to the **degree of urbanisation**, the rate of employment dropped more in the two large urban centres of Thessaloniki and Athens and less in rural areas. The smallest drop was in the islands (except Crete) and Epirus.

The largest contribution (3.9 percentage points) to the year-on-year drop in employment in the first half of 2012 came from the significant reduction in the number of **private** sector employees (by 163,200 or 9.6%). The decrease in the number of civil servants (by 77,700 or 8.2%) contributed another 1.9 percentage points. The number of self-employed persons with employees shrank dramatically (by 15.2\% or 50,200), contributing 1.2 percentage points to the decline in total employment. A similar drop in absolute terms (by 42,100 or 18.2%) was observed among family workers who contributed 1 percentage point to the drop in total employment. Self-employed without employees, who make up a much larger share of total employment than those with employees, saw a milder decrease (by 26,600 or 2.8%), thus contributing 0.6 percentage points to the reduction in employment (see Chart III.7).

Rather than just staff cuts, lower employment also reflects the fact that businesses have discontinued their operation. According to data by the Social Insurance Institute (IKA) for 2011, the total number of businesses was 14.8% lower year-on-year.

A comparison of employment in January-June 2012 and the same period a year earlier shows a fall in the number of jobs in trade (-90,900), manufacturing (-61,300), construction (-48,500), public administration (-38,300) and agriculture (-23,000). Job losses were heavier in the second than in the first quarter of 2012 for trade and public administration, while it was the other way round for agriculture and manufacturing.

 $[\]begin{array}{ll} \textbf{41 See} & http://ec.europa.eu/europe2020/pdf/themes/15_employment_target.pdf. \end{array}$

⁴² According to Eurostat population projections for 2020.

Table III.8 Labour force participation, employment and unemployment by age group (2008 HI and 2012 HI)

	Labour force pa	articipation (%)		Employment (%)	Unemployment (%)		
Age	2008 H1	2012 H1	2008 H1	2012 H1	2008 H1	2012 H1	
15-19	8.9	8.1	6.5	2.9	26.9	64.0	
20-24	50.0	51.3	39.4	24.8	21.2	51.6	
25-29	84.6	85.5	73.3	54.5	13.4	36.3	
30-34	85.0	87.8	77.5	64.7	8.8	26.3	
35-39	85.7	87.2	80.3	69.1	6.2	20.8	
40-44	84.5	86.3	79.8	70.2	5.7	18.6	
45-49	80.3	82.4	76.7	67.9	4.4	17.7	
50-54	70.8	72.8	67.7	60.9	4.4	16.3	
55-59	56.9	55.7	54.8	48.0	3.7	13.8	
60-64	31.7	27.9	30.9	25.1	2.5	9.9	

Source: ELSTAT, Labour Force Survey.

This is also reflected in occupational employment data, which show a strong reduction in the number of those in technical occupations, specialised or non-specialised, and office occupations. The number of senior private sector managers also declined considerably. For free-lance professionals, the decline was smaller.

In October 2012, despite the fact that employment had already decreased significantly, short-term employment expectations of businesses, as reflected in IOBE business surveys (see Chart III.8), were still negative in all sectors, especially in retail trade and construction. In retail trade and services, business employment expectations were worse than in 2011, but had improved in manufacturing and construction. Employment surveys conducted by ALBA (which mostly focuses on executives⁴³), Manpower Group Inc. and IME-GSEVEE (the Small Enterprises' Institute of the Hellenic Confederation of Professionals, Craftsmen and Merchants) also point to a negative employment outlook for the second half of 2012.

The uneasiness caused to employees is evident from the fact that even those currently in

Table III.9 Employment rate for people aged 30-49 by level of education (2008 HI and 2012 HI)

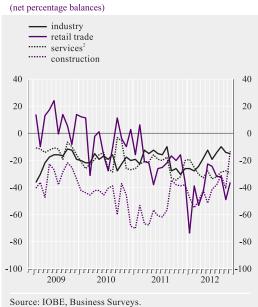
	2008 H1	2012 H1
Tertiary graduates	87.7	77.2
Higher secondary graduates	77.0	65.7
Lower secondary graduates	74.4	61.7
Primary graduates	67.2	53.8
Source: FLSTAT Labour Force Su	TUON	

employment are looking for another job either out of desire for a better job or fear of losing their current one (136,000 or 3.6% of the total number of employed persons in the first half of 2012, compared with 124,000 or 3.0% in the first half of 2011).

With the decrease in the number of the employed, the number of the unemployed rose by 343,000 to 1,144.500 (on average) in the first half of 2012. The average rate of

⁴³ Recruitment Confidence Index. See http://www.alba.edu.gr/RCI/Documents/RCI%202012%20B.pdf [in Greek].

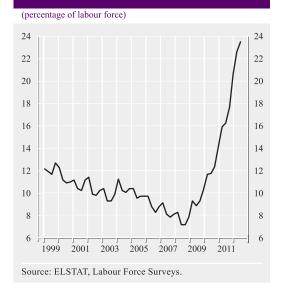
Chart III.8 Employment expectations (March 2009 - October 2012)



1 Firms were asked to assess the prospect of an increase in the number of their employees over the coming period.

2 Excluding banks and retail trade.

Chart III.9 Total unemployment rate (1999-2012)



unemployment was 23.1%, i.e. 7 percentage points higher than in the same period a year earlier (see Chart III.9). If provisional seasonally adjusted data for July and August are also taken into account, the average rate of

unemployment in January-August comes to 23.4%.

In the first half of 2012, the male unemployment rate rose to 20.2%, from 13.5% in the same period a year earlier, whereas the female unemployment rate to 26.9% from 19.7%. For those aged 25-29, the rate of unemployment went up by 9.3 percentage points, from 27% to 36.3%. For the age group 15-24, with its anyway low participation in the labour force (29.2%), the rate of unemployment reached 53.3%, up from 41.3%.

The increase in the number of the unemployed between the first half of 2011 and the first half of 2012 (+343,000) was smaller than the decrease in the number of the employed (-360,000), which suggests, assuming a stable population, that the labour market participation rate edged down slightly. At the beginning of the recession and up to 2010, this rate had increased. While deterioration was observed from 2011 onwards, the labour market participation rate decreased much less in the first half of 2012 than in 2011, suggesting that those out of employment continued to look for a job despite reduced salaries. In fact, July and August 2012 saw a marginal improvement in the participation rate, compared with the second quarter of the year, according to (seasonally adjusted) Labour Force Survey data. It is quite characteristic that young Greeks, unlike their counterparts in other European countries also under an economic adjustment programme, have not turned to education. Instead, they have sought to find a way into the labour market to support the family income.

In addition to the increase in the number of the unemployed, as officially defined by the International Labour Organization (ILO), there was also an increase in: (a) the number of those who are not looking for a job because the believe they will not find one (from 15,800 in the first half of 2011 to 20,800 in the first half of 2012); (b) the number of those who are not looking for a job for other reasons (from 48,900

to 65,500); (c) the number of those working part-time because they cannot find full-time employment (from 134,900 to 149,900).

Quite alarming is the rise in the number of the long-term unemployed, i.e. people who stay unemployed for more than 12 months (first half of 2011: 391,000; first half of 2012: 661,000) and, all the more so, the rise in the number of those unemployed for more than 24 months (first half of 2011: 194,400; first half of 2012: 333,600). The cause of concern is that those hit hardest by long-term unemployment are typically those without a high level of education, whose chances of finding employment diminish the longer they remain unemployed. That way, unemployment becomes structural.

While the short-term outlook for employment is surely negative, over the medium term, the crisis could open up new business opportunities, leading to a restructuring of the economy towards more effective and productive units. As already mentioned in Section 1 of this chapter, larger enterprises saw a smaller decrease in employment, which resulted in an increase in the percentage of those working in big enterprises. This, in turn, could contribute to improved productivity in the economy. In the third quarter of 2012, OAED (Manpower Employment Organisation) data on salaried employment flows in the private sector showed some promising signs. In every month of the period from January to September 2012 except in August, the sum of employment contracts that were terminated or expired was lower than a year earlier. A similar pattern was recorded for voluntary quits. Recruitments, on the other hand, continued to be lower in every month of the first half of 2012 compared with a year earlier. However, in the third quarter of the year, their number significantly exceeded that of the previous year.

To fight unemployment and make sure it will not become structural, the Ministry of Labour, Social Security and Welfare announced that it would spend €150 million on

innovative measures and targeted actions intended to give work to more than 80,000 young unemployed all over Greece. The Ministry of Labour, in collaboration with OAED, has focused on two key areas: (i) training (in ITC and training combined with work in the mining industry); and (ii) labour market integration (or re-integration) through subsidised job schemes for the most vulnerable (young, people nearing retirement). Moreover, the Task Force for Greece was asked to see to the transfer of German know-how in issues related to apprenticeship.

In addition, OAED undergoes modernisation. That involves using its website as a meeting point for employers and employees and making sure its Centres for the Promotion of Employment are more actively involved in facilitating a better match between supply and demand. Evaluations of policies adopted by other countries to tackle youth unemployment highlight the importance of employment promotion agencies providing personalised counselling for young people out of the labour market. By way of example, public employment services in Sweden and Finland are required, within three months of registration of a young person, to draw up a personalised plan for that person containing one of the following: (i) a job offer; (ii) an opportunity to study or receive training; or (iii) alternative action (e.g. startup funding).44

In addition to high unemployment rates, a significant challenge facing the unemployed and the government is uninsured labour. The Ministry of Labour is pushing ahead with a plan to give enhanced responsibilities to the Hellenic Labour Inspectorate (SEPE), while the newly introduced SEPE-OAED platform will save businesses an estimated €25 million annually in administration expenses. With IKA-ETAM joining the platform, the proportion of undeclared labour will also decrease.

⁴⁴ Mascherini, M. (2012), Youth Guarantee: Experiences from Finland and Sweden, Eurofound (http://www.eurofound.europa.eu/pubdocs/2012/42/en/1/EF1242EN.pdf).

3 INFLATION, LABOUR COSTS AND COMPETITIVENESS: DEVELOPMENTS AND PROSPECTS

3.1 INFLATION

- The average annual rate of increase in HICP (Harmonised Index of Consumer Prices), which had picked up to 4.7% in 2010 driven by indirect tax hikes, dropped to 3.1% in 2011 and is expected to drop further to 1.2% in 2012 (it stood at 0.9% in October - see Table III.10 and Chart III.10). On the other hand, annual average core inflation (which excludes energy and unprocessed food prices) receded to 1.7% in 2011, after reaching 3.0% in 2010, and is expected to fall further to zero (0%) this year - having stood at 0% in August, -1.0% in September, and -0.8% in October (see Chart III.11). In 2013, inflation is forecast to maintain its downward path, with the average annual increase in HICP moderating to around 0.3% and annual average core inflation turning negative (-0.5%).
- Without the impact of indirect tax increases, average HICP inflation was only 1.1% in 2011. In 2012, it is expected to drop to 0.2%, before falling further to -0.5% in 2013. Average core inflation, on the other hand, will turn clearly negative in 2012 at -0.6% (it was -0.8% in October), after a modest 0.2% in 2011.
- Inflation fell more sharply this year (compared with the previous year) reflecting (i) the quicker unwinding of the impact of indirect taxes (estimated to burden annual average inflation by approximately one percentage point in 2012, compared with two percentage points in 2011); (ii) a far larger drop in unit labour costs in the business sector; (iii) the continued decline in domestic demand; and (iv) the further deceleration (for the second year in a row) of the growth of international crude oil prices in euro (see Charts III.13 and III.14).
- The two key disinflationary factors that will be affecting inflation dynamics until late 2013,

Chart III.10 Harmonised index of consumer prices in Greece, the euro area and the European Union (January 2011 - October 2012)

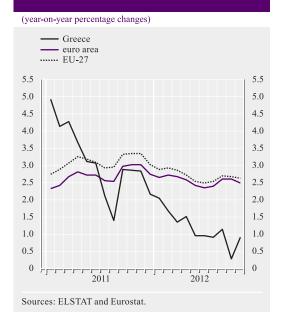
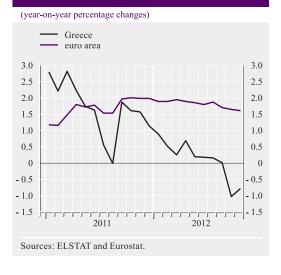


Chart III.11 Core inflation in Greece and the euro area on the basis of the HICP excluding energy and unprocessed food (January 2011 - October 2012)



namely subdued demand and declining unit labour costs, are largely reflected in the rate of change in the prices of industrial goods (excluding energy and processed food), which is now negative (-0.4% in October) and is expected to remain so. They are also reflected

Table III.10 Harmonised index of consumer prices: Greece and the EU (2010-2012)

(annual percentage changes)

Country	2010 (year average)	2011 (year average)	October 2011	October 2012
Austria	1,7	3.6	3.8	2.9
Belgium	2.3	3.5	3.4	2.6
Bulgaria	3.0	3.4	3.0	3.0
Cyprus	2.6	3.5	3.2	2.6
Czech Republic	1.2	2.1	2.6	3.6
Denmark	2.2	2.7	2.7	2.3
Estonia	2.7	5.1	4.7	4.2
Finland	1.7	3.3	3.2	3.5
France	1.7	2.3	2.5	2.1
Germany	1.2	2.5	2.9	2.1
Greece	4.7	3.1	2.9	0.9
Hungary	4.7	3.9	3.8	6.0
Ireland	-1.6	1.2	1.5	2.1
Italy	1.6	2.9	3.8	2.8
Latvia	-1.2	4.2	4.3	1.6
Lithuania	1.2	4.1	4.2	3.2
Luxembourg	2.8	3.7	3.8	3.2
Malta	2.0	2.5	2.5	3.2
Netherlands	0.9	2.5	2.8	3.3
Poland	2.7	3.9	3.8	3.4
Portugal	1.4	3.6	4.0	2.1
Romania	6.1	5.8	3.6	5.0
Slovakia	0.7	4.1	4.6	3.9
Slovenia	2.1	2.1	2.9	3.2
Spain	2.0	3.1	3.0	3.5
Sweden	1.9	1.4	1.1	1.2
United Kingdom	3.3	4.5	5.0	2.7
European Union - 27	2.1	3.1	3.4	2.6
Euro area	1.6	2.7	3.0	2.5

Source: Eurostat.

in HICP services prices, with their annual rate of change turning negative in September (-0.9%) and October (-1.1%) and likely to remain so, mostly on account of the significant fall in residential rent prices.

• By contrast, processed food prices contributed to maintaining a positive, although low, inflation; their annual rate of change was 1.3% in August, -0.3% in September, -0.5% in October, and is expected to stand between slightly negative and positive values (of

around 3.0%) until late 2013. Processed food prices are influenced by the high import content of processed food products, reflecting, with a time lag, the large rise in world food commodity prices in 2011. Finally, despite the aforementioned continued slowdown in the growth of fuel prices, the energy component of the HICP rose by 18.2% year-on-year in October. The annual rate of increase in HICP energy prices will remain positive and accelerate towards the end of the third quarter of 2013.

Chart III.12 Consumer Price Index and core inflation in Greece (January 2011 - October 2012)

(year-on-year percentage changes)

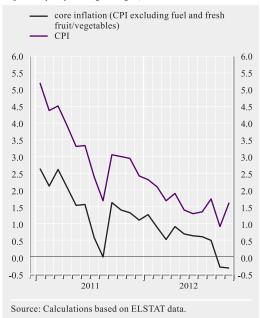


Chart III.14 Inflationary contribution of changes in fuel prices (January 2011 - October 2012)

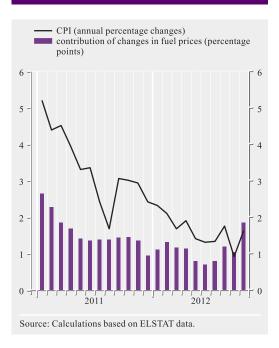


Chart III.13 Evolution of CPI/PPI fuel prices and of the euro price of Brent crude oil (January 2011 - October 2012)

(year-on-year percentage changes)

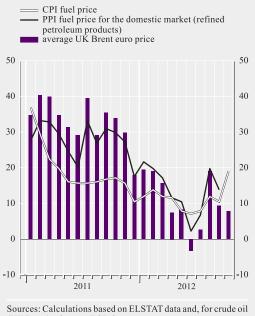


Chart III.15 Import price index in industry and the inverse of the effective exchange rate of the euro, weighted on the basis of Greece's external trade (January 2011 - September 2012)

(year-on-year percentage changes) - import prices (total) - import prices excluding energy prices inverse of the effective exchange rate 12 12 10 10 8 8 6 6 4 4 2 2 0 0 -2 -2 2012

(UK Brent) prices, on ECB data.

3.1.A IS INFLATION DECLINING ENOUGH?

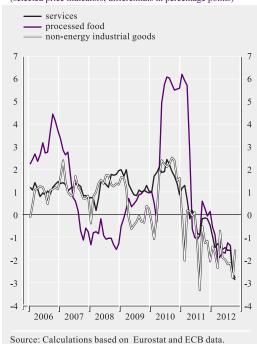
As already mentioned, without the impact of indirect tax hikes, core inflation (which excludes energy prices) will turn negative this year (-0.6%). If the impact — estimated at 0.2 percentage point in 2012— from administrative price increases in the context of the fiscal consolidation effort is also excluded, the anticipated "net" inflation stands at -0.8%. Moreover, 2012 will be the first year since Greece joined EMU twelve years ago when inflation is below the euro area average, which is estimated to range between 2.4% and 2.6% in 2012 (against 2.5% in October, see Table III.11 and Charts III.10, III.11 and III.16).

The question that arises is: why hasn't the drop in consumer prices been greater in this framework of protracted decline in consumer demand and accelerating decrease in unit labour costs? Most of the reasons are far from unknown.

• The main reason is the inadequate competition in sectors which are critical to consumer prices, such as distributive trade. 45 Distortions in competition, for example in the food sector, were also established in a recent report

Chart III.16 Annual inflation differentials between Greece and the euro area (2006 - 2012)





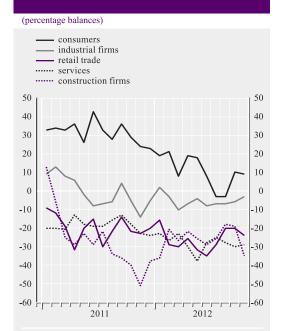
45 See also Structural features of distributive trades and their impact on prices in the euro area, September 2011, ECB Structural Issues Report. A short summary of the report is available in Box VI.1 ("Structural features of trade in Greece and the euro area"), Bank of Greece, Monetary Policy – Interim Report 2011, November 2011, pp. 133-136.

Table III.11 Contributions to the inflation differential between Greece and the euro area (2007-2012)

(percentage points)						
	2007	2008	2009	2010	2011	2012 (JanOct.)
Average annual HICP inflation differentials	0.90	1.00	1.10	3.10	0.40	-1.40
Contributions:						
Core inflation	1.00	0.77	0.91	1.60	-0.04	-1.49
of which						
Services	0.50	0.56	0.64	0.71	0.01	-0.73
Processed food	0.13	-0.14	0.14	0.52	0.21	-0.24
Non-energy industrial goods	0.35	0.35	0.13	0.37	-0.26	-0.52
Unprocessed food	-0.06	0.03	0.39	-0.12	0.08	-0.12
Energy	-0.03	0.24	-0.25	1.66	0.40	0.26

Source: Calculations based on Eurostat and ELSTAT data.

Chart III.17 Inflation expectations of consumers and business firms (January 2011-October 2012)



Sources: IOBE and European Commission, Business and consumer survey results.

1 The responses of business firms concern the prospect of price increases in the goods they produce over the next 3-4 months, while consumers' responses concern the prospect of a faster increase in consumer prices over the next 12 months. Seasonally adjusted data for consumers.

by the European Competition Network -ECN⁴⁶ (concerning infringements of competition rules in individual EU countries over the period 2004-2011). According to the report, the most active enforcement record was shared by Greek and Spanish authorities, with 18 enforcement actions each, out of a combined total of 182 enforcement actions undertaken by the national competition authorities and the European Commission. Competition infringements in Greece (collusion and abuse of dominant position) concerned flour production, dairy products, purchasing milk from producers, meat, poultry, eggs, canned fruit, frozen and fresh vegetables, trade in fresh vegetables, beer, instant coffee, cola-type soft drinks, salty snacks, as well as competition restraining practices imposed by large supermarket chains on their distribution networks. These findings are indirectly corroborated by the relative stickiness of consumer prices, as shown by disaggregated CPI data on several products (fish, meat, sugar, chocolates and sweets, dairy products, breakfast cereals, coffee-cocoa-tea, alcoholic and non-alcoholic beverages, tobacco) in 2009-2012.

- Competition distortions also include distortions arising from intra-group transactions of multinational companies, as well as pricing practices and procurement restrictions that multinationals impose on products sold by their subsidiaries.⁴⁷
- Imperfect competition can also be reflected in relative consumer prices. According to a news release by Eurostat, 48 while the average consumer price level in Greece was only slightly below that of EU-27 in 2011 (95 as opposed to 100), price levels were above the average for EU-27 (100) in the individual sub-categories of (i) food and non-alcoholic beverages (103), (ii) clothing (103), (iii) footwear (108), (iv) consumer electronics (108), and (v) communication (128). Price levels of food corroborate these findings, whereas those of clothing, footwear and consumer electronics point to significant distortions in pricing policy. Finally, a most surprising fact is the very high price levels for communication services. While this may be a sign of price-setting collusion (despite the seemingly fierce price competition between companies), it is more likely to reflect the fact that indirect taxes on telephony services - mostly on mobile telephony services - rose

⁴⁶ See *ECN* activities in the food sector, May 2012. Full text: http://ec.europa.eu/competition/ecn/food_report_en.pdf. Press release: http://europa.eu/rapid/pressReleasesAction.do?reference=IP/12/502&format=HTML&aged=0&language=EN&guiLanguage=en.

All nits press release of 17 September 2012 (NCGT responds to 'Why prices are not falling in the market') [in Greek], the National Confederation of Greek Trade cites, among others, the following reasons: (i) "transfer pricing", i.e. intra-group practices used by multinationals to inflate prices and costs in order to avoid being taxed in Greece. Under this practice, a domestic subsidiary of a multinational company imports products at an artificially inflated cost, which it then passes through to consumers in the form of higher prices; (ii) clauses prohibiting parallel imports, whereby retailers are not allowed to purchase products from a subsidiary in another country at a price that could be lower than the price at which the products are sold in the Greek market.

significantly in 2010-2011. It should be noted, however, that, while price variation may reflect differences in competition, it does not necessarily reflect differences in inflation rates.

- Despite the recession, undeclared income earned in the shadow economy (although this has also been negatively affected by the crisis) continues to prop up demand for non-essential goods and services, thus contributing somewhat to the downward stickiness of relevant consumer prices.
- Another factor is the increase in the overall tax burden of enterprises, either directly (e.g. extraordinary levies) or indirectly (e.g. government delays in paying VAT refunds and other arrears to businesses). That has essentially the same effect as if a production cost component increased since it drives prices up or, to put it more accurately, hinders or limits their reduction. Indeed, the fact that unit labour costs in the business sector are estimated to have fallen by 1.1% in 2010 and 3.5% in 2011, while a further drop of 10.4% is anticipated for this year, whereas the GDP deflator rose by 1.1% in 2010 and 1.0% in 2011, only dropping by 0.6% in January-September 2012,49 shows that the profit margin in the business economy as a whole (measured exclusively by comparing unit labour costs to the GDP deflator) has increased, despite the recorded decrease in the profit margins of non-financial corporations listed on the Athens Exchange.⁵⁰ That seems to reflect that firms do not move to more substantial price (and hence profit margin) cuts in order to meet their increased tax obligations. The analysis of input-output tables leads to the assumption that, if the fall in unit labour costs had been fully passed through to final consumer prices, inflation might have been even lower in 2011 and 2012 (by 0.5-1.0 and 1.5-2.0 percentage points, respectively). Thus, in other words, enterprises do rely on reduced unit labour costs to meet their tax obligations and overcome financial stress and higher energy costs.

- Rigidities in the methodology used for the compilation of the HICP may also result in an incomplete recording of actual inflation. In greater detail:
- While reduced prices during an official sales season are recorded in the price samples used for the compilation of the HICP, this is not the case for price cuts in the context of special offers, which are ignored, in line with Eurostat methodology. Since the onset of the crisis, such offers have become more frequent and it would be reasonable to assume that their share in total purchases has also increased, offsetting, if only slightly, the decline in consumers' purchasing power caused by lower incomes. While the recording of sale and/or offer prices has an almost neutral effect on HICP inflation, methodological rigidities in the compilation of the HICP can potentially result in some sort of incomplete recording of actual inflation.
- Also, insofar as there are time lags in updating the composition of the HICP, both the weights used and the composition of the index itself may not reflect all changes in consumption patterns as a result of the crisis (e.g. a shift of consumers towards cheaper substitutes or a shift away from consumer durables, imported or luxury goods). Nevertheless, even a timely and complete recording of changing consumption patterns would not necessarily lead to a smaller increase, or a decrease, in HICP.
- Finally, external factors such as fuel and other imported commodities (food and nonfood commodities) can produce significant inflationary effects. Fuel prices are constantly on the rise, albeit with some small downward
- **49** Similarly, producer prices in the domestic non-energy market rose by 0.9% in 2010, 2.7% in 2011 and 0.9% in January-September 2012.
- 50 According to the financial statements published by 163 non-financial corporations listed on the Athens Exchange, in the first half of 2012 sales dropped by 11.2%, gross profits by 13.5% and net pretax profits by 76.6%. As a result, the gross profit margin shrank by 0.4 percentage point, from 17.4% to 17.8%, and the net profit margin came to almost zero (0.8%) from 3.1%. Return on equity (RoE) declined to 0.5% from 2.1%, year-on-year and return on assets (RoA) dropped to 0.2% from 1.0%. The Hellenic Telecommunications Organisation (OTE) and the two oil distilleries are not included in these 163 enterprises.

adjustments, and world prices for non-oil commodities (mostly basic agricultural products, e.g. maize, wheat, soybeans) remain at high levels, but lower than in 2011, due to climate change. Pressure on final prices created by the protracted increases in the world prices of oil and food commodities, although apparently contained by insufficient demand, is not negligible.

3.2 WAGES AND UNIT LABOUR COSTS

• In 2012, average nominal pre-tax earnings in total economy are estimated to fall at an average annual rate of 7.0%, with the decline in average real earnings amounting to 8.1% (in 2011, they decreased by 1.7% and 4.7%, respectively). Compensation per employee, including employer contributions and public pension spending, will also shrink at an average 6.4%. The reduction in average earnings in the business economy will be larger (-8.7% in nominal terms and -9.8% in real terms).

Table III.12 offers more detailed estimates (see also Table III.13).

- Given that the average annual increase in productivity could turn out to be very small, unit labour costs in both the total and the business economy are expected to decrease for the third consecutive year in 2012, though at a much faster pace than in 2010-2011 (6.9% and 10.4%, respectively).
- It should be noted that these estimates may prove to be conservative if ELSTAT's national accounts data are taken into consideration. According to data from ELSTAT's Labour Force Survey, monthly labour costs per employee (not per unit) in euro dropped by 11.6% year-on-year in the first half of 2012, after annual decreases of 6.1% in 2011 and 2.7% in 2010. Lastly, according to the Labour

⁵¹ At least, as suggested by the disaggregated quarterly data for the first half of 2012 (currently under revision).

Table III.12 Earnings and labour	costs (2006-2	013)						
(annual percentage changes)								
	2006	2007	2008	2009	2010	2011	2012	2013 (forecast)
Greece								
Average gross earnings (nominal):								
- total economy	5.7	5.2	6.2	4.6	-4.6	-1.7	-7.0	-7.8
- central government ¹	3.1	3.8	7.1	5.2	-7.7	-0.5	-3.8	-6.7
– public utilities	7.0	7.1	8.2	7.7	-5.5	-7.9	-9.5	-10.0
– banks	10.8	8.9	0.0	3.7	-1.8	0.1	-7.5	-10.0
- non-bank private sector	6.8	6.1	6.5	2.8	-2.9	-1.7	-9.3	-7.8
Minimum earnings	6.2	5.4	6.2	5.7	1.7	0.9	-19.6 ³	
Average gross earnings (real)	2.4	2.2	1.9	3.3	-8.9	-4.7	-8.1	-8.1
Total compensation of employees	7.8	8.2	8.5	3.2	-6.9	-8.1	-12.6	-11.4
Compensation per employee	5.9	5.6	6.8	4.9	-4.0	-0.7	-6.4	-8.0
Unit labour costs:								
- total economy	2.2	4.5	8.7	6.4	-2.1	-1.1	-6.9	-7.4
– business sector ²	2.8	5.3	7.9	4.4	-1.1	-3.5	-10.4	-8.0

Sources: ELSTAT (GDP for 2006-2011), Bank of Greece estimates/forecasts (for GDP in 2012-2013 and the other annual aggregates in 2006-2013).

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



¹ Average compensation per employee.

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

Table III.13 Average earnings and unit labour costs in total economy: Greece and the euro area (2001-2013)

(annual percentage changes)

	Average	earnings	Unit labour costs			
Year	Greece	Euro area	Greece	Euro area		
2001	4.7	2.8	3.9	2.4		
2002	6.6	2.7	5.5	2.5		
2003	5.6	2.9	2.3	2.2		
2004	7.2	2.6	4.3	1.0		
2005	4.4	2.2	3.4	1.3		
2006	5.7	2.5	2.2	1.1		
2007	5.2	2.5	4.5	1.4		
2008	6.2	3.4	8.7	3.8		
2009	4.6	1.8	6.4	4.3		
2010	-4.6	1.9	-2.1	-0.7		
2011	-1.7	2.2	-1.1	0.9		
2012	-7.0	1.9	-6.9	1.4		
2013 (forecast)	-7.8	2.0	-7.4	1.2		

Sources: For Greece, Bank of Greece estimates; for the euro area: European Commission, Economic Forecasts, Autumn 2012.

Cost index published by Eurostat on 17 September 2012, during the first quarter of 2012 nominal hourly labour costs in the business economy fell by 8.9% and those in the mainly non-business economy by 15.7%. In total economy, the annual rate of decline was 11.5%, against 8.1% in the fourth quarter of 2011.

- The drop in unit labour costs is expected to continue in 2013 (7.4% in total economy and 8.0% in the business economy), while an increase (0.5% and 1.8% respectively) could be expected in 2014 as the economy starts to recover.
- In 2010-2012, unit labour costs in the total economy are estimated to have declined by a cumulative 9.9% (14.5% in the business economy).
- According to these provisional and approximate calculations, the target set in the Memorandum adopted by Parliament in February 2012—i.e. to cut unit labour costs by 15% over the three years from 2012 to 2014—will be overshot, as the cumulative reduction in unit labour costs will amount to 16.0% in that period.

3.2.A EARNINGS IN THE BUSINESS ECONOMY: HOW ARE THEY AFFECTED BY RECENT LABOUR MARKET REFORMS AND THE RECESSION?

The decline in employee earnings in 2012 and 2013 is and will be affected by (i) significant policy measures, launched in October 2011, February and November 2012, relating to the level of wages (especially in the business economy) and the regulatory framework of wage formation, and (ii) the economic recession, which also shapes conditions in the labour market.

- Since late October 2011, following the enactment of Law 4024 (Article 37), which has lifted remaining barriers and thus facilitated the conclusion of enterprise-level agreements, a clear shift of private enterprises towards such contracts is observed.
- Structural labour market interventions envisaged in the Memorandum (Law 4046/2012) concern: (a) an immediate cut of 22% in the minimum earnings for those aged 25+ and 32% for those under 25; (b) sus-

pension of automatic wage increases due to seniority; (c) limitation of the continued effect ("after-effect") of collective agreements after they expire and establishment of a maximum duration for collective agreements; (d) conversion of fixed, long-term employment contracts (quasi-permanency) in currently or formerly state-owned enterprises to indefinite duration contracts; (e) a cut, within 2012, of 10% (on average) in special wage regimes (applying to judges, diplomats, medical doctors, university professors, armed forces and law enforcement agencies).

- Law 4093 (approval of the Medium-Term Fiscal Strategy framework 2013-2016 and emergency measures for the implementation of Law 4046/2012), enacted on 7 November, and the Budget for 2013, adopted on 11 November, include measures to further cut earnings in the public sector, together with additional regulations to increase flexibility in the labour market.
- Meanwhile, already from the onset of the crisis, private enterprises sought to adjust labour costs to lower demand by various means: reduction/elimination of overtime work, suspension of personnel, introduction of reduced weekly working hours, conversion of full-time work contracts to part-time or short-time, wage cuts through individual work contracts, staff layoffs. In 2012, private enterprises resorted more to individual employment contracts than in the past.

In most cases, enterprise-level agreements provide for a downward adjustment of actual earnings by 10%-40% – relative to the level of minimum earnings and benefits stipulated in sectoral and occupational agreements (depending on the case). Significant cuts also result from enterprise-level agreements in banks and public utilities. Between late October 2011 (enactment of Law 4024/2011) and late September 2012, more than 870 enterprise-level collective agreements had been entered into, covering more than 130,200 people (81,950 of whom work in banks, public

utilities and large manufacturing enterprises, while the remaining 48,250 work in micro, small and medium-sized private enterprises). Significant sectoral agreements have been signed in 2012, the most important of which (covering more than 300,000 employees in retail and wholesale trade) provided for a 6.3% wage cut. Other sectoral agreements (covering employees in hotels, foreign airlines, wood manufacturing and processing, confectionery stores, cosmetic companies, private clinics) provided for cuts of up to 15%. Moreover, according to data from the Hellenic Labour Inspectorate (SEPE), between 14 February and 30 June 2012, a total of 109,123 individual employment contracts had been signed in 26,150 enterprises providing for average wage reductions of 23.4%.

According to data available thus far, it is estimated that at least 14.25% of all business economy employees have been affected by salary cuts introduced through enterprise-level agreements and individual employment contracts, while 20-25% have been affected by reductions through sectoral agreements.

The downward adjustment process will continue in 2013, with those sectoral and occupational agreements that had not expired in 2012.

3.3 INTERNATIONAL COST COMPETIVENESS

• It should be recalled that the simplest approach to investigate the effect of labour costs on competitiveness would be to measure the change in unit labour costs in a common currency (the so-called "ULCT (unit labour costs in the total economy)-deflated real effective exchange rates"). This indicator is calculated vis-à-vis Greece's 28 main trading partners, including euro area countries. According to revised estimates by the Bank of Greece, this indicator rose by 31.5% in the 2001-2009 period, which suggests an equal loss in cost competitiveness. Thereafter, in 2010-2011, it decreased by 7.2%, indicating some recovery in competitiveness (see Table III.14). That

Table III.14 Greece: revised nominal and real effective exchange rate (EER) indices1

(annual percentage changes in year averages)

(annual percentage changes in year averages)						
		Real EER				
	Nominal EER	On the basis of relative consumer prices	On the basis of relative unit labour costs in total economy			
2001	1.7	1.1	0.7			
2002	2.3	2.6	4.2			
2003	5.0	5.5	3.8			
2004	1.7	1.9	4.4			
2005	-1.0	-0.1	0.4			
2006	0.0	0.8	0.9			
2007	1.3	1.6	3.6			
2008	2.4	2.5	6.7			
2009	1.2	1.6	3.4			
2010	-2.8	-0.5	-5.2			
2011	0.5	0.4	-2.1			
2012*	-2.0	-3.0	-10.9			
Cumulative percentage change between 2001 and 2012*	10.5	15.0	8.8			

Sources: Exchange rates: ECB, euro reference exchange rates. CPI: ECB, HICP where available. Unit labour costs in total economy: Bank of Greece estimates for Greece, ECB for the other countries.

brought the cumulative loss in competitiveness down to 22.1% for the 11-year period from 2001 to 2011. The exchange rate is irrelevant when calculating competitiveness losses against Greece's trading partners in the euro area alone, as there is a single currency and therefore changes in this indicator solely reflect changes in relative labour costs. According to Bank of Greece estimates, the cumulative loss in competitiveness vis-à-vis Greece's euro area trading partners, on the basis of relative labour costs, reached 22.3% in 2001-2009, but it is estimated to have improved by 3.5% in 2010-2011, thus coming down to 18.0% for the 2001-2011 period.

• According to the aforementioned forecasts of unit labour costs in 2012 and 2013, relative unit labour cost-based competitiveness against the 28 trading partners is expected to improve by 10.9% in 2012, and 8.8% in 2013 (against

the euro area it will improve by 8.5% in 2012 and 8.2% in 2013).

• Improved competitiveness in 2010-2012 is also corroborated by ECB's harmonised competitiveness indicators. The "real harmonised competitiveness indicators based on unit labour costs indices for the total economy" for Greece⁵² rose by 24.3% (and hence competitiveness declined) in the nine years from 2001 to 2009 and declined by 18.6% (and hence competitiveness improved) in the period from 2009 up to the second quarter of 2012. As a result, the overall increase in the indicator (decrease in competitiveness) between 2001 and the second quarter of 2012 came to 1.2%, which suggests that 95.1% of competitiveness losses in 2001-2009 were recovered.

^{*} Provisional data and estimates.

¹ Revised (on 1 January 2011) indices are compiled by the Bank of Greece and include Greece's 28 main trading partners. Weights were revised on the basis of imports and exports of manufacturing goods (SITC 5-8) in the years 1998-2000 for the period 1993-2000 and in the years 2004-2006 for the period 2001-2010. Weights take account of third-market effects.

⁵² Calculated vis-à-vis 36 trading partners, including all other euro area countries.

- The "ULC-deflated real effective exchange rates" estimated by the European Commission also support this picture.⁵³ The rate for Greece decreased by 2.8% in 2010 and 1.9% in 2011 (that is an overall reduction of 4.65% for the two years combined), which corresponds to equal improvements in cost competitiveness, while further sharp decreases (competitiveness gains) are forecast for 2012 (-11.8%) and 2013 (-6.3%). Overall, it is estimated that competitiveness gains in the four-year period from 2010 to 2013 will reach 21.2%, more than offsetting a cumulative loss of 8.6% in 1998-2009, since it implies a 14.4% improvement in 2013 against 1997.
- Of course, as highlighted in previous Bank of Greece reports,54 after a necessary initial corrective period, a sustainable improvement in competitiveness cannot rely on a combination of lower nominal earnings and lower or stagnant productivity, as the negative impact of a continuous reduction in earnings on domestic demand would outweigh any positive impact on external demand. Therefore, improving cost competitiveness should also rely on enhanced productivity. Structural reforms designed to increase the operational efficiency of product and labour markets are precisely geared to this direction, thus also enabling higher potential growth and improved structural competitiveness. It is also noted that the disaggregated quarterly national accounts data (currently under revision) pointed to a rebound in labour productivity (GDP per employee) already since the third quarter of 2011, with its average annual growth rate in the 12-month period from July 2011 to June 2012 estimated at 2.3%. However, that was a reflection of the fact that the decrease in employment outweighed output contraction, when what is needed instead is to achieve an increase in both aggregates and a parallel increase in productivity.

3.3.A RECOVERING COST COMPETITIVENESS LOSSES OF 2001-2009: PERFORMANCE AND PROSPECTS

The aforementioned Bank of Greece estimates suggest that in 2010-2011 Greece regained

19%-30% of previous cost competitiveness losses against the rest of the euro area and the 28 trading partners. Overall, in the three years from 2010 to 2012, 64% of the losses against the rest of the euro area and 72% of the losses against the 28 trading partners will be recovered, with competitiveness gains reaching 11.7% and 17.3% respectively. Finally, all losses, both against the rest of the euro area and the 28 trading partners, are estimated to be recouped by 2013.

4 EXTERNAL BALANCE: DEVELOPMENTS AND PROSPECTS

4.1 CURRENT ACCOUNT BALANCE

4.1.1 INTRODUCTION

Developments in the current account balance in 2012 were marked by a drastic reduction in the current account deficit. According to data covering the January-September 2012 period, this deficit dropped to 1/4 of the 2011 figure, i.e. to €3.5 billion (see Table 6 of the Statistical Appendix). Besides, excluding the net oil import bill and net interest payments on public debt, the current account balance in 2011 showed a slight surplus (0.2%), which increased further to 4.1% of annual GDP in the first nine months of 2012. In 2011 a surplus of €1.8 billion was also recorded in the goods and services balance excluding oil and ships (reaching €6 billion for the Jan.-Sept. 2012 period).

The factors that have helped drive down the current account deficit in 2012 can be summarised in the protracted recession in the domestic market, a decrease in the net oil import bill and a considerable drop in net interest payments on Greek government bonds held by non-residents. This latter drop is due to the PSI and to lower interest payments on



⁵³ See European Commission, European Economic Forecast – Autumn 2012, 7 November 2012.

⁵⁴ Monetary Policy – Interim Report 2011, November 2011, p. 22, Monetary Policy 2011-2012, March 2012, p.68.

loans under the support mechanism on account of the interest rate adjustment.⁵⁵

Despite an essential improvement in cost competitiveness, which is projected to continue in the years ahead, the level of the current account balance cannot be considered satisfactory, even though the deficit is estimated to shrink on an annual basis, to just 4.5% of GDP, from 9.9% of GDP in 2011. In more detail, this spectacular improvement, as already mentioned, is to a great extent the result of reduced interest payments and the recession in the domestic market. The decrease in the import bill, in particular, reflects a decline in investment activity and, subsequently, a fall in the imports of capital goods and of consumer durables. However, the existing structural weaknesses of the Greek economy, such as its strong dependence on foreign energy sources,56 the asymmetry in the income elasticity of imports coupled with a zero potential for import substitution, the high import content of Greek exports, as well as the financing of the trade deficit with services sensitive to exogenous factors, will continue - if they remain unaddressed - to rekindle the trend for a widening current account deficit, once the economy has returned to positive growth rates.

In several previous reports as well as in one of its special papers,⁵⁷ the Bank of Greece has repeatedly stressed the need to improve the Greek economy's structural competitiveness by cutting red tape and burdensome regulations in factor, product and services markets.58 The improved structural competitiveness of the Greek economy is expected to help attract foreign direct investment, which would contribute to the financing of the current account deficit and, in the long run, would lead to import substitution in several product categories. Nevertheless, investment activity can only be encouraged by bolstering the financing of enterprises, given that liquidity supply can help to boost export activity even in the short term and thus contribute to the narrowing of the current account deficit. Therefore, credit to non-financial corporations, which had shrunk for the reasons described in Chapter V, needs to be supported – using all available tools.

The urgent need to adopt such measures becomes evident also from the fact that the persisting recession for fifth consecutive year has brought about a long-term withdrawal of product and services inputs from economic activity, which, compounded by rapid technological developments in many sectors of the economy, will inevitably lead to a gradual impairment of assets and human capital, rendering the former obsolete and the latter inadequately skilled.

4.1.2 TRADE BALANCE

The decline of 76.5% or €11.3 billion in the current account deficit during the first nine months of 2012 is largely due to a 40.4% contraction in the non-fuel trade deficit and a 68.6% drop in the income account deficit. The first development reflects shrinking imports excluding fuel, on account of the protracted recession in the domestic market which has sharply reduced the overall non-fuel import bill. Specifically, the drastic reduction of the trade deficit excluding fuel came as a result of a faster rate of decline in the import bill excluding fuel and ships, year-on-year, as export receipts excluding fuel and ships continued to increase, albeit at a weaker pace. Regarding the purchase of ships, net payments decreased considerably, mainly because of a decline in gross payments, which was faster than the decline in receipts from the sale of ships.

- 55 The role of the PSI in the reduction of the deficit is evident, if account is taken of the fact that net interest payments averaged 3.9% of GDP in the last five years (against 4.6% in 2011).
- 56 Illustrative of the Greek economy's foreign energy dependence is the fact that the net fuel import bill came on average to 4.3% of GDP in the last five years (5.2% in 2011).
- 57 See Bank of Greece, Greece's current account balance: Causes of imbalances and policy suggestions, July 2010 [in Greek].
- 58 (a) Transparency International, Money, Politics, Power: Corruption Risks in Europe, June 2012, (b) World Bank, Doing Business 2013, (c) World Economic Forum, Global Competitiveness Report 2012-2013 (according to this report, Greece fell to the 96th position among 144 economies, at the bottom of the EU ranking). Besides, in a recent speech (Athens, October 2012), Dr. Augusto Lopez-Claros, Director of Global Indicators and Analysis at the World Bank, commented on the country's ranking in Doing Business, saying that despite its higher ranking this year, there is still ample room for structural reforms over a medium- and long-term horizon, such as cutting red tape on starting a business.

Table III.15 Breakdown of Greek imports of goods (excluding fuel and ships) according to their use

	2008	2009	2010	2011	2011 Jan Sept.	2012 Jan Sept.	2009/08	2010/09	2011/10	2011/08	2012/11 Jan Sept.
	(million euro)				(percentage change)						
Non-oil raw materials and intermediate goods	6,244 (15.3)	3,741 (12.2)	3,926 (15.7)	4,223 (18.9)	3,333 (19.5)	2,515 (18.3)	-40.1	5.0	7.6	-32.4	-24.5
Consumer non-durables	19,183 (47.0)	15,980 (51.9)	13,412 (53.6)	12,513 (56.0)	9,506 (55.7)	7,896 (57.6)	-16.7	-16.1	-6.7	-34.8	-16.9
Consumer durables	5,012 (12.3)	2,879 (9.4)	2,708 (10.8)	1,847 (8.3)	1,425 (8.3)	1,115 (8.1)	-42.6	-5.9	-31.8	-63.1	-21.8
Capital goods	10,406 (25.5)	8,172 (26.6)	4,969 (19.9)	3,766 (16.9)	2,815 (16.5)	2,184 (15.9)	-21.5	-39.2	-24.2	-63.8	-22.4
Total (excluding fuel, ships and unclassified goods)	40,846	30,771	25,015	22,349	17,079	13,710	-24.7	-18.7	-10.7	-45.3	-19.7
Unclassified goods ¹	320	526	2,349	3,775	2,528	2,963					
Total (excluding fuel and ships)	41,166	31,297	27,364	26,124	19,607	16,673	-24.0	-12.6	-4.5	-36.5	-15.0

Source: Bank of Greece

Note: The percentage share of import expenditure in the total (excluding fuel, ships and unclassified goods) is shown in parentheses.

Over the January-September 2012 period, **export receipts excluding fuel and ships** covered 60% of the respective import bill. However, export growth declined from 17.3% in 2011, to 9% in the first quarter of 2012 and to 1.8% in the first nine months. These developments reflect a weakening in external demand, 59 mainly from the EU, that constitutes the main destination of Greek exports, as well as the liquidity constraints faced by Greek enterprises, mainly on account of their limited access to bank credit.

According to disaggregated balance of payments data, the key driver of the rise in **export receipts** was "other manufactured goods" (excluding chemicals, metallurgical products, machinery and vehicles),⁶⁰ which include, among other things, non-metallic minerals and cotton (textiles and yarn). A substantial contribution came also from "agricultural products" (oils and fats, dairy, vegetable and fruit products) and "mechanical equipment". Receipts from metallurgical product exports,

which recorded an outstanding performance in 2011, decreased over the reviewed period, 61 mainly on account of changes in the international prices of these products. Moreover, regarding chemicals-plastics, receipts from plastics exports increased, whereas pharmaceutical export receipts fell. In any case, the breakdown of exports by product category remained virtually unchanged.

Available ELSTAT trade statistics on the volume of Greek exports show a considerable change in the geographical destinations of

- 59 The manufacturing new export orders index, which captures developments in external demand, after rising sharply in 2010 and 2011, slowed down towards the end of 2011 and started falling in 2012. These downward trends were more pronounced in the sub-index for intra-euro area orders, whereas the sub-index for extra-euro area orders rose in 2012. For the external market as a whole, the index rose in a number of sectors, such as paper, metal products, IT and electronic equipment.
- 60 The largest share is accounted for by goods that cannot be classified, receipts from which rose in 2012 due to the upward adjustment of the minimum value of trade transactions that credit institutions are obliged to report to the Bank of Greece for the compilation of the balance of payment statistics.
- 61 In more detail, receipts from the export of nickel, copper and related products increased, while receipts from the export of iron, aluminium, bauxite and related products decreased.



¹ Goods for which the transaction value is below the minimum value (as defined by the EU) that credit institutions are obliged to report under a Combined Nomenclature Code to the Bank of Greece. As from 1 January 2010 this limit was increased from €12,500 to €50,000 and, as a result, a significant rise in expenditure for imports of goods of this category was recorded.

Greek products in 2012, as exports to EU countries follow a downward path. A sizeable decrease was recorded in export activity towards major markets, such as Italy, Germany, France, the United Kingdom and Cyprus, as well as to Bulgaria and Romania, which rank top among Greek product destinations in SE Europe. At the same time, a rise was observed in exports to non-EU countries with stronger growth rates, such as Turkey, Russia, China, India, the United States, Japan or the Middle East and North Africa countries. Thus, the share of total exports excluding ships and fuel towards EU-27 shrank to 61% in 2012, from 66% at end-2011.

The drop in the import bill excluding fuel and ships, which had slowed in 2011, started to pick up in 2012. The fuel import bill rose in 2012 on the back of higher international oil prices, but at a slower rate than in 2011. According to disaggregated balance of payments data, in the first half of 2012 the steepest fall was observed in the import bill for raw materials and intermediate products (see Table III.15), which had risen in 2010 and 2011, while the import bill for capital goods continued to fall, due to a decline in investment and production activity. The import bill for consumer goods decreased, albeit at a weaker pace. More specifically, the import bill for consumer non-durables, of which 1/3 is food (the import bill for which did not change significantly), declined at a much faster pace than in 2011, as a result of lower incomes and domestic demand. The reduction in the import bill mainly stems from chemicals (pharmaceuticals mostly), metallurgical products and mechanical equipment. The breakdown of imports by country of origin remained virtually unchanged.

4.1.3 SERVICES BALANCE

In the first nine months of 2012, the services balance recorded a surplus of €12.6 billion. This stems, on the one hand, from higher net transport and travel receipts and, on the other, from lower net payments for other services. The decrease in gross travel receipts reflects a drop of 5.2% in arrivals, year-on-year. Never-

theless, it should be noted that this decrease was offset by a reduction in gross travel payments over the same period.

Tourist activity appears lower after last year's considerable increase (which was due to the shift of tourist traffic from North Africa to Greece because of social unrest in this region). Yet, it should not be overlooked that the prevailing uncertainty during the protracted preelection period had a negative impact on arrivals. In fact, mass booking cancellations were recorded in the first half of 2012, a trend that was reversed immediately after the normalisation of the political situation in the country. Losses have moderated, according to data on foreign tourist arrivals in the country's principal airports during the first ten months of 2012,62 while arrivals from new markets such as Russia or China continue their upward path.

The tourist industry is expected to benefit from the full liberalisation of the cruise market, which —coupled with the implementation of several investment programmes for the upgrading of port facilities and with the elimination of structural barriers — will improve Greek ports' poor competitiveness. As a result, Greek ports will increasingly be used as home ports, which could boost the annual revenue of the cruise sector. 63

- 62 Source: Association of Greek Tourism Enterprises (SETE), January-October 2012/2011: -3.4%. However, according to the European Commissioner for Industry and Entrepreneurship, Mr. Tajani, tourism would bring better results, if special emphasis was given to quality. More specifically, in his speech at the recent SETE conference (Athens, October 2012), Mr. Tajani highlighted the role of professional training of the workforce in enhancing quality. He also noted that the Greek tourist industry could be part of an overall EU strategy aimed at promoting tourism to new markets, e.g. emerging economies, especially considering the Greek cultural heritage. The Commissioner recommended a number of measures for enhancing the efficiency of the sector, such as the facilitation of visa issuance, the promotion of low-season tourism and coastal tourism, or specialised tourist services for specific target groups (senior citizens, industrial tourism) as well as the expansion of the cruise sector, which under the LeaderSHIP 2020 strategy will help boost the shipbuilding industry.
- 63 "Cruise industry: A sector with potential revenues of €2bn", National Bank of Greece Sectoral Report, August 2012. The structural barriers include, among other things, legal obstacles to the conclusion of concession agreements, the lack of a berth allocation system for cruise ships and important shortcomings in terms of infrastructure (mostly in berths, passenger terminals, bunkering and ship repair facilities). This study estimates that, if these structural distortions are removed, annual revenue from cruise tourism will amount to €1.2-€2 billion in 2016, compared with €600 million in 2011, leading at the same time to the creation of up to 30,000 new jobs.

Turning to transport services, as world fleet continued to outgrow world trade volumes, international freight rates fell by about 20%64 over the January-September 2012 period, year-on-year. However, the decline in freight rates had a marginally adverse impact on (mainly sea) transport receipts, as it was largely offset by the appreciation of the US dollar vis-à-vis the euro over the period under review. It should be noted that net transport receipts increased by €445 million euro, or 8.9%, during the reviewed period, on the back of lower net transport payments.

4.1.4 INCOME ACCOUNT BALANCE

During the January-September 2012 period, the income account deficit narrowed to less than one third of the 2011 income account deficit. This reduction is a result of the exchange of Greek government bonds under the PSI, as the new bonds have lower face value and bear lower interest rate. The decline in interest payments is also accounted for by a 1.5% cut in interest rates, applied retroactively on loans under the EU support mechanism. In the light of the above, the decrease in the income account deficit is projected to reach about €4.5 billion in 2012, corresponding to 2%-2.5% of GDP.

4.1.5 CURRENT TRANSFERS BALANCE

In the January-September 2012 period, the current transfers balance registered a surplus of €1.6 billion, up by €933 million year-on-year. This development is exclusively due to an increase in general government net transfer receipts (mainly from the EU),⁶⁵ given that net transfer receipts of sectors other than general government (mainly emigrants' remittances) registered a slight decrease.

4.1.5.A THE MEDIUM-TERM PROSPECTS OF CUR-RENT TRANSFERS

In the medium run, transfers to Greece under CAP are still significant. Income support is reduced by around 3% per annum in nominal

terms, amounting to around €2.0 billion per year; 70% of these funds will be granted automatically and 30% by complying with strict environmental conditions. Income support will now be internally allocated on the basis of the regional model, according to which Member States get to choose the support criteria. In the current juncture, it is required to place emphasis on the growth contribution of Community resources under CAP and to exploit complementarity between CAP and structural funds' resources.

4.2 CAPITAL TRANSFERS BALANCE

In the January-September 2012 period, the surplus of the capital transfers balance⁶⁶ stood at €1.6 billion, against €1.2 billion in the corresponding period of 2011.

In the context of the NSRF, by the end of September 2012, approximately €9.0 billion had been absorbed from structural funds, including advance payments. As a result, the absorption rate was close to $45\%^{67}$ of total Community funding for 2007-2013, i.e. slightly over the corresponding EU-27⁶⁸ average, which means that Greece has achieved the absorption target on the basis of the so-called "n+3 rule" set by the European Commission. However, the target

- 64 Dry bulk carriers suffered most, given that the Baltic Dry Index recorded a decrease of 36%. By contrast, the Baltic Dirty Tanker Index fell by just 6%.
- 65 Current transfers from the EU mainly include direct financial assistance and subsidies under the Common Agricultural Policy (CAP), as well as receipts from the European Social Fund (ESF), while current transfers to the EU mainly include Greece's contributions (payments) to the Community Budget. The bulk of total funds per annum allocated under CAP are absorbed according to the relevant procedures during the first two months of each year. In January-September 2012, general government receipts include €349.1 million that concern the interest collected after the implementation of Eurogroup's decision of 21 February 2012.
- 66 Capital transfers from the EU mainly include receipts from the Structural Funds (not including the European Social Fund) and the Cohesion Fund under the Community Support Frameworks (CSFs) and the National Strategic Reference Framework (NSRF).
- 67 The operational programmes "Competitiveness and Entrepreneurship", "Accessibility Improvement" and "Human Resource Development" recorded the highest absorption rates, while the operational programmes "National Contingency Reserve", "Public Administration Reform" and "Digital Convergence" recorded the lowest. See Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, Special Secretariat NSRF, Monitoring Information System Office, September 2012.
- 68 See statements by the Minister of Development, Competitiveness, Infrastructure, Transport and Networks and by Commissioner of Regional Development, J. Hahn, 12 July 2012.



provided for in the Memorandum of Understanding is higher, at €3.73 billion for 2012. The fact that only €730 million had been absorbed in the first half of the year against the six-month target of €1.2 billion, partly due to the two elections, will challenge the achievement of the annual target.⁶⁹ In addition, some of the measures relating to the general regulatory and organisational framework to eliminate bureaucratic procedures in the implementation of the NSRF have not been implemented.⁷⁰

In January-September 2012, the combined current and capital transfers balance reached €3.2 billion, against €1.8 billion in the corresponding period of 2011. Total net EU fund transfers (current transfers plus capital transfers less payments to the Community budget) came to €3.3 billion, compared with €2.1 billion in the corresponding period of 2011. As the reform of CAP will be implemented from 2014 onwards, direct financial assistance and subsidies under CAP will remain broadly unchanged until 2013 (almost €2.2 billion per annum). Consequently, annual net current transfers from the EU are estimated at €770 million, while annual capital transfers from the EU are estimated at €3.8 billion in 2012-2013 and at €3.3 billion in 2014, from €2.8 billion in 2011. Total net EU fund transfers in 2012 and 2013 will reach approximately €4.5 billion per annum on a cash basis and €3.8 billion in 2014, compared with €3.6 billion in 2011 (Bank of Greece estimates, September 2012).

4.2.A THE MEDIUM-TERM OUTLOOK FOR THE UTIL-ISATION OF COMMUNITY FUNDS: RECENT DEVELOPMENTS AND POLICY SUGGESTIONS

Community funds have gained particular significance as a tool for economic growth, especially now that available national resources have shrunk, due to the serious fiscal difficulties. It is well known that the absorption of funds does not necessarily coincide with the maximisation of the growth benefits of projects and programmes. In order to maximise the growth benefits, it is necessary, inter alia: (a) to take into account the economic

and social impact of the recession and of the fiscal and structural adjustment measures, (b) to implement projects and programmes that can be combined, in order to achieve the greatest possible multiplier effect, and (c) to identify and fully exploit the synergies between Community funds and structural actions provided for in the Memorandum.

To ensure a faster absorption and more effective utilisation of funds under the NSRF, the European Commission and the Greek authorities have ratified the decision to raise to 95% the Community co-financing rate for projects and programmes under the NSRF, with corresponding advance disbursement of Community funds.

In addition, the role of the European Investment Bank (EIB) has been enhanced with measures such as the activation of the agreement signed with the EIB in March 2012 for the establishment of a Guarantee Fund for SMEs and the creation of a Risk Sharing Instrument for Infrastructure and Productive Investment Projects with the guarantee of funds under NSRF and leverage by the EIB, as well as the support provided by the EIB for the completion of motorways constructed in the context of concession contracts, for the Greek privatisation programme, for the implementation of PPP projects, for the financing of foreign investment in Greece and for the promotion of projects in sectors of crucial importance, such as energy and waste management.

Besides: (a) discussions were initiated with the European Investment Fund, member of the EIB group, on the creation of a new programme to finance small and medium enterprises to import raw material from abroad (trade finance), (b) the EU-EIB Project Bond Initiative has entered its final phase; it aims at providing credit enhancement to infra-

⁶⁹ See statements by the Minister of Development, Competitiveness, Infrastructure, Transport and Networks, 11 October 2012.

⁷⁰ See European Commission, One year of Task Force for Greece, Brussels, 15 October 2012.

structure projects so that they can attract private finance (the initiative will be implemented in cooperation with the EIB, through financing from the Community budget⁷¹), (c) negotiations have started with the European partners for the creation of a new Hellenic Investment Fund supported also by EU resources (structural funds, European financial institutions).

Other steps that could considerably contribute to growth concern the implementation of the law on public-private partnerships (PPPs) and of the investment law (3908/11), the effective use of EU initiatives JEREMIE, JESSICA, etc. (in which the private sector is also involved), the functioning of the Hellenic Fund for Entrepreneurship and Development (ETEAN)⁷² and the activation of the operational programme "National Contingency Reserve", co-financed by the European Social Fund.

Finally, the approved review of NSRF operational programmes within November 2012, the prioritisation of projects on the basis of their "value added" to growth and employment, the implementation of measures simplifying the NSRF management system, and the provision of technical assistance of the special EU group (EU Task Force for Greece) are expected to contribute to a better management of Community resources.

As regards the outlook and the utilisation of Community funds in the medium term, in accordance with the European Commission proposals on the EU budget for 2014-2020 (June 2011),⁷³ total transfers of Community funds to Greece will be reduced and will be subject to a completely different conditionality. More specifically, given that the cohesion policy will focus on the less developed regions and Member States of the EU, Greece is expected to receive ≤ 12 to ≤ 13 billion from the structural funds, compared with ≤ 20.4 billion for the period 2007-2013. Therefore, as mentioned in a study commissioned by the Bank of Greece to ELIAMEP, which was pre-

sented on 29 October, it is necessary to support an effective negotiating strategy as regards the level and the best possible utilisation of Community funds to Greece.⁷⁴ Besides, since the level of Community funding from structural funds will depend on the new classification of EU regions, Greece is pressing in favour of the use of the most recent statistical data for calculating per capita GDP and Gross National Income (GNI), so as to take into account the effect of the recession.⁷⁵

- 71 See Regulation (EU) No 670/2012 of 11 July 2012, Official Journal of the European Union L 204/1, 31.7.2012, and EIB, European Commission EIB Press Release, Brussels, 7 November 2012. For more information, see European Commission, (http://ec.europa.eu/economy_finance/financial_operations/investment/europe_2020/in dex en.htm).
- 72 Three out of the five actions of the ETEAN's Fund are already available to enterprises. These three actions are expected to inject into the market loans amounting to €510 million (see Ministry of Development, Competitiveness and Shipping, announcement of 1 February 2012). The upcoming actions are "Youth Entrepreneurship" and "General Entrepreneurship", totalling €390 million. In order to further enhance firms' liquidity, the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks is considering the possibility to also finance firms' working capital through ETEAN. Finally, in September 2012, ETEAN signed a cooperation agreement with a Greek bank for the new programme "Provision of guarantee for issuing letters of guarantee in favour of micro, small and medium-sized enterprises". The Ministry of Development, Competitiveness, Infrastructure, Transport and Networks is promoting a law which facilitates ETEAN to manage various procedural difficulties, so that favourable conditions can be created for directly injecting around €1 billion into the real economy (see statements by the Minister of Development, Competitiveness, Infrastructure, Transport and Networks, 11 October 2012).
- 73 See European Commission, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Budget for the "Europe 2020" PART I, and A Budget for the "Europe 2020" PART II: Policy fiches, COM (2011) 500 final, 29 June 2011, and European Commission, Commission Staff Working Paper, SEC (2011) 868 final, 29 June 2011. The European Commission has already approved the general legislative framework and the individual regulations for EU funds, aiming at their adoption by the end of 2012 (see European Commission, Press Release IP/11/1159, 6 October 2011). The Multiannual Financial Framework 2014-2020 was on the agenda of the European Council meeting on 22 November 2012.
- 74 Unpublished study by ELIAMEP, "Assessment of the impact of policies funded by the EU budget on the course of the Greek economy", Part B, Proposals for the programming period 2014-2020, July 2012.
- 75 On the basis of statistical data for the period 2007-2009 for calculating per capita GDP with regard to financing from the European Regional Development Fund (ERDF) and the European Social Fund (ESF), and the period 2008-2010 for calculating the country's GNI with regard to financing from the Cohesion Fund, as proposed by the European Commission, Greece will have five "less developed" regions, six regions "in transition" and two "more developed" regions. This will result in considerable changes in the overall level of Community financing by the ERDF and the ESF, while the country will cease to be eligible for aid from the Cohesion Fund. Nevertheless, it might receive some aid from the Cohesion Fund on a transitional and ad hoc basis. The possible loss of resources is, to a large extent, attributed to the fact that Attica - the definitely most populated region in the country - is now classified under the "more developed regions". Apparently, the overall loss of resources will be even greater in case Greece does not receive aid from the Cohesion Fund.

In addition, extending the possibility to finance infrastructure projects in regions other than the "less developed" would serve Greek interests, as would the greater flexibility in choosing the infrastructure projects financed by the Cohesion Fund. Finally, the proposal to increase the rate of Community co-financing on the total cost of projects and programmes should be supported.⁷⁶

5 FINANCIAL ACCOUNT BALANCE

In January-September 2012, the financial account balance showed a net inflow of €3.3 billion, compared with €14.8 billion in January-September 2011. Specifically, a net inflow was recorded mainly under "other" investment (€77.3 billion) and - to a much lesser extent - direct investment (€2.0 billion), while portfolio investment showed a net outflow of €76.0 billion.

Non-residents' direct investment in Greece recorded a net inflow of €1.8 billion (against an outflow of €727 million in 2011). The main inflow under this category concerned the participation of Crédit Agricole (France) in the capital increase of Emporiki Bank.⁷⁷ In the first three months of 2012, as well as in May, August and September, foreign direct investment (FDI) in Greece recorded *negative reinvested earnings* (i.e. losses instead of profits on the balance sheets of direct investors in Greece).

Low FDI in Greece can be attributed to an unstable macroeconomic environment, inadequate infrastructure, labour market rigidities and a lack of trust of prospective investors in the domestic financial system and public institutions (due to corruption and time-consuming red tape, delays in litigation, and other factors that limit public sector productivity).⁷⁸

During the period under review, residents' direct investment abroad⁷⁹ showed an inflow (disinvestment) of \in 185 million, against an outflow of \in 1.2 billion in the respective period of 2011.

Under portfolio investment, the first nine months of 2012 saw a net outflow of €76.0 billion (compared with €16.9 billion in the first months of 2011). In more detail, outflows were recorded due to (a) a €38.8 billion increase in residents' holdings of bonds and Treasury bills issued by non-residents (including EFSF bonds); (b) a €36.2 billion decline in non-residents' holdings of bonds and Treasury bills issued by residents; (c) a €719 million increase in residents' investment in foreign derivatives; (d) a €102 million rise in residents' holdings of foreign shares; and (e) a €149 million drop in non-residents' holdings of Greek shares.

Under "other" investment, a net inflow of €77.3 billion was recorded (compared with €33.8 billion in the respective period of 2011), mainly due to net general government borrowing of €75.1 billion, which corresponds to gross borrowing of €75.6 billion from the EFSF and the IMF. There was also an inflow as a result of a €13.7 billion decrease in resident credit institutions' and institutional investors' foreign deposits and repo holdings. These developments were partly offset by a

- 76 According to the Commission's proposals, Community co-financing rates are from 75% to 85% for the less developed regions, 60% for regions in transition and 50% for the more developed regions. Especially for countries receiving financial assistance, the Commission proposes an increase of 10% in the respective rate.
- 77 This development reflects the following inflows: (a) €2.3 billion for the participation of Crédit Agricole (France) in the capital increase of Emporiki Bank; (b) €213 million as a capital endowment to RBS NB by the parent company RBS NB (Netherlands); (c) €164 million for the participation of Pfizer (Luxembourg) in the capital increase of its affiliated company Pfizer Hellas SA; (d) €150 million for the participation of Delhaize Le Lion SA (Belgium) in the capital increase of its affiliated company AB Vassilopoulos SA; (e) €114 million for the participation of the German majority shareholder in the capital increase of Siemens SA Electrotechnical Projects and Products: (f) €47 million for the participation of the Cypriot company TBG Cyprus Holdings Limited in the capital increase of Pepsico-IVI SA; (g) €43 million for the participation of the Dutch majority shareholder in the capital increase of Siemens Healthcare Diagnostics SA; (h) €30 million for the capital increase of Abbott Laboratories Hellas SA by the parent company Abbott Investments SARL (Luxembourg); and (i) €25 million for the capital increase of AbbVie Pharmaceuticals SA by the parent company AbbVie Investments SARL (Luxembourg).
- 78 All these issues have repeatedly been stressed by the Bank of Greece in several reports, as well as by international organisations.
- 79 The most important transaction concerned an inflow of €460 million from the sale (disinvestment) of Eurobank's subsidiary in Poland EFG Eurobank Ergasias SA Spolka Akcyjna Oddzial w Polsce to Austrian Raiffeisen Bank International AG. Besides, an outflow of €70 million was recorded for the participation of the parent company Jumbo SA in the capital increase of its subsidiary Jumbo ECB (Bulgaria).

€11.9 billion decrease (outflow) in non-residents' deposits and repo holdings in Greece.

At end-September 2012, Greece's reserve assets stood at €5.9 billion.

IVFISCAL DEVELOPMENTS AND PROSPECTS

I REVIEW OF FISCAL DEVELOPMENTS

I.I INTRODUCTION

Fiscal consolidation in the last few years, still in full swing, has resulted in substantial progress as regards narrowing the fiscal deficits, but not without taking a toll on economic activity. Specifically, the general government deficit on a national accounts basis decreased from 15.6% of GDP in 2009 to 9.4% in 2011, while further considerable decrease is projected for the current year: down to 6.6% of GDP according to the Introductory Report to the 2013 Budget, or to 6.8% of GDP according to the European Commission.² More impressive yet is the reduction of the primary deficit, which narrowed from 10.5% of GDP (or €24.1 billion) in 2009 to 2.3% of GDP (or €4.8 billion) in 2011, and is expected to shrink further this year, to 1.2% of GDP according to the Introductory Report to the 2013 Budget.

Taking into consideration that fiscal efforts are carried out amidst profound economic recession, it becomes evident that the improvement of the cyclically adjusted primary balance is even greater. According to Bank of Greece estimates, the cyclically adjusted primary deficit has narrowed from around 14.0% of potential GDP in 2009 to 2.5% of potential GDP in 2011, while a small cyclically adjusted primary surplus is projected to be recorded in 2012. In the same vein, the respective IMF estimates³ expect Greece to improve its cyclically adjusted primary balance by roughly 13.2% of potential GDP in 2010-2012, something that no other developed country has ever achieved before. Over the same period, Portugal, Spain and Ireland are anticipated to improve their cyclically adjusted primary balances by 8.5%, 6.9% and 6.8% of potential GDP, respectively. Furthermore, according to a recent Central Bank of Ireland study,4 Greece has made a greater fiscal effort than other countries with comparable problems (Ireland, Portugal, Cyprus and Spain). Specifically, it is calculated that in 2010-2011 the measures taken border on 20% of GDP

and are estimated to cumulatively reach 40% of GDP by the end of 2014.

It should be emphasised that the fiscal consolidation measures would be even more effective had the economy not been in deep and prolonged recession, which started in 2008 and then aggravated by fiscal consolidation itself and the deteriorating financial conditions. More specifically, debt-to-GDP ratio reduction has been delayed mainly due to the declining GDP ("snowball effect").⁵ Indicatively, had nominal GDP remained at 2008 levels, the estimated debt-to-GDP ratio for 2012 would have been approximately 30 percentage points lower.

Fiscal consolidation continued on a good path in 2012, despite the valuable time lost due to the two general elections of May and June. Specifically, according to the available data on a cash basis⁶ for the period from January to September 2012, the general government deficit is estimated at 5.0% of GDP (€9,689 million), compared with 9.0% of GDP (€18,744 million) one year before. The same period saw a primary surplus of 0.6% of GDP, against a primary deficit of 2.0% of GDP in the respective period of 2011. Year-on-year, the balances of the state budget and the social security funds have improved, whereas the surpluses of local government and legal entities have narrowed.

In the first ten months of 2012 the state budget recorded a deficit of 6.3% of GDP (\leq 12,259 million), against 10.1% of GDP (\leq 21,086 million) in the respective period of 2011 (see Table IV.1). This large year-on-year reduction of the state budget deficit stemmed by 85.6%

- 1 This chapter takes account of data and information published up to 21 November 2012.
- 2 European Commission, European Economic Forecast, Autumn 2012, p. 66.
- **3** See IMF, *Fiscal Monitor*, April 2012, Statistical Table 4.
- 4 Weymes, L. (2012), "Fiscal Consolidation Does it deliver?", Central Bank of Ireland, Economic Letters Series, No. 7, p. 5.
- 5 For more information, see Box IV.1.
- 6 Cash data collected by the State General Accounting Office. They include expenditure for interest accruals (amounting to €4.751 million) paid in March 2012 under the government debt restructuring programme.

Table IV.I State budget balance

(orna	
lion e	
(mill	

	Jan	January-October	Į.	Percentage changes	changes			Annual data				Percentag	Percentage changes	
	2010	2011	2012*	2011/10	2012*/11	2010	2011*	2012		2013	2011*/10	2012	2012/11*	2013/12
								Suppl. budget after PSI Estimates	Stimates	Budget		Suppl. budget	Estimates	Budget/ Estimates
	(1)	(5)	(3)	(4=2:1)	(5=3:2)	9)	(7)	(8)	(6)	(10)	(11=7:6)	(12=8:7)	(13=9:7)	(14=10:9)
I. Revenue	42,280	41,159	41,777	-2.7	1.5	53,929	53,931	56,159	52,393	51,458	0.0	4.1	-2.9	-1.8
1. Ordinary budget (net)	40,913	39,271	39,131	-4.0	-0.4	50,857	50,158	51,409	47,706	46,322	-1.4	2.5	-4.9	-2.9
Revenue before tax refunds	44,621	43,506	41,917	-2.5	-3.7	56,179	54,284	54,949	51,363	49,137	-3.4	1.2	-5.4	-4.3
Special revenue from licensing and consession fees	0	0	0			0	1,157	270	32	98				
Tax refunds	3,708	4,235	2,786	14.2	-34.2	5,322	5,283	3,810	3,689	2,901	-0.7	-27.9	-30.2	-21.4
2. Public investment budget	1,367	1,888	2,646	38.1	40.1	3,072	3,773	4,750	4,687	5,136	22.8	25.9	24.2	9.6
- Own revenue	200	105	149	-47.5		271	147	200	200	200	-45.8	36.1	36.1	0.0
- Receipts from the EU	1,167	1,783	2,497	52.8		2,801	3,626	4,550	4,487	4,936	29.5	25.5	23.7	10.0
II. Expenditure	61,120	62,245	54,036	1.8	-13.2	76,212	76,705	70,298	68,705	62,652	9.0	-8.4	-10.4	-8.8
(State budget primary expenditure)	48,377	47,019	42,917	-2.8	-8.7	62,989	60,357	57,248	56,970	53,752	-4.2	-5.2	-5.6	-5.6
1. Ordinary budget	55,074	58,459	50,759	6.1	-13.2	67,758	70,146	62,998	61,855	55,802	3.5	-10.2	-11.8	8.6-
- Interest payments	12,743	15,226	11,119	19.5	-27.0	13,223	16,348	13,050	11,735	8,900	23.6	-20.2	-28.2	-24.2
- Ordinary budget primary expenditure	40,576	41,574	38,032	2.5	-8.5	52,179	51,561	47,685	47,586	44,650	-1.2	-7.5	7.7-	-6.2
- Grants to hospitals for past debt settlement	340	434	392	27.6	-9.7	367	435	400	400	400	18.5	-8.0	-8.0	0.0
- Procurement of defense equipment	550	200	260	-63.6	30.0	1,017	360	700	700	750	-64.6	94.4	94.4	7.1
 Call-in of guarantees from entities of which 	865	1,025	586	18.5	-42.8	972	1,442	1,163	698	1,027	48.4	-19.3	-39.7	18.2
from within the general government	759	993	516			827	1,249	1,026	691	558	51.0	-17.9	-44.7	-19.2
from outside the general government	106	32	70			145	193	137	178	469	33.1	-29.0	-7.8	163.5
 Fee for disbursement of EFSF loans 	0	0	370						292	75				
2. Public investment budget	6,046	3,786	3,277	-37.4	-13.4	8,454	6,559	7,300	6,850	6,850	-22.4	11.3	4.4	0.0
III. State budget balance	-18,840	-21,086	-12,259	11.9	-41.9	-22,283	-22,774	-14,139	-16,312	-11,194	2.2	-37.9	-28.4	-31.4
% of GDP	-8.5	-10.1	-6.3			-10.0	-10.9	-7.3	-8.4	-6.1				
1. Ordinary budget	-14,161	-19,188	-11,628			-16,901	-19,988	-11,589	-14,149	-9,480				
2. Public investment budget	-4,679	-1,898	-631			-5,382	-2,786	-2,550	-2,163	-1,714				
IV. State budget primary balance	-6,097	-5,860	-1,140	-3.9	-80.5	-9,060	-6,426	-1,089	-4,577	-2,294	-29.1	-83.1	-28.8	-49.9
% of GDP	-2.7	-2.8	9.0-			-4.1	-3.1	9.0-	-2.4	-13				
V. General government balance	•	•	•			-10.7	-9.4	-6.7	9.9-	-5.2				
% of GDP (on a national accounts basis)														
Amortisation payments	19,366	25,902	12,534	33.7		19,549	28,843	41,900	12,860	12,845	47.5	45.3	-55.4	-0.1
GDP (at current prices)	222,151	208,532	194,003	-6.1	-7.0	222,151	208,532	194,003	194,003	183,049	-6.1	-7.0	-7.0	-5.6

Source: Ministry of Finance.
* Provisional data.

from the ordinary budget and by 14.4% from the public investment budget.

In parallel, the state budget primary deficit narrowed to 0.6% of GDP (€1,140 million) in the same ten-month period, against 2.8% (€5,860 million) in the respective period of 2011 and a revised annual primary deficit target of €4,577 million in 2012 (according to the Introductory Report to the 2013 Budget).

1.2 FISCAL DEVELOPMENTS IN JANUARY-OCTOBER 2012 BASED ON ADMINISTRATIVE DATA

The major characteristic of budget execution in the period from January to October 2012 was the large containment of spending, and mainly of ordinary budget primary expenditure. Thanks to this particularly positive development, the ordinary budget deficit in the tenmonth period narrowed by €7,560 million or 3.9 percentage points of GDP, compared with the respective deficit in 2011 (see Table IV.1). In the same period, the ordinary budget primary deficit also narrowed, by roughly 1.6 percentage points of GDP. Although primary expenditure was curtailed partly by delaying the settlement of certain government liabilities - as evidenced by an increase of €1,566 million in general government arrears in the first nine months of the year- substantial containment was nevertheless achieved, since the reduction of ordinary budget primary expenditure was far greater, amounting to €3,542 million.

Unlike expenditure, the ordinary budget revenue up to end-July fell considerably short of both the targets set and last year's respective figures. However, for reasons discussed further below, from August onwards revenue recovered to a great extent, without however fully offsetting as yet the shortfall recorded in the first seven months of the year.

Ordinary Budget Revenue

Throughout most of the ten-month period, the performance of revenue (before tax refunds)

was the major problem in budget execution. However, improved revenue in the three-month period from August to October reduced considerably the shortfall recorded until end-July (-7.0% compared with the respective receipts of 2011). Thus, in the ten-month period the fall in revenue was contained at 3.7%. Improved receipts in the three-month period from August to October (on average +3.7%) resulted mainly from the payment of the first instalments (or in some cases of the entire amount) of personal income tax and the special tax on real estate (EETIDE).

According to the detailed data available for the ten-month period, direct tax revenue rose by 9.0% year-on-year, overshooting the revised annual target for an increase of 2.6%; in absolute terms, it stood at €17,253 million. This development is associated with: (i) 20.6% higher receipts from personal income tax, due to the reduced tax-free threshold and the collection of the extraordinary solidarity contribution applied to incomes earned in 2011 and 2012, as well as to other measures, and (ii) the considerable revenue (amounting to roughly €2.0 billion, collected mainly during the first months of the year) from the extraordinary special tax on real estate, charged through the Public Power Corporation invoices. In contrast, revenue from corporate income tax fell in the ten-month period by 38.8%, due to the losses recorded in several enterprises in 2011 and the liquidity shortage.

Revenue from indirect taxation in the tenmonth period dropped by 9.1% against the previous year and falls short of the annual target for a 8.5% drop. VAT receipts fell by 11.1%, reflecting the downturn in economic activity, the upsurge in tax evasion (since general elections usually lead to sluggish tax collections), as well as the liquidity shortage. Reductions, compared with the previous year, are also recorded in receipts from taxes on tobacco (-12.7%), liquid fuels (-3.7%) and alcohol (-14.9%), as well as from other indirect taxes such as the real estate transfer tax (-23.4%) and car registration fees (-52.7%).

Finally, compared with the respective receipts of 2011, both non-tax revenue (-29.9%) and "non-ordinary revenue" (-2.6%) were reduced.

Lower revenue from indirect taxation compared with the respective period of 2011 and its deviation from the annual target are associated with: (i) further subdued economic activity, which leads to considerable shortfalls of VAT and corporate income tax receipts, (ii) tax evasion, intensified due to higher tax rates and liquidity shortages (although also observed in tourist areas with much lower liquidity shortage), and (iii) sluggish tax collections due to the two general elections held.

Ordinary Budget Expenditure

As mentioned above, the major characteristic of budget execution in the first ten months of 2012 was the containment of expenditure, despite the two general elections held. Obviously, this also implies an effort to offset the shortfall of ordinary budget revenue relative to the initial targets.

Specifically, ordinary budget expenditure in the ten-month period was 13.2% lower, contained at €50,759 million, against €58,458 million in the respective period of 2011. This performance overshoots the 2012 target for an (annual) 11.8% cut on expenditure. The improvement stemmed mainly from ordinary budget primary expenditure, which recorded a larger reduction (-8.5%) than the annual target for a 7.7% decrease. It should be noted, however, that around 44.2% of the contained ordinary budget primary expenditure is accounted for by an increase of €1,566 million in general government arrears and may be reversed in the remaining months of the year.

Interest payments in the ten-month period have decreased by 27.0% year-on-year. Since a large part of such expenditure (€4,751 million) was paid in advance in February under the government debt restructuring programme, the rate of change in interest pay-

ments slows down as we come closer to the end of the year and is estimated to stand at levels that are in line with the annual target (-28.2%).

As regards ordinary budget primary expenditure, 35.1% of the containment is accounted for by lower wage and pension outlays, which in the ten-month period fell by 6.9% compared with the previous year. This development also overshoots the annual target for a 5.4% decrease. The reduction is mainly associated with payroll outlays, as pension outlays have dropped by 0.8%, in line with the annual target.

Social security, healthcare and protection costs, albeit 6.9% lower compared with 2011, fall short of the annual target for a 8.5% decrease. This development reflects increased subsidies to social security funds — which have already absorbed 91.0% of the annual grants — due to deeper-than-anticipated recession, higher unemployment and lower employee earnings (i.e. factors that have led to lower contribution revenue for social security funds). Finally, operating costs appear contained (-2.1%) compared with the previous year and overshoot the annual target for a 1.9% increase.

Public Investment Budget

The contained state budget deficit in the tenmonth period is by 14.4% attributable to the public investment budget. This development is associated with 40.1% higher revenue (mainly receipts from the EU Funds) and 13.4% lower expenditure under the public investment budget compared with the previous year (see Table IV.1).

Accelerated receipts are a particularly positive development, as (in addition to narrowing the deficit) they help address the economy's liquidity problem. However, lower disbursements, as well as the ongoing general decline in investment expenditure since 2009, aggravate recession and delay the absorption of NSRF funds, a large part of which risks being lost if



not absorbed by 2015. A much faster NSRF fund absorption rate will bring multiple benefits in respect to enhancing liquidity and reviving the Greek economy.

1.3 FISCAL DEVELOPMENTS IN JANUARY-OCTOBER 2012 BASED ON CASH DATA

The positive course of budget execution in 2012 is also confirmed by the cash data for the first ten months of the year. Specifically, the state budget deficit was contained at €6,840 million or 3.5% of GDP, against 9.5% of GDP in the respective period of 2011 (see Table IV.2 and Chart IV.1). This sizeable deficit reduction is partly associated with the cash recording method applied to the accrued interest paid in February under the government debt reduction programme.⁷ However, even taking these interest accruals into account, the deficit in the ten-month period does not exceed 6.0% of GDP (against 9.5% in the respective period of 2011).

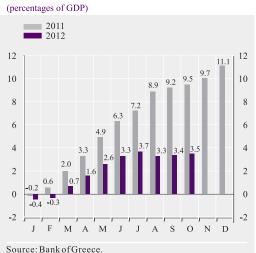
Moreover, the primary deficit was contained at 0.2% of GDP, compared with a respective deficit of 2.2% in 2011. This positive development is attributable to lower primary expenditure and improved revenue under the ordinary budget, whereas the change in other accounts held with the Bank of Greece was negative due to the payment of €901 million for the country's ESM participation.

1.4 2013 BUDGET

According to the Introductory Report to the 2013 Budget, submitted to Parliament on 31 October 2012, the general government deficit (under ESA 95) should stand at €12,882 million or 6.6% of GDP in 2012, compared with the February 2012 Supplementary Budget target amounting to €13,732 million or 6.7% of GDP. The general government primary deficit should stand at €2,396 million or 1.2% of GDP.

For 2013, the general government deficit (under ESA 95) is forecast at €9,442 million or

Chart IV.1 Net borrowing requirement of central government on a cash basis (January 2011 - October 2012)



Source: Bank of Greece.

Notes: "Monthly" data refer to the percentage for the period from the beginning of the year up to the reference month. The balance in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee Community Aid) account is availabled.

5.2% of GDP, while the European Commission expects a deficit of 5.5% of GDP.8 Moreover, a primary surplus of €748 million or 0.4% of GDP is projected for 2013. In other words, the general government primary balance is expected to improve by roughly 1.6% of GDP in 2013.

To attain the above targets for 2013, additional measures have to be taken, totalling €10,983 million with a net effect of €9,374.1 million or 5.1% of GDP, which —according to the MTFS— are estimated to reduce nominal GDP by roughly 3.5% in 2013. Around 82% of the interventions will come from the expenditure side; of these, 47.8% relate to the State Budget and 47.2% to social security funds and hospitals, whereas interventions regarding local government (2.0%), public enterprises and organisations (1.9%) and legal entities (0.9%) will be considerably lower.

- 7 Cash data do not include the payment of interest accruals amounting to roughly €4,751 million (around 2.4% of GDP), since this was made in EFSF bonds and not in cash.
- 8 European Commission, European Economic Forecast, Autumn 2012, p. 66.

Table IV.2 State budget deficit on a cash basis 1,2

(million euro)

	Ye	ar		January-October	
	2010	2011	2010		2012*
State budget	23,396	23,144	20,618	19,781	6,840
% of GDP	10.5	11.1	9.3	9.5	3.5
— Ordinary budget ³	18,3334	20,0825	16,016	17,9206	6,2267
-Public investment budget	5,063	3,062	4,602	1,861	614

Source: Bank of Greece.

3 Including changes in Greek state accounts held with the Bank of Greece, excluding account No. 200 "Greek State-Receipts and payments". 4 Including expenditure of: a) €297.9 million (bond issue reopening) for the payment of past government debt to the Social Insurance Institute (IKA); and b) €714.7 million (bond issuance) for the payment of Greek government debt to the Hellenic Petroleum SA (ELPE), EGNA-TIA MOTORWAY SA, and the Agricultural Bank of Greece, but excluding expenditure of: a) €849.2 million (bond issue reopening) for the payment of public hospitals' arrears pursuant to Article 27 of Law 3867/2010, which burdens the 2010 debt; and b) €424.3 million (bond issuance) for the settlement of financial obligations to the Hellenic Agricultural Insurance Organisation (ELGA), a replacement of a previous loan with the same terms. Also, excluding expenditure of €1,500 million for the paying-up of the capital of the Hellenic Financial Stability Fund.

5 Not including revenue of: a) €675 million from the sale of preference shares of the Agricultural Bank of Greece by the Greek State; and b) €250 million from the Deposits & Loans Fund due to the reduction of its reserves. By contrast, including privatisation proceeds of €1,548.3 million, but excluding expenditure of: a) €4,011 million (bond issue reopening) for the payment of public hospitals' arrears pursuant to Article 27 of Law 3867/2010, which burdens the 2011 debt; b) €350 million (bond issuance) for the settlement of financial obligations of the Helenic Agricultural Insurance Organisation (ELGA), a replacement of a previous loan with the same terms; and c) €140.2 million (bond issuance) for covering the State's debt to the former employees of Olympic Airlines that were laid off. Also, not including expenditure of €1,551.8 million for the participation of the Greek State to capital increases, of which €1,434.5 million relate to the capital increase of the Agricultural Bank of Greece as well as to the proceeds from a bond issue reopening (€1,380 million) paid for the purchase by the Greek State of preference shares of the National Bank of Greece and Piraeus Bank.

6 Including proceeds of €391.4 million from the sale of OTE shares, but not including revenue of: a) €675 million from the sale of preference shares of the Agricultural Bank of Greece by the Greek State; and b) €250 million from the Deposits & Loans Fund due to the reduction of its reserves, but excluding expenditure of: a) €4,011.5 million (bond issue reopening) for the payment of public hospitals' arrears pursuant to Article 27 of Law 3867/2010, which burdens the 2011 debt; b) €350 million (bond issuance) for the settlement of financial obligations of the Hellenic Agricultural Insurance Organisation (ELGA), a replacement of a previous loan with the same terms; and c) €140.2 million (bond issuance) for covering the State's debt to the former employees of Olympic Airlines that were laid off. Also, excluding expenditure of €1,227 million for the participation of the Greek State to capital increases, of which €1,144.5 million relate to the capital increase of the Agricultural Bank of Greece.

7 Excluding expenditure of €9.9 million (bond issuance) for covering the State's debt to the Jewish Community of Thessaloniki, as well as €65 million for the participation of the Greek State in capital increases (Horse Racing Organisation of Greece (ODIE), Hellenic Vehicle Industry (ELVO), Hellenic Defence Systems SA, etc.). Also, not including €4,751 million for accrued interest on PSI bonds paid in the form of EFSF notes. Including income of €280.1 million from ANFA holdings of Greek government bonds of euro area NCBs, as well as expenditure of €901.3 million relating to Greece's participation in the European Stability Mechanism (ESM).

As a result of the above interventions, total expenditure under the ordinary budget is projected to stand at €55,802 million, down by €6,053 million or 9.8% compared with the respective estimates for 2012. Ordinary budget primary expenditure is projected to stand contained at €44,650 million, down by €2,936 million or 6.2% compared with the respective estimates for 2012. Despite the interventions aimed at rationalising the tax system, tax revenue is expected to decrease by 4.3% in 2013 on account of continued recession and a projected 4.5% decline in real GDP.

General government debt is estimated to decrease in 2012 by €15 billion and stand at €340.6 billion at the end of the year, from €355.7 billion in 2011. Continuing recession, however, is estimated to push the debt-to-GDP ratio up, from 170.6% in 2011 to 175.6% in 2012. In 2013, government debt is projected to reach €346.2 billion or 189.1% of GDP. In 2013, privatisation proceeds are estimated to stand at €2,586 million.

According to the Introductory Report to the 2013 Budget, all general government arrears are expected to be paid in full in 2012-2013, as

^{*} Provisional data.

¹ As shown by the respective accounts with the Bank of Greece and other credit institutions. Figures may not add up due to rounding.

² Excluding movements in the OPEKEPE (Payment and Control Agency for Guidance and Guarantee Community Aid) account.

provided for under the Economic Adjustment Programme.

Attaining the fiscal targets included in the Introductory Report to the 2013 Budget will be a fundamental step for the country towards tidying up its public finances, restoring its credibility, and exiting the debt crisis.

1.5 MEDIUM-TERM FISCAL STRATEGY FRAMEWORK 2013-2016

On 31 October 2012, the government released the bill on the "Medium-Term Fiscal Strategy Framework 2013-2016" (MTFS 2013-2016), the main objective of which is the achievement of primary surpluses. The first step is to be taken in 2013, while a general government primary surplus amounting to 4.5% of GDP is projected for 2016, thus revising the target of the Second Economic Adjustment Programme for the attainment of a primary surplus of 4.5% of GDP in 2014.

On 7 November 2012 the Parliament passed the omnibus law 4093/2012 on the "Approval of the Medium-Term Fiscal Strategy Plan 2013-2016 – Urgent implementation measures of Law 4046/2012 and the Medium-Term Fiscal Strategy Framework 2013-2016". This omnibus law incorporates the MTFS 2013-2016, as well as important interventions to support fiscal consolidation, including a further sizeable reduction of pensions and social expenditure, lower wage outlays through the abolition of holiday and vacation benefits and the reduction of public sector "special payscales", contained pharmaceutical expenditure, amendments to several tax provisions, and the establishment of the position of General Secretary of Public Revenue. Moreover, it includes important provisions for further increasing labour market flexibility and opening up "closed" professions.

According to the MTFS estimates, the general government deficit will stand at €13,537 million or 7.0% of GDP in 2012, 9 €10,047 million or 5.5% of GDP in 2013, and €6,324 million or

3.2% of GDP in 2016. The general government primary balance, from a deficit of 1.5% of GDP in 2012, will stand at 0.0% of GDP in 2013, and then turn into a surplus amounting to 1.5% of GDP in 2014, 3.0% of GDP in 2015, and 4.5% of GDP in 2016. Fiscal consolidation in 2013-2016 is to be frontloaded, relying on interventions with a net effect of €14,244 million. Of this amount, €9,374 million relate to 2013, €4,186 million to 2014, €529 million to 2013, and €155 million to 2016.

The package of measures introduced for the period 2013-2016 includes the following (with the respective estimated net effects in parentheses):

- (1) restructuring the public sector (€719 million);
- (2) restructuring the local governments (€210 million);
- (3) lowering wage outlays (€1,497 million);
- (4) reducing pensions expenditure (€5,475 million);
- (5) rationalising social transfers (€307 million);
- (6) rationalising healthcare spending (€1,113 million);
- (7) cutting defence expenditure (€406 million);
- (8) rationalising education expenditure (€133 million);
- (9) rationalising the operation of public enterprises and organisations (€495 million); and
- (10) reforming the tax system (\leq 3,890 million).
- 9 As is mentioned in the MTFS, ANFA profits, i.e. the amounts to be given to Greece by national central banks for the Greek government securities held and not participating in the PSI, are not taken into account in the calculations of the MTFS targets, but are included in the Introductory Report to the 2013 Budget; as a result, fiscal projections in the 2013 budget and the MTFS appear slightly different.

Thus, 38.4% of the interventions in 2013-2016 relate to the rationalisation of pension expenditure, and 27.3% to additional revenue from the tax system reform. Moreover, 34.2% of all interventions refer to the period 2014-2016, with 19.4% of them relating to expenditure cutbacks and 14.8% to increased revenue.

In addition, by implementation of the "1:5 rule", in 2013-2016 the MTFS foresees the retirement of 96,139 civil servants and the respective hiring of 15,234, i.e. a net reduction of 80,905 in the number of public sector employees.

In 2012-2016, real GDP is estimated to shrink by 6.5% in 2012 and by 4.5% in 2013, before its growth rate enters into positive territory from 2014 onwards: 0.2% in 2014, 2.5% in 2015 and 3.5% in 2016. Moreover, the unemployment rate (on a national accounts basis – ESA) is estimated to stand at 22.4% in 2012 and to rise further to 22.8% in 2013, before starting to gradually decline to stand at 17.1% in 2016.

Stronger fiscal efforts and improved economic activity will contribute to a gradual reduction of the general government debt as a percentage of GDP from 2015 onwards. According to the MTFS estimates, general government debt is projected to stand at €363,400 million or 184.9% of GDP in 2016.

Government debt relief efforts will also be supported by a more realistic privatisation programme. Specifically, expected proceeds for the period 2013-2016 will cumulatively rise to $\[\in \]$ 9,515 million, or analytically to $\[\in \]$ 2,586 million in 2013, $\[\in \]$ 2,347 million in 2014, $\[\in \]$ 1,141 million in 2015, and $\[\in \]$ 3,441 million in 2016.

It should be noted that, according to the estimates included in the MTFS, without the additional measures for 2013-2016 mentioned above (but taking into account the measures legislated by April 2012), the general government deficit (under ESA 95) would stand at 9.3% of GDP in 2013, at 9.6% of GDP in 2014, and close to 11.5% of GDP in 2016. Based on the same assumptions, the general government primary balance would be a deficit of €8,642 million or 4.6% of GDP in 2016, i.e. there would be a cumulative fiscal gap totalling €17.1 billion or 9.1% of GDP, compared to the target for a primary surplus amounting to 4.5% of GDP in 2016. In addition, according to the MTFS "baseline scenario", without measures real GDP would continually shrink up to 2016, by 2.7% in 2013 and by 1.0% in each year of the period 2014-2016, while unemployment would also remain on a steadily upward path, reaching 23.5% in 2016 (on a national accounts basis). With the continuing downturn in economic activity and the accumulation of deficits, government debt would thus be rocketed to €411,900 million or 220.4% of GDP in 2016.

Therefore, according to the MTFS, implementing the fiscal policy in order to achieve primary surpluses at general government level and taking measures for immediately reviving the economy, such as expediting the absorption rate of funds for NSRF projects, combined with an accelerated implementation of structural reforms and the privatisation programme, will contribute to the correction of the country's fiscal and macroeconomic imbalances and its getting back on track towards sustainable growth.

2 FACTORS-INTERVENTIONS THAT MAY AFFECT PERFORMANCE IN 2012 AND 2013

Carrying on with fiscal consolidation and structural reforms is necessary in order to create investment opportunities that will support potential growth. In parallel, demand-boosting policy measures that facilitate economic recovery are required. Furthermore, efforts must be



continued to cut non-productive spending, tackle tax and contribution evasion, and broaden the tax base without tax rate hikes.

In the effort to put an end to squandering, the law on the "Reduction of public expenditure, regulation of issues of financial control and other provisions" (Law 4081/2012) was passed with a view to cutting operating costs (rents paid by public sector entities), reducing the expenditure for the operation of the country's political system and public administration, and improving the effectiveness of fiscal audits. Moreover, the Ministry of Administration reform and e-Governance has announced the merger or elimination of 21 public sector entities or groups of entities that currently number 213 legal persons (in public and private law) across the country, leading to only 9 groups of entities numbering 34 legal persons. According to the Ministry's announcement, these organisations employ in total 5,256 people. It is expected that redundant staff members of the merged or eliminated organisations will not be dismissed, but transferred or reassigned to other positions according to their qualifications and depending on public sector needs. The fact that so far eliminations and mergers of public sector entities have not delivered the expected results calls for intensified efforts in this direction.

In order to improve its spending control policy, the Greek government intervened on 18 November 2012 with a Legislative Content Act reforming the framework that relates to the obligations and responsibilities of general government entities managing public resources. Specifically, this Legislative Content Act provides for:

- (a) approving the budgets of all general government entities by 31 January each year;
- (b) preparing monthly budget execution programmes;
- (c) setting quarterly targets for the ministries and the entities supervised by them;

- (d) adopting timely corrective measures in case of deviations from the targets that place budget execution at risk;
- (e) concluding programme agreements between the Ministry of Finance and the other ministries; and
- (f) imposing sanctions in case of non-compliance. Such sanctions include: (1) budget cuts when deviations exceed 10% of the agreed targets and no correction measures are taken, and (2) the appointment of an economic services supervisor in entities with serious deviations/non-compliance.

Moreover, it is necessary to carry on with the interventions that are geared towards tackling tax and contribution evasion, intensifying controls and further strengthening and restructuring the tax offices, based on a precise schedule and clear quantifiable criteria. According to a paper published by the University of Chicago,¹⁰ it is estimated that in 2009 the selfemployed in Greece concealed in total at least €28 billion of taxable income. According to this paper, the resulting loss in tax revenue is estimated to amount to 31% of the deficit in 2009, and 48% of the deficit in 2008. Also, the self-employed earn on average an income almost two times higher (1.92:1) than the one they declare. The highest tax evasion shares seem to involve physicians, engineers, accountants, lawyers, financial consultants and private tutors.

In order to tackle tax evasion, the government took a legislative initiative in early September (Law 4079/2012), expanding to all taxpayer groups (wage-earners, pensioners, farmers, rentiers) the indirect tax audit techniques applied to businesses already since the beginning of 2012.¹¹ Thus, during the audits of even

¹⁰ Artavanis, A., A. Morse, M. Tsoutsoura, (2012), "Tax evasion across industries: Soft credit evidence from Greece", Chicago Booth Research Paper No. 12-25, Fama-Miller Center for Research in Finance, The University of Chicago, Booth School of Business, 25.6, 2012

¹¹ Law 4038/2012 on "Urgent measures implementing the mediumterm fiscal strategy framework 2012-2015", Article 4.

wage-earners and pensioners, taxable income will not be determined based only on the income reported by the taxpayer, but also by checking bank deposits, analysing records of consumer expenditure paid in cash or via credit card, and cross-checking other sources of income and savings. Such cross-checks will help to curb tax evasion.

In addition, in the context of the national debate on the tax system reform, issues to be considered include the need to further broaden the tax base (by curbing tax evasion) and enhance tax equity, as well as to eliminate counterincentives for work. More specifically, the overtaxation of labour has been characterised even by OECD¹² as a counterincentive that must be corrected over the medium term, but in a way that would produce a neutral fiscal result.

In the Memorandum of Economic and Financial Policies (MEFP) and the Memorandum of Understanding on Specific Economic Policy Conditionality approved by the Greek Parliament on 12 February 2012, the Greek authorities committed to attain primary surpluses of 1.8% of GDP in 2013 and of 4.5% of GDP in 2014. To achieve these targets, in February 2012 they made expenditure cutbacks amounting to 1.5% of GDP, and were also committed to further expenditure reductions amounting to 5.5% of GDP and an additional tax revenue amounting to 1.5% of GDP for 2013-2014, stemming from improved tax administration.

However, the Medium-Term Fiscal Strategy Framework 2013-2016 expects a general government primary surplus of 4.5% of GDP to be achieved in 2016 – i.e. revises the target of the Second Economic Adjustment Programme for a primary surplus of 4.5% of GDP in 2014.

Despite the relative delay, in the context of the MTFS, the new coalition government formed after the June 2012 elections proceeded with the planning of a package of fiscal measures totalling €18.9 billion, which includes expenditure cutbacks and tax interventions for 2013-

2016. Of these, measures amounting to €14.2 billion have already been fully specified, while additional ones amounting to €4.6 billion await specification.

Implementing the above package of measures will largely help to restore the country's credibility and achieve the adjustment programme targets. However, there constantly lies a risk—particularly on account of reduced wage and pension outlays— of a heavier than anticipated squeeze on private spending and economic activity, a fact that may lead to deviations from the fiscal targets.

According to earlier OECD estimates, ¹³ the average multiplier of public expenditure in Greece ranges between 0.4 and 0.5, bordering on 0.8 in the case of public investment. The average multiplier of direct taxes stands close to 0.4 and of indirect taxes to 0.2. Based on the structure of the package of measures totalling €18.9 billion, the average multiplier is calculated to be in the order of 0.44. It is thus estimated that this package of measures will lead to a cumulative loss of around 4.2% in nominal GDP terms in 2013-2016.

In fact, according to a more recent IMF study, ¹⁴ in developed countries the fiscal multiplier of expenditure is still higher in periods of recession, when the output gap is negative. This means that the adverse effects of the package of measures included in the MTFS 2013-2016 may be even greater. In addition, considering the interrelation between economic activity and fiscal consolidation, the expected cumulative decline in GDP on account of the measures could eliminate a considerable part of the direct impact of the initial package of measures on deficit and debt (*ceteris paribus*). Of course, it should be noted that the negative impact on economic activity could be dampened by meas-



¹² See Barnes, S., R. Bouis, P. Briard, S. Dougherty and M. Eris (2011), "The GDP impact of reform: A simple simulation framework", *OECD Economics Department Working Papers*, No. 834. OECD, Paris.

¹³ OECD (2011), Economic Surveys: Greece.

¹⁴ See footnote 3.

ures that compensate for the loss in effective demand, e.g. by considerably speeding up public investment.¹⁵

Privatisation Programme

Implementation of the privatisation programme will contribute to reducing the debt and strengthening economic activity by injecting new inflows into the Greek economy. However, so far the target for the proceeds from privatisations has been repeatedly revised. The initial indicative target for less than €10 billion of proceeds by 2015 was later revised considerably upwards, to €50 billion to be collected by 2015, while the Second Economic Adjustment Programme readjusted this target to €19 billion by the end of 2015.16 Still, according to the MTFS 2013-2016, it is estimated that only around €9.5 billion will be collected in 2013-2016, with €2,586 million being the target for 2013. The total target for a collection of €50 billion from privatisations and the development of public property is now deemed attainable after 2020.

Privatisation proceeds until the end of 2011 amounted to €1.6 billion, compared with a revised target of €1.7 billion. It should be noted that technical, legal and other objective

difficulties, such as the negative economic sentiment, render the achievement of the annual targets for the collection of proceeds from privatisations even harder. In more detail, the first nine months of 2012 saw the collection of €40 million from the sale of four (Airbus type) aircraft of the former Olympic Airways and the implementation of a long-term lease of the International Broadcast Centre (IBC) building for 90 years, while privatisation of the Hellenic State Lotteries is currently in progress. Also in progress are a number of other actions taken by the Hellenic Republic Asset Development Fund (HRADF) for the acceleration of privatisations.

Despite the negative economic sentiment, the Greek authorities should carry on with privatisation and public property development efforts at an accelerated pace. Continuing the narrowing of primary deficits, promptly implementing the fiscal consolidation measures and keeping up the effort to reform will play a decisive role in turning the sentiment around, a fact that will affect positively both the privatisation programme and the reduction of government debt.

- 15 For more information see Box IV.1.
- 16 Indicative target of the Second Economic Adjustment Programme.

Box IV.I

DEBT DYNAMICS AND THE EFFECTS OF STRUCTURAL REFORMS

The analysis of the sustainability of public finances focuses on public debt dynamics, as the debt-to-GDP ratio in conjunction with long-term economic prospects greatly affect the government's ability to smoothly refinance government debt.

The course of the debt-to-GDP ratio over time is given by the "public debt dynamics equation", according to which the change in the debt-to-GDP ratio is the combined result of three factors:

1 The change in the debt-to-GDP ratio is calculated as follows:

The change in the debt-to-GDF ratio is each
$$\Delta d_t = d_t - d_{t-1} = d_{t-1} * \left(\frac{r_t - g_t}{1 + g_t}\right) - ps_t + sf\alpha_t ,$$

where Δd_i is the change in debt over period t, d_i is the debt-to-GDP ratio over period t, d_{i-1} is the debt-to-GDP ratio over period t. d_{i-1} is the debt-to-GDP ratio over period t, d_i is the weighted average rate paid to service government debt over period t, g_i is the rate of economic growth (nominal GDP growth) over period t, ps_i is the primary surplus to GDP over period t and $sf\alpha_i$ is the stock-flow adjustment to GDP over period t, including any transaction increasing or reducing the debt burden that is not recorded in the primary balance.

- the general government primary balance (as a percentage of GDP),
- the differential between the interest rate paid to service government debt and the growth rate,² and
- the deficit-debt adjustment (as a percentage of GDP).

A rise in the government debt-to-GDP ratio cannot be controlled when the average rate on government borrowing exceeds the growth rate, unless there is a satisfactory primary surplus.

The key components of policies aimed at improving the sustainability of government debt are the following: (i) achieving primary surpluses, and (ii) promoting growth-enhancing initiatives so that the growth rate of the economy offsets the negative effects of government debt servicing costs. Furthermore, privatisation programmes could directly contribute to a substantial reduction of government debt.

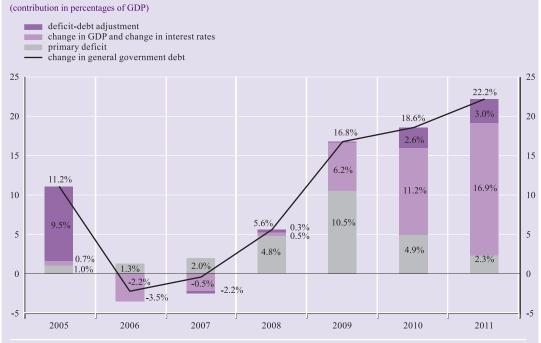
Recent measures to address the fiscal crisis in Greece aimed at improving the general government primary balance. At the same time however, fiscal consolidation measures had a negative impact on economic growth, thereby limiting the positive effects of fiscal adjustment on deficit and eliminating the impact of lower fiscal deficit on debt.

In recent years, the Greek economy benefited considerably from the relatively high growth rates, together with the historically low interest rates. Specifically, between 2001 and 2008, upon Greece's entry into the EMU, the government debt was contained at levels close to 100% of GDP, as a result of the considerable reduction in debt servicing costs, but mainly due to the positive effect of the economic growth rate, which —at the time—was higher than the interest rate on government debt.³ Thus, over this period, the cumulative reduction in debt owing to the favourable differential between the two rates came close to 13% of GDP.

This beneficial effect on debt sustainability came to an end immediately after 2008, as a result of the large primary deficit recorded in 2009, higher borrowing costs and the negative growth rate (see chart). The significant financial performance, as a result of the implementation of the economic adjustment programme, with the reduction of primary deficit by more than 8% of GDP in 2010 and 2011 cumulatively, have limited the negative impact of deficit on debt. However, the sustainability of government debt is also affected by:

- the achievement of a primary surplus,
- the uncertainty surrounding the long-term growth prospects of the Greek economy and the continued decline in disposable income, which are constantly deteriorating economic activity.
- 2 This is the so-called "snowball effect" and is expressed by the first term of the equation in footnote 1 $d_{r,l} * \frac{f_1 g_1}{r_1 g_2}$.
- 3 At the beginning of the period, the general government primary balance was marginally positive, while at the end of the period it became strongly negative, weighing on the sustainability of government debt.

Contributions to changes in general government debt (2005-2011)



Source: ELSTAT.

These factors have widened the negative differential between debt servicing and economic growth rates, leading to a complete elimination of the positive effects of fiscal adjustment on debt.⁴

It is worth noting that the considerable decline in the weighted average interest rate on Greece's public debt in 2012 (the first year of the PSI agreement) from 5.5% to around 3.4% is expected to be fully offset by the greater than expected recession. According to the Introductory Report on the 2012 Budget, real GDP was expected to decline by 2.8%, while according to the Introductory Report on the 2013 Budget, it is expected to decline by 6.5%. This has also resulted in a higher debt-to-GDP ratio, due to the differential between the two rates. Specifically, according to the Introductory Report on the 2013 Budget, while the general government debt in absolute terms is projected to decline by around €15 billion in 2012, it is nonetheless expected to rise by 5 percentage points as a percentage of GDP, since it is anticipated to grow by around 18 percentage points of GDP as a result of the differential between the interest rate on government debt and the economic growth rate and by another 1.2 percentage points as a result of the primary deficit. This burden more than offsets the anticipated net benefit from the PSI agreement (i.e. the reduction of debt by 14.4 percentage points of GDP).

Overall, between 2010 and 2012, the differential between the two rates is expected to cumulatively increase the general government debt by around 46% of GDP. For 2013 this dif-

⁴ For the 2010-2011 period, this differential has risen from 11.2% to 16.9%.

ferential is expected to cumulatively increase the general government debt by around 16% of GDP. This effect will be only partly offset by the anticipated primary surplus of 0.4% of GDP and by privatisations; thus, the overall increase in debt will be around 14% of GDP.

The economic adjustment programme and the need to enhance growth

The economic adjustment programme aims at restoring public finances and addressing external imbalances. In the case of Greece however, the tight fiscal policy pursued combined with adverse monetary developments affect economic activity, which in turn weighs upon the achievement of the deficit targets and debt sustainability itself. It is therefore necessary to break this circle of recession. To this end, certain initiatives would be really helpful, namely:

- further targeting the fiscal adjustment programme towards cutting non-productive spending,
- absorbing funds under the National Strategic Reference Framework (NSRF),
- swiftly completing the recapitalisation of banks in order to enhance the financing of the real economy,
- accelerating privatisations, in order to reduce government debt and also support liquidity in the economy,
- accelerating structural reforms and the restructuring of the public sector, in order to achieve a more efficient use of public recourses, restore international investors' confidence in Greece and put the economy on a sustainable recovery path.

The role of reforms in the evolution and sustainability of Greek government debt

As mentioned above, it is crucial to implement a vigorous programme of structural reforms. As noted by the OECD,⁵ bold and substantial reforms in countries with serious fiscal problems would boost productivity and improve competitiveness and growth. This would reduce imbalances in the current account balance and enhance growth.

Effective management and rationalisation of public expenditure would contribute to the proper allocation of resources to growth-friendly sectors, such as education, innovation, research and infrastructure development, thus creating the conditions to strengthen economic growth and competitiveness.

On the revenue side, a sound planning of the tax policy would decisively contribute to economic growth, by generating incentives for labour market participation, savings, and taking business risks, thus contributing to conditions that improve competitiveness. Structural changes in the tax mechanism are also required, in a way that the operation of control mechanisms and tax administration in general are optimised to ensure the adequacy of tax revenue and channel it into growth.

⁵ OECD (2012), OECD Economic Surveys: Euro area (2012), Chapter 2, pp. 61-64, OECD (2012), Economic Policy Reforms 2012: Going for growth, Chapter 1.



According to empirical OECD reports,⁶ a faster implementation of reforms could — in the case of Greece—raise GDP by around 18% over the next ten years. Consequently, a reforms policy would restrain, over the medium term, the negative contribution that the differential between the interest rate on government debt and the growth rate has on changes in the debt-to-GDP ratio (this contribution is estimated at around 62% of GDP for 2010-2013). Moreover, it would also contribute indirectly to achieving a primary surplus next year.

An acceleration of structural reforms is estimated to lead to a decline in the debt-to-GDP ratio by at least 13 percentage points by 2020. This does not include the indirect positive effect on the primary balance or the reduction of the borrowing cost, which would come as a result of renewed market confidence and could lead to an even greater decline in government debt.

6 See Barnes, S., R. Bouis, P. Briard, S. Dougherty, M. Eris (2013), "The GDP impact of reform: A simple simulation framework", OECD Economics Department Working Papers, No. 834, and Bouis, R. and R. Duval (2011), "Raising Potential Growth after the Crisis", OECD Economics Department Working Papers, No. 835.



V MONETARY AND CREDIT AGGREGATES AND DEVELOPMENTS IN FINANCIAL MARKETS IN GREECE

I INTRODUCTION

The necessary fiscal adjustment in Greece implies a decline in aggregate demand and monetary and credit developments do not suffice to halt the ensuing economic downturn. At the same time, it is still too soon for the structural reforms that have been implemented so far to bear fruit and set in motion strong growth dynamics.

Debt dynamics has by itself limited the ability of the banking system to finance real economy. The uncertainty arising from the debt crisis made it almost impossible for domestic credit institutions to access international markets, which prior to the crisis were their main sources of funding. Furthermore, uncertainty compounded by economic recession brought about an almost continued decrease in bank deposits, which could not be halted even when banks offered increasingly higher interest rates on time deposits between end-2009 and the first half of 2012.

Besides, the long-lasting economic recession in Greece, which is ultimately due to the fiscal crisis, has also led to a surge in non-performing loans to the private sector, while the restructuring of Greek government debt in early 2012 also contributed to a considerable impairment of Greek banks' capital base. This development in banks' capital could not underpin credit growth, as would be required in order to fully offset the contractionary effects of the fiscal adjustment.

Heightened credit risk, which is associated with the aforementioned higher NPL frequency, had a dual effect on bank interest rates on new loans. Initially, these rates rose between end-2009 and the third quarter of 2011, mainly as a result of an increase in risk premia. On the other hand, extensive loan rescheduling, which was warranted to improve the prompt servicing of loan obligations given the negative impact of macroeconomic conditions on borrowers' financial situation, gradually led to a decline in the level of bank lending rates. Of

course, this development is also associated with other factors, as explained below.

Bank liquidity pressures eased considerably on account of banks' recourse to the Eurosystem monetary policy operations and to emergency financing provided by the Bank of Greece. The extensive liquidity support from the central bank has contributed to containing the rate of decline in credit to non-financial corporations and households below that of nominal GDP, certainly below the rate at which banks' deposit base has contracted. To this extent, the Bank of Greece, as a member of the Eurosystem, has helped to mitigate the adverse effects of the debt crisis and the fiscal adjustment on economic activity. Liquidity constraints affecting real economy and difficulties in accessing bank credit, as reported by firms and households, would have been more severe without support from the central bank.

Furthermore, through its enhanced supervision of credit institutions, the Bank of Greece has succeeded in safeguarding financial stability, despite the depth of the economic recession and the strong pressures exerted on banks' liquidity and capital adequacy ratios. A potential undermining of financial stability could very well have impaired depositors' and other economic agents' confidence or could have even triggered actions (e.g. mass deposit withdrawals, a subsequent stronger contraction of bank credit) that would have dramatically affected economic activity. Having designed and set up an effective framework for the resolution of credit institutions, the Bank of Greece ensured that the six banks that had to cease operating in 2011-2012 were to a large extent absorbed (in part) by other credit institutions, while fully protecting depositors from any losses.

In addition, a large part of the funds that will be channeled in the country by EU partners and the IMF, under the second loan agreement, will be used to more than offset the aforementioned weakening of Greek banks' capital base. The initial phase of the recapitalisation process of four systemic credit institutions was completed last May, following an assessment of their viability by the Bank of Greece. As a result, by next year, any setbacks in bank's credit policy stemming from the requirement to maintain a capital adequacy ratio capable of ensuring a high level of solvency will tend to subside, as the capital base of systemic credit institutions will be strengthened. Smaller banks will also engage in share capital increases and mergers, and thus all domestic credit institutions will have their share in supporting economic activity more effectively.

Meanwhile, the capital enhancement of credit institutions will boost the confidence of depositors and markets. Such a development would help relieve the liquidity constraints faced by banks. Through this channel, restoring banks' capital bases will increase their ability to supply credit to the Greek economy.

The shocks ensuing from the debt crisis have set in motion procedures for the restructuring of the credit system, with a view to ensuring its sustainability. Through mergers and acquisitions or under the framework for the resolution of other domestic credit institutions, the size of banking groups increases, therefore creating economies of scale and synergies and reducing the occurrence of threats to financial stability, given that larger banks are typically more resilient. This way, the banking sector plays a leading part in the overall effort towards the structural reform of the Greek economy, which is key to achieving sustainable growth.

Turning to developments in the major financial markets between January and October 2012, although trading volumes have shrunk, the course of government bond yields as well as the evolution of the Athex general share price index (particularly compared with one year earlier) point to a considerable alleviation of public debt thanks to the restructuring. They also reveal the positive effect on investor confidence from the endorsement of the second support programme for the Greek economy at the beginning of the year and, more recently, from the formation of a coalition government

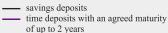
and the progress achieved in the negotiations with the EU and the IMF.

2 MONETARY AGGREGATES

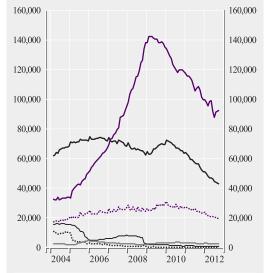
- During the January-August 2012 period the rate of decline in M3 (excluding currency in circulation) gradually strengthened and exhibited some fluctuations (August 2012: -18.9%, December 2011: -16.5%). In September the contraction in this monetary aggregate moderated¹ and came to -15.3%, as this particular month saw an inflow of deposits into the Greek banking system, whereas in September 2011 a considerable outflow of deposits² had been observed (see Table V.1).
- In the first nine months of 2012 the rate of decline in overnight deposits (September 2012: -19.2%, December 2011: -18.0%) was higher than that of deposits with an agreed maturity of up to 2 years (September 2012: -13.0%, December 2011: -15.3%, see Table V.1 and Chart V.1).
- As regards the origin of deposits, those by non-financial corporations declined at a faster rate over the period under review (September 2012: -25.3%, December 2011: -22.4%), whereas deposits by households shrank at a slower pace (September 2012: -14.5%, December 2011: -16.4%).³
- Deep economic recession, uncertainty among savers and a decrease in the nominal value of firms' and households' assets explain to a large extent the decline in M3 in Greece.
- The contraction in deposits in Greece, given the drastic reduction of funding from alternative wholesale sources, has put a lot of strain on Greek banks' liquidity, thereby hindering the extension of new bank credit to the real economy.
- 1 For the fourth time during the first nine months of 2012.
- 2 As a result, the base effects from the outstanding balance of M3 in September 2012 weighed less heavily on its annual rate of decline, compared with previous months.
- 3 Comprising deposits not included in M3 (e.g. redeemable at notice of over three months).

Chart V.1 Deposits, repurchase agreements and money market fund units in Greece (January 2004 - September 2012)

(end-of-period balances; million euro)



- repurchase agreements (repos)
 sight deposits and current account
 deposits
- money market fund units
 deposits redeemable at notice of up to
 three months²



Source: Bank of Greece.

- 1 These aggregates are included in M3 according to the ECB definition and therefore constitute the Greek contribution to the corresponding euro area aggregates.
- $2\ \ Including \ savings \ deposits \ in currencies \ other than \ the \ euro.$

2.A MAIN FACTORS BEHIND THE EVOLUTION OF DEPOSITS, SIGNS AND PROSPECTS OF STABILISATION OR INCREASE

Between January and September 2012, total deposits⁴ with MFIs other than the Bank of Greece declined by 9.6% to €209.9 billion. Over the same period, deposits by domestic firms and households decreased by 11.4% to €154.3 billion.⁵ Relative to September 2009,⁶ total deposits declined by approximately 26% in September 2012,⁷ i.e. outflows amounting to €106.5 billion were recorded. Similarly, deposits by domestic enterprises and households shrank by about 35%, which represents an outflow of €85.2 billion.

In more detail, compared with September 2009, the drop in the deposits of enterprises (total: -42%, non-financial corporations: -50%) by far exceeded that of household deposits (-33%).

Turning to the factors behind the decline in bank deposits as a result of the crisis, it is known that demand for deposits⁸ depends, among other things, upon real GDP and total wealth distribution. Therefore, the decline in real GDP from 2008 onwards, compounded by the decreasing prices of houses, shares and Greek government bonds over the past years, contributed to a continuous slowdown (since mid-2009) in the annual growth rate of bank deposits by domestic firms and households. This slowdown turned gradually into an almost continuous drop in the level of such deposits as from October 2009.

The shrinking of bank deposits followed an uneven pattern. The decline in outstanding deposits of domestic enterprises and households (that is, more or less, the outflow⁹ of

- 4 Apart from deposits by domestic firms (including financial corporations other than MFIs, e.g. insurance companies) and households, total deposits also comprise general government and nonresidents' deposits. The factors determining deposits by the general government and non-residents are generally different from those determining other deposits. For instance, non-residents' deposits cannot be correlated directly with domestic GDP, while general government deposits are not affected by uncertainty and tend to peak whenever a new instalment of the euro area/IMF financial assistance for Greece is paid. For this reason, the above analysis focuses on deposits by domestic enterprises and households (i.e. the private sector).
- 5 Averaging levels similar to those of 2005.
- 6 After this month, the yield spread between Greek and German government bonds started to widen, as markets, in the light of new fiscal data and amid conditions of excess risk aversion following the default of Lehman Brothers, reassessed the severity of imbalances that had accumulated in the Greek economy for decades.
- 7 On a comparable basis and if foreign exchange valuation differences or reclassifications are not taken into account, this decline is 38%. As from June 2010, financial liabilities related to transferred assets (which are still recognised in accounting books) and reflecting securitised loans and bonds have been incorporated into total deposits. Therefore, the amount of securitisations must be subtracted, so that total deposits in September 2012 are comparable with those of September 2009. Securitisations do not affect deposits by domestic firms and households.
- 8 To be precise, the stock of deposits in real terms.
- 9 Any movements in the level of outstanding deposits of domestic firms and households arising from fluctuations in the exchange rate of the euro (as is the case with foreign currency deposits valued in euro when calculating outstanding total deposits by domestic enterprises and households) or from the reclassification of deposits from other sectors into the sector of domestic enterprises and households, and vice versa, are not taken into account as inflows/outflows of deposits into/from the banking system, respectively.

Table V.I Greek contribution to the main monetary aggregates of the euro area

(non-seasonally adjusted data)

	Outstanding					Annual p	Annual percentage changes ¹	ınges ¹				
	30.9.2012	2008	2009	2010	2011				2012	2		
	(million euro)	Q4 ²	Q4 ²	Q4 ²	Q4 ²	Dec.3	Q1 ²	Q2 ²	032	July ³	Aug. ³	Sept.3
1. Overnight deposits	62,643	-7.0	11.4	-8.0	-17.3	-18.0	-20.2	-20.8	-21.5	-20.9	-22.5	-19.2
1.1 Sight deposits and current account deposits	19,742	-3.6	15.7	-7.6	-12.8	-12.2	-17.1	-18.9	-19.5	-17.6	-21.1	-16.9
1.2 Savings deposits	42,901	-7.9	9.5	-8.1	-19.3	-20.3	-21.4	-21.2	-22.0	-21.9	-22.8	-20.2
2. Time deposits with an agreed maturity of up to 2 years	92,632	39.1	2.7	-13.8	-14.6	-15.3	-15.9	-15.5	-16.0	-16.1	-16.3	-13.0
3. Deposits redeemable at notice of up to 3 months ⁴	2,357	-24.1	64.2	-7.0	-14.9	-13.6	-13.3	-15.9	-15.6	-16.0	-16.1	-12.9
4. Total deposits (1+2+3)	157,632	15.3	9.9	-11.3	-15.7	-16.4	-17.7	-17.7	-18.3	-18.1	-18.9	-15.6
5. Repurchase agreements	621	-11.4	-67.1	-48.9	1.4	2.4	-13.5	-18.7	108.7	-0.7	-22.1	694.4
6. Money market fund shares/units	639	-58.8	-44.8	-45.8	-22.7	-31.6	-33.8	-33.9	-23.0	-22.8	-23.0	-15.0
7. Debt securities issued with a maturity of up to 2 years ⁵	6		,		,			,		,		
8. M3 excluding currency in circulation (4+5+6+7)	158,901	14.4	4.8	-11.8	-15.8	-16.5	-17.7	-17.8	-18.3	-18.1	-18.9	-15.3

Sources: Bank of Greece and ECB.

1 Annual rates of change in the corresponding index. which is compiled on the basis of outstanding stocks for December 2001 and cumulative monthly flows, adjusted for exchange rate variations, reclassifications, etc.

2 The quarterly average is derived from monthly averages (which are calculated as arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the "Euro area statistics" section of the ECB Monthly Bulletin).

3 Based on end-of-month levels.

4 Including savings deposits in currencies other than the curo.

5 This aggregate is calculated on a consolidated basis with the other curo area countries and thus does not include domestic MFIs' holdings of debt securities with a maturity of up to two years issued by euro area MFIs.

such deposits from the banking system) was stronger during months of heightened uncertainty, whereas in months of strengthened confidence (when it was firmly believed that the debt crisis in Greece would be overcome), outstanding deposits increased – that is, an inflow of deposits into the Greek banking system was observed.

For instance, May 2012 (when a general election was held resulting in no government formation) saw the largest monthly outflow of deposits by domestic enterprises and households since the onset of the crisis (€-9.2 billion). By contrast, July 2012, which was the first full month after the appointment of the new coalition government, saw the highest monthly inflow of deposits into the Greek banking system in 2012.

Indeed, during months of escalated uncertainty and high deposit outflows from the banking system, a concurrent outflow of funds abroad by residents (excluding banking institutions) was typically observed. In other words, shifts in residents' portfolios were recorded mainly towards deposits with banks outside Greece as well as towards holdings of foreign debt securities. Besides, there is clear evidence that over the same period currency in circulation in Greece increased, i.e. depositors withdrew from banks large quantities of banknotes (mostly of high nominal value) for hoarding purposes.

In the 36 months to September 2012, monthly deposit outflows exceeded monthly inflows both in frequency (26 months saw outflows, whereas 10 months saw inflows) and in size. As a result, among other things, the stock of banknotes in the hands of the public in Greece increased considerably.

Consequently, aside from the decline in GDP and the total value of assets in Greece, uncertainty arising from the crisis, and most importantly, uncertainty surrounding the continued participation of the country in the euro area, was the main factor behind shrink-

ing deposits with credit institutions, thereby having a negative effect on the expected return of deposit holdings at the domestic level.¹⁰

Although banks could rely on the Bank of Greece for funding through the Eurosystem monetary policy operations¹¹ or emergency financing, their very limited ability to attract funds from international markets, as well as the extensive and continuous deposit withdrawals (in retail banking) had their share in reducing the net flow of bank credit to the private sector. Indeed, in September 2012 the banking sector's assets,¹² as well as the level of bank credit to domestic non-financial corporations and households declined by €44 billion (-9%) and €19 billion (-8%)¹³ respectively in nominal terms¹⁴ (about -20% in real terms), against September 2009.

- 10 If an attempt is made for an, inevitably incomplete, quantification of uncertainty-insecurity with the consumer confidence index, the economic sentiment indicator, the level of the default risk premium, the yield spread between the Greek and the German 10-year government bonds or the intraday fluctuations of Athex share prices, the common perception is confirmed that uncertainty escalated gradually from end-2009 onwards (albeit with some fluctuations). Some of the abovementioned indices also reveal that the successful restructuring of the Greek government debt in early 2012 halted, at least temporarily, the escalating path of uncertainty, although the indices did not reach their pre-end 2009 levels.
- 11 Actually, banks had to cope with a shortage of collateral (which is required to back central bank financing), as they saw the value of the debt securities that they held in their portfolios, and which were eligible collateral, decline. See also footnote 26.
- 12 Excluding the Bank of Greece.
- 13 Excluding the decrease in outstanding credit arising from loan write-downs/write-offs or foreign exchange differences etc., as calculated with the cumulative net flow of financing over October 2009-September 2012, the decline in bank credit to domestic non-financial corporations and households amounts to €12.9 billion (-5%).
- 14 In order to enhance comparability of figures between September 2009 and September 2012 (so as to clarify percentage changes):
 (a) In the banking system's assets throughout September 2009-September 2012 account was taken of financial liabilities related to transferred assets (that are still recognised in accounting books) and reflecting securitised loans and bonds, which were not even partly included in assets before June 2010. This adjustment is important for the months prior to June 2010, implying an increase of about 10% in assets. As a result of such an adjustment, the decline in the banking system's assets between September 2009 and September 2012 comes to €91 billion (-17%).
 - (b) An even higher comparability (between September 2009 and September 2012) as regards the assets of the banking system as a whole would be ensured if the effect of the PSI, which had affected this figure already since the second half of 2011, was eliminated. In this event, the decrease in the banking system's assets in 2011 (-7.3% in percentage terms) and in January-September 2012 (-9%) would be smaller (-6.5% and -3.2%, respectively), whereas in September 2009-September 2012 the decrease would come to €62 billion (-12%), against €91 billion (-17%) without an adjustment for the PSI.

Nevertheless, as a percentage of nominal GDP, credit institutions' total assets appear to have increased in Q3 2012 (214%), 15 compared with Q3 2009 (198%),16 though following a downward trend since early 2011. In addition, as a percentage of GDP, bank credit to non-financial corporations and households has displayed an upward trend¹⁷ since Q1 2010, rising to 110% in Q3 2012, from 101% in Q3 2009.18 The support of the Eurosystem to domestic credit institutions ensured that the decline in bank intermediation¹⁹ and particularly in the outstanding balance of credit to the real economy would be smaller than the contraction of the Greek economy as measured by GDP.

Credit institutions tried to contain deposit withdrawals and to provide incentives for the recovery of hoarded amounts of money or the repatriation of funds, by progressively raising interest rates on time deposits for the largest part of the period starting from late 2009 and by improving a number of features in such deposits (e.g. lowering the minimum amount of time deposits), while overnight deposit rates remained broadly unchanged. It should be noted that despite these developments, the share of time deposits in total deposits included in M3 fell to 57% in January-September 2012, from 59% in January-September 2009, while the share of overnight deposits rose to 41%, from 39%.

This implies that the propensity to withdraw was stronger for time deposits than for overnight deposits (i.e. current accounts, saving deposits, etc.), which is reasonable as time deposits are held for investment purposes, while overnight deposits are largely used as a means of payment in transactions with bank intermediation and therefore cannot be easily substituted. Lastly, firms' greater possibilities, compared with households, to transfer funds abroad or even safely hoard banknotes and in general to limit the use of deposits as a means of payment by choosing the appropriate transaction among them, as well as the default of several firms

are possible explanations for the above-mentioned development – i.e. that the decrease in firms' deposits was relatively stronger compared with households in the period after October 2009. In conclusion, the almost continuous decline in the outstanding balance of bank deposits, which reflects among other things decreasing bank credit to the private sector and higher reliance of commercial banks on Bank of Greece financing, will not be halted unless confidence in the future of the Greek economy is restored.

3 BANK DEPOSIT RATES

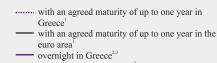
• The upward path of interest rates on new bank deposits in Greece, which has been recorded since late 2009, continued into the first half of 2012, albeit at a decelerating pace, and was subsequently inversed. As a result, deposit rates declined overall between January and September 2012. Specifically, over the period under review, interest rates dropped in all categories of new deposits (up to 33 basis points, depending on beneficiary and maturity) with the exception of interest rates on deposits with an agreed maturity of one to two years by households, and deposits with an

- 15 The average assets of the banking sector in a given quarter are divided by quarterly GDP in the same quarter multiplied by 4.
- 16 If the adjustment referred to under (a) in footnote 14 is applied, total assets of credit institutions in Q3 2009 account for 204% of GDP. Moreover, assets as a percentage of GDP have been following a downward trend since Q2 2011. If adjusted for the PSI, assets in Q3 2012 account for 228% of GDP.
- 17 It was calculated alternatively by dividing outstanding bank financing in quarter T by the sum of quarterly GDP in quarters T-3, T-2, T-1 and T, instead of multiplying GDP in quarter T by 4 (see footnote 15). If calculated this way, the percentage appears to have increased between late 2010 and late 2011, and to have subsequently decreased slightly (by two percentage points).
- 18 If, with a view to enhancing comparability, the time series for bank credit is adjusted for certain bank loans to shipping, bank credit to non-financial corporations and households as a percentage of GDP rises to 110% of GDP in Q3 2012, from 104% in Q3 2009.
- 19 As measured by key aggregates of the banking system, excluding the Bank of Greece.
- 20 Even hoarded banknotes cannot fully substitute for this means of payment, as bank intermediation offers practical advantages for transactions over a certain threshold or can even be required by law. Besides, traditional studies on demand for money have typically found higher income elasticity in broad money than in narrow money. It is therefore consistent with this traditional finding that economic recession in Greece in recent years had a more negative effect on time deposits than on overnight deposits, although this effect must have been offset to a certain extent by the widening of the interest rate differential in favour of time deposits.

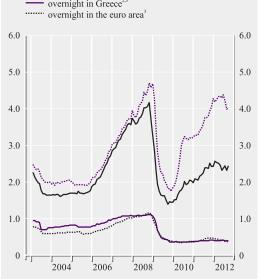
agreed maturity of up to one year by enterprises, which rose (by 11 and 43 basis points, respectively). It should be noted that the interest rate on the most important category of deposits, namely new deposits with an agreed maturity of up to one year by households, fell by 28 basis points over the period under review to 4.60% in September 2012, although still remaining (since May 2011) the highest across euro area countries (see Chart V.2 and Tables V.2A and V.2B).

- The registered increase in Greek deposit rates relative to the levels prevailing in late 2009 reflects banks' efforts to contain, as far as possible, shrinking deposits and to create incentives for a swift return of the funds that, in periods of heightened uncertainty, had been hoarded, deposited with banks abroad or invested in foreign debt securities. Lately, the following factors have eased pressures on banks to further raise deposit rates and have created room for the cuts observed after the first half of 2012: (a) earlier cuts in the Eurosystem key interest rates in November and December 2011, as well as the reduction in key policy rates in July 2012, that led to a lower cost of credit institutions' refinancing by the Bank of Greece, (b) the implementation of the initial phase of the recapitalisation process of the four largest Greek banks with the distribution of highly liquid EFSF bonds which are also eligible collateral in the Eurosystem refinancing operations and (c) the gradual return of deposits into the credit system, as uncertainty eased considerably, initially on the back of the newly formed government after the June 2012 election and subsequently the progress of negotiations with the Troika.
- In the first nine months of 2012, interest rates fell in almost all deposit categories in the euro area, on average, as a result of interbank rate cuts and the ample liquidity provided by the Eurosystem, which brought about a widening of the positive differential between the average deposit rates in Greece and the euro area as a whole. This reflects increased liquidity constraints faced by Greek banks com-

Chart V.2 Bank interest rates on new deposits by households in Greece and the euro area (January 2003 - September 2012)



(percentages per annum)



Sources: Bank of Greece and ECB.

- 1 Monthly average rate.
- 2 Interest rate on savings deposits (these deposits represent the bulk of overnight deposits and their interest rate is almost identical to the overnight rate).
- 3 End-of-month rate

pared with credit institutions in other member countries.

- Over the January-September 2012 period, real interest rates²¹ on new deposits in Greece rose considerably, as opposed to nominal interest rates, on account of lower inflation (as already mentioned, the rise in nominal interest rates had a secondary contribution to only two categories of deposits). Real interest rates on new deposits with an agreed maturity, which have been hovering in positive territory since May 2011, rose sharply by 156-231 basis points (depending on the deposit beneficiary and maturity) during the period under review,
- 21 The real interest rate on a given month is equal to the month's nominal rate (either average or end-of-month, depending on the category of deposits) less the annual inflation rate of the same month.

Table V.2A Bank interest rates on new deposits by households in the euro area and Greece

(percentages per annum)

	December 2011	September 2012	Change Dec. 2011/ Sept. 2012 (percentage points)
Overnight ¹			
Weighted average interest rate in the euro area	0.54	0.42	-0.12
Maximum interest rate	1.10	1.10	0.00
Minimum interest rate	0.09	0.08	-0.01
Interest rate in Greece	0.48	0.46	-0.02
Interest rate differential between Greece and the euro area	-0.06	0.04	0.10
With an agreed maturity of up to one year ²			
Weighted average interest rate in the euro area	2.78	2.80	0.02
Maximum interest rate	4.88	4.60	-0.28
Minimum interest rate	1.03	0.31	-0.72
Interest rate in Greece	4.88	4.60	-0.28
Interest rate differential between Greece and the euro area	2.10	1.80	-0.30

Sources: ECB and euro area NCBs.

Table V.2B Bank interest rates on new deposits by households in euro area countries 1

	Overnig	ght ²	With an agreed matu	urity of up to 1 year ³
	December 2011	September 2012	December 2011	September 2012
Austria	0.79	0.56	1.83	0.94
Belgium	0.34	0.27	1.03	0.54
Cyprus	1.10	1.10	4.25	4.43
Estonia	0.12	0.08	1.52	0.55
Finland	0.47	0.37	1.95	1.31
France	0.09	0.08	2.20	1.81
Germany	0.91	0.64	1.38	1.29
Greece	0.48	0.46	4.88	4.60
Ireland	0.62	0.48	2.554	1.634,5
Italy	0.41	0.36	3.46	2.73
Luxembourg	0.85	0.60	-	0.31
Malta	0.30	0.32	1.99	1.92
Netherlands	0.56	0.46	2.84	2.84
Portugal	0.12	0.10	3.56	2.60
Slovakia	0.41	0.41	1.92	1.88
Slovenia	0.24	0.18	2.28	2.23
Spain	0.28	0.26	2.73	2.90

Sources: ECB and euro area NCBs.

¹ End-of-month rates.

² Monthly averages.

¹ Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in the classification of banking products, which is partly due to differences in national conventions and practices as well as in regulatory and fiscal arrangements.

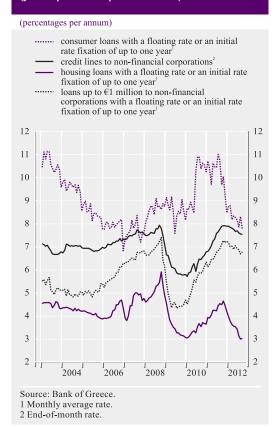
² End-of-month rate.
3 Monthly average rate.
4 The interest rate applies to all time deposits irrespective of maturity.
5 The latest available data refer to August 2012.

while the real interest rate on overnight deposits turned positive for the first time in September 2012.

4 BANK LENDING RATES AND THE INTEREST RATE SPREAD

• Interest rates declined sharply in January-September 2012 across all categories of new bank loans in Greece (see Chart V.3). Among the main categories, the largest decline was recorded in loans to individuals and private non-profit institutions (in principle households) and particularly in consumer loans with an initial rate fixation²² of one up to five years (234 basis points, see Tables V.3A and V.3B). The decrease in interest rates on new loans to non-financial corporations was more moderate (up to 118 basis points, see Tables V.3A and V.3B).

Chart V.3 Bank interest rates on new loans in Greece (January 2003- September 2012)



- The sharp decline in bank lending rates throughout 2012 reflects, among other things, (a) the favourable effect of the Eurosystem non-standard monetary policy measures and key interest rate cuts on Euribor rates, which are used as benchmark rates in many loan agreements in Greece, as well as on the cost of refinancing of credit institutions by the Bank of Greece, (b) weaker demand for new loans, (c) banks' policy to increase their collateral requirements from borrowers in comparison with the past in many cases of new loans, and (d) the extensive restructuring of existing loans by banks, with a view to improving debt servicing prospects.²³ The relatively smaller decline observed in the interest rates on corporate loans compared with the interest rates on housing loans reflects, to a certain extent, the fact that credit risk has risen in the economy and that the weakening in demand for corporate loans was more moderate and more recent compared with household credit. Besides, the decline in interest rates on business loans was much smaller relative to consumer loans, possibly because the number of rescheduled business loans is low compared with rescheduled consumer loans, as the NPL ratio for corporate loans is much lower than for consumer loans.
- In the first nine months of 2012, the interest rate differential between Greece and the euro area as a whole narrowed in most categories of loans to non-financial corporations and households (see Chart V.4), as Greek lending rates recorded overall a larger decline than the corresponding euro area average. The gradual narrowing of the differential in 2012 was more pronounced in loans to households due to large-scale loan rescheduling in Greece, as well as to increased credit risk in other euro area countries too, mainly on account of subdued economic activity.

²² Loans are classified, among other things, depending on the length of period during which, under the loan agreement, the interest rate remains fixed and cannot in principle be re-adjusted (e.g. in the case of housing and consumer loans with a fixed rate for one year or for one to five years).

²³ Changes in interest rates in the context of loan restructuring-rescheduling are classified under new business, thus affecting the average interest rate of new loans.

Table V.3A Bank interest rates on new loans in the euro area and Greece

(percentages per annum)

(percentages per annum)			
	December	September	Change Dec. 2011/ Sept. 2012 (percentage
	2011	2012	points)
A. Loans with a floating rate or an initial rate fixation of up to one year ¹			
A.1. Loans up to €1 million to non-financial corporations			
Weighted average interest rate in the euro area	4.44	3.87	-0.57
Maximum interest rate	7.53	7.20	-0.33
Minimum interest rate	2.87	1.98	-0.89
Interest rate in Greece ²	7.26	6.79	-0.47
Interest rate differential between Greece and the euro area	2.82	2.92	0.10
A.2. Loans of more than €1 million to non-financial corporations			
Weighted average interest rate in the euro area	3.16	2.21	-0.95
Maximum interest rate	6.64	6.63	-0.01
Minimum interest rate	2.24	1.45	-0.79
Interest rate in Greece	6.64	5.46	-1.18
Interest rate differential between Greece and the euro area	3.48	3.25	-0.23
A.3. Housing loans			
Weighted average interest rate in the euro area	3.49	2.92	-0.57
Maximum interest rate	5.73	5.34	-0.39
Minimum interest rate	2.52	1.70	-0.82
Interest rate in Greece	4.18	3.01	-1.17
Interest rate differential between Greece and the euro area	0.69	0.09	-0.60
A.4. Consumer loans			
Weighted average interest rate in the euro area	5.27	5.77	0.50
Maximum interest rate	21.33	17.08	-4.25
Minimum interest rate	3.08	3.16	0.08
Interest rate in Greece	8.49	7.75	-0.74
Interest rate differential between Greece and the euro area	3.22	1.98	-1.24
B. Loans with an initial rate fixation of over one and up to 5 years ¹			
B.1. Housing loans			
Weighted average interest rate in the euro area	3.74	3.27	-0.47
Maximum interest rate	5.58	5.98	0.40
Minimum interest rate	2.57	2.35	-0.22
Interest rate in Greece	3.29	-	-
Interest rate differential between Greece and the euro area	-0.45	-	-
B.2. Consumer loans			
Weighted average interest rate in the euro area	6.44	6.18	-0.26
Maximum interest rate	23.06	15.57	-7.49
Minimum interest rate	4.76	3.94	-0.82
Interest rate in Greece	9.87	7.53	-2.34
Interest rate differential between Greece and the euro area	3.43	1.35	-2.08

Sources: ECB and euro area national central banks.

Monthly average rates.

2 As of June 2010, loans to sole proprietors and unincorporated partnerships are presented separately and are no longer included in credit to enterprises.



Table V.3B Bank interest rates on new loans in euro area countries

(percentages per annum)

		E	New Ioans with a flo	oating rate or an in	New Ioans with a floating rate or an initial rate fixation of up to one year ²	up to one year ²			New loans with an initial rate fixation of over one and up to five years²	n initial rate one and up to irs²
		To non-financial corporations	corporations							
	Loans up to £1 million	€1 million	Loans over £1 million	1 million	Housing loans	oans	Consumer loans	loans	Consumer loans	loans
	Dec. 2011	Sept. 2012	Dec. 2011	Sept. 2012	Dec. 2011	Sept. 2012	Dec. 2011	Sept. 2012	Dec. 2011	Sept. 2012
Austria	2.98	2.17	2.67	1.62	3.16	2.65	4.96	4.48	4.76	3.94
Belgium	2.87	2.28	2.24	1.76	3.82	3.20	5.97	4.96	5.77	6.33
Cyprus	7.39	7.20	6.53	6.63	5.73	5.34	6.93	6.92	6.	6.
Estonia	4.92	3.24	3.95	3.16	3.32	2.44	21.33	17.08	23.06	12.62
Finland	3.27	2.60	2.82	2.18	2.52	1.70	3.72	3.91	7.49	5.75
France	3.27	2.27	2.92	1.83	3.70	3.14	6.42	6.34	6.26	6.12
Germany	3.92	3.07	2.93	2.12	3.67	2.85	3.08	4.37	5.59	5.12
Greece	7.26	6.79	6.64	5.46	4.18	3.01	8.49	7.75	6.87	7.53
Ireland	4.69	3.79	3.68	2.56	2.98	3.12	5.04	5.59	m,	e.
Italy	4.95	4.39	3.80	2.92	3.64	3.55	8.00	8.46	7.24	8.01
Luxembourg		1.98		1.62	1	2.00	,	3.16		4.80
Malta	4.56	4.80	4.12	4.26	3.38	3.53	5.04	5.81	£.	e."
Netherlands	3.66	2.99	2.68	1.45	4.07	3.66	۳,	en_	6.	en_
Portugal	7.53	6.81	5.88	5.61	4.25	3.69	8.04	7.89	11.58	11.95
Slovakia	4.44	3.69	3.61	2.17	4.92	4.72	14.90	14.57	15.50	15.57
Slovenia	5.84	5.72	5.06	4.85	3.89	2.96	5.28	4.81	7.00	7.23
Spain	4.95	5.06	3.36	2.30	3.47	2.94	6.87	7.28	10.13	9.91
60 1										

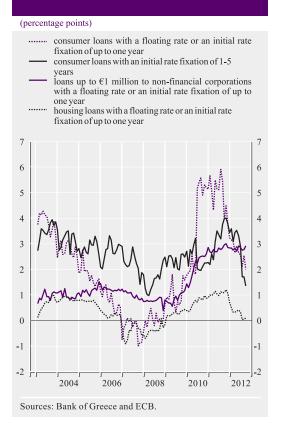
Sources: ECB and euro area national central banks.

1 Despite the efforts to harmonise statistical methodologies across the euro area, considerable heterogeneity remains in terms of instrument characteristics and relative weights; this partly reflects differences in national conventions and practices, as well as in regulatory and fiscal arrangements.

2 Monthly average rates.

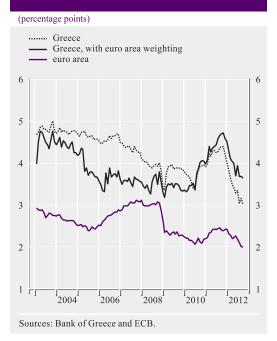
3 These countries do not publish data on the respective interest rates.

Chart V.4 Bank interest rates on new loans: differential between Greece and the euro area (January 2003 - September 2012)



- On the other hand, over the period under review, interest rates (in real terms) on new loans to non-financial corporations and households rose by 9-150 basis points (depending on the beneficiary and the maturity of the loan). This development reflects a considerable decline in inflation and exerts a contractionary effect on aggregate demand for goods, given that, typically, consumer and investment spending is adversely affected by rises in the cost of financing (in real terms). By contrast, in a number of loan categories (such as consumer loans with an initial rate fixation of one to five years) real interest rates decreased, as a result of a sharp drop in the respective nominal interest rates.
- After an upward trend observed since mid-2010, the spreads between average lending and deposit rates in Greece followed a downward

Chart V.5 Average interest rate spread between new loans and new deposits in Greece and the euroarea (January 2003 - September 2012)



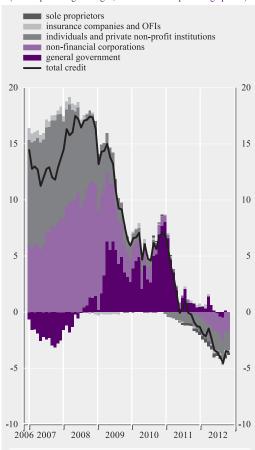
path over the January-September 2012 period, which largely reflects lower average bank lending rates (see Chart V.5).

5 CREDIT AGGREGATES

• Between January and September 2012, the annual rate of change in total credit to the Greek economy by domestic MFIs turned, almost uninterruptedly, all the more negative (September 2012: -3.5%, December 2011: -2.0% - see Chart V.6 and Table V.4). In more detail, the rate of change in bank credit to the general government exhibited considerable volatility, as it shifted from positive to negative territory between May and July 2012 and has recently come to zero (September 2012: 0.0%, December 2011: 2.0%). As for bank credit to the private sector, its rate of decline strengthened gradually for the largest part of the reviewed period (September 2012: -4.5%, December 2011: -3.1% - see Chart V.7 and Table V.5).

Chart V.6 Sectoral contributions to total domestic MFI credit (December 2006 - September 2012)

(annual percentage changes; contributions in percentage points)



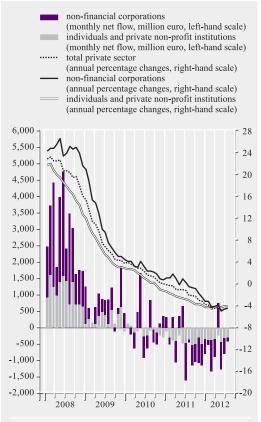
Source: Bank of Greece.

Note: Total MFI credit comprises MFI credit (stock) to the domestic private sector and the general government, as well as MFI holdings of government debt securities, corporate bonds, securitised loans and securitised corporate bonds. The rates of change are adjusted for exchange rate variations and loan write-offs carried out by banks during the reference period.

• As regards the private sector, the rate of decline in bank credit to non-financial corporations strengthened gradually and almost uninterruptedly (September 2012: -4.6%, December 2011: -1.8%), while the rate of decline in bank loans to individuals and private non-profit institutions (that is, households essentially) also gathered pace somewhat (September 2012: -4.2%, December 2011: -3.9%). In more detail, the decline in housing loans picked up (September 2012: -3.7%, December 2011: -2.9%), whereas, conversely, the decline

Chart V.7 Credit to the domestic private sector by domestic MFIs (January 2008- September 2012)

(monthly net flow²; annual percentage changes)



Source: Bank of Greece.

I Including MFI loans and holdings of corporate bonds, as well as the outstanding amounts of securitised loans and securitised corporate bonds. The annual rates of change are adjusted for loan write-offs, reclassifications, foreign exchange valuation differences on loans denominated in foreign currency and PSI-related impairment losses on Greek government bonds in March-April 2012.

2 The monthly net flow of credit is calculated as the difference between the outstanding stock of credit at the beginning and the end of a given month, adjusted for foreign exchange valuation differences in respect of loans denominated in foreign currency, loan write-offs and reclassifications during that month.

in consumer loans moderated (September 2012: -5.3%, December 2011: -6.4%).

• According to the results of the Bank Lending Survey,²⁴ Greek banks tightened their credit standards in Q3 2012, compared with Q4 2011. It should be noted that the tightening of credit

²⁴ The Bank Lending Survey is conducted by the Bank of Greece on a quarterly basis as part of a Eurosystem-wide survey.

Table V.4 Credit to the economy by domestic MFIs

(annual percentage changes; non-seasonally adjusted data)

	2008	2009	2010	2011		2012					
	Q4 ²	Q42	Q4 ²	042	Dec.3	Q1 ²	Q2 ²	$Q3^2$	July ³	Aug.3	Sept.3
1. Total MFI credit	16.3	6.5	8.9	-1.3	-1.9	-1.9	-3.4	-3.9	-4.5	-3.5	-3.5
2. Credit to general government	7.3	17.2	32.7	2.5	2.3	3.7	0.2	-1.3	-3.3	1.0	0.0
3. Credit to the private sector	18.3	4.5	0.0	-2.4	-3.1	-3.6	4.4	7.4-	4.8	4.8	-4.5
3.1 Enterprises ⁴	21.8	5.5	2.0	8.0-	-2.0	-2.4	-4.3	-5.0	-5.3	-5.3	-4.9
of which:											
3.1.1 Credit to non-financial corporations	23.8	5.4	1.9	-1.0	-1.8	-2.8	-4.1	-4.7	-5.1	-4.6	-4.6
3.1.2 Credit to insurance companies and other financial institutions (non-MFI)	-2.4	7.4	4.2	4.2	-5.2	4.3	-8.0	-11.0	-7.4	-17.0	-10.2
3.2 Sole proprietors and unincorporated partnerships ⁴	•	,	1.4	-6.0	-6.6	-7.3	-6.2	-4.9	-5.3	-4.7	-4.1
3.3 Individuals and private non-profit institutions	14.6	3.3	-0.3	-3.6	-3.9	-4.2	4.4	-4.3	-4.3	-4.2	-4.2
of which:											
3.3.1 Housing credit	13.1	3.9	0.5	-2.5	-2.9	-3.1	-3.5	-3.6	-3.5	-3.6	-3.7
3.3.2 Consumer credit	18.4	2.4	-2.8	9.9-	-6.4	-6.7	-6.5	-5.7	-5.9	-5.3	-5.3

Source: Bank of Greece.

I Including MFI loans and holdings of corporate bonds and government securities, as well as the outstanding amounts of securitised loans and securitised corporate loans. The rates of change are adjusted for loan write-offs, reclassifications and exchange rate variations in respect of loans denominated in foreign currency and for the impaired value of government securities for public debt restructuring purposes in March-April 2012.

2 The quarterly average is derived from monthly averages (which are calculated as the arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the "Euro area statistics" section of the ECB Monthly Bulletin). Then the average quarterly rate of average annual rates is taken for the months comprising this quarter.

3 Based on end-of-month levels.

4 As of June 2010, loans to sole proprietors and unincorporated partnerships are presented separately and are no longer included in "credit to enterprises".

Table V.5 Credit to the domestic private sector by domestic MFIs

(annual percentage changes; non-seasonally adjusted data)

(annual percentage enambes) non seasonany adjasted and												
	Outstanding balances on	2008	2009	2010	2011				2012			
	30.09.12 (million euro)	Q4 ²	042	Q42	Q4 ²	Dec.3	Q1 ²	Q2 ²	032	July ³	Aug.3	Sept.3
A. Enterprises 4.5	110,320	21.8	5.5	2.0	-0.8	-2.0	-2.4	-4.3	-5.0	-5.3	-5.3	6.4-
A.1 Non-financial corporations	103,419	23.8	5.4	1.9	-1.0	-1.8	-2.8	-4.1	-4.7	-5.1	-4.6	-4.6
1. Trade	22,641	22.2	5.0	-2.1	-5.7	-6.0	6.9-	-8.3	-8.5	-9.2	-7.9	-8.1
2. Industry ⁶	22,011	17.4	-2.8	-1.3	0.4	0.1	-1.9	-3.5	-5.3	-6.7	-5.3	-4.2
3. Shipping	14,190	24.6	3.9	6.9	1.1	2.4	0.2	9.0-	-2.1	-1.3	-2.8	-3.9
4. Construction	10,146	37.4	2.2	2.3	-3.6	-7.4	-7.0	-7.1	-7.2	-7.4	-7.4	9.9-
5. Tourism	7,326	24.4	6.4	4.0	-1.0	-2.3	-1.5	-0.4	9.0-	-1.1	-0.2	-0.2
6. Electricity - gas - water supply	5,944	36.5	14.8	23.1	13.9	12.3	10.7	5.9	6.1	5.2	9.9	9.9
7. Agriculture	1,503	20.5	3.7	9.0	-5.0	-5.6	-8.5	-10.4	-8.6	-9.1	-8.4	-8.5
8. Transport (excluding shipping)	1,135	35.7	19.5	-3.8	-7.9	-3.7	-5.0	-6.3	-7.3	-3.3	-9.0	-8.5
9. Other sectors	18,523	23.8	12.3	5.0	0.1	-2.1	-2.3	-3.8	-3.8	-4.3	-3.6	-4.0
A.2 Insurance companies and other financial institutions (non-MFI)	6,902	-2.4	7.4	4.2	4.2	-5.2	4.3	-8.2	-11.2	-8.0	-17.0	-10.2
B. Sole proprietors and unincorporated partnerships 5	13,957	•	٠	1.4	-6.0	9.9-	-7.3	-6.2	-4.9	-5.3	-4.7	-4.1
C. Individuals and private non-profit institutions	107,541	14.6	3.3	-0.3	-3.6	-3.9	-4.2	4.4	-4.3	-4.3	-4.2	-4.2
1. Housing loans	75,098	13.1	3.9	0.5	-2.5	-2.9	-3.1	-3.5	-3.6	-3.5	-3.6	-3.7
2. Consumer loans	30,634	18.4	2.4	-2.8	9.9-	-6.4	-6.7	-6.5	-5.7	-5.9	-5.3	-5.3
- Credit cards	6,554	12.4	-0.4	-4.6	6.6-	6.6-	-10.2	-10.1	-9.0	-9.7	-8.3	-7.8
- Other consumer loans ⁷	24,055	20.9	3.5	-2.2	-5.6	-5.3	-5.6	-5.4	-4.7	-4.8	-4.5	-4.6
3. Other loans	1,809	7.5	-2.3	9.6	3.8	-2.2	-2.1	4.4	-9.4	-9.3	-12.4	9.9-
TOTAL	231,818	18.3	4.5	6.0	-2.4	-3.1	-3.6	4.4	-4.7	-4.9	4.8	4.5

Source: Bank of Greece.

1 Including MFI loans and holdings of corporate bonds as well as the outstanding amounts of securitised loans and securitised corporate loans. The rates of change are also adjusted for writhe-offs, reclassifications and

exchange rate variations.

2 The quarterly average is derived from monthly averages (which are calculated as the arithmetic means of two successive end-of-month figures) and is not the three-month average of end-of-month annual growth rates (see the Technical notes in the "Euro area statistics" section of the ECB Monthly Bulletin). Then the average quarterly rate of average annual rates is taken for the months comprising this quarter.

3 Based on end-of-month levels.

4 Sectors are listed in descending order according to their share in total credit, with the exception of "other sectors". Growth rates take into account loan write-offs. 5 As of June 2010, loans to sole proprietors and unincorporated partnerships are presented separately and are no longer included in "credit to enterprises". 6 Comprising manufacturing and mining/quarrying.
7 Comprising personal loans and loans against supporting documents.

standards eased quarter-on-quarter in 2012. Furthermore, banks reported a weakening in demand for loans to households in the first three quarters of 2012 and for loans to non-financial corporations in Q2 and Q3 2012. It should also be noted that, overall, the decline in loan demand observed in the first three quarters of 2012 was weaker relative to Q4 2011.

5.A KEY FACTORS BEHIND CREDIT EXPANSION, MAINLY TO FIRMS

The monthly net flow of MFI credit to nonfinancial corporations, sole proprietors and unincorporated partnerships and households has been hovering in mostly negative territory for several months. After slowing down for a number of years, the respective annual rates of change also turned negative eventually.²⁵

Many factors have contributed to this credit contraction. On the one hand, demand for bank loans weakened on account of the following: (a) shrinking GDP, (b) uncertainty, which discourages investment activity or even current output, (c) rising bank lending rates both in nominal and in real terms for a large part of the period after late-2009, (d) decrease in households' disposable income, real estate prices and rents in recent years, as well as (e) increasing tax burdens on residential property.

On the other hand, the reduced supply of bank loans was due to: (a) liquidity constraints faced by the banking system, as Greek credit institutions were cut off international money and bond markets while, at the same time, depositors were withdrawing their (retail) deposits - developments that marked the crisis,²⁶ (b) capital adequacy constraints due to doubtful loans and the restructuring of public debt,²⁷ (c) a significant increase in credit risk that was observed also in the private sector (as evidenced by the rising number of nonperforming loans), mainly on the back of the deep economic recession and the fiscal crisis, and (d) uncertainty surrounding an eventual exit of the country from the euro area.

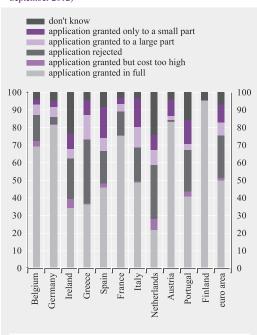
Literature on the transmission of monetary policy through the credit channel rests upon the finding that the financing of businesses is a prerequisite for fixed capital formation and that in several cases bank credit is the only available, or more attractive whatsoever, form of financing. The same applies to the acquisition of newly-built homes by households. Furthermore, bank credit used to finance working capital is considered an essential element of the production process. Therefore, inadequate credit supply limits both current output (supply of products) and demand for products, particularly on behalf of relatively smaller enterprises and households. Alternative sources of financing, such as retained earnings, and for larger firms, issuing of shares or debt securities,²⁸ cannot, especially at the current conjuncture, replenish bank credit shortage. Against this background, policy interventions, including a more extensive mobilisation of European mechanisms, which effectively increase the supply of funding resources in the economy, can have an immediate and long-term favourable effect on economic activity.

From late 2009 until recently, there is evidence indicating that bank credit supply has for long periods lagged behind firms' demand for credit in Greece. Naturally, this

- 25 Thus, in September 2012 the outstanding balance of MFI credit to the domestic private non-financial sector stood, on average, at levels similar to 2008.
- 26 In addition, credit institutions faced difficulties as regards the adequacy of available collateral used for funding by the Eurosystem, the decreased value of eligible collateral in the Eurosystem monetary policy operations and the increased cost of refinancing by the central bank insofar as they had to resort to emergency financing. The enrichment of domestic MFI portfolios with EFSF bonds, initially under the PSI in March and April and subsequently during the initial phase of the recapitalisation of the four largest Greek banks in May 2012, helped credit institutions reduce their funding costs and their overall difficulties in accessing central bank financing.
- 27 One of the objectives of the second financial support programme for Greece is to offset the impairment in the capital base of banks arising from these two factors and to establish an additional capital buffer against future non-performing loans in the context of the recapitalisation of the banking system. However, there have been periods (even after the Summit of 21 July 2011) when banks' expectations might not have fully mirrored this development, although concerns were mounting about their future capital adequacy.
- 28 Commercial credit is also of utmost importance for ensuring liquidity in the economy. As reported in the SME surveys (see below), a significant decline in commercial credit has been observed during the crisis.

Chart V.8 Outcome of applications for bank financing by SMEs

(percentage of firms that had applied for bank loans in April-September 2012)



Source: ECB, Survey on the access to finance of small and medium-sized enterprises in the euro area, April to September 2012. November 2012.

is also the case for households. Indeed, many surveys show that firms do not manage to take on as many bank loans as they actually need. For instance, as evidenced in the latest survey by the Eurosystem and the European Commission on the access of SMEs to finance, between April and September 2012 the rejection rate was the highest, whereas the percentage of the loan applications that were fully satisfied by banks was among the lowest in Greece²⁹ compared with other euro area countries (see Chart V.8).30 The same picture was drawn in all previous Surveys (after the Survey for the first half of 2009) conducted by the Eurosystem and the European Commission twice a year from 2009 onwards. It should also be noted that, according to these Surveys, the rejection rate for Greek SMEs applying for new loans followed an upward trend during the past three years, while the percentage of loan applications that are fully satisfied, as well as that of loan applications that are partly satisfied, albeit with some fluctuations, dropped sharply after the second half of 2009.

According to the Survey of Greek SMEs, which was conducted by the National Bank of Greece and published on 26 July 2012, most enterprises believe that their access to bank lending is constantly deteriorating [...] firms consider the main reason for their restricted access to financing to be the current economic environment (i.e. the general state of the economy or banks' tight credit policy). Notwithstanding lower demand for loans due to the economic recession, the increase in both nominal and real lending rates that has been observed for a protracted period during the crisis, compounded by a decline in bank financing of the non-financial enterprises (in nominal and real terms), implies a decrease in the supply of bank loans.³¹ Besides, the gradual tightening of terms of borrowing other than the interest rate over several years, e.g.

29 It was even lower in Ireland and the Netherlands.

30 Other interesting findings of the survey can be summarised as follows: (a) about 50% of small and medium-sized enterprises in Greece believe that banks were even less willing to provide loans over the reviewed six months than in the past; (b) the expectations of enterprises regarding the availability of bank credit over the next six months, i.e. October 2012-March 2013, are the most pessimistic across euro area countries; (c) over the past two years the number of enterprises that do not even apply for a new loan has increased, as they think that their application will be rejected; (d) an increasing number of enterprises believes that the availability of external financing is adversely affected by macroeconomic factors or the firm-specific economic outlook (i.e. factors which primarily affect demand for financing resources) rather than by banks' willingness to provide loans. Surely the significance of this finding is controversial, as banks' willingness and ability to grant loans are inevitably influenced by macroeconomic conditions, as well as the economic outlook of firms applying for a loan; (e) a much higher share of Greek firms relative to the other Member States reports the lack of financing resources, including commercial credit, as the most pressing problem they are facing. As a matter of fact, this percentage gradually increased between April-September 2010 and October 2011-March 2012, but fell over the April-September 2012 period. Other pressing problems that firms had to choose from were finding customers, the high cost of production or labour, fierce competition, etc.; (f) over the past two years, an increasing number of firms finds that the unfavourable course of their profitability raises the need for external financing in terms of working capital or fixed capital investment. In spite of the above, over the sixmonth periods that preceded the April-September 2012 period, the majority of enterprises report a decrease in the total debt to total assets ratio, possibly because their increased needs for financing were not met.

31 Of course, this development is also associated with higher credit risk premia that have been incorporated into bank lending rates, in contrast with reduced credit supply due to other reasons. banks' collateral requirements, signals a decline in bank loan supply.³²

The reduction in bank financing during the intensification of the crisis, which was marked by a sharp widening in the yield spread between Greek and German government bonds, varied across economic sectors. Between September 2009 and September 2012, a drop in bank credit³³ was reported in mining and quarrying (-22.0%),³⁴ transport other than shipping (-21%), trade (-12.5%), manufacturing (-5.6%),³⁵ industry (-5.5%),³⁶ agriculture (-5.5%) and construction (-5.3%). Conversely, an increase in financing was recorded in the sectors of electricity-gaswater supply (50.5%), tourism (3.5%) and shipping (3.2%).

To the extent that shrinking bank deposits reflect factors associated with the supply of loans, together with the fact that credit risk varies across economic sectors, output and investment in sectors that saw their bank financing drop more than other sectors may have been hit the hardest. On the other hand, shrinking bank financing could also reflect factors relating to loan demand. If this is the case, the uneven pattern of financing across economic sectors is probably due to the fact that weaker demand for products and services and, subsequently, the downward revision of expectations regarding future profitability (which affect investment demand) were more pronounced in certain sectors than in others. Divergent developments in economic activity across sectors during the crisis are mirrored in changes in value added, which are broken down in the sub-sectors of the primary, secondary and tertiary sectors.37

Out of the three economic sectors that witnessed an increase in bank financing amidst overall credit constraints, two are clearly outward-oriented (tourism, shipping). However, there is evidence indicating that some of the sectors to which bank credit receded substantially (e.g. mining-quarrying and manu-

facturing) were also outward-oriented.³⁸ Conversely, trade (particularly with regard to retail sales) and construction, two sectors in which bank credit also declined sharply, are not associated with (remarkable) export activity. Agriculture, which records some export performance, has also suffered from a decline in bank financing, roughly equal to that in construction. As a result, the slowdown in credit expansion, which most probably is not only due to the economic downturn but also contributes per se to a contraction in output and investment, does not appear to hit disproportionately harder economic sectors with a relatively high degree of extroversion.^{39,40}

- 32 This is corroborated as regards loans to non-financial corporations and households— by the Eurosystem Bank Lending Survey, as well as the aforementioned survey of the Eurosystem and the European Commission on SMEs access to finance.
- 33 The decrease in outstanding loans in foreign currency due to exchange rate variations or in the outstanding stock of credit arising from loan write-offs or in the value of MFI holdings of securities resulting from a drop in bond prices, etc. are not considered to represent a reduction in bank financing.
- **34** Available data on this sector allow for a comparison between June 2010 and September 2012.
- 35 See previous footnote.
- 36 This sector consists of manufacturing and mining-quarrying. For the financing of the sector as a whole, percentage changes between September 2009 and September 2012 can be calculated and are therefore noted above.
- 37 Ranging from a 42% decline in wholesale and retail trade and in other services (e.g. transport) to a 12% increase in agriculture, forestry and fishing (comparison between Q3 2009 and latest available quarter, i.e. Q2 2012).
- 38 On the basis of available data, it is not possible to examine the path of bank credit to individual branches of manufacturing or whether credit varied between more and less outward-looking branches.
- 39 The above analysis rests upon the assumption that bank financing needs per unit of output are similar across various sectors, an assumption that seems to be rather arbitrary. Most probably, sectors where the production process or the amortisation of investment are time-consuming, or sectors where fixed costs are high or own funds are for some reason low, have a relatively greater need for bank credit. Therefore, a reduction in bank credit even by 1 percentage point affects more adversely activity in such sectors. The sectoral breakdown of bank financing is based on different economic sectors than those used in the sectoral breakdown of value added. Seven sectors, which are in principle common for both breakdowns, can be matched, provided that some of the sectors included in the breakdown of bank financing are consolidated. However, it should be noted that as regards the most important sectors with statistical coverage for both value added and bank financing (i.e. industry, construction and a single sector comprising trade, transport including shipping and tourism), the ratio of bank financing to value added followed an upward course in 2005-2012. As a matter of fact, from 2009 onwards the values of the ratio in individual sectors tend to converge, which provides a first indication that the above-mentioned assumption is substantiated.
- 40 By contrast, according to the aforementioned business survey on SMEs conducted by the National Bank of Greece, "liquidity problems" were harsher for exporting firms than for non-exporting firms in each of the surveyed sectors (industry, services, trade and construction).

On the other hand, the Panhellenic Exporters Association (PEA) has recently announced⁴¹ that about 2/5 of exporters included in a stratified sample were having serious liquidity constraints and difficulties in accessing new credit lines in 2012 (against 1/4 of exporters in 2011). It also stresses that "liquidity constraints" are reported more frequently among larger exporters relative to smaller exporting firms, which is attributable to the fact that relatively larger amounts from VAT refunds are due to larger firms. It should also be noted that stronger liquidity pressures are exerted on the industries of food, pharmaceutical products and transport.⁴² Finally, on the basis of the sample analysis, the PEA underscores the importance of EU funds under the NSRF for the financial support of enterprises.⁴³

Overall, additional EU financial support mechanisms are in place, with a view to enhancing credit to Greek enterprises. In the near future, the European Investment Bank (EIB), covered in part by Greek State guarantees or NSRF appropriations, will allocate funds (far exceeding the guarantees provided) to Greek banks, which in turn will channel those funds in the form of loans to SMEs. The EIB will also contribute to the establishment of the Risk Sharing Finance Facility, aimed at financing infrastructure projects and productive investment (e.g. construction of motorways), while NSRF funds will be earmarked as guarantees in favour of the EIB, which will provide funds of a much greater value relative to the guarantees.

Due to the fact that foreign suppliers require an advance payment from Greek firms and given Greek banks' limited capacity to finance such payments, a new mechanism is scheduled to operate soon, under which the European Investment Fund (an affiliated EIB body) will provide short-term loans to Greek SMEs to help them finance the supply of raw material from abroad. It should be noted that the European Investment Fund has already started allocating funds to SMEs through domestic credit institutions under the Jeremie initiative.

Furthermore, the National Hellenic Fund for Entrepreneurship and Development (ETEAN), which provides guarantees for certain types of domestic MFI credit to non-financial corporations, continues to operate smoothly. It also provides (almost entirely NSRF) funds aimed at co-financing, together with much greater bank lending, business investment. It is noteworthy that banks still bear the sole responsibility of assessing prospective borrowers' applications and the overall management of co-financed loans.

6 THE GOVERNMENT BOND MARKET

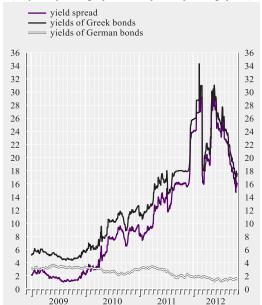
Trends prevailing in the secondary Greek government bond market over the January-October 2012 period reflect, on the one hand, deterioration in the Greek economy's key aggregates and, on the other hand, an environment of heightened uncertainty and serious concerns about a Greek exit from the euro area that very often took on disproportionate magnitude to the country's economic performance. Eliminating this uncertainty is a sine qua non for improving the economic climate and boosting investment confidence, both of which will contribute to ensuring the exit of the Greek economy from the crisis.

The steep upward trend of Greek government bond yields throughout 2011 continued into the first two months of 2012, but was interrupted after the completion of the public debt restructuring in March 2012.⁴⁴ Coupled with lower interest rates and longer maturities by

- 41 Press release of 16 October 2012.
- 42 This finding from the PEA sample seems to be in line with the aforementioned outcome (which was based on data for the economy as a whole) that the decline in bank credit to transport excluding shipping has been pronounced since the onset of the crisis across various economic sectors.
- 43 The PEA press release also refers to a finding of a previous survey, conducted in collaboration with the Greek Ministry of Development and Competitiveness (2011), that the vast majority of exporters states as a "precondition of sustainability and expansion of their export activities the access to working capital ranging from €500,000 to €1 million", particularly with the aim to pre-finance exports (purchase of raw material, packaging and shipment costs, etc.).
- 44 For the restructuring of Greek-law government bonds, which was successfully completed in March 2012, see Bank of Greece, *Annual Report 2011*, pp. 142-144.

Chart V.9 10-year Greek and German government bond yields¹ (January 2009-October 2012)



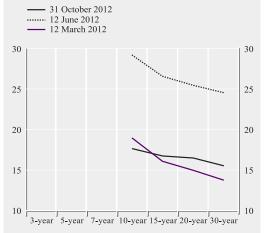


Source: Bank of Greece.

1 On the HDAT. As Greek government bonds are traded on several regulated markets (e.g. HDAT, BrokerTec, MTS, ICAP etc.), as well as on electronic OTC trading platforms (e.g. Reuters, Bloomberg), divergences in prices (and relevant yields) are often observed across data providers. These divergences became more apparent in Q4 2011 due to considerably lower transactions in Greek bonds.

Chart V.10 Greek government paper yield curves

(yields in percentages per annum)



Source: Bank of Greece. Note: On 12 March 2012, following the completion of the PSI, the new Greek government bonds were admitted to trading.

euro area countries, the restructuring succeeded in reducing Greece's debt servicing burden and created the conditions for the endorsement of the second financial support programme. As a result, the yield of the new Greek government benchmark bond (maturing on 24 February 2023, i.e. a maturity of almost 10 years) declined by 12 percentage points visà-vis the old 10-year benchmark bond (9.3.2012: 31.0%, 12.3.2012: 19.0%; see Chart V.9). The restructuring involved debt securities issued under Greek law, whereas on 25 April 2012 the exchange of foreign-law bonds issued or guaranteed by the Greek government was completed. All in all, €20.8 billion of bonds governed by foreign law were exchanged for new bonds with a face value reduced by 53.5%, as well as for GDP-linked options.

After the new Greek bonds started to trade, upward pressures on yields re-emerged and persisted until mid-June 2012 (new benchmark bond yield on 12.6.2012: 29.3%). Subsequently, yields gradually declined overall until late October by more than 11 percentage points, as investors' concerns about a Greek exit from the euro area were eased by the appointment of a coalition government following the June 2012 election (yield on 31.10.2012: 17.7%). These developments are also mirrored in the evolution of the yield curve, which flattened over the reviewed period, but remained negative (see Chart V.10). Respectively, the yield spread between the Greek and the German 10-year⁴⁵ bonds widened after the completion of the exchange offer of Greek government bonds and narrowed following the June 2012 election (9.3.2012: 2,922 basis points; 12.3.2012: 1,723 basis points; 12.6.2012: 2,788 basis points; and 31.10.2012: 1,619 basis points – see Chart V.9). It should be noted that, after the Greek debt restructuring in March 2012, the maturities of the new bonds are longer than 10 years and



⁴⁵ It should be noted that, after the completion of the PSI, the ensuing maturities of the new Greek government bonds exceed 10 years. However, it is widely accepted, for discussion purposes, that 11-year debt securities are used as benchmark bonds that are directly comparable to the old Greek government bonds or the sovereign bonds of other euro area countries with a maturity of 10 years.

there is no yield curve segment corresponding to maturities of 1 to 10 years.

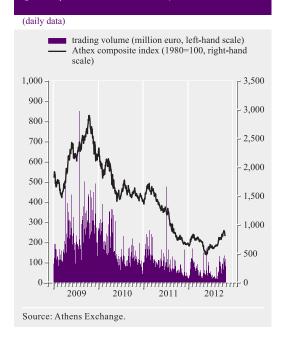
Transaction activity on the secondary bond market shrank further over the period under review. The average daily value of transactions in the Electronic Secondary Securities Market (HDAT) stood at €2.7 million during the January-October 2012 period, against €24.9 million in the corresponding period of 2011. Over the same period, the daily average value of transactions in the Dematerialised Securities System⁴⁶ was €418 million (compared with €770 million in 2011).

In 2012 the Greek government continued its regular Treasury bills issues with a maturity of 6 and 3 months and managed to raise a total amount of about €37 billion by the end of October 2012. The weighted average interest rate was 4.42% in January-October 2012, compared with 4.63% in 2011.

7 THE STOCK MARKET

• After a sharp decline in 2010 and 2011, share prices on the Athens Exchange (Athex) rebounded in January-October 2012 - very much in line with rising share prices in the euro area and the US. The path of share prices in Greece was initially affected by (a) investor uncertainty concerning the evolution of the economic adjustment programme and a potential Greek exit from the euro area, (b) the deep recession and (c) the losses posted by Athex-listed firms.⁴⁷ However, over the June-October 2012 period the investment climate seems to have improved thanks to the appointment of a new coalition government, the important decisions that were adopted at the EU level to support European banks⁴⁸ and the progress made in the recapitalisation process of Greek credit institutions and the restructuring of the Greek banking system. More specifically, following a drop of 23% during the January-May 2012 period, the Athex general share price index recovered considerably in the next five months (up by 53%).

Chart V.II Athens Exchange: composite share price index and trading volume (January 2009 -October 2012)



• All in all, between January and October 2012 the Athex general share price index rose by 18%, against a sharp decline of 43% over the respective period of 2011 (see Chart V.11). Movements in the Dow Jones Euro Stoxx Broad index for the euro area and in the S&P 500 index for the United States were in positive territory (10% and 12%, respectively), compared with -15% and 0% one year earlier. It should be noted that the performance of stock market indices was mixed across individual euro countries in the first ten months of 2012 – Belgium, BEL 20 (14%); France, CAC 40 (9%); Germany, DAX 30 (23%); Italy, FTSE MIB (3%); Spain, IBEX 35 (-8%); Portugal, PSI 20 (-3%) – thereby confirming that the economies

- 46 Transactions in the Bank of Greece Dematerialised Securities System (DSS) include, in addition to HDAT transactions, the trading of securities and repurchase agreements on other electronic trading platforms, as well as on the OTC market, given that DSS serves as a depository for Greek government securities.
- 47 According to the results for the first half of 2012, non-financial corporations listed on the Athens Exchange posted losses of €766 million, against profits of €233 million in 2011.
- 48 At their meeting on 28-29 June 2012, the heads of state or government of the EU Member States decided, among other things, to establish a single banking supervisory mechanism for the euro area and, at a later stage, to provide the European Stability Mechanism (ESM) with the possibility to recapitalise banks directly.

Table V.6 Funds raised on the Athens Exchange

	Number	of firms	Funds raised (million euro) ¹		
	January-	October	January-October		
Categories of firms and sectors	2011	2012*	2011	2012*	
Listed firms	12	6	2,296.8	132.1	
Newly-listed firms	-	-	0.0	0.0	
Total	12	6	2,296.8	132.1	
Financial sector-Banks	2	1	2,066.4	90.0	
Non-financial sector	10	5	230.4	42.1	

Sources: Athens Exchange and Bank of Greece.

that are directly hit by the debt crisis are marked by adverse developments in stock market indices, with the exception of Greece as a result of the aforementioned reasons.

- Turning to the remaining key aggregates in the Athens Exchange, transaction activity was significantly lower compared with the respective period of 2011 (see Chart V.11). In more detail, between January and October 2012 the daily average and the total value of transactions in the Athens Exchange fell by 45% and 44%, respectively, year-on-year. It should be noted that in September (October) 2012 both the daily average and the total value of transactions in the Athens Exchange increased considerably by 190% (24%) and 163% (43%), respectively, month-on-month (August/September 2012). The market capitalisation of the Athens Exchange came to €30 billion at end-October 2012, up by 12% against end-December 2011.⁴⁹ Furthermore, the total amount of funds raised from the stock market dropped sharply to €132 million in January-October 2012, compared with €2.3 billion year-on-year (see Table V.6). Just as in 2011, the bulk of funds raised over the period under review related to financial corporations.
- The banking sub-index rose (by 14%) over January-October 2012, against a sharp decline in the respective period of 2011 (-75%). This rise was stronger than that of the correspon-

ding banking sub-index for the euro area -Dow Jones EURO STOXX Banks (6%). Although Greek banks have come under a lot of pressure due to liquidity constraints, reduced profitability⁵⁰ and the erosion of their capital base, a positive effect on the banking sector's share prices over the June-October 2012 period was exerted by the implementation of the initial phase of the recapitalisation process of the four largest Greek commercial banks, as well as by the considerable headway made in the restructuring of the domestic banking system. More specifically, after a drop of 31% between January and May 2012, the banking sub-index picked up considerably (by 66%) over the next five months and outperformed the Athex general share price

- In conclusion, despite some clear trends of reversal in plummeting share prices, which has marked the Athens Exchange over the past years, a recovery of the stock market, alongside a somewhat lasting increase in transaction volumes, will be feasible only if uncertainty concerning the country's exit from the euro area is dissipated.
- 49 The participation of foreign investors in the market capitalisation of the Athens Exchange in October 2012 (51%) is roughly equal to the rates of December and October 2011. Capital outflows by non-resident investors were €169 million in the first ten months of 2012, against outflows of €262 million in 2011.
- **50** For further details, see Section 8 below.



^{*} Provisional data.

¹ Capital increases through public offerings, private placements and conversion of bonds into equity. Subscriptions to a capital increase are entered on the last day of the public offering period.

Table V.7 Financial results of Greek commercial banks and banking groups with shares listed on the Athens Exchange (2011 Q1-2012 Q1)

(million euro)

	Banks			Banking groups			
	JanMar. 2011	JanMar. 2012	Change (%)	JanMar. 2011	JanMar. 2012	Change %	
Operating income	1,798	1,243	-30.9	2,862	2,242	-21.7	
Net interest income	1,468	1,295	-11.8	2,268	2,026	-10.6	
- Interest income	3,430	3,359	-2.1	4,738	4,574	-3.5	
- Interest expenses	1,961	2,064	5.2	2,470	2,548	3.1	
Net non-interest income	330	-52	-115.8	595	216	-63.7	
- Net fee income	160	115	-28.1	320	299	-6.4	
- Income from financial operations	-15	-160	-	26	-148	-	
- Other income	185	-6	-103.5	249	65	-74.0	
Operating costs	883	828	-6.2	1,423	1,333	-6.3	
Staff costs	518	485	-6.3	797	734	-7.9	
Administrative costs	306	278	-9.1	495	461	-6.7	
Depreciation	58	64	9.8	128	136	5.6	
Other costs	1	1	30.5	3	2	-19.9	
Net income (operating income less costs)	915	415	-54.7	1,439	909	-36.8	
Provisions for credit risk	1,032	1,816	76.0	1,275	2,091	64.0	
Share of profit (loss) of associates				0	-4	-	
Pre-tax profits	-116	-1,401	-	164	-1,185	-	
Taxes	-40	-593	-	-1	-531	-	
After tax profits	-76	-808	-	165	-654	-	

Source: Financial statements of Alpha Bank, Attika Bank, Geniki Bank, National Bank of Greece, Eurobank and Piraeus Bank. The Agricultural Bank of Greece and the Hellenic Postbank have not published income statements for 2012 Q1.

8 OVERVIEW OF DEVELOPMENTS IN THE BANKING SECTOR

- Pressures on the profitability, liquidity position and capital adequacy of Greek credit institutions remained strong in the first months of 2012.
- According to the releases of financial data for the first quarter of 2012,⁵¹ banks reported losses (after tax) amounting to €808 million, while banking groups posted losses totalling €654 million (see Table V.7).⁵² This development was mainly due to the following factors:
- increased provisioning for credit risk, as a result of a deteriorating macroeconomic envi-

ronment that has a negative effect on borrowers' financial condition;

- reduced operating income (i.e. net interest and fee income), due to subdued business and higher refinancing costs, and
- losses resulting from financial operations.
- A slight upward effect on operating results was exerted by the reduction in operating costs. However, this reduction was rather limited, given the challenges facing the banking sector and the drastic drop in operating income (the

⁵¹ It should be noted that, as the present report went to press, banks had not released their financial results for the first half of 2012.

⁵² It should be noted that the effect of the PSI on banks' figures is mirrored in the results of 2011 (see Section 8.A below).

cost-to-income ratio rose). A further rationalisation of banks' operating costs is warranted.

- The quality of Greek banks' loan portfolios also worsened across all loan categories. The ratio of non-performing loans to total loans came to 18.7% at end-March 2012, from 16% at end-December 2011. The NPL ratio was higher in the category of consumer credit.
- Credit institutions also faced severe liquidity constraints. Greek banks continued to experience sizeable outflows of deposits by non-financial corporations and households in Q1 2012, while at the same time they saw the value of their collateral used to obtain refinancing from the Eurosystem and/or emergency financing provided by the central bank decline.
- Although the financial indicators of banks were strongly affected, as already mentioned, the Bank of Greece took all necessary action to ensure that such adverse developments would not undermine the stability of the domestic financial system and the interests of depositors.
- Among the events that marked the period after Q1 2012, the most important was the assessment of banks' capital needs on the basis of the recapitalisation exercise conducted by the Bank of Greece, as envisaged in the Memorandum of Economic and Financial Policies. The Bank of Greece has already communicated to each bank the level of its capital needs, as well as the deadlines for the submission of capital enhancement and implementation plans.⁵³
- A prerequisite for the completion of the recapitalisation process, following the finalisation of the institutional framework that will specify the terms and conditions as well as the available financial instruments for the participation of the private sector,⁵⁴ is the disbursement of the next instalment under the second Economic Adjustment Programme

Table V.8 Advance payment from the Financial Stability Fund

Bank	Amount (million euro)
National Bank of Greece	7,430
Eurobank Ergasias	3,970
Alpha Bank	1,900
Piraeus Bank	4,700
Total	18,000

for Greece, as it includes a sizeable amount for the Hellenic Financial Stability Fund. It should be noted that the Hellenic Financial Stability Fund advanced €18 billion to the four core banks, identified as independently viable, thereby helping them to replenish their capital above regulatory minimum (see table V.8).

• A development of paramount importance is also the fact that the first steps towards a more compact banking system have already been made. Resolution measures were successfully implemented on ATE Bank with the transfer of its sound assets to Piraeus Bank. Furthermore, Piraeus Bank has acquired Geniki Bank, Alpha Bank has acquired Emporiki Bank and the National Bank of Greece is currently negotiating the acquisition of Eurobank. If completed, the banking group that will emerge will be able to accomplish important synergies and will become the largest regional bank in South- Eastern Europe and one of the largest banks in Europe. This joining of forces is expected to continue in the future. Thus, the banking sector sets the pace for the overall efforts geared towards the structural reform of the Greek economy, which is essential to sustainable growth.

⁵³ It should be noted that the Bank of Greece, taking into account banks' financial results and measures taken in the first half of 2012, has already updated the assessment of their capital needs.

⁵⁴ See Cabinet Act No. 38/9.11.2012.

Table V.9 Financial results of Greek commercial banks and banking groups (2010-2011)

(million euro)

		Banks			Banking groups			
	2010	2011	Change (%)	2010	2011	Change %		
Operating income	7,889	7,562	-4.1	12,686	11,853	-6.6		
Net interest income	6,948	6,874	-1.1	10,515	10,055	-4.4		
- Interest income	15,012	15,990	6.5	19,612	20,752	5.8		
- Interest expenses	8,064	9,117	13.0	9,097	10,697	17.6		
Net non-interest income	941	688	-26.9	2,171	1,798	-17.2		
- Net fee income	1,062	744	-29.9	1,765	1,495	-15.3		
- Income from financial operations	-294	-141	-	79	-32	-		
- Other income	173	86	-50.6	327	336	2.6		
Operating costs	4,798	4,552	-5.1	7,161	6,875	-4.0		
Staff costs	2,748	2,707	-1.5	3,962	3,894	-1.7		
Administrative costs	1,621	1,478	-8.8	2,399	2,238	-6.7		
Depreciation	298	303	1.7	601	592	-1.6		
Other costs	132	65	-50.8	199	151	-24.1		
Net income (operating income less costs)	3,091	3,010	-2.6	5,524	4,978	-9.9		
Provisions for credit risk	4,846	9,744	101.1	5,915	10,951	85.1		
Provisions for the PSI	0	28,431	-	0	29,860	-		
Share of profit (loss) of associates				-3	-32	-		
Pre-tax profits	-1,755	-35,165	-	-393	-35,865	-		
Taxes	158	-4,117	-	449	-4,187	-		
After tax profits	-1,913	-31,048	-	-843	-31,678	-		

Source: Financial statements of 14 commercial banks. The Agricultural Bank of Greece and the Hellenic Postbank have not published financial statements for 2011; New Proton Bank is not included, because data are not comparable.

• The recapitalisation and restructuring of the banking system are pivotal structural reforms that crucially contribute to restoring confidence in the prospects of the Greek economy and constitute prerequisites for economic recovery. In fact, these reforms are expected to first underpin stabilisation and then contribute to a gradual return of deposits (which has already been observed since July, see Sections 1 and 1A of this chapter), while in the medium term they will help Greek banks to gradually regain access to international money and capital markets. By strengthening their capital base and by improving their ability to attract deposits and raise funds on the markets, banks will be able to provide stronger credit flows in order to finance production, investment and exports, which will boost economic activity.

8.A FINANCIAL RESULTS OF GREEK BANKS AND BANKING GROUPS IN 2011

• In 2011 losses (after tax) came to €31 billion for banks and €31.7 billion for banking groups (see Table V.9). This is primarily due to high provisioning to accommodate for impairment losses as a result of the private sector involvement in the restructuring of public debt in March (and in April) of 2012. Banks' provisions came to €28.4 billion on a solo basis and to €29.8 billion on a consolidated basis.

- A sizeable increase in provisions for credit risk also had its toll on losses, amid a rapidly worsening macroeconomic environment that strongly affected borrowers' financial condition.
- At the same time, banks' operating income decreased on account of the recession, while lower operating costs were not sufficient to counterbalance diminishing operating income.

VISTRUCTURAL REFORMS INCREASE POTENTIAL OUTPUT AND IMPROVE DEBT SUSTAINABILITY PROSPECTS

I INTRODUCTION

Regulatory interventions could lead to a nonoptimal allocation of available resources and could thus have an adverse effect on competition, productivity and inflation, to the extent that they hinder the adjustment of businesses and the economy in general to exogenous shocks. Several regulatory interventions are adopted with a view to protecting workers, consumers, the natural environment, investors, as well as the interests of the State. However, in the case of the Greek economy, introducing -for a long period of time - new measures without a full cost-benefit analysis and maintaining older measures despite changes in market conditions have led to a situation in which the total cost of interventions has exceeded the benefit arising from them. This situation necessitates the promotion of structural reforms in order to increase the economy's output and employment.

Economic policy making is called upon to face the root causes of the deep recession and twin deficits (the public deficit and the current account deficit).

Priority is certainly given to an immediate relaunching of the economy and measures are taken to accelerate the absorption of NSRF funds, create the Greek Investment Fund, utilise the financing instruments of the European Investment Bank and re-start the construction of road axes.

At the same time, however, structural reforms are being promoted so as to achieve satisfactory and sustainable growth. Addressing, through structural reforms, the causes that created the twin deficits implies their effective and permanent elimination. If the causes of the deficits are dealt with through measures of a temporary nature, the Greek economy will soon find itself in an even worse position. Moreover, it is pointed out that avoiding reforms maintains low GDP growth rates and acts against debt sustainability. Besides, the Memorandum itself provides for specific reforms as a pre-

requisite for the disbursement of the loan. Past delays in the completion of structural reforms, despite any progress, postpone the emergence of their beneficial effects and lead to pressures for further expenditure cuts.

The reform process takes time and its positive effects are seen at a later stage. Any delay would simply exacerbate problems, this is why it is imperative to immediately press forward with reforms.

Economic policy makers are faced with three challenges:

- First, to design measures with a long-term perspective, taking into account short-term restrictions.
- Second, to adequately justify the need to implement measures and estimate anticipated benefits.
- Third, to offset any short-term cost that the implementation of the measures could imply for the most vulnerable groups, in order to ensure fairness and enhance social cohesion.

2 THE EFFECTS OF STRUCTURAL REFORMS ON GROWTH

The need to adopt measures is demonstrated by the anticipated growth rates presented in the Medium-Term Fiscal Strategy Framework (October 2012) and by the IMF.

Specifically, according to the MTFS, if the measures (fiscal and structural) included in Law 4093/2012 are not implemented, the decline in GDP in 2013 will be smaller (-2.7% against -4.5%), but recession will continue through 2016. By contrast, if measures are implemented, recession will be deeper in 2013,

1 This finding is rather common in literature. Indicatively, de Mello and Padoan (2010) make specific estimates and compare policies in terms of the time required for the results to materialise. They estimate that measures aimed at the labour market and tax reforms usually yield results quickly, while the opposite is true for reforms of the educational system.

Table VI. I Global competitiveness indicators: Greece's rank in total economies

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
WEF	36 (75)	38 (80)	35 (102)	37 (104)	46 (117)	47 (125)	65 (131)	67 (134)	71 (133)	83 (139)	90 (142)	96 (144)	
IMD	30 (49)	36 (49)	42 (51)	44 (51)	50 (51)	42 (53)	36 (55)	42 (55)	52 (57)	46 (58)	56 (59)	58 (59)	
WB							109 ² (175)	100^{2} (178)	100^{2} (183)	97 ² (183)	101 ² (183)	89 ² (183)	78 ² (185)
TI	42 (91)	44 (102)	50 (133)	49 (146)	47 (159)	54 (163)	56 (180)	57 (180)	71 (180)	78 (178)	80 (182)		
WEF- INSEAD	31 (75)	42 (82)	34 (102)	42 (104)	43 (115)	48 (122)	56 (127)	55 (134)	56 (133)	64 (138)	59 (142)		
UNCTAD	107 (178)	123 (181)	127 (182)	130 (182)	135 (182)	117 (182)	132 (182)	128 (182)	135 (182)	134 (182)	142 (182)		

Sources: World Economic Forum, *The Global Competitiveness Report 2012-2013* (5.9.2012) and previous issues; Institute for Management Development (IMD), *World Competitiveness Yearbook 2012* (31.5.2012) and previous issues; World Bank, *Doing Business 2013* (23.10.2012) and previous issues; Transparency International, *Corruption Perceptions Index 2011* (1.12.2011), World Economic Forum, *Global Information Technology Report 2012* (April 2012) and previous issues; UNCTAD, *World Investment Report 2012*.

Explanations: WEF: World Economic Forum, Global Competitiveness Index.

IMD: Institute for Management Development, World Competitiveness Scoreboard.

WB: World Bank, Ease of doing business index.

TI: Transparency International, Corruption Perceptions Index (CPI).

WEF-INSEAD: World Economic Forum-INSEAD, Networked Readiness Index (NRI).

UNCTAD: FDI Attraction Index.

but positive growth rates are expected from 2014 onwards (2014: 0.2%, 2015: 2.5% and 2016: 3.5%).

The IMF estimates that, without structural reforms, the average growth rate of the Greek economy will be a mere 1% in 2017-2025. The implementation of reforms could imply a much higher rate of growth, depending on the extent and composition of reforms.

Before the crisis, the Greek economy was characterised by strong structural weaknesses and public administration inefficiency, which resulted in a limited "responsiveness" of the economy. Economic policy makers, investors, businesses and households were not responding in time to the challenges arising from a globalised economic environment.

Specifically, economic policy making did not adjust the policy pursued to the emerging long-

term changes, businesses failed to respond with speed and vision to changes in demand and to new technologies, and the society did not realise or feel the changes, was negative towards reforms and did not recognise their long-term positive effects.

These practices were detrimental prior to the crisis, as they did not ensure a satisfactory, sustainable growth rate and led to a deterioration of competitiveness indicators (see Table VI.1). This is why changes are now imperative – for at least three reasons:

- First, the access of the banking system to markets is difficult, while the external deficit has to be reduced in order to avoid an increase in external debt in other words export receipts should cover, more than in the past, import payments.
- Second, lack of investment and protracted unemployment for large part of the workforce



¹ The numbers in parentheses refer to the total number of economies.

² As given in the following year issue.

Table VI.2 Data on migration from Greece to Germany and the United Kingdom				
(flows of migrants into host countries per period))			
	1996	2010	2011	
Germany – all professions	-	12,256	8,890 (H1)	
United Kingdom – medical doctors	299	282	365	
Germany – medical doctors and related			•••	

Sources: Germany: OECD (2012), International Migration Outlook (Figure 1.7, p. 44) and http://www.bundesaerztekammer.de; United Kingdom: General Medical Council (2012), The state of medical education and practice in the UK, Figure 1.7, p. 25 and Box 1.1, p. 27.

are contributing to a depreciation of human and physical capital.

• Third, migration (see Table VI.2) and expected demographic developments forebode a reduction in labour force: population aged 15-64 years is expected to decline at an average annual rate of 0.2% in the next decade (i.e. 2% cumulatively).

Furthermore, it should be ensured that growth will not be accompanied by inflationary pressures in the future. It is imperative to timely proceed with reforms that increase productivity and eliminate obstacles in competition, investment and entrepreneurship (Vettas, 2011).

The aim of reforms: a modern competitive economy

A competitive economy is not identified with a low-cost² economy. The mechanisms making a modern economy competitive are much more complex. Factors affecting competitiveness can be distinguished in institutional and economic.³

The four key institutional factors are the following:⁴

- First, a flexible State that is allied to the citizens and guarantees the provision of security, health and education services in the most efficient manner.⁵
- Second, a flexible State that is friendly to entrepreneurial activity through clear and transparent laws which are observed.

- Third, modern institutions that promote a sense of fairness and trust among social partners.
- Fourth, political stability.

The **economic factors** deemed important are the following:

- Macroeconomic stability.
- Infrastructure sufficiency.
- Access to the financial system.
- Specialised workforce.
- Adequate domestic and foreign competition.
- Synergies among enterprises (e.g. existence of "clusters" of enterprises) facilitating innovation and diffusion of technology.
- Adept business administration.
- Rational incentives policy at business level (corporate governance, connection of remuneration with productivity, etc.).
- 2 Besides, as pointed out by Delgado et al. (2012), "Similarly, unit labor costs can be in line with sustainable external balances at many different levels of prosperity and economic performance" (p. 7).
- B Delgado et al. (2012).
- 4 Hall and Jones (1999) summarise the four macroeconomic factors with the term "social infrastructure", which covers institutions and also the policies creating the economic environment in which individuals and enterprises invest in human and physical capital respectively and produce output.
- 5 Literature shows that the size of the public sector cannot by itself explain the success or failure of an economy. By contrast, the structure of taxation and the performance or non-performance of public expenditure constitute explanatory factors. See Johansson et al. (2008).

Table VI.3 Indicative estimates of the expected macroeconomic effects of reforms in advanced economies

Study	Sample	Finding
Everaert and Schule (2006)	EU countries	Product and labour market reforms have sizeable steady state effects, well above 10 percentage points of GDP for some countries, depending on pre-reform rigidities.
Annett (2007)	14 EU countries, 1980-2003	Higher tax wedge and benefits affect labour supply negatively. Benefits of wage moderation are higher in countries with more liberal product and labour market regulations.
Berger and Danninger (2007)	OECD, 1990-2004	Comprehensive and large-scale labour and product market reforms can lead to additional employment growth of 1-1.3 percentage points annually.
Bassanini and Venn (2008)	OECD, 1982-2003	Strict employment protection depresses productivity growth in industries where this is binding.
Ostry, Prati, and Spilimbergo (2009)	91 developed and emerging countries	Structural reforms boost income growth, but growth effects depend on reform sequencing.
Allard et al. (2010)	G20, Europe	Labour and service market reforms to fill half the gap with the three best EU performers could yield $\frac{1}{2}$ percentage points of additional annual growth over the next 5 years.
Gomes et al. (2011)	Euro area	Benefits from implementing reforms are large and cross-country coordination adds extra benefits by limiting the deterioration in relative prices that occur if reforms are implemented unilaterally.
Bouis and Duval (2011)	OECD, euro area	A comprehensive country-specific reform package could yield an overall gain in potential GDP of more than 10 percent of GDP for most euro area countries over a 10-year period.
World Bank (2012)	OECD, EU members and accession countries	Strict employment protection, high labour tax, and minimum wages are associated with lower participation and higher unemployment rates.

Source: Table 1 in Barkbu, B., J. Rahman, and R. Valdés (2012), Fostering growth in Europe now, IMF Staff Discussion Note SDN/12/07.

Structural reforms aim at ensuring that these institutional and economic conditions are created and preserved.

Table VI.3 presents some estimates on how the liberalisation of product and services markets is expected to affect growth and employment in developed countries and in Greece. Estimates of the benefits of structural reforms differ depending on (a) the field of reforms (product markets, labour markets), (b) the starting point, i.e. the extent of initial limitations and existing human capital, (c) the combined or non-combined lifting of distortions (e.g. simultaneous lifting of distortions in the labour market and the product market), (d) the extent of political support and (e) the level of demand in the economy.

The enhancement of the Greek economy's adaptability presupposes that distortions in the labour market (those remaining after the extended reforms of the past two and a half years), limitations in the operation of certain professions (closed professions) and/or barriers and strict conditions for the new entrants are eliminated. It also requires the abolition of administrative obstacles faced by enterprises in their transactions with the State.

Progress in all three fronts has been recorded in recent years. It is also positive that Greece has a well-trained workforce, as acknowledged also by international organisations monitoring structural competitiveness. Thus, in the *Global Competitiveness Report, 2012-2013* of the World Economic Forum, for instance, it is

reported (p. 28) that: "In working to overcome the present difficulties, Greece has a number of strengths on which it can build, including a reasonably well educated workforce that is adept at adopting new technologies for productivity enhancement. With the correct growth-enhancing reforms, there is every reason to believe that Greece will improve its competitiveness in the coming years".

The beneficial effect of reforms in the Greek economy is not visible yet, mainly for two reasons: **first**, reforms take time to yield results and, furthermore, their results extend to a medium-and-long term horizon and **second**, the prerequisites for the smooth operation of the financial system and the existence of a satisfactory level of demand and growth⁶ are not met.

The next sections present data on the course of reforms that aim at rationalising the institutions governing the labour and product markets.

3 LABOUR MARKET REFORMS⁷

The need for structural changes in the Greek labour market is justified by insufficient job creation in the private sector, the extent of uninsured work, low mobility and high labour cost in relation to productivity/competitiveness.8 Among the factors that contributed to limited job creation and led to a radical modification of legislation for collective bargaining and the labour market in May 2010-November 20129 are the high cost of recruitments and dismissals,10 and the mismatch between wage increases, productivity and investment performance at business level. This mismatch is due to the fact that not all businesses are represented in the bargaining for sectoral agreements (and, as a result, the level of unemployment and conditions prevailing in the non-represented businesses are not taken into account), while agreements at an occupational level by definition do not take account of the conditions prevailing in the businesses or sectors where the members of the specific profession are employed. The problem, in general, is that collective agreements, in terms of earnings, seek to ensure in the best possible manner those "inside" (the employed) and ignore or do not take sufficiently into account the interests of those "outside" (the unemployed).

Limiting the gap between competitiveness and the cost of factors of production can be achieved by reducing wages and/or increasing productivity. Economic policy seeks to improve competitiveness through higher productivity, but in the short run, competitiveness is necessarily enhanced by reducing labour cost. Inevitably, for a sustainable improvement of competitiveness, wages in the future need to be connected with productivity.

A major challenge for economic and social policy is to improve labour productivity through (a) measures for the reorganisation of public administration, (b) incentives for business growth and investment in infrastructure and new technologies, (c) efforts to improve the education system (including vocational training) and its link with the labour market, and (d) incentives for in-house training.

Under the new legislation, minimum wages are reduced by 22% and, in order to facilitate youth employment, people up to 25 years of age will receive a wage lower by another 12.8%.

- 6 See Padoan in general (2012).
- 7 Extensive reference to the structural problems of the Greek labour market has already been made in previous publications of the Bank. See Bank of Greece (2010), Box VI.1, Bank of Greece (2011), Box VI.1 and Bank of Greece (2012), Box VI.1.
- 8 The gap between the level of competitiveness and the cost of the factors of production determines the attractiveness of a place for investment (Delgado et al., 2012). If a country wishes to attract investment, it should eliminate such gaps. However, political and economic distortions hamper adjustment, and structural reforms aim at eliminating such distortions.
- 9 See Laws 3845, 3863, 3871 and 3899 of 2010, 3996 and 4024 of 2011 and 4046 and 4093 of 2012 and Cabinet Act no 6/28 February 2012.
- 10 Cross-country comparisons regarding the components of the labour market rigidity index (Employment Protection Legislation Index) of the OECD show that the cost of dismissals in Greece for individuals with long working experience was until recently higher than in most EU countries.

To the same end and also to enhance occupational mobility (which is of particular importance in a restructuring period), other measures were also adopted:

- First, the cost of contract termination was reduced with an aim to enhancing labour mobility.
- Second, for all enterprises with more than 20 employees, the limit beyond which dismissals are considered as group dismissals has been redefined. This means that an enterprise may expand without fearing that it will not be able to cut down its activities if economic conditions prove unfavourable.
- Third, enterprises were given the possibility to adjust wage changes to individual economic conditions. After lifting all remaining limitations in the conclusion of collective agreements at enterprise level (Law 4024 at end-October 2011), more than 870 contracts were signed up to end-September 2012, all of which provide for a reduction in wages or adjustment of wages to conditions prevailing in each enterprise, thus creating a new situation in the entrepreneurial sector.
- Fourth, the duration of collective agreements was reduced (to three years), and the same applies to the "continued effect" of a contract after its expiration (which acts as an incentive for a more rapid conclusion of new collective agreements to replace those that have expired).

The structural weaknesses pointed out above — and specifically the high cost of recruitments and dismissals, in conjunction with the high rates of workers' and employers' contributions — favour **uninsured work**. The need to combat this phenomenon, in order to protect the employed and achieve fiscal adjustment (and improve the position of social security funds), is one more reason for the implementation of structural reforms in the labour market. Among others, the reform of the social security system aims at combatting uninsured work

and increasing employment (see Box VI.1 at the end of this chapter).

Another measure to combat undeclared work is the obligation of employers to electronically announce recruitment, withdrawal, retirement, etc. to the information system of the Ministry of Labour, the Social Insurance Institute (IKA) and the Manpower Employment Organisation (OAED). Furthermore, clear strategic targets have been set for the Labour Inspectorate (SEPE), which include addressing violations in the application of labour legislation, combating uninsured work, establishing SEPE's conciliatory and consulting role in the labour market.

The Memorandum of February 2012 (Law 4046/2012) seeks an agreement between the government and social partners as regards the way to determine the minimum wage. Law 4093/2012 clarifies that the minimum wage will be defined by the government, after consultation with social partners and specialised scientific and research bodies, and will take account of the situation and the outlook of the economy, especially the course of employment and unemployment as well as the competitiveness of the economy. This procedure will be established by means of a Cabinet Act in the first quarter of 2013.

The need to change the system determining the minimum wage arises from the inability of the existing system to incorporate the needs of the population (i.e. to increase employment and reduce unemployment) and of the economy as a whole. This is why it seems imperative for the government to participate more actively in the determination of minimum wages, starting from a comprehensive picture of the economy. At the same time, there should be confidence among employers, workers and the government, based on the acknowledgement of common strategic orientations. The institutions facilitating coordinated wage bargaining in an economy can contribute to a larger adaptability of the labour market in times of crisis, through a swifter response of wages and working hours to changes in macroeconomic conditions. 11

The fact that unemployment continues to increase, despite the implementation of several of the abovementioned measures, does not mean that the measures are ineffective. Structural measures of this kind yield positive results almost immediately at times of growth. In recession, measures may take time to deliver, but they accelerate recovery. It is pointed out however that a net reduction of salaried employment in the private sector was recorded in January-October 2012, but it was much smaller than in the corresponding period of the previous year.¹²

4 STRUCTURAL REFORMS IN PRODUCT MARKETS

4.1 REMOVAL OF ADMINISTRATIVE BARRIERS TO ECONOMIC ACTIVITY

Regulatory interventions in business start-up and operation procedures are aimed at the protection of consumers, investors, the environment, and the State. They usually take one of the following forms: (i) payment of fees, (ii) obligation on the part of enterprises to inform authorities on a number of issues relating to their operation (e.g. statute amendments, publication of articles of incorporation, disclosure of financial accounts, etc.), (iii) restrictions on businesses' activities (e.g. prohibitions on establishment in certain areas, etc.), and (iv) anti-competitive, protectionist restrictions in favour of groups with the same interests.

In certain instances, however, such interventions are not effective (e.g. businesses are under the obligation to submit the same information to many overlapping authorities), no longer serve their original objectives, or create market distortions. In other words, the total cost of administrative burdens is likely to exceed the expected benefit. Reducing such burdens would instead produce net gains: indicatively, it has been estimated that a reduction of 25% in administrative burdens in the

EU would lead to a real GDP increase of 1.7% (Tang and Verveij, 2004).

Business surveys (both in Greece and internationally) suggest that such administrative regulations can hinder economic activity. Even amidst the crisis, when a number of other problems emerged (e.g. uncertainty, liquidity shortage), respondents to the Executive Opinion Survey for the World Economic Forum's Global Competitiveness Report 2012-2013 cited inefficient government bureaucracy as the most problematic factor for doing business. Given that this is the case for companies already doing business in Greece, it is clear that such regulatory interventions also discourage foreign direct investment (FDI). There have been calls from the Hellenic Federation of Enterprises (SEV) and the Greek International Business Association (SEVE) to reduce administrative burdens. The recently announced improvement (see Table VI.1) in the country's ranking on the World Bank's "Ease of Doing Business" index was of course a positive development, but there is still a long way to go – e.g. relating to the procedures for starting a business, for which the country still ranks very low, mainly because of the elevated cost of setting up a limited liability company.¹³

Estimates¹⁴ of the total direct and indirect cost for each economy arising from the need to comply with administrative requirements in the EU-15 countries show that the sum of the direct and indirect cost of burdens on all companies amounts to 6.8% of Greece's GDP, compared with just 1.5% in the UK and Sweden.¹⁵ Of course, these estimates are only tentative, as they usually rely on inadequately

^{11 &}quot;What makes labour markets resilient during recessions?" Chapter 2 in OECD (2012), Employment Outlook, Paris.

¹² In 2011, the bulk of job losses was recorded in the fourth quarter.

13 The minimum start-up capital for limited liability companies is also relatively high. However, the latest *Doing Business* report fails to take account of a new company type, i.e. the Private Company (introduced by Law 4072/2012), which is an advanced form of limited liability company with a (minimum) start-up capital of just one

¹⁴ See Kox (2005) and European Commission (2007).

¹⁵ The indirect cost is calculated as the product of time needed to comply with the regulations, times the average wage.

founded assumptions and, as a result, there are large discrepancies between alternative estimates of the cost for the same procedure. 16

One of the actions undertaken since 2010 for the simplification of business start-up and authorisation procedures is the creation of "one-stop shops", which liaise between companies and the public sector. They are points of single contact, either physical or electronic, which provide businesses with all the necessary legal information regarding company set-up, authorisation and operation in Greece, but also offer the possibility to complete certain formalities with public authorities.

The aim of one-stop shops is to cut red tape and reduce associated costs for businesses. Their ultimate objective is to foster competition by lifting restrictions on market access.

The establishment of one-stop shops in the EU Member States, in particular the operation of electronic points of single contact modelled on one-stop shops, is one of the key measures introduced by the Directive on Services in the Internal Market (Services Directive), and its implementation is under way. Interlinkages between one-stop shops will be pursued at national level, so that businesses may obtain information on the legal frameworks of other countries and conduct distance transactions (e.g. submit applications using e-signatures).

One-stop shops have been set up on a thematic basis. Some deal with the establishment of sociétés anonymes and limited liability companies, 17 others are at the service of investors interested in renewable energy sources, 18 and there are also one-stop shops under formation for strategic investments, as well as investments in tourism and shipping, for telecommunications, trade, and exports. A recent (May 2012) review by the General Secretariat of Commerce at the Ministry of Development, Competitiveness, Infrastructure, Transport and Networks, which supervises one-stop shops dealing with the set-up of sociétés anonymes and limited liability companies, indicates that:

- fifty-nine chambers of commerce and 3,000 notaries' offices have been designated as points of contact, which carry out all the necessary procedures for a business company to acquire legal entity and start operating;
- about 9,000 businesses have been set up through one-stop shops;
- the operation of one-stop shops is satisfactory and it is considered that one-stop shops help considerably to improve the business environment.¹⁹

The role of chambers will be further enhanced by measures currently under public consultation relating to the authorisation of establishment, expansion and modernisation of industrial and other businesses.

In a recent study (January 2012) on European Points of Single Contact (PSCs) commissioned by the European Commission,²⁰ Greece ranks 23rd out of 30 European countries (the 27 EU Member States and the three European Free Trade Association (EFTA) countries participating in the EEA) based on the scope and usability of the services provided. This study recommends: (i) promoting the use of PSCs, once the information available is improved and they become integrated with other services and portals (e.g. www.startupgreece.gov.gr, www.businessportal.gr), (ii) introducing the ability to complete procedures online (for instance, e-signature, e-identification and epayments), and (iii) enabling the translation of

- 16 Discrepancies are attributed to differences in the definitions adopted, e.g. whether the time needed by an entrepreneur to comply with regulations is taken into account, or the way in which time cost is calculated, etc. For a more detailed analysis, see Kox (2005).
- 17 Joint Ministerial Decision No. K1-802/23 March 2011 on the establishment and operation of one-stop shops for business start-ups, and Joint Ministerial Decision No. DOL KEP/F.16/3/OIK.7055/31 March 2011 on the certification of Citizens' Service Centres (KEP) as one-stop shops for the start-up of General Partnerships and Limited Partnerships.
- 18 Establishment of a Renewable Energy Agency: Article 11 of Law 3851/2010 (Government Gazette 85 A').
- 19 For a summary of the benefits of one-stop shops, see General Secretariat of Commerce (2012) and http://government.gov.gr/2011/05/09/13137/
- 20 See European Commission (2012a).



information and administrative forms (e.g. licenses).²¹

The recent decision of the Ministry of Administrative Reform to issue and circulate documents within the Ministry only electronically is also of relevance to the relations between businesses and the State.

4.2 STRUCTURAL REFORMS IN RETAIL TRADE

The legislative framework on retail trade applicable until recently in Greece raised barriers to entry into and *conduct* of a trade activity.²² Such barriers included e.g. administered prices of retail goods, prohibitions on the sale of certain products in department stores, etc.²³ The extensive regulatory restrictions weighed considerably on this sector's productivity, which was found to be low in a recent report prepared by McKinsey (2012).²⁴

Completed or upcoming interventions relating specifically to the retail trade sector are: the adoption of new health regulations and rules on the distribution of/trade in goods and the provision of services in October 2012, the upcoming review and amendment of the Market Policing Code, the lifting of constraints for retailers to sell restricted product categories (tobacco, press, baby food), the abolition of the prohibition to sell merchandise at prices below cost (Law 4072/2012) and delinking the working hours of employees in retail outlets from the opening hours (Law 4093/2012).

The new market regulations can contribute to lower prices through competition-enhancing measures such as the removal of restrictions on the sale of some product categories, and the removal of the obligation of wholesalers to submit price lists and cost elements to the Ministry of Development, Transport and Networks, thus increasing the flexibility of the fresh-food supply chain, and broadening the range of packaging choices.

The new legislative framework on retail trade, currently under formation, strengthens con-

sumer protection, reduces the administrative burden on retailers, fosters productivity growth for existing retail outlets and promotes further development of the sector.²⁵ These structural measures are of direct relevance to the average household's welfare, given that the retail sector accounts for a significant share in the consumer price basket (up to 25% at EU level) and absorbs a significant percentage of the labour force (in 2010, it represented 11% of total employment in Greece).²⁶

4.3 STRUCTURAL REFORMS IN THE TRANSPORT SEC-TOR

Over the past few years, measures have been introduced in **road freight transport** and legislative actions for the sector's liberalisation have already been completed. In Greece, which lacks an extensive railway network, road transport accounts for 97% of total land freight transport.²⁷

The road freight transport industry's relevance to the economy is both direct (in 2007, the year before the onset of the recession, it accounted for 3.5% of total added value and represented 3.4% of total employment) and indirect, since it is being used as an input in many economic activities.²⁸ The European Commission estimates that transportation and

- 21 The same points are reported in a recent review (March 2012) of the Economic Adjustment Programme for Greece. See European Commission (2012b).
- 22 In 2008, Greece ranked 21st out of 34 countries on the OECD's Non-Manufacturing Regulations (NMR) indicator for the retail distribution sector, which measures, *inter alia*, barriers to entry.
- 23 For more details on the food retail sector, see Research Institute of Retail Consumer Goods (IELKA) (2011) and its recent relevant proposals.
- **24** Greece's retail trade productivity is 30-40% lower than the EU-15 average.
- 25 Investments in the retail sector are encouraged by the New Building Regulation (Law 4067/2012, Government Gazette A' 79/9.4.2012), which allows for a higher building coefficient under certain conditions, although the relevant legal framework will be completed with the promulgation of a Presidential Decree on "Land Categories and Uses" (see relevant public consultation at http://www.opengov.gr/minenv/?p=3174).
- 26 Furthermore, the rate of employment of self-employed workers, young persons and women is higher than in other sectors of economic activity. See ECB (2011).
- 27 See Eurostat's Transport Database.
- 28 According to data from the Inflow-Outflow Table of the Hellenic Statistical Authority (ELSTAT) for the year 2010, 56% of the sector's total output is used as inflow in other sectors.

storage costs account for 10-15% of the final cost of the finished products for enterprises in the EU.²⁹

The road freight transport legislative framework in force until 2010 created significant entry restrictions (such as the fact that the number of licenses for commercial vehicles remained unchanged) and conduct restrictions (for instance, as regards commercial vehicles, a prohibition on the pursuit of transport activity outside a given geographical area, prescribed maximum and minimum tariffs for transportation services, restrictions on company form and on the transportation of mixed loads, and as far as 'own-account' vehicles are concerned, a prohibition on combined transport, on the transportation of empty, thirdparty containers and of liquid fuels).30 The impact of such regulations is evident in:

- firstly, the **elevated cost** of transport, which has in fact contributed to high price levels in Greece:³¹
- secondly, an increase in the prices of transport services at a faster rate than average price levels (particularly in the 2005-2009 period), and
- thirdly, the sector's **low productivity**: the productivity of the transport industry in Greece was about 40% lower than the EU-15 average (McKinsey, 2011).³² This is probably attributable to:
- (a) the **old age of the vehicle fleet**, 33 which, coupled with a significant lack of infrastructures (e.g. motorways, storage facilities at major hubs), has an adverse effect on the quality of the services provided,
- (b) the **sector's low efficiency** (significant percentage of empty runs, long-distance carriage of heavy cargoes with a small payload),³⁴
- (c) the significant number of 'own-account' vehicles, as a result of restrictions on commercial vehicle licenses. Indicatively, in 2009, the ratio of heavy vehicles ('own-account' and com-

mercial vehicles) to Greece's GDP was three times that in Germany, Austria and Ireland.

Since 2010, a number of legislative measures have been introduced for the liberalisation of land (freight) transport, aimed at:

- firstly, abolishing all quantitative restrictions on the issue of new licenses to natural or legal persons established in the EU, provided that specific criteria on financial standing, professional competence and vehicle technology are met;³⁵
- secondly, reducing the time required to issue a road haulage license: the prescribed maximum timeframe for issuing such a license is three months;
- 29 See the European Commission's website at http://europa.eu/pol/trans/index_en.htm.
- 30 The Supreme Administrative Court Plenum ruled on 27.12.2011 that Article 4(3) of Law 383/1976 placing restrictions on the issue of licenses for commercial vehicles and Article 15(4) of Law 1959/1991 prohibiting the replacement of a commercial vehicle with a vehicle of any other category or its conversion for the purpose of providing transport services of another category are unconstitutional. Furthermore, in its opinion of 23 July 2012, the State Legal Council concluded that "commercial vehicles of other categories can be freely converted into road tankers."
- 31 See http://apod.gge.gov.gr/wpcontent/uploads/2012/02/EKSI.pdf and http://www.sev.org.gr/Uploads/pdf/ypomnima_ypan_september2012.pdf.
- 32 According to Eurostat data and EU studies, Greece lags behind other EU countries in terms of the share of non-resident carriers in its national market (cabotage penetration rates), following the lifting of cabotage restrictions under Regulation 3118/93, but also in terms of the share of Greek hauliers in the markets of other EU Member States (see, for instance, Eurostat data, at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Competitiveness_in_EU_road_freight_transport).
- 33 In 2009, according to Eurostat data, 34% of freight transport in the EU-27 countries was performed by vehicles of less than 2 years and 11% by vehicles of over 10 years. The corresponding rates for Greece were 11% and 39%, respectively (see http://epp.eurostat.ec.europa.eu/statistics_explained/index.php?title=File:Share_of_age_categories_in_road_goods_transport,_2010_(percent-in_vkm).PNG&filetimestamp=20120130135421).
- 34 Greece's falling behind other euro area countries is reflected in EU reports (see, for instance, European Commission, 2011). A similar picture is painted by the World Bank's Enterprise Surveys (ES) Logistics Performance Index. The IOBE (2007) and Alpha Bank (2008) studies have similar findings.
- 35 Law 3887/2010 (September 2010) transposing Directive 96/26/EU (on admission to the occupation of road haulage operator and road passenger transport operator and mutual recognition of diplomas, certificates and other evidence of formal qualifications intended to facilitate for these operators the right to freedom of establishment in national and international transport operations) and Regulation 1071/2009 (establishing common rules concerning the conditions to be complied with to pursue the occupation of road transport operator) is aimed at lifting restrictions on market access to, and provision of services in, land freight transport and sets a transitional 3-year period (ending 30 June 2013). Article 5 of Law 4038/2012 (16 March 2012) amending Law 3887/2010 shortened the transitional period (new end date: 27 January 2012).



- thirdly, lowering the road haulage license price in order to bring it in line with administrative costs, and
- fourthly, deregulating freight charges.

New road haulage license issuance is proceeding smoothly and there is also progress in the evaluation of proposals under the operational programme for the modernisation of road freight transport operators, financed by the National Strategic Reference Framework (NSRF).

The new legislative framework is considered to have reduced administrative costs and red tape associated with the start-up of a road freight business. The country's ranking in the OECD's indicator of regulation in energy, transport and communications (ETCR), which measures the rigidity of the regulatory framework, has considerably improved, i.e. it is now above the OECD average. The implementation of the new framework's provisions, coupled with NSRF-funded infrastructure projects, will bolster the sector's productivity.

The evaluation of road freight transport liberalisation in other OECD countries is overall positive. In most cases, it was introduced gradually and focused on lifting market entry barriers (i.e. licensing restrictions) and price liberalisation.

A 2005 report of the Foundation of Economic & Industrial Research (IOBE) estimated that the gradual deregulation of prices and licensing would bring significant benefits to the sector, such as a decline in freight charges (by 1.5-2.5% annually), an increase in the number of enterprises in the sector (1-2% annually), a reduction in business operating costs (2.5-4.5% annually), and a rise in the number of persons employed (2-4% annually). The general estimate was that full liberalisation would help enhance productivity of individual companies and, more generally, the sector, but also improve the services provided, having a significant positive impact on the Greek economy as a whole.³⁶

Given that the new legal framework entered into force recently, it is very difficult to collect the necessary data in order to assess the economic impact of road freight transport liberalisation (e.g. data on the number of enterprises and their efficiency). The evaluation of the sector's liberalisation outcome is also hampered by current economic conditions. There are, however, signs of a decline in transportation costs.³⁷

4.4 OPENING UP OF "CLOSED" PROFESSIONS

A special case of elimination of rigidities in the products market is the liberalisation of "closed" professions. A profession is deemed closed if it is subject to regulations which prevent natural or legal persons from taking up the given professional activity and/or determine administered prices/fees without accounting for market demand and supply. In most OECD countries, progress towards eliminating barriers to professional activities was made between 2003 and 2008 in view of the implementation of the EU Services Directive.38 According to the 2008 OECD professional services indicator measuring regulatory conditions in the legal, engineering, accounting and architectural professions, Greece ranked 27th among 34 countries.

The removal of restrictions on access to, and conduct of, 'closed' professions should help improve productivity in these sectors by boosting competitiveness, cutting red tape, reducing corruption, and lowering the prices of services offered and, ultimately, of goods and services,

- 36 According to IOBE, the Consumer Price Index should fall by 0.2-0.3 percentage point. Taking into account data from France, the United States and Mexico, the IOBE expects the benefit to the economy as a whole to range between €700 million and €1.6 billion.
- 37 See the September 2012 memo of the Hellenic Federation of Enterprises (SEV) to the Minister of Development, Transport and Networks, available in Greek only on the SEV website (http://www.sev.org.gr/Uploads/pdf/ypomnima_ypan_september 2012.pdf).
- 38 The Directive on Services in the Internal Market (Services Directive) concerns both liberal professions and other services such as retail distribution. Under this Directive, restrictions should have been lifted by December 2009, in order to, inter alia, facilitate EU cross-border trade. See Monteagudo, J., A. Rutkowski and D. Lorenzani (2012) for a first, positive assessment of the Directive's implementation up to 2011.

Table VI.4 Indicative estimates of the effects of the Services Directive

Study	Methodology, structural reforms discussed and effective mechanisms	Estimated economic impact on Greece
Copenhagen Economics (2005)	General equilibrium model; full implementation of community directive on services; mechanisms: enhancing trade and productivity, reducing production costs in protected industries, supporting employment and consumption.	 Lower cost of services offered by regulated professions by 9.5% and in distributive trade by 1.7% Increase in total employment by 0.2% Higher consumption by 0.3-0.4% Rise in wages by 0.3%
IOBE (2010)	General equilibrium model, adjustment of the profit mark-up to prices of non-tradable goods and services and the wage mark-up to a level above the marginal labour product close to the euro area levels.	 Increase in GDP by 4.8-13.5% (depending on the degree of containment of profit mark-ups and the wage mark-up) Benefits to GDP from deregulating the labour market: 17%, of which around 60% in 5 years Increase in consumption by 15.5% Higher employment by 0.6-1.5% Higher exports by 3.1-8.4%
Monteagudo et al. (2012)	Gravity model and general equilibrium model, actual implementation of the Directive by 2011.	Increase in foreign investment in Greece by 2% , exports by 6% , imports by 12.7% , and productivity by 6.7%
KEPE (2012)	Calculation of the burden on the national income due to the burden on prices of closed professions, alternative assumptions concerning the degree of decline in services' final prices.	Lower cost (benefit) by 0.9-1.9% as a percentage of GDP (June 2012 temporary estimate, probable revision)

for which the output of these professions constitutes an inflow.^{39,40} The Centre of Planning and Economic Research (KEPE) conducted a detailed survey (under publication) on the progress made so far with the liberalisation of 'closed' professions and its expected impact on the Greek economy, which forms the basis for the analysis that follows.

Supporters of restrictions argue that they are necessary for reasons of public interest, given that certain activities have an environmental impact, create risks to public safety, etc. and that consumers find it hard to evaluate the quality of the services provided.⁴¹ However, these arguments no longer stand, as regulatory authorities and consumer unions have been established to protect the public interest and the interests of consumers.

In Greece, the opening up of closed professions and the full implementation of the Services Directive was one of the obligations under the first Memorandum and is expected to have a positive effect on growth and employment (see

Table VI.4). The Services Directive was transposed into Greek law in May 2010 (Law 3844/2010) and unwarranted entry and conduct restrictions (*numerus clausus*, geographic/territorial limits) were abrogated in March 2011 by Law 3919/2011, which provided for a 4-month adjustment period for professional associations. However, in order for this law to be implemented, a detailed report had to be drawn up listing the restrictions, supervisors by profession, and secondary legislative acts (presidential decrees, ministerial decisions and circulars); this report could not be completed in such a short amount of time. As a result, the

- 39 Reports of the European Commission (2004) and the OECD (2005a, 2005b, 2005c) confirm that the lifting of restrictions on professional services in EU countries in the 1970s and 1980s has a positive (i.e. downward) effect on prices.
- 40 According to the 2010 Input-Output Table of the Hellenic Statistical Authority (ELSTAT), 86% of Greece's professional services output (NACE-rev.2 codes: 69, 70, 71) is made available in the form of intermediate goods to enterprises of other sectors. The corresponding percentage for the Greek economy as a whole is just 36%.
- 41 Arguments of this kind are summed up and refuted in EU studies, such as European Commission (2004), which can also be found on the European Commission's website at http://ec.europa.eu/internal_market/services/services-dir/index_en.htm//ec.europa.eu/internal_market/services/services-dir/index_en.htm.

second Memorandum (February 2012) specified more clearly the steps required to implement and complement Law 3919/2011 and laid down the timeframes for the completion of relevant actions, which were designated as prior actions for the disbursement of the next tranche of the loan. The Hellenic Competition Commission plays a key role in the liberalisation process, as it has to issue opinions on applications for exempting certain professions from the law's provisions.

The process of listing the restrictions per profession was completed in the first quarter of 2012, while the process of evaluation by the Hellenic Competition Commission of applications for exemption from the provisions of Law 3919/2011 was completed on 1 October 2012.⁴²

In conclusion, over the past two years, considerable progress has been made towards lifting restrictions on the conduct of professions, and further steps are expected to be taken pur-

suant to Law 4093/2012, which was passed by Parliament on 7 November 2012,⁴³ although relevant restrictions have not been completely removed yet.⁴⁴ As a result of the deep economic recession, the benefits arising from this liberalisation cannot be assessed properly.

- 42 Today, most of the restrictions have been lifted on: primary healthcare professionals, actuaries and accountants/book-keepers, customs agents, marine chemists, loaders/dockers, private career counselling agencies, temping agencies, music academies, dance, drama and film schools, tour guides, driving instructors, radio repair technicians/mechanics, energy inspectors, as well as other technical professions (refrigerationists, plumbers, industry and fuel technicians). The Hellenic Competition Commission issued an opinion in favour of maintaining licensing restrictions on certain activities falling within the remit of the Ministry of Culture (e.g. conservators of works of art and antiquities), the Ministry of Citizen Protection (e.g. lifeguards) and the Ministry of Education (e.g. post-secondary education centres). As regards lawyers/law firms, notaries, engineers, and public accountants-auditors, the second-stage process provided for by Law 3919/2011 has been completed, but some of the actions stipulated by the second Memorandum in relation to the professions of e.g. lawyer and engineer are still pending.
- 43 It is indicatively noted that notary fees have dropped by about 30% following the recent legislative measures (see European Commission 2012b, p. 41, paragraph 51).
- 44 See recent memos by the Greek Federation of Enterprises (SEV) at http://www.sev.org.gr/Uploads/pdf/ypomnima_ypan_september2012. pdf and Hellenic Confederation of Professionals, Craftsmen & Merchants (GSEVEE) at http://www.gsevee.gr/index.php?option=com_content&view=article&id=206:2012-10-08-11-53-12&catid=23:deltiatupou&ttemid=122.

Box VI.I

FISCAL IMPACT AND PROSPECTS OF THE SOCIAL SECURITY REFORM

The financial crisis exacerbated the problem of financing a social security system that is unable to meet its liabilities over the long term. The social security reform of July 2010 (Law 3863/2010 and Law 3865/2010) does not address the immediate financing needs of the system; however, it allows the pension system to avoid the long-term impasse by absorbing almost all ageing-related pressures on public finances. Nevertheless, the reduction of the fiscal burden raises questions about the future adequacy of pensions and demonstrates the need to tap the currently underdeveloped pillars of occupational and private insurance.

I The need for social security reform

The need to reform the social security system has been discussed at length in regular reports of such international organisations as the European Commission and the OECD, and has been repeatedly pointed out in previous Bank of Greece reports.¹

On top of the injustices, weaknesses or defects of the system, reform was inevitable in view of its constantly rising operating costs. According to the European Commission's quantitative analy-

1 See e.g. European Commission (2001, 2006, 2009), OECD (1997, 2005, 2007, 2009); Boersch-Supan and Tinios (2001); and Bank of Greece (1999, 2000, 2007, 2010). sis of the fiscal implications of population ageing, without systemic overhaul, the financing costs of the Greek social security system would rise by 12.4% of GDP over the next 50 years, against a European average of 2.4% of GDP.²

As is the case with all purely pay-as-you-go (PAYG) systems, pensions of previous generations are financed by the social security contributions of future generations, thus the system's self-financing becomes more difficult as the pensioners-to-workers ratio increases.

With the failure to adjust the system parameters, the ageing phenomenon in Greece would significantly aggravate the pensioners-to-workers ratio and dramatically increase government pension expenditure. This does not mean that demographics in Greece are much worse than in the other European countries, which on average show comparable ageing rates.³ The reason why comparable demographic pressures led to such a disproportionate increase in social security spending in Greece was the failure of the existing regulatory framework to manage the rapidly changing population age composition.

Despite a number of interventions to reform the social security system, until 2010 it was still highly fragmented, which made both its actuarial evaluation and audit harder. Characteristically, despite the mergers implemented under Law 3655/2008, which reduced the number of social security funds from 133 to 13, the wage earners' fund (IKA – Social Insurance Institute) still used some 800 different pension scales that varied according to the pensioner's type of work and the date he/she entered the labour market.⁴

At the same time, the pension system remained subject to distortions which allowed for —or even encouraged — abuses, including widespread contribution evasion;⁵ for instance, substantial variations in the link between contributions and benefits, both among and within funds, comparatively increased opportunities for early retirement, and a high actuarial gross replacement rate⁶ ensured by a minimum pension.

2 The main aspects of the social security reform

The July 2010 reform (Law 3863/2010 and Law 3865/2010) made the social security system practically immune to demographic changes, which is an important step towards enhancing long-term fiscal sustainability. The reform tackles the problem of fragmentation, introduces common incentives for the extension of working life and strengthens the link between contributions and benefits. At the same time, a minimum, adequate non-contributory pension is introduced.⁷ In brief, the following main changes were enacted:

- 2 See European Commission (2009), Table 1, p. 26.
- 3 The number of people aged 65+ relative to the population aged 15-64, also known as old-age dependency ratio, was projected to increase by 28.9 percentage points in Greece in 2010-2060, against 26.2 percentage points in the euro area (European Commission, 2008, Table 1.14, p. 47).
- See OECD (2011a), p. 95.
 See OECD (1997), pp. 65-97. For a comprehensive overview, see Tinios (2010) (in Greek).
- 6 The gross replacement rate is calculated by the OECD as the ratio of average gross pension in retirement to average gross earnings throughout the entire working life. Similarly, the net replacement rate is divided by net pre-retirement earnings.
- 7 The establishment of a minimum non-contributory pension by definition distorts the incentives behind the purely contributory pension. Recently, the minimum pension replacement rate was high enough to discourage active participation (paying contributions) after establishing entitlement to minimum pension. The substantial increase in the minimum pension between 1978 and 1990 in particular for pensions granted by IKA—ensured that 15 contribution years would provide a higher replacement rate than 25 contribution years; as a result, in 1997, 70% of pensioners retired earlier and received the minimum pension. According to the OECD, this not only undermined the system's sustainability, but also fuelled contribution evasion (OECD, 1997, pp. 70-73). The actuarial study on the social security system after the 2010 reform does not include detailed estimates on incentives attributable to the establishment of a new minimum pension level. However, the European Commission estimates that the new social security system as a whole is consistent with significantly higher participation rates of people aged 55-64 (European Commission, 2012a, Table 1.7, p. 85), which suggests that the level of the new minimum pension does not cause distortions, as it did in the past.



Extension of working life and disincentives to early retirement8

- Gradual (as from 1 January 2011) increase in the statutory retirement age to 65 (until 2015) and the minimum retirement age to 60 for all insured persons (until 2013).
- Gradual (as from 1 January 2011) increase in the minimum contribution period required for retirement.
- Full pension after 40 years of contributions (as from 2015).
- 6% decline per year in pension benefits for those retired before the age of 65 with less than 40 years of contributions.

Establishment of indexation mechanisms

- The statutory retirement age is indexed to changes in life expectancy (every three years, as from 2021).
- Pension benefits will be indexed on a yearly review basis to the percentage change of the CPI and the GDP (as from 2014).

Strengthening of the link between contributions and benefits and introduction of common incentives to extend working life

The new system uses the full earnings history to calculate pensionable earnings (as from 1 January 2011) and introduces one profile of accrual rates for all workers, bringing these down from 2-3% a year to a much lower range of 0.80-1.50% a year, depending on the years of service. Pensions under this system will start to be granted from 2015.

Ensuring a minimum adequate pension

A minimum non-contributory pension for all insured persons, including a means-tested pension for those not establishing pension entitlement, was introduced (to be granted as from 2015).

Moreover, March 2012 saw the merger (under Law 4052/2012) of all major supplementary pension funds of wage-earners, and the introduction of a "notional" defined contribution system for those insured after 1 January 2001.

Overall, the social security reform is in line with prevailing international trends towards balancing the adequacy and sustainability of social security systems. ¹⁰ However, in Greece both the second (occupational funds) and the third (private insurance companies) pillars remain relatively underdeveloped.

⁸ Changes in retirement conditions and methods of calculating pensions as from 1 January 2011 have no effect on pension entitlements established up to 31 December 2010. In cases where the retirement age increases gradually, prospective pensioners are subject to the applicable qualifying age limit when they reach 55 or 60.

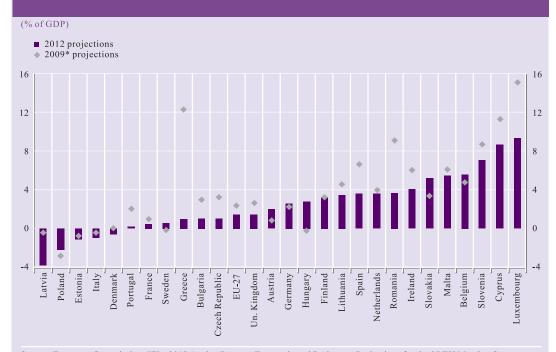
⁹ In a notional defined contribution system, social security contributions are held in personal accounts, in contrast with PAYG schemes, where each insured person's contributions fund current pensions (of other insured persons).
10 See OECD (2012), Table 1.1, p. 23.

3 Quantification of the fiscal impact

As regards the short-term financing needs of social security funds (SSFs), a review of the national accounts shows that the social security reform has had limited impact. Spending cuts in the SSFs in 2011 (-3.6%) on the one hand cannot keep track with the rate of decline in revenue (-8.4%) and, on the other, mostly focus on intermediate consumption expenditure (-34.7%), the bulk of which is not affected by the pension system parameters.¹¹

By contrast, the social security reform critically enhances the long-term sustainability of public finances. According to the European Commission, the projected increase in pension expenditure in 2010-2060 fell to 1% of GDP after the reform, against an average increase of 1.5% of GDP in the European Union, i.e. it improved by 11.5% of GDP, against the 2009 projections (see Chart A).¹²

Chart A European Union: pension expenditure projections for 2010-2060



Source: European Commission, "The 2012 Ageing Report - Economic and Budgetary Projections for the 27 EU Member States (2010-2060)", *European Economy 2/2012*, Table 2.28. *The 2009 projections refer to the 2007-2060 period.

Reining in the upward trends in pension expenditure reduces the size of the permanent budget adjustment required to ensure that the public budget constraints are met (sustainability gap). In 2009, the sustainability gap in Greece reached 20.3% of GDP, against an average of 6.8% of GDP in the euro area. Taking into account the social security reform and the fiscal adjustment already

¹³ See European Commission (2010), Annex 14, p. 66. The projection is based on the S2 indicator, which shows the adjustment to the current primary balance required to fulfil the infinite horizon intertemporal budget constraint, including paying for any additional expenditure arising from an ageing population. The S2 figure for 2009 is underestimated, as it is based on a fiscal deficit of 12.7% of GDP, instead of the actual outturn of 15.6% of GDP.



¹¹ General government national accounts (ELSTAT), key aggregates of SSFs and Hospitals (on a consolidated basis).

 ¹² See European Commission (2012a), Table 2.5, p. 101 and Table 2.27, p. 154. It should be noted that projections take no account of a series of additional fiscal measures to further reduce pension spending (National Actuarial Authority, 2012, p. 2010).
 13 See European Commission (2010), Annex 14, p. 66. The projection is based on the S2 indicator, which shows the adjustment to the current

achieved, the European Commission projects that in 2011 the sustainability gap will be as low as 5.7% of GDP, against an average of 5.1% of GDP in the euro area, implying an adjustment of 14.6% of GDP against 2009 (see Chart B).¹⁴

4 Determinants of developments in pension expenditure between 2010 and 2060

The main burden on pension expenditure in 2010-2060, both in Greece and in the EU as a whole, comes from the expected deterioration of the dependency ratio. ¹⁵ Demographic pressures on pension expenditure (+10.4% of GDP), though less than in 2009 (+12.7% of GDP), still remain stronger than the European average (+8.5% of GDP). However, the social security reform absorbs the bulk of demographic pressures, reducing the fiscal burden to +1% of GDP, against +2% in the euro area and +1.5% of GDP in the EU as a whole. ¹⁶

In more detail (see Chart C), parametric changes, such as new accrual rates and the calculation of pensionable earnings on the basis of the full earnings history, reduce the relative amount of pensions (benefit ratio), absorbing 34.6% of demographic pressures (-3.6% of GDP). Moreover, the extension of working life and the indexation of retirement age are reflected in the decline in the coverage ratio, which absorbs 32.7% of demographic pressures (-3.4% of GDP).

Furthermore, the long-term evolution of the employment rate is expected to absorb 18.3% of demographic pressures (-1.9% of GDP). Nonetheless, this impact is not directly attributable to the social security reform.¹⁸

5 Link between contributions and benefits, pension adequacy and the need to reinforce the second and third pillars

Although the Greek national insurance legislation provides for three pillars (social, occupational and private insurance), pensions are almost exclusively provided by the government through the first pillar. According to Mylonas and de la Maisonneuve (1999), insurance companies attribute the low demand for private pensions to the generosity of the public pension system.

Characteristically, before the social security reform, the gross replacement rate of first pillar pensions in Greece stood at 95.7%, which was also the highest among the 34 OECD member countries for high and middle earners and the second highest for low earners, after Luxembourg (97.9%). Taking into account the effects of taxation, the net replacement rate of first pillar pensions in Greece was the highest in all income categories and exceeded 110% on average. It should be noted that, on average in the European Union, the net replacement rate of first pillar pensions stands at 67.2% for low earners, gradually falling to 58.1% for middle and to 53.2% for high earners. ¹⁹

¹⁴ See European Commission (2012b), Table II.1.1, p. 19.

¹⁵ The 2012 common projections of the European Commission calculate the fiscal impact from the change in the ratio of persons 65+ to the population aged 20-64. In previous reports, the denominator of the ratio was the population aged 15-64, which makes it difficult to compare developments over time.

to compare developments over time.

16 See European Commission (2012a), Table 2.28, p. 155 and Table 2.27, p. 154.

¹⁷ The benefit ratio is calculated as the ratio of average pension granted to average earnings in the total economy, and reflects the relative generosity of the pension system. An increase (decrease) in this ratio tends to increase (reduce) pension expenditure. As a concept, it is similar to — but not identical with — the wider known replacement ratio. The coverage ratio describes the ratio of pensioners to the total number of persons aged over 65. An extension (shortening) of working life causes a decrease (increase) in the coverage ratio, which tends to reduce (raise) pension expenditure.

¹⁸ In the European Commission's projections, employment rates for all EU Member States are based on commonly agreed exogenous assumptions. Compared with the 2009 projections, the 2012 projections for Greece are based on significantly more favourable assumptions concerning the long-term evolution of both the employment rate and the labour market participation rate for people aged 55-64. See European Commission (2012a), Table 1.7, p. 85.

¹⁹ See OECD (2011b), p. 121 and 127.

Chart B Euro area: Fiscal sustainability gap (S2) and its components

(% of GDP)

a. Projections before reform (2009)

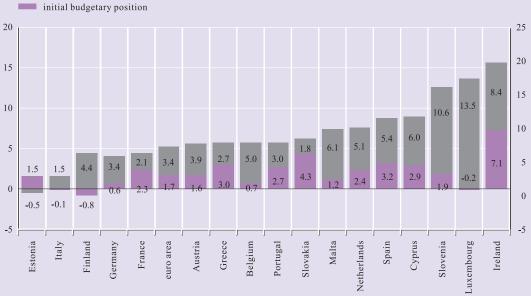
ageing component initial budgetary position



Source: European Commission, Annexes to the Interim EPC-SPC Joint Report on Pensions, Annex 14, 31 May 2010.

b. Projections after reform (2011)

ageing component



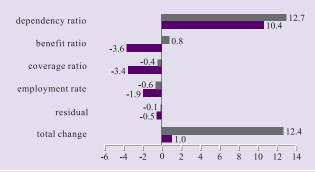
Source: European Commission, Quarterly Report on the Euro Area, Vol. 11, No. 1, Table II.1.1, April 2012.



Chart C Decomposition of the public pension expenditure to GDP ratio over 2010-2060 in Greece

(% of GDP)

- projections after reform (2012)
- projections before reform (2009)*



Source: European Commission, "The 2012 Ageing Report - Economic and Budgetary Projections for the 27 EU Member States (2010-2060)", European Economy 2/2012, Table 2.28. *The 2009 projections refer to the 2007-2060 period.

However, the generosity of the social security system was not evenly spread across SSFs. According to the National Actuarial Authority (EAA), in 2007 the average replacement rate for persons insured with IKA was 84.2%, against 149.8% for civil servants.²⁰

The heterogeneity reveals another aspect of pension cuts in the context of the ongoing fiscal adjustment. As long as contribution rates are not taken into account, cuts made exclusively on the basis of pension levels break the link between contributions and benefits. Effectively, they constitute a redistribution of wealth from high-pension earners, who have paid proportionally high contributions for a longer period of time, to high- or low-pension earners that have paid lower contributions.²¹

In the transition period until the full implementation of the social security reform, breaking the link between contributions and benefits provides additional incentives for early retirement to insured persons that pay proportionally higher contributions, at the very time when, already since 2008, the Greek social security system has been providing the strongest incentives for early retirement among the OECD member countries.²² Moreover, this has a critical impact on the credibility of the social security system, which could have short- and long-term consequences.

The parametric harmonisation between SSFs brought about by the social security reform will eliminate any variations in the link between contributions and benefits among funds in the future; however, it limits substantially the total gross replacement rate of the system. According to a recent actuarial study of the National Actuarial Authority, the total gross replacement rate after the reform is projected to drop to 49.6% by 2060, a prospect also reflected in the above-mentioned contribution of the benefit ratio to containing pension expenditure.²³

²⁰ See National Actuarial Authority (2008) (in Greek), Table 4, p. 16.

²¹ Certain SSFs apply no maximum income level for the calculation of contributions, on the basis of ratios that are almost double the IKA ratios. See also footnote 7 concerning the minimum pension.

²² See OECD (2011b), Figure 3.3, p. 55. 23 See National Actuarial Authority (2012) (in Greek), Table 9, p. 18.

The reduced generosity of the first pillar, while contributing to the sustainability of public finances, also raises questions about the future adequacy of pensions, to the extent that it does not ensure a level of income over the relative poverty threshold.²⁴ The drop in the replacement rates for new entrants tends to make second and third pillar schemes more attractive. However, so far as participation remains voluntary, international experience shows that coverage tends to range below 50%.25

Certain countries, such as New Zealand²⁶ and Germany, resorted to partial subsidisation of the third pillar benefits, thus achieving a substantial increase in the coverage ratio (KiwiSaver and Riester schemes, respectively), while 14 countries made private insurance mandatory, covering as a rule over 50% of persons aged 15-64 years.²⁷ Alternatively, in Denmark, the Netherlands and Sweden the emphasis is on the second pillar, with mandatory occupational insurance in the context of collective or sectoral agreements, thus ensuring a coverage ratio of over 60%.

6 Constraints on tapping the second and third pillars

Increased focus on the second and third pillars may substantially enhance the adequacy of total pension benefits. However, international experience highlights a series of factors likely to undermine the effective tapping of private or occupational insurance, which underscores the need for careful planning.

According to the OECD, low earners and people without permanent employment tend to have lower participation in voluntary third-pillar schemes, which raises questions about the adequacy of pensions.²⁸ In part, this could be addressed by making participation (enrolment) in the third pillar "automatic" or mandatory. There are numerous examples of countries that recently (2007) adopted "automatic enrolment", e.g. Italy and New Zealand, the latter being more successful.

Moreover, in countries with a large shadow economy, mandatory or automatic enrolment poses difficulties. For instance, although mandatory participation in third pillar insurance schemes in Chile and Mexico ensures high rates of enrolment (73.7% and 57.7%, respectively), the share of those actively contributing to a pension scheme during their working life is almost 40 percentage points smaller in both cases. Such gap is less commonly found for the second pillar.²⁹

Lastly, the financial crisis has brought to the fore the need to enhance the risk management framework of funded schemes in general, as well as the need for more effective supervision. In 2008, third pillar insurance funds recorded negative returns on average in real terms in the OECD member countries (-10.5%), while the average annual real returns in 2001-2010 were a mere +0.1%.30 Losses sustained by private funded schemes, combined with the need to cover urgent fiscal needs, led to a partial (Estonia, Lithuania, Poland, Slovakia) or even full (Hungary) shift towards the public PAYG first pillar. According to the OECD, as a rule this translates into lower gross replacement rates and entails the risk of inadequacy of future pensions.³¹

- 24 Based on Eurostat's definition, the relative poverty threshold represents 60% of the median disposable income.
- 25 See OECD (2012), Table 4.1, p. 105. Excluding the Czech Republic, with a coverage ratio of 61.2%.
- 26 In New Zealand, subsidisation of third pillar schemes is also combined with automatic enrolment.
- $27\ Excluding\ Hungary\ (45.4\%)\ and\ Slovakia\ (43.9\%).\ In\ Hungary\ , mandatory\ private\ insurance\ was\ abolished\ at\ end-2010\ , while\ in\ Slovakia\ (43.9\%)\ .$ it ceased being mandatory as from 1 January 2008.
- 28 See OECD (2012), Figure 4.5a, p. 112, Figure 4.5b, p. 113 and Figure 4.8, p. 115. 29 See OECD (2012), Table 4.2, p. 108.
- 30 See OECD (2012), pp. 20-21.
- 31 See OECD (2012), Table 3.5, p. 92 and Figure 3.6, p. 96.



References

Bank of Greece (1999), Annual Report 1998.

Bank of Greece (2001), Annual Report 2000.

Bank of Greece (2007), Monetary Policy - Interim Report 2007.

Bank of Greece (2010), Monetary Policy - Interim Report 2010.

Börsch-Supan, A. and P. Tinios (2001), "The Greek Pension System: Strategic Framework for Reform", in Bryant, R.C., N.C. Garganas and G.S. Tavlas (eds.), *Greece's Economic Performance and Prospects*, Bank of Greece & The Brookings Institution.

European Commission (2001), "Budgetary challenges posed by ageing populations: the impact on public spending on pensions, health and long-term care for the elderly and possible indicators for the long-term sustainability of public finances", EPC/ECFIN/655/01-EN final, Brussels, 24 October 2001.

European Commission (2006), "The impact of ageing on public expenditure: projections for the EU25 Member States on pensions, health care, long-term care, education and unemployment transfers (2004-2050)", *European Economy*, Special Report No. 1/2006.

European Commission (2008), "The 2009 Ageing Report – Underlying assumptions and projection methodologies", *European Economy*, 7/2008.

European Commission (2009), "2009 Ageing Report – Economic and budgetary projections for the 27 EU Member States (2008-2060)", *European Economy*, 2/2009.

European Commission (2010), "Annexes to the Interim EPC-SPC Joint Report on Pensions", ARES (2010) 221924, Brussels 31/5/2010.

European Commission (2012a), "The 2012 Ageing Report – Economic and budgetary projections for the 27 EU Member States (2010-2060)", *European Economy*, 2/2012.

European Commission (2012b), Quarterly Report on the Euro Area, Volume 11, No. 1.

Mylonas, P. and C. de la Maisonneuve (1999), "The problems and prospects faced by pay-as-you-go pension systems: A case study of Greece", OECD Economic Department Working Paper No. 215.

National Actuarial Authority (2008), Greece, National Bulletin on Public Expenditure 2008.

National Actuarial Authority (2012), Greek Pension System Fiche – European Commission Economic Policy Committee Ageing Working Group Ageing Projections Exercise 2012.

OECD (1997), Economic Surveys - Greece 1996-1997.

OECD (2005), Economic Surveys - Greece, Volume 2005/12, September.

OECD (2007), Economic Surveys - Greece, Volume 2007/5, April.

OECD (2009), Economic Surveys – Greece, Volume 2009/15, July.

OECD (2011a), Economic Surveys - Greece, August.

OECD (2011b), Pensions at a Glance 2011 – Retirement-income systems in OECD and G20 countries.

OECD (2012), Pensions Outlook 2012.

Tinios, P. (2010), Social Security Debate: A Review [in Greek], Kritiki Publishing.

REFERENCES

Alpha Bank (2008), Economic Bulletin, 107, November [in Greek].

Bank of Greece (2010), Monetary Policy - Interim Report 2010, October.

Bank of Greece (2011), Annual Report 2010, April.

Bank of Greece (2012), Annual Report 2011, April.

Centre of Planning and Economic Research (2012), The impact of the implementation of Law 3919/2011 "on the principle of freedom of profession, repeal of unwarranted restrictions on access to and the pursuit of professions", unpublished report [in Greek].

Commission of the European Communities (2004), Report on competition in professional services, COM(2004) 83 final, Brussels.

Copenhagen Economics (2005), The economic effects of services liberalization in Switzerland.

Delgado M., C. Ketels, M.E. Porter and S. Stern (2012), "The determinants of national competitiveness", NBER Working Paper No. 18249.

De Mello, L. and P.C. Padoan (2010), "Promoting potential growth: the role of structural reform", OECD Economics Department Working Paper No. 793.

European Central Bank (2011), "Structural features of distributive trades and their impact on prices in the euro area", Occasional Paper No 128, September, Frankfurt.

European Commission (2007), Impact assessment of the Action Programme for Reducing Administrative Burdens in the European Union. SEC(2007)84, Brussels.

European Commission (2011), Road Freight Transport Vademecum 2010 Report, Brussels.

European Commission (2012a), The functioning and usability of the Points of Single Contact under the Services Directive – State of Play and Way Forward – Final report, Brussels.

European Commission (2012b), "The Second Economic Adjustment Programme for Greece", Occasional Papers 94, March, Brussels.

Foundation of Economic & Industrial Research (IOBE) (2007), The closed market for publicuse vehicles: problems and perspectives, Sectoral study No. 216 [in Greek].

Foundation of Economic & Industrial Research (IOBE) (2010), *The Greek Economy*, Issue 59 [in Greek].

General Secretariat of Commerce (2012), *Taking stock of actions November 2009-May 2012, The next steps*, May [in Greek].



- Hall, R.E. and C.I. Jones (1999), "Why Do Some Countries Produce So Much More Output Than Others?", *Quarterly Journal of Economics*, Vol. 114, No. 1, pp. 83-116.
- Johansson, A., C. Heady, J. Arnold, B. Brys and L. Vartia (2008), "Tax and economic growth", OECD Economics Department Working Paper No. 620.
- Kox, H. (2005), "Intra-EU differences in regulation-caused administrative burden for companies", CPB Memorandum 136 CPB, The Hague.
- McKinsey & Company (2012), Greece 10 years ahead: Defining Greece's new growth model and Strategy, Athens Office, March.
- Monteagudo, J., A. Rutkowski and D. Lorenzani (2012), "The economic impact of the Services Directive: A first assessment following implementation", *European Economy Economic Papers*, No. 456.
- OECD (2005a), *Product Market Regulation and Productivity Growth*. Working Party No. 1 on Macroeconomic and Structural Policy Analysis, October.
- OECD (2005b), *Policies to Improve Innovation Performance in OECD Countries*. Working Party No. 1 on Macroeconomic and Structural Policy Analysis, October.
- OECD (2005c), Growth in Services. Fostering Employment, Productivity and Innovation. Meeting of the OECD Council at Ministerial Level.
- OECD (2012), Employment Outlook, Paris.
- Padoan, P.C. (2012), "Structural reforms for sustainable growth", Presentation at the G20 Seminar on Challenges and Opportunities for the Global Economy, Mexico City, 21-22 September.
- Research Institute of Retail Consumer Goods (IELKA) (2011), The food retail sector: sectoral study and account of its contribution to the national economy, June [in Greek].
- Tang, P. and G. Verweij (2004), "Reducing the administrative burden in the European Union" CPB Memorandum 93, CPB Netherlands Bureau for Economic Policy.
- Vettas, N. (2011), "Competition and regulation in product markets in the context of the Greek economic crisis", in Gortsos, Ch. and G. Hardouvelis (eds), *The international crisis, the Crisis in the Euro Area and the Greek Financial System*, pp. 347-58. Hellenic Bank Association [in Greek].
- World Economic Forum (2012), The Global Competitiveness Report 2012-2013, Geneva.



MONETARY POLICY MEASURES OF THE EUROSYSTEM

13 JANUARY 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

3 FEBRUARY 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

3 MARCH 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

It also decided to continue conducting its main refinancing operations as fixed rate tender procedures with full allotment for as long as necessary and at least until 12 July 2011. This procedure will also remain in use for the Eurosystem's special term refinancing operations with a maturity of one maintenance period, which will continue to be conducted for as long as needed and at least until the end of the second quarter of 2011. The fixed rate in these specialterm refinancing operations will be the same as the main refinancing operation (MRO) rate prevailing at the time. Furthermore, the Governing Council of the ECB decided to conduct the 3-month longer-term refinancing operations (LTROs) to be allotted at end-April, end-May and end-June 2011 as fixed rate tender procedures with full allotment. The rates in these 3-month operations will be fixed at the average rate of the MROs over the life of the respective LTRO.

31 MARCH 2011

The Governing Council of the ECB decided to suspend the application of the minimum credit rating threshold (BBB-) in the collateral eligibility requirements for the purposes of the Eurosystem's credit operations in the case of marketable debt instruments issued or guaranteed by the Irish government. The Irish government is implementing the economic and financial adjustment programme. The Governing Council has assessed the programme positively. The suspension is based on this positive assessment of the programme, the commitment of the Irish government to fully implement it and the Irish government's decisions to ensure a capital increase of €24 billion, for four Irish banks, and to deleverage and downsize the banking sector.

7 APRIL 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations of the Eurosystem will be increased by 25 basis points to 1.25%, and that the interest rates on the marginal lending facility and the deposit facility will be increased by 25 basis points, to 2.00% and 0.50% respectively, with effect from 13 April 2011.

5 MAY 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50%, respectively.

9 JUNE 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.25%, 2.00% and 0.50%, respectively.

In also decided to continue conducting its MROs as fixed rate tender procedures with full allotment for as long as necessary and at least until 11 October 2011. This procedure will also remain in use for the Eurosystem's specialterm refinancing operations with a maturity of one maintenance period, which will continue to be conducted for as long as needed and at least until the end of the third quarter of 2011. The fixed rate in these special-term refinancing operations will be the same as the MRO rate prevailing at the time. Furthermore, the Governing Council of the ECB decided to conduct the 3-month LTROs to be allotted at end-July, end-August and end-September 2011 as fixed rate tender procedures with full allotment. The rates in these 3-month operations will be fixed at the average rate of the MROs over the life of the respective LTRO.

29 JUNE 2011

The Governing Council of the ECB decided to continue to conduct US dollar liquidity-providing operations with a maturity of seven days. These operations will continue to take the form of repurchase operations against eligible collateral and will be carried out as fixed rate tender procedures with full allotment. To this end, the Governing Council of the ECB decided, in co-ordination with other central banks, to extend the liquidity swap arrangements with the Federal Reserve up to 1 August 2012.

7 JULY 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations of the Eurosystem will be increased by 25 basis points to 1.50%, starting from the operation to be settled on 13 July 2011 and the interest rates on the marginal lending facility and the deposit facility will be increased by 25 basis points to 2.25% and 0.75% respectively, with effect from 13 July 2011.

The Governing Council also decided to suspend the application of the minimum credit rating threshold (BBB-) in the collateral eli-

gibility requirements for the purposes of the Eurosystem's credit operations in the case of marketable debt instruments issued or guaranteed by the Portuguese government. The Portuguese government has approved an economic and financial adjustment programme. The Governing Council has assessed the programme and considers it to be appropriate, while the Portuguese government is committed to fully implement it.

4 AUGUST 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75%, respectively.

Given the renewed tensions in some financial markets in the euro area, the Governing Council of the ECB also decided to conduct a supplementary liquidity-providing LTRO with a maturity of approximately six months on 11 August 2011. The operation will be conducted as a fixed-rate tender procedure with full allotment. The rate of the operation will be fixed at the average rate of the MROs over the life of the supplementary LTRO.

The Governing Council also decided to continue conducting its MROs as fixed rate tender procedures with full allotment for as long as necessary and at least until 17 January 2012. This procedure will also remain in use for the Eurosystem's LTROs with a maturity of one maintenance period, which will continue to be conducted at least until the end of the fourth quarter of 2011. The fixed rate in these specialterm refinancing operations will be the same as the MRO rate prevailing at the time. Furthermore, the Governing Council decided to conduct the 3-month LTROs to be allotted at end-October, end-November and end-December 2011 as fixed rate tender procedures with full allotment. The rates in these three-month operations will be fixed at the average rate of the MROs over the life of the respective LTRO.

8 SEPTEMBER 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75%, respectively.

15 SEPTEMBER 2011

The Governing Council of the ECB decided, in coordination with the Federal Reserve, the Bank of England, the Bank of Japan and the Swiss National Bank, to conduct three US dollar liquidity-providing operations with a maturity of approximately three months covering the end of the year. These operations will be conducted in early October, November and December 2011. These will all take the form of repurchase operations against eligible collateral and will be carried out as fixed rate tender procedures with full allotment.

6 OCTOBER 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.50%, 2.25% and 0.75%, respectively.

The Governing Council also decided to conduct two LTROs, one with a maturity of approximately 12 months, on 27 October 2011, and the other with a maturity of approximately 13 months, on 22 December 2011. The operations will be conducted as fixed-rate tenders with full allotment. In both operations, the rate applied will be fixed at the average of the rates in the MROs over the life of the relevant LTRO (371 days and 406 days, respectively), and interest will be paid at maturity.

The Governing Council also decided to continue conducting its MROs as fixed rate tender procedures with full allotment for as long as necessary and at least until 10 July 2012. This procedure will also remain in use for the

Eurosystem's special-term refinancing operations with a maturity of one maintenance period, which will continue to be conducted for as long as necessary and at least until the above date. The fixed rate in each special-term refinancing operation will be the same as the MRO rate prevailing at the time. In addition, the Governing Council decided to conduct the 3-month LTROs to be allotted at the end of each month in the period January-June 2012 as fixed rate tender procedures with full allotment. In each of these 3-month operations, the rate applied will be fixed at the average rate of the MROs over the life of the respective LTRO.

Finally, the Governing Council also decided to launch a new covered bond purchase programme (CBPP2) involving purchases for an intended amount of €40 billion. Further details regarding the modalities of CBPP2 will be announced after the Governing Council's meeting of 3 November 2011.

3 NOVEMBER 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations of the Eurosystem will be decreased by 25 basis points to 1.25%, starting from the operation to be settled on 9 November 2011, and the interest rates on the marginal lending facility and the deposit facility will be decreased by 25 basis points to 2.00% and 0.50% respectively, with effect from 9 November 2011.

The Governing Council also decided on the technical modalities of the new covered bond purchase programme (CBPP2). It decided, inter alia, the following: the purchases of covered bonds will be distributed across the euro area. The counterparties qualified to participate in CBPP2 are those eligible for the Eurosystem's monetary policy operations, together with any other counterparties that are used by the Eurosystem for the investment of its euro-denominated portfolios. In order to be qualified for purchase under the programme,

covered bonds must: be eligible for use as collateral in Eurosystem credit operations; have a minimum rating of BBB- or equivalent from at least one of the major rating agencies; have a maximum residual maturity of 10.5 years; and have an issue volume of €300 million or more. Furthermore, the Governing Council decided to make its CBPP2 portfolio available for lending. Lending will be voluntary and conducted through security lending facilities offered by central securities depositories or via matched repo transactions with eligible counterparties.

30 NOVEMBER 2011

The Governing Council of the ECB decided, in cooperation with the Federal Reserve, the Bank of England, the Bank of Canada, the Bank of Japan and the Swiss National Bank, to lower the pricing on the existing temporary US dollar liquidity swap arrangements by 50 basis points, with effect from 5 December 2011, so that the new rate will be the US dollar Overnight Index Swap (OIS) rate plus 50 basis points.

In addition, it was decided to extend the conduct of US dollar liquidity swap lines with the Federal Reserve through 1 February 2013, same as with other central banks.

The Governing Council of the ECB decided, in cooperation with other central banks, the establishment of a temporary network of reciprocal swap lines. This action will enable the Eurosystem to provide euro to those central banks when required, as well as to provide liquidity operations, should they be needed, in Japanese yen, sterling, Swiss francs and Canadian dollars (in addition to the existing operations in US dollars).

8 DECEMBER 2011

The Governing Council of the ECB decided that the interest rate on the main refinancing operations of the Eurosystem will be decreased by 25 basis points to 1.00%, starting from the operation to be settled on 14 December 2011,

and the interest rates on the marginal lending facility and the deposit facility will be decreased by 25 basis points to 1.75% and 0.25% respectively, with effect from 14 December 2011.

The Governing Council of the ECB also decided:

a) to conduct two 36-month liquidity-providing operations with full allotment on 22 December 2011 and 1 March 2012, respectively, at a rate that will be fixed at the average rate of the MROs over the life of the respective LTRO. Interest will be paid when the respective operation matures. After one year, counterparties will have the option to repay any part of the amounts they are allotted in the operations. The 12-month LTRO to be settled on 22 December 2011 will be allotted on 21 December 2011 and will replace the 12-month LTRO announced on 6 October 2011. Counterparties are permitted to shift all of the outstanding amounts received in the 12-month LTRO allotted in October 2011 into the first 3-year LTRO allotted on 21 December 2011;

b) to discontinue for the time being, as of the maintenance period starting on 14 December 2011, the fine-tuning operations carried out on the last day of each maintenance period;

c) to reduce the reserve ratio, which is currently 2%, to 1% as of the reserve maintenance period starting on 18 January 2012;

d) to lower the minimum credit rating threshold for asset-backed securities (ABS). Specifically, in addition to the ABS that are already eligible for Eurosystem operations, ABS having a second-best rating of at least "single A" in the Eurosystem's harmonised credit scale at issuance, and at all times subsequently, and the underlying assets of which comprise residential mortgages and loans to small and

1 The second-best rating must comply with credit quality step 2 of the Eurosystem's harmonised rating scale (details of which are available on the ECB's website), which corresponds to a long-term rating of A+/A/A- by Fitch or Standard & Poor's, A1/A2/A3 by Moody's or AH/A/AL by DBRS.



medium-sized enterprises (SMEs), will be eligible for use as collateral in Eurosystem credit operations;

e) as a temporary solution, to allow national central banks to accept as collateral for Eurosystem credit operations additional performing credit claims that satisfy specific eligibility criteria. The responsibility entailed in the acceptance of such credit claims will be borne by the NCB authorising their use;

f) further technical details on (a)-(e) above.

Furthermore, the Governing Council announced that it would welcome wider use of credit claims as collateral in the Eurosystem's credit operations on the basis of harmonised criteria.

16 DECEMBER 2011

The Governing Council of the ECB decided to conduct two one-day liquidity-providing fine-tuning operations (FTOs). The first will be settled on 21 December 2011 and the second on 29 February 2012. These operations will be conducted as fixed rate tenders with full allotment (the rate being the same as the prevailing MRO rate) and will have the purpose of smoothing out the liquidity effects of the MROs maturing on these dates. Raising new liquidity through 36-month LTROs will only be possible a day later, i.e. on 22 December 2011 and 1 March 2012, respectively.

12 JANUARY 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

9 FEBRUARY 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing

operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

Following up on its decision of 8 December 2011, the Governing Council approved for the seven national central banks that have put forward relevant proposals, specific national eligibility criteria and risk control measures for the temporary acceptance of additional credit claims as collateral in the Eurosystem's credit operations.

28 FEBRUARY 2012

The Governing Council of the European Central Bank (ECB) has decided to temporarily suspend the eligibility of marketable debt instruments issued or fully guaranteed by the Hellenic Republic for use as collateral in Eurosystem monetary policy operations. This decision takes into account the rating of the Hellenic Republic as a result of the launch of the private sector involvement offer. Marketable debt instruments issued or fully guaranteed by the Hellenic Republic will become in principle eligible upon activation of the collateral enhancement scheme agreed by the Heads of State or Government of the euro area on 21 July 2011, and confirmed on 26 October 2011. In the meantime, the liquidity needs of affected Eurosystem counterparties can be satisfied by the relevant national central banks, in line with relevant Eurosystem arrangements (emergency liquidity assistance).

8 MARCH 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25%, respectively.

The Governing Council has acknowledged the activation of the buy back scheme, provided to underpin the quality of marketable debt instru-

ments issued or fully guaranteed by the Hellenic Republic. In light of this, the Governing Council has decided that the aforementioned debt instruments will be again accepted as collateral in Eurosystem credit operations, without applying the minimum credit rating threshold for collateral eligibility until further notice. The scheme is backed up by bonds issued by the European Financial Stability Facility with a nominal value of €35 billion.

21 MARCH 2012

The Governing Council of the ECB decided to temporarily lift the obligation of NCBs to accept as collateral for Eurosystem credit operations eligible bank bonds guaranteed by a Member State under a European Union/International Monetary Fund programme, or by a Member State whose credit assessment does not comply with Eurosystem's benchmark for establishing its minimum requirement for high credit standards for issuers and guarantors of marketable assets.

4 APRIL 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

5 APRIL 2012

The Governing Council of the ECB approved the direct link between the Greek securities settlement system and Clearstream Banking AG – CASCADE as eligible to be used for the collateralisation of Eurosystem credit operations. Greek credit institutions will be able to use this link in order to use short-term EFSF bonds (which they acquired in the context of the public debt restructuring in March and April 2012) as collateral to raise liquidity from the Bank of Greece.

3 MAY 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

6 JUNE 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 1.00%, 1.75% and 0.25% respectively.

It also decided on the details as regards the tender procedures and modalities to be applied in its refinancing operations up to 15 January 2013, notably to continue its fixed rate tender procedures with full allotment. This procedure will also remain in use for the Eurosystem's special-term refinancing operations with a maturity of one maintenance period, which will continue to be conducted for as long as needed. The fixed rate in these special-term refinancing operations will be the same as the MRO rate prevailing at the time. The Governing Council also decided to conduct the three-month longer-term refinancing operations (LTROs) to be allotted on 25 July, 29 August, 26 September, 31 October, 28 November and 19 December 2012 as fixed rate tender procedures with full allotment. The rates in these three-month operations will be fixed at the average rate of the MROs over the life of the respective LTRO.

20 JUNE 2012

The Governing Council of the ECB decided on additional measures to improve the access of the banking sector to Eurosystem operations in order to further support the provision of credit to households and non-financial corporations. It reduced the rating threshold and amended the eligibility requirements for certain asset-backed securities (ABSs) and thus broadened the scope of the measures to increase collateral availability. In addition to the ABSs that are already eligible for use as collateral in Eurosystem operations, the Eurosystem will consider the following ABSs as eligible:



- 1. Auto loan, leasing and consumer finance ABSs and ABSs backed by commercial mortgages (CMBSs) which have a second-best rating of at least "single A" in the Eurosystem's harmonised credit scale, at issuance and at all times subsequently. These ABSs will be subject to a valuation haircut of 16%.
- 2. Residential mortgage-backed securities (RMBSs), securities backed by loans to small and medium-sized enterprises (SMEs), auto loan, leasing and consumer finance ABSs and CMBSs which have a second-best rating of at least "triple B" in the Eurosystem's harmonised credit scale, at issuance and at all times subsequently. RMBSs, securities backed by loans to SMEs, and auto loan, leasing and consumer finance ABSs would be subject to a valuation haircut of 26%, while CMBSs would be subject to a valuation haircut of 32%.

3 JULY 2012

The Governing Council of the ECB decided that credit institutions that issue eligible bank bonds guaranteed by an EEA public sector entity with the right to impose taxes may not submit such bonds or similar bonds issued by closely linked entities as collateral for Eurosystem credit operations in excess of the nominal value of these bonds already submitted as collateral. In exceptional cases, the Governing Council may decide on derogations, as long as credit institutions also submit a funding plan.

5 JULY 2012

The Governing Council of the ECB decided to decrease the interest rate on the main refinancing operations by 25 basis points to 0.75%, starting from the operation to be settled on 11 July 2012. In addition, it decided to decrease the interest rates on both the marginal lending facility and the deposit facility by 25 basis points, to 1.50% and 0.00% respectively, both with effect from 11 July 2012.

18 JULY 2012

Due to the expiration on 25 July 2012 of the buy-back scheme for marketable debt instru-

ments issued or fully guaranteed by the Hellenic Republic, these instruments will become for the time being ineligible for use as collateral in Eurosystem monetary policy operations. Liquidity needs may be addressed by the relevant national central bank in line with existing Eurosystem arrangements. In line with established procedures, the Governing Council of the ECB will assess their potential eligibility following the conclusion of the currently ongoing review, by the European Commission in liaison with the ECB and the IMF, of the progress made by Greece under the second adjustment programme.

2 AUGUST 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

6 SEPTEMBER 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

The Governing Council of the ECB decided on a number of technical features regarding the Eurosystem's outright transactions in secondary sovereign bond markets that aim at safeguarding an appropriate monetary policy transmission and the singleness of the monetary policy. These will be known as Outright Monetary Transactions (OMTs). The Governing Council will consider them to the extent that they are warranted from a monetary policy perspective.

A necessary condition for Outright Monetary Transactions is strict and effective conditionality attached to an appropriate European Financial Stability Facility/European Stability Mechanism (EFSF/ESM) programme. Such programmes can take the form of a full EFSF/ESM macroeconomic adjustment programme or a precautionary programme (Enhanced Conditions Credit Line), provided that they include the possibility of EFSF/ESM primary market purchases. The involvement of the IMF shall also be sought for the design of the country-specific conditionality and the monitoring of such a programme.

Following a thorough assessment, the Governing Council will decide on the start, continuation and suspension of Outright Monetary Transactions in full discretion and acting in accordance with its monetary policy mandate.

Outright Monetary Transactions will be considered for future cases of EFSF/ESM macroeconomic adjustment programmes or precautionary programmes as specified above. They may also be considered for Member States currently under a macroeconomic adjustment programme when they will be regaining bond market access.

Transactions will be focused on the shorter part of the yield curve, and in particular on sovereign bonds with a maturity of between one and three years.

No ex ante quantitative limits are set on the size of Outright Monetary Transactions.

The Eurosystem intends to clarify in the legal act concerning Outright Monetary Transactions that it accepts the same (pari passu) treatment as private or other creditors with respect to bonds issued by euro area countries and purchased by the Eurosystem through Outright Monetary Transactions, in accordance with the terms of such bonds.

Aggregate Outright Monetary Transaction holdings and their market values will be published on a weekly basis. Publication of the average duration of Outright Monetary Transaction holdings and the breakdown by country will take place on a monthly basis.

The Securities Markets Programme is terminated. The liquidity injected through the SMP will continue to be absorbed as in the past, and the existing securities in the SMP portfolio will be held to maturity. The liquidity created through Outright Monetary Transactions will be fully sterilised.

The Governing Council of the ECB also decided on additional measures to preserve collateral availability for counterparties in order to maintain their access to the Eurosystem's liquidity-providing operations. More specifically, the Governing Council decided to suspend the application of the minimum credit rating threshold in the collateral eligibility requirements for the purposes of the Eurosystem's credit operations in the case of marketable debt instruments issued or guaranteed by the central government, and credit claims granted to or guaranteed by the central government, of countries that are eligible for Outright Monetary Transactions or are under an EU-IMF programme and comply with the attached conditionality as assessed by the Governing Council. The Governing Council also decided that marketable debt instruments denominated in currencies other than the euro, namely the US dollar, the pound sterling and the Japanese yen, and issued and held in the euro area, are eligible to be used as collateral in Eurosystem credit operations until further notice.

4 OCTOBER 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.

8 NOVEMBER 2012

The Governing Council of the ECB decided that the interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.75%, 1.50% and 0.00% respectively.



STATISTICAL APPENDIX

TABLES

I	Consumer price index: general index and basic sub-indices	191
2	Harmonised index of consumer prices: general index and basic sub-indices	192-93
3	Industrial producer price index (PPI) for the domestic market: general index and basic sub-indices	194
4	Industrial producer price index (PPI) for the external market and import price index in industry	195
5	Employed persons of 15 years and over, by branch of economic activity	196
6	Balance of payments	197
7	Monetary aggregates of the euro area	198
8	The Greek contribution to the main monetary aggregates of the euro area	199
9	Greece: deposits of domestic firms and households with OMFIs, by currency and type	200
10	Money market interest rates	201
П	Greek government bond yields	202
12	Domestic MFI loans to the domestic private sector by branch of economic activity	203
13	Greece: bank rates on new euro-denominated deposits of euro area residents	204
14	Greece: bank rates on new euro-denominated loans to euro area residents	205

Table I Consumer price index: general index and basic sub-indices

		Genera	l index	Goo	ods	Serv	rices	CPI exclue		CPI exc	
Period	ı	(2009=100)	Percentage change over previous year								
2008		98.8	4.2	100.6	4.3	96.5	3.9	97.7	3.4	97.5	3.0
2009		100.0	1.2	100.0	-0.5	100.0	3.6	100.0	2.4	100.0	2.6
2010		104.7	4.7	105.6	5.6	103.6	3.6	103.0	3.0	103.4	3.4
2011		108.2	3.3	110.0	4.2	105.9	2.3	104.6	1.5	104.8	1.3
2011	I	106.5	4.7	107.3	5.9	105.5	3.2	103.2	2.5	103.3	2.5
	II	109.0	3.5	111.7	4.5	105.7	2.4	105.2	1.7	105.7	1.6
	III	107.6	2.4	108.9	2.9	106.0	1.8	104.0	0.7	104.0	0.3
	IV	109.6	2.8	112.2	3.6	106.5	1.9	106.0	1.3	106.2	0.8
2012	I	108.7	2.0	110.0	2.5	106.9	1.4	104.1	0.9	103.9	0.6
	II	110.7	1.5	113.9	2.0	106.7	0.9	106.0	0.7	106.2	0.5
	III	109.0	1.3	111.0	1.9	106.6	0.6	104.3	0.3	104.1	0.1
2010	Jan.	101.0	2.4	100.3	2.0	102.0	2.9	100.6	1.6	100.7	1.9
	Feb.	100.5	2.8	99.3	2.4	102.0	3.3	99.4	1.5	99.2	1.9
	March	103.7	3.9	104.4	4.0	102.7	3.8	102.0	2.0	102.4	2.5
	Apr.	104.9	4.8	106.2	5.7	103.1	3.7	103.0	2.9	103.4	3.4
	May	105.7	5.4	107.5	6.6	103.3	3.8	103.7	3.6	104.2	4.1
	June	105.4	5.2	107.0	6.2	103.4	3.9	103.7	3.6	104.3	4.1
	July	104.9	5.5	105.6	6.4	104.1	4.3	103.2	3.8	103.6	4.3
	Aug.	104.2	5.5	104.2	6.7	104.2	4.0	102.2	3.6	102.4	4.1
	Sept.	106.2	5.6	107.6	7.0	104.3	3.6	104.3	3.6	104.9	4.0
	Oct.	106.4	5.2 4.9	107.8 108.2	6.6	104.4 104.5	3.4	104.6	3.5	105.2 105.4	4.0
	Nov. Dec.	106.6 107.0	5.2	108.2	6.1 7.1	104.5	2.6	104.7 104.8	3.0	105.4	3.7
2011	Jan.	107.0	5.2	108.9	6.8	104.6	3.2	104.8	2.7	103.4	2.7
2011	Feb.	104.9	4.4	107.1	5.1	105.5	3.5	103.5	2.1	103.4	2.1
	March	104.3	4.5	110.5	5.9	105.6	2.8	104.7	2.6	105.1	2.7
	Apr.	109.0	3.9	111.6	5.1	105.7	2.5	105.1	2.1	105.5	2.1
	May	109.2	3.3	111.9	4.1	105.7	2.3	105.3	1.5	105.7	1.4
	June	109.0	3.3	111.5	4.3	105.7	2.2	105.3	1.6	105.7	1.4
	July	107.4	2.4	108.8	3.0	105.8	1.7	103.8	0.6	103.7	0.2
	Aug.	105.9	1.7	106.1	1.7	105.8	1.6	102.2	0.0	101.9	-0.6
	Sept.	109.4	3.1	111.9	3.9	106.4	2.0	106.0	1.6	106.3	1.3
	Oct.	109.6	3.0	112.1	3.9	106.4	1.9	106.0	1.4	106.3	1.0
	Nov.	109.7	2.9	112.4	3.9	106.4	1.8	106.1	1.3	106.3	0.9
	Dec.	109.6	2.4	112.0	2.9	106.6	1.9	106.0	1.1	106.1	0.6
2012	Jan.	108.7	2.3	110.0	2.7	107.2	1.8	104.6	1.3	104.4	1.0
	Feb.	107.1	2.1	107.3	2.8	106.8	1.2	102.4	0.9	101.9	0.6
	March	110.1	1.7	112.8	2.1	106.8	1.1	105.2	0.5	105.3	0.2
	Apr.	111.1	1.9	114.5	2.6	106.7	1.0	106.1	0.9	106.3	0.7
	May	110.7	1.4	113.9	1.8	106.7	0.9	106.0	0.7	106.2	0.4
	June	110.4	1.3	113.3	1.6	106.7	0.9	106.0	0.6	106.2	0.4
	July	108.9	1.3	110.7	1.7	106.7	0.8	104.4	0.6	104.3	0.5
	Aug.	107.8	1.7	108.6	2.4	106.8	0.9	102.7	0.5	102.2	0.4
	Sept.	110.4	0.9	113.7	1.7	106.3	-0.1	105.7	-0.3	105.8	-0.5
	Oct.	111.3	1.6	115.6	3.1	106.0	-0.4	105.7	-0.3	105.7	-0.5

Table 2 Harmonised index of consumer prices: general index and basic sub-indices

		Genera	l index	Unproces	ssed food	Process	ed food	Non-energy inc	lustrial goods
Period	ı	(2005=100)	Percentage change over previous year						
2008		110.9	4.2	108.3	4.0	114.6	5.0	105.9	2.0
2009		112.4	1.3	112.5	3.9	116.5	1.6	106.7	0.8
2010		117.7	4.7	112.7	0.2	122.3	5.0	108.7	1.9
2011		121.4	3.1	116.5	3.4	128.1	4.7	108.6	-0.2
2011	I	119.4	4.5	115.7	2.7	126.3	8.1	104.9	-0.1
	II	122.3	3.3	118.8	4.9	127.0	3.3	111.6	1.1
	III	120.7	2.1	114.8	2.5	128.6	3.2	106.2	-1.3
	IV	123.0	2.6	116.9	3.4	130.3	4.3	111.6	-0.3
2012	I	121.4	1.7	118.0	2.0	130.0	2.9	104.2	-0.7
	II	123.7	1.1	120.0	1.0	129.2	1.7	111.3	-0.2
	III	121.7	0.8	117.3	2.2	129.7	0.9	105.0	-1.1
2010	Jan.	113.6	2.3	110.9	-3.2	117.0	1.6	105.2	-0.3
	Feb.	112.9	2.9	113.1	-0.9	117.0	1.1	100.9	-1.0
	March	116.4	3.9	114.0	-0.8	116.7	0.2	109.0	0.2
	Apr.	117.8	4.7	115.1	-0.9	120.3	2.7	109.9	2.0
	May	118.7	5.3	113.9	-2.4	124.0	5.8	110.7	2.7
	June	118.5	5.2	110.8	-2.0	124.5	6.6	110.7	2.6
	July	118.0	5.5	110.0	-0.7	124.8	7.0	107.6	2.6
	Aug.	117.2	5.6	112.2	3.6	124.7	7.0	104.0	2.6
	Sept.	119.4	5.7	113.7	3.1	124.3	6.8	111.3	3.1
	Oct.	119.5	5.2	112.9	2.3	124.4	6.8	111.9	3.1
	Nov.	119.8	4.8	113.1	1.7	125.0	6.9	111.9	2.3
	Dec.	120.4	5.2	113.1	2.8	125.1	7.1	112.0	2.3
2011	Jan.	119.2	4.9	113.9	2.7	126.4	8.0	105.7	0.4
	Feb.	117.6	4.2	116.1	2.6	126.3	8.0	98.9	-1.9
	March	121.4	4.3	117.1	2.8	126.3	8.2	110.2	1.0
	Apr.	122.2	3.7	119.0	3.5	126.8	5.4	111.2	1.2
	May	122.4	3.1	119.7	5.1	127.1	2.5	111.7	1.0
	June	122.2	3.1	117.6	6.1	127.2	2.1	111.8	1.0
	July	120.5	2.1	115.5	5.0	127.7	2.4	106.1	-1.4
	Aug.	118.8	1.4	114.4	2.0	128.1	2.7	100.5	-3.3
	Sept.	122.8	2.9	114.4	0.6	130.0	4.6	112.0	0.7
	Oct.	123.0	2.9	115.5	2.3	130.1	4.6	111.9	0.0
	Nov.	123.2	2.8	117.1	3.5	130.2	4.2	112.0	0.1
2012	Dec.	123.0	2.2	118.0	4.4	130.4	4.2	111.0	-0.9
2012	Jan.	121.6	2.1	117.1	2.8	130.8	3.5	105.2	-0.5
	Feb.	119.6	1.7	117.8	1.4	130.3	3.2	98.3	-0.7
	March	123.0 124.0	1.4	119.2 119.6	1.8 0.5	128.8 129.2	2.0 1.9	109.1 111.9	-1.0 0.6
	Apr. May	124.0	0.9	119.6	0.5	129.2	1.9	111.9	-0.6
	-								
	June	123.4	1.0	119.7	1.8	129.1	1.5	111.0	-0.7
	July	121.6	0.9	116.8	1.1	129.8	1.6	105.3	-0.7
	Aug.	120.2	1.2	117.3	2.5 2.9	129.7	1.3	99.4	-1.1
	Sept.	123.2	0.3	117.7		129.6	-0.3	110.2	-1.6
	Oct.	124.1	0.9	117.8	2.0	129.5	-0.5	111.4	-0.4

Table 2 Harmonised index of consumer prices: general index and basic sub-indices (continued)

		Energy		Service	s	HICP excluding unp	
Period		(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2008		127.2	13.8	111.0	3.8	109.8	3.4
2009		111.8	-12.1	114.6	3.2	112.2	2.2
2010		145.7	30.4	118.1	3.1	115.6	3.0
2011		170.0	16.7	120.3	1.9	117.5	1.7
2011	I	164.3	25.5	119.9	2.6	115.7	2.6
	II	171.3	15.3	120.0	1.9	118.3	1.9
	III	171.4	14.1	120.4	1.4	116.8	0.8
	IV	172.9	12.9	121.0	1.6	119.2	1.4
2012	I	186.3	13.4	120.6	0.6	116.4	0.6
	II	188.2	9.9	120.4	0.3	118.7	0.3
	III	190.4	11.1	120.3	-0.1	116.5	-0.3
2010	Jan.	123.0	20.0	116.7	2.5	112.8	1.4
	Feb.	129.3	24.9	116.6	3.0	111.3	1.4
	March	140.3	36.0	117.2	3.5	114.3	1.8
	Apr.	145.7	36.3	117.8	3.3	115.5	2.7
	May	150.4	38.0	117.7	3.1	116.3	3.4
	June	149.5	33.1	117.9	3.2	116.5	3.6
	July	150.6	31.8	118.7	3.8	115.9	3.9
	Aug.	150.1	28.5	118.8	3.6	114.6	3.9
	Sept.	150.0	30.5	118.9	3.3	117.1	3.8
	Oct.	150.0	26.5	118.9	3.1	117.4	3.7
	Nov.	151.8	26.2	119.0	2.7	117.5	3.2
	Dec.	157.6	32.6	119.3	2.2	117.7	3.0
2011	Jan.	161.2	31.0	119.8	2.6	116.0	2.8
2011	Feb.	162.8	25.9	120.0	2.9	113.7	2.2
	March	168.9	20.4	119.9	2.3	117.6	2.8
	Apr.	171.8	17.9	120.0	1.9	118.1	2.2
	May	171.8	14.3	120.1	2.0	118.3	1.7
	June	170.3	13.9	120.1	1.9	118.4	1.6
	July	171.4	13.8	120.1	1.2	116.5	0.6
	Aug.	171.0	13.9	120.2	1.1	114.6	0.0
	Sept.	171.8	14.5	121.0	1.8	119.3	1.9
	Oct.	172.8	15.2	120.9	1.7	119.3	1.6
	Nov.	173.2	14.1	121.0	1.7	119.4	1.6
	Dec.	172.7	9.5	121.0	1.5	119.1	1.1
2012	Jan.	182.4	13.2	120.8	0.9	117.0	0.9
2012	Feb.	186.2	14.3	120.4	0.3	114.3	0.5
	March	190.3	12.7	120.4	0.5	117.9	0.3
	Apr.	192.4	12.0	120.4	0.3	118.9	0.7
	May	187.6	9.2	120.4	0.2	118.6	0.7
	June	184.6	8.4	120.4	0.3	118.6	0.2
	July	186.9	9.0	120.4	0.2	116.7	0.2
	Aug.	192.6	12.6	120.4	0.2	114.6	0.2
	Sept.	192.8	11.7	119.9	-0.9	114.6	-1.0
		204.3				118.4	
	Oct.	204.3	18.2	119.6	-1.1	118.4	-0.8

Table 3 Industrial producer price index (PPI) for the domestic market: general index and basic sub-indices

		PPI – domes (General		Ener (tota		Fue	el	General excl. en	
Perio	d	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2008		123.0	10.0	135.2	17.1	145.8	24.7	116.4	6.4
2009		115.8	-5.8	115.0	-15.0	104.2	-28.6	116.3	-0.1
2010		122.9	6.1	133.1	15.8	137.8	32.3	117.4	0.9
2011		132.0	7.4	153.4	15.3	175.9	27.6	120.5	2.7
2011	I	129.9	7.6	148.2	16.2	167.9	31.2	120.0	2.6
	II	132.1	7.1	153.7	13.7	177.8	24.7	120.5	3.0
	III	132.6	8.1	154.7	16.8	177.6	30.3	120.7	2.8
	IV	133.6	6.9	157.2	14.5	180.2	24.6	120.9	2.2
2012	I	139.1	7.1	172.0	16.0	200.5	19.4	121.4	1.1
	II	138.0	4.5	169.0	10.0	192.3	8.2	121.3	0.7
	III	139.7	5.3	173.2	12.0	201.2	13.3	121.6	0.7
2010	Jan.	120.0	5.2	125.8	14.2	124.5	40.9	116.8	0.6
	Feb.	120.2	6.2	126.2	15.9	125.3	43.9	117.0	1.2
	March	121.8	7.9	130.6	20.7	134.2	55.2	117.1	1.5
	Apr.	123.5	9.1	135.1	24.1	142.6	52.7	117.2	1.5
	May	122.7	7.3	133.8	19.6	140.0	39.4	116.8	1.0
	June	123.8	6.1	136.7	15.7	145.1	28.0	116.8	0.8
	July	122.3	5.5	132.2	14.4	135.9	26.5	117.0	0.7
	Aug.	122.6	4.0	132.3	10.1	136.5	16.4	117.3	0.7
	Sept.	123.0	5.3	132.9	14.4	136.3	25.6	117.7	0.4
	Oct.	123.2	4.4	132.8	11.0	137.0	20.2	118.0	0.7
	Nov.	124.8	5.4	137.1	13.3	142.5	21.6	118.2	1.0
	Dec.	126.9	6.9	141.9	17.2	154.2	31.9	118.8	1.2
2011	Jan.	128.1	6.8	144.0	14.5	158.9	27.6	119.5	2.3
	Feb.	129.8	8.0	147.8	17.1	166.8	33.1	120.1	2.6
	March	131.7	8.2	152.8	17.0	178.0	32.6	120.4	2.9
	Apr.	133.3	7.9	156.9	16.2	184.6	29.5	120.5	2.8
	May	131.5	7.1	152.0	13.7	174.6	24.7	120.4	3.1
	June	131.6	6.3	152.1	11.3	174.1	20.0	120.5	3.1
	July	133.0	8.7	156.0	18.0	181.1	33.3	120.6	3.1
	Aug.	131.8	7.5	152.5	15.3	173.2	26.8	120.7	2.8
	Sept.	133.0	8.1	155.6	17.1	178.5	30.9	120.8	2.6
	Oct.	132.9	7.9	155.3	17.0	177.8	29.8	120.8	2.4
	Nov.	133.8	7.2	157.8	15.1	181.4	27.3	120.9	2.2
	Dec.	134.1	5.7	158.4	11.6	181.4	17.6	121.1	1.9
2012	Jan.	137.9	7.7	168.5	17.1	193.4	21.7	121.4	1.5
	Feb.	138.8	6.9	171.3	15.9	199.7	19.7	121.3	1.0
	March	140.5	6.7	176.0	15.2	208.4	17.1	121.4	0.8
	Apr.	140.2	5.2	175.2	11.7	205.9	11.5	121.4	0.7
	May	138.2	5.1	169.5	11.5	193.2	10.6	121.4	0.8
	June	135.7	3.2	162.5	6.8	177.9	2.2	121.3	0.7
	July	138.5	4.1	170.0	9.0	193.0	6.6	121.5	0.7
	Aug.	140.7	6.8	176.3	15.6	207.5	19.8	121.6	0.8
	Sept.	139.8	5.1	173.3	11.4	203.3	13.9	121.7	0.8

Table 4 Industrial producer price index (PPI) for the external market and import price index in industry

			PPI – extern	al market					
		Genera	l index	General index	excl. energy	Import pr	ice index	Import pr excl. er	
Period	ı	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year	(2005=100)	Percentage change over previous year
2008		114.9	6.4	108.9	3.2	114.5	7.1	108.4	2.5
2009		108.0	-6.0	109.4	0.5	112.5	-1.8	108.9	0.5
2010		117.5	8.8	113.9	4.0	120.0	6.6	110.4	1.4
2011		127.9	8.8	118.2	3.8	129.1	7.6	112.0	1.5
2011	I	125.8	10.2	117.6	4.8	126.6	7.4	111.9	2.1
	II	127.8	8.4	118.1	4.0	129.2	7.1	112.1	1.8
	III	128.7	9.3	118.5	3.8	129.5	7.8	112.1	1.5
	IV	129.2	7.5	118.6	2.7	131.0	8.1	112.0	0.7
2012	I	133.6	6.2	119.8	1.8	136.3	7.7	112.5	0.5
	II	132.6	3.8	119.8	1.4	134.7	4.3	112.8	0.6
	III	134.1	4.2	119.8	1.1	136.0	5.0	112.8	0.6
2010	Jan.	113.1	7.8	111.8	2.9	116.9	7.4	109.3	0.6
	Feb.	113.6	8.7	112.1	3.2	117.4	7.9	109.6	0.8
	March	115.9	11.6	112.9	4.6	119.1	9.6	109.9	1.1
	Apr.	117.9	12.3	113.3	4.8	120.9	10.1	110.0	1.4
	May	117.5	10.2	113.5	4.5	120.3	7.8	110.1	1.3
	June	118.2	8.1	113.8	4.1	121.0	6.2	110.4	1.4
	July	117.2	8.4	113.6	4.0	120.1	6.0	110.3	1.3
	Aug.	117.8	6.4	114.2	3.9	120.6	4.6	110.5	1.4
	Sept.	118.1	7.8	114.6	3.8	119.7	4.9	110.5	1.4
	Oct.	118.4	7.0	114.7	3.6	119.6	4.0	110.9	1.7
	Nov.	119.8	7.8	115.5	4.5	121.0	4.6	111.1	1.9
	Dec.	122.4	10.0	116.3	4.7	123.0	6.6	111.5	2.2
2011	Jan.	123.7	9.4	116.9	4.6	124.0	6.1	111.7	2.1
	Feb.	125.6	10.5	117.7	4.9	126.3	7.6	111.9	2.1
	March	128.1	10.6	118.4	4.9	129.4	8.6	112.1	2.0
	Apr.	128.5	9.0	117.9	4.0	130.5	8.0	112.1	1.9
	May	127.1	8.2	118.1	4.0	128.1	6.5	112.2	1.8
	June	127.6	8.0	118.3	4.0	129.0	6.7	112.1	1.6
	July	129.3	10.3	118.9	4.6	130.6	8.7	112.2	1.7
	Aug.	127.9	8.6	118.5	3.7	128.3	6.4	112.0	1.4
	Sept.	128.7	9.0	118.1	3.0	129.6	8.3	112.0	1.4
	Oct.	128.7	8.7	118.3	3.1	130.0	8.6	111.9	0.9
	Nov.	129.5	8.1	118.7	2.8	131.3	8.5	112.1	0.8
	Dec.	129.4	5.7	118.8	2.1	131.9	7.2	112.0	0.5
2012	Jan.	132.2	6.9	119.7	2.4	134.8	8.7	112.2	0.5
	Feb.	133.4	6.2	119.8	1.9	136.2	7.8	112.6	0.6
	March	135.1	5.5	119.9	1.2	137.9	6.6	112.7	0.5
	Apr.	134.8	4.9	120.0	1.8	137.3	5.2	112.8	0.6
	May	132.9	4.5	119.9	1.6	134.7	5.1	112.8	0.6
	June	130.0	1.9	119.5	1.0	132.1	2.4	112.7	0.6
	July	132.7	2.6	119.7	0.7	135.0	3.4	112.7	0.4
	Aug.	135.0	5.5	119.7	1.0	137.2	6.9	112.9	0.7
	Sept.	134.5	4.5	120.0	1.6	136.0	4.9	112.9	0.8

Table 5 Employed persons of 15 years and over, by branch of economic activity

(thousands)

	Q2 2	012
	Total employed persons	Salaried employees
Total	3,793.10	2,398.8
Agriculture, forestry and fishing	494.00	51.6
Mining and quarrying	10.30	9.2
Manufacturing	359.50	260.4
Electricity, gas, steam and air conditioning supply	26.00	25.5
Water supply, sewerage, waste management and remediation activities	20.30	20.2
Construction	213.50	122.6
Wholesale and retail trade; repair of motor vehicles and motorcycles	679.40	381.5
Transportation and storage	182.70	122.2
Accommodation and food service activities	275.10	161.1
Information and communication	72.20	63.7
Financial and insurance activities	122.40	107.9
Real estate activities	6.50	2.0
Professional, scientific and technical activities	220.50	83.6
Administrative and support service activities	72.30	60.9
Public administration and defence; compulsory social security	323.70	323.7
Education	306.30	285.0
Human health and social work activities	230.00	193.3
Arts, entertainment and recreation	41.80	27.6
Other service activities	75.90	40.0
Activities of households as employers	58.40	54.6
Activities of extraterritorial organisations and bodies	2.20	2.2

 $Source: ELSTAT, Labour \ Force \ Survey.$

Table 6 Balance of payments

(million euro)

(m	illion euro)						
		Jan	uary-Septemb	er		September	
		2010	2011	2012	2010	2011	2012
I	CURRENT ACCOUNT BALANCE (I.A+I.B+I.C+I.D)	-16,069.6	-14,738.0	-3,462.0	-1,211.8	-1,069.1	774.6
	TRADE BALANCE (I.A.1–I.A.2)	-22,271.1	-20,991.2	-15,651.8	-2,281.0	-2,051.5	-1,351.4
	Oil trade balance	-7,056.9	-8,422.1	-8,165.0	-865.6	-787.3	-719.8
	Non-oil trade balance	-15,214.3	-12,569.1	-7,486.8	-1,415.4	-1,264.2	-631.6
	Ship balance	-2,711.2	-2,802.6	-829.4	-255.2	-210.2	-90.1
	Trade balance excl. oil and ships	-12,503.1	-9,766.5	-6,657.4	-1,160.2	-1,054.0	-541.5
	I.A.1 Exports of goods	12,188.5	15,053.6	16,090.9	1,494.4	1,873.4	1,908.3
	Oil	3,363.7	4,583.4	5,471.6	369.6	457.0	751.4
	Ships (receipts)	685.9	628.7	603.4	74.8	74.0	27.8
	Other goods	8,138.9	9,841.4	10,015.9	1,050.1	1,342.4	1,129.1
	I.A.2 Imports of goods	34,459.6	36,044.8	31,742.7	3,775.4	3,924.8	3,259.7
	Oil	10,420.6	13,005.5	13,636.6	1,235.1	1,244.3	1,471.2
	Ships (payments)	3,397.1	3,431.3	1,432.8	330.0	284.2	117.9
	Other goods	20,642.0	19,607.9	16,673.3	2,210.3	2,396.3	1,670.6
I.B	SERVICES BALANCE (I.B.1–I.B.2)	11,272.5	12,031.4	12,621.6	1,861.6	2,123.6	2,048.4
	I.B.1 Receipts	22,707.7	22,749.7	22,007.3	3,127.6	3,211.2	2,920.0
	Travel	8,502.9	9,333.7	9,085.2	1,489.1	1,610.3	1,620.6
	Transport	11,758.8	10,547.7	10,185.4	1,317.2	1,241.0	1,036.1
	Other services	2,446.0	2,868.3	2,736.7	321.3	359.9	263.3
	I.B.2 Payments	11,435.2	10,718.2	9,385.7	1,266.1	1,087.6	871.6
	Travel	1,650.8	1,790.2	1,474.5	161.7	157.9	165.9
	Transport	6,179.8	5,556.9	4,749.6	687.8	590.5	448.3
* ~	Other services	3,604.6	3,371.1	3,161.5	416.5	339.2	257.3
I.C	INCOME BALANCE (I.C.1–I.C.2)	-5,761.3	-6,431.0	-2,017.8	-597.1	-938.6	143.8
	I.C.1 Receipts	3,051.1	2,426.1	2,443.0	349.5	277.9	256.3
	Wages, salaries	152.0	138.1	145.8	17.7	13.8	16.6
	Interest, dividends, profits	2,899.1	2,288.0	2,297.2	331.8	264.1	239.8 112.5
	I.C.2 Payments	8,812.4	8,857.1 340.2	<i>4,460.9</i> 350.4	946.5 30.1	1,216.5 43.2	33.0
	Wages, salaries Interest, dividends, profits	281.6 8,530.9	8,516.8	4,110.5	916.4	1,173.3	79.5
ID	CURRENT TRANSFERS BALANCE (I.D.1–I.D.2)	690.4	652.8	1,586.0	-195.4	-202.6	-66.2
I.D	I.D.1 Receipts	4,009.5	3,705.5	4,503.0	154.1	136.7	191.5
	General government (mainly transfers from the EU)	2,893.3	2,806.4	3,688.3	35.6	43.0	99.6
	Other sectors (emigrants' remittances etc.)	1,116.2	899.1	814.6	118.5	93.7	91.9
	I.D.2 Payments	3,319.2	3,052.7	2,917.0	349.4	339.3	257.7
	General government (mainly payments to the EU)	2,133.2	1,935.3	2,096.7	227.6	213.5	188.5
	Other sectors	1,185.9	1,117.4	820.3	121.8	125.7	69.2
II	CAPITAL TRANSFERS BALANCE (II.1– II.2)	769.0	1,152.1	1,582.7	-18.3	7.9	-8.1
**	II.1 Receipts	978.7	1,342.1	1,757.2	8.3	37.9	7.0
	General government (mainly transfers from the EU)	886.0	1,238.4	1,698.8	0.5	1.6	0.4
	Other sectors	92.7	103.7	58.4	7.8	36.3	6.6
	II.2 Payments	209.6	190.0	174.4	26.6	30.0	15.1
	General government (mainly payments to the EU)	13.5	10.3	12.2	0.7	1.3	0.3
	Other sectors	196.1	179.7	162.3	25.9	28.7	14.8
III	CURRENT ACCOUNT AND CAPITAL TRANSFERS	-15,300.6	-13,585.9	-1,879.3	-1,230.2	-1,061.2	766.5
IV	BALANCE (I+II) FINANCIAL ACCOUNT BALANCE (IV.A+IV.B+IV.C+IV.D)	16,027.0	14,777.4	3,351.0	597.0	1,407.5	-690.9
1 V	IV.A DIRECT INVESTMENT 1	-796.7	-1,962.1	2,019.0	-214.2	-233.1	-39.9
	By residents abroad	-/9 0. / -897.9	-1,902.1 -1,234.8		-214.2 -100.1	-233.1 -50.1	-14.7
	By non-residents in Greece	101.2	-1,234.6	185.3 1,833.7	-100.1	-183.1	-14.7
	IV.B PORTFOLIO INVESTMENT ¹	-18,264.9	-16,944.5	-75,984.1	-114.1 -187.0	-3,677.7	-23.2 40.6
	Assets	12,263.0		-39,625.8			949.6
	Assets Liabilities	-30,527.9	3,473.5	-39,625.8	2,625.6 -2,812.7	-4,017.1 339.4	-909.0
			-20,417.9	77,331.8			-909.0 - 684.6
	IV.C OTHER INVESTMENT ¹ Assets	34,958.6	33,778.0	13,183.1	969.2 -2,199.4	5,417.3 52.8	- 684.6 1,019.1
	Liabilities	-6,541.4	146.8 33,631.2	64,148.7			-1,703.6
	(General government loans)	41,500.1 27,571.3	32,045.7	75,124.9	3,168.6 9,050.0	5,364.5 -23.3	-1,703.6 -18.9
	IV.D CHANGE IN RESERVE ASSETS ²	130.0	-94.0	-15.0	29.0	-23.3 -99.0	-18.9 -7.0
V	ERRORS AND OMISSIONS	-726.4	-1,191.5	-1,472.5	633.2	-346.2	-75.7
•	RESERVE ASSETS ³	-/40.4	-1,171.3	-1,4/4.3	2,498.0	4,409.0	5,941.0
	ALDERY E ADDE 10				2,770.0	7,707.0	5,741.0

Source: Bank of Greece.

Source: Bank of Greece.

1 (+) net inflow, (-) net outflow.

2 (+) decrease, (-) increase.

3 Following Greece's entry into the euro area in January 2001, reserve assets, as defined by the European Central Bank, comprise monetary gold, the "reserve position" in the IMF, "Special Drawing Rights", and Bank of Greece's claims in foreign currency on non-euro area residents. Excluded are euro-denominated claims on non-euro area residents, claims (in foreign currency and in euro) on euro area residents, and the Bank of Greece share in the capital and reserves of the ECP of the ECB.

Table 7 Monetary aggregates of the euro area 1,2

(outstanding balances in billion euro; seasonally adjusted)

(out	tunuing out	ances in billio	ii curo, scuson	uniy uujusteu)							
End of per	iod	Currency in circulation	Overnight deposits	М1	Deposits with agreed maturity up to two years	Deposits redeemable at notice up to three months	M2 (6) = (3) + (4)	Repurchase agreements ³	Money market fund shares/units	Debt securities up to two years	$M3^4$ $(10) = (6) + (7)$
		(1)	(2)	(3) = (1) + (2)	(4)	(5)	+(5)	(7)	(8)	(9)	+(8)+(9)
2007		626.0	3,214.9	3,840.8	1,978.0	1,540.9	7,359.7	305.3	680.2	311.7	8,656.9
2008		711.3	3,280.1	3,991.4	2,482.7	1,567.3	8,041.3	349.6	747.6	264.3	9,402.8
2009		757.4	3,740.6	4,498.0	1,906.5	1,803.4	8,207.9	338.0	666.7	131.7	9,344.3
2010		794.0	3,908.2	4,702.1	1,794.7	1,912.6	8,409.4	178.4	568.7	123.1	9,279.6
2011		843.2	3,942.6	4,785.9	1,846.3	1,958.4	8,590.6	144.7	535.5	206.6	9,477.2
2010	Jan.	760.0	3,775.0	4,535.0	1,857.2	1,816.1	8,208.3	324.2	656.7	131.3	9,320.5
	Feb.	764.5	3,794.6	4,559.1	1,839.0	1,827.0	8,225.0	333.4	642.1	124.9	9,325.4
	March	775.2	3,797.0	4,572.3	1,820.9	1,837.2	8,230.4	338.2	627.3	134.0	9,329.9
	Apr.	772.3	3,852.0	4,624.4	1,789.6	1,846.0	8,259.9	349.9	625.7	134.4	9,369.9
	May	778.8	3,871.2	4,650.0	1,790.0	1,850.5	8,290.5	356.1	618.3	129.1	9,393.9
	June ³	783.5	3,881.2	4,664.7	1,790.3	1,856.7	8,311.7	184.9	609.3	125.6	9,231.5
	July	784.5	3,900.1	4,684.5	1,782.9	1,868.0	8,335.5	180.2	594.0	129.5	9,239.2
	Aug.	790.5	3,916.1	4,706.6	1,791.3	1,882.8	8,380.7	174.6	596.8	129.3	9,281.4
	Sept.	790.4	3,886.9	4,677.3	1,788.8	1,896.6	8,362.7	172.9	592.9	130.6	9,259.1
	Oct.	789.9	3,898.7	4,688.6	1,799.4	1,907.1	8,395.2	180.6	580.5	124.9	9,281.1
	Nov.	793.8	3,891.5	4,685.3	1,802.2	1,915.4	8,402.9	177.9	586.7	121.8	9,289.2
	Dec.	794.0	3,908.2	4,702.1	1,794.7	1,912.6	8,409.4	178.4	568.7	123.1	9,279.6
2011	Jan.	800.8	3,891.5	4,692.3	1,807.8	1,915.6	8,415.7	188.2	574.2	130.0	9,308.1
	Feb.	803.5	3,894.5	4,697.9	1,818.2	1,918.3	8,434.5	189.0	573.6	127.8	9,324.9
	March	803.7	3,910.7	4,714.4	1,819.0	1,923.4	8,456.9	160.4	567.1	155.0	9,339.2
	Apr.	805.9	3,894.1	4,700.0	1,825.4	1,926.7	8,452.1	169.7	562.4	158.8	9,343.0
	May	812.5	3,890.1	4,702.6	1,844.5	1,935.7	8,482.7	170.7	555.9	159.1	9,368.5
	June	816.0	3,899.1	4,715.0	1,839.3	1,939.9	8,494.2	157.2	549.6	176.2	9,377.3
	July	818.3	3,908.7	4,727.0	1,841.0	1,945.4	8,513.4	167.7	537.1	177.9	9,396.2
	Aug.	825.9	3,955.3	4,781.3	1,841.8	1,952.5	8,575.6	182.1	549.7	175.0	9,482.4
	Sept.	832.0	3,948.5	4,780.5	1,853.4	1,957.2	8,591.2	167.2	552.1	170.5	9,481.0
	Oct.	840.5	3,933.3	4,773.9	1,840.1	1,961.8	8,575.8	171.2	547.0	170.8	9,464.8
	Nov.	844.5	3,940.7	4,785.2	1,833.7	1,972.9	8,591.8	168.2	547.2	173.2	9,480.4
	Dec.	843.2	3,942.6	4,785.9	1,846.3	1,958.4	8,590.6	144.5	535.5	206.6	9,477.2
2012	Jan.	849.9	3,940.7	4,790.6	1,876.9	1,959.3	8,626.7	159.2	500.5	203.9	9,490.3
	Feb.	852.7	3,966.0	4,818.6	1,897.7	1,968.6	8,684.9	151.6	485.7	217.5	9,539.7
	March	847.8	4,000.5	4,848.3	1,901.4	1,975.9	8,725.6	131.9	497.0	240.5	9,595.0
	Apr.	850.1	3,943.9	4,794.0	1,917.3	1,982.9	8,694.1	127.2	500.6	229.3	9,551.2
	May	856.7	4,015.5	4,872.2	1,887.8	1,997.0	8,757.0	130.7	510.0	223.4	9,621.0
	June	861.0	4,033.4	4,894.5	1,879.5	2,007.5	8,781.5	126.9	500.6	231.9	9,640.9
	July	866.2	4,089.4	4,955.6	1,866.8	2,019.1	8,841.5	138.7	494.7	233.8	9,708.8
	Aug.	868.2	4,177.2	5,045.4	1,802.6	2,029.6	8,877.6	132.9	489.9	219.4	9,719.9
	Sept.*	867.2	4,157.9	5,025.1	1,803.0	2,041.3	8,869.5	120.4	482.3	213.3	9,685.5
~											

¹ Figures take into account euro area enlargements.
2 Monetary aggregates comprise monetary liabilities of MFIs and central government (Post Office, Treasury) vis-à-vis non-MFI euro area residents excluding central government.

³ As from June 2010, repo transactions conducted through central counterparties are not included.

⁴ M3 and its components excluding non-residents' holdings of money market fund shares/units and debt securities of up to two years.

Table 8 The Greek contribution to the main monetary aggregates of the euro area

(outstanding amounts in million euro; not seasonally adjusted)

		Ov	ernight deposit	s	Deposits with an	Deposits redeemable		Money	Debt	Total ³ (M3	
End of		(1)	Sight deposits and current accounts	Savings deposits	agreed maturity up to two years	at notice up to three months ¹	Repurchase agreements (repos)	market fund shares/units	securities up to two years ²	excluding currency in circulation) (7)=(1)+(2)+ +(3)+(4)+ +(5)+(6)	Memo item: Currency in circulation ⁴
2007		98,837	28,290	70,547	97,548	2,261	703	7,918	-1,587	205,680	14,247
2008		90,599	25,916	64,683	137,828	1,882	378	2,266	2,126	235,079	16,318
2009		103,165	31,057	72,109	134,003	3,141	189	1,539	-69	241,968	19,122
2010		90,831	26,978	63,853	117,623	3,015	87	935	6	212,497	20,383
2011		74,572	23,698	50,874	99,845	2,692	89	640	-1	177,837	21,370
2010	Jan.	100,503	28,653	71,850	131,480	3,214	174	1,500	-75	236,796	18,859
	Feb.	99,125	27,983	71,142	128,957	3,138	149	1,306	-73	232,602	19,022
	March	98,051	27,253	70,798	127,505	2,918	169	1,167	-75	229,735	19,111
	Apr.	96,950	27,364	69,586	123,047	2,800	136	1,031	-48	223,916	19,254
	May	95,559	26,934	68,625	121,702	2,872	123	966	-17	221,205	19,376
	June	96,283	28,877	67,406	119,794	3,531	105	894	-7	220,600	19,640
	July	93,401	26,700	66,701	118,021	3,290	138	894	2	215,746	19,839
	Aug.	92,649	26,362	66,287	119,596	3,267	128	899	1	216,540	19,732
	Sept.	92,831	27,906	64,925	119,522	3,031	110	935	2	216,431	19,719
	Oct.	91,462	26,499	64,963	119,480	3,015	113	856	-2	214,924	19,768
	Nov.	89,981	26,837	63,144	118,568	3,104	106	853	1	212,613	19,927
	Dec.	90,831	26,978	63,853	117,623	3,015	87	935	6	212,497	20,383
2011	Jan.	89,282	26,331	62,951	115,593	2,959	84	952	5	208,875	19,930
	Feb.	87,613	25,770	61,843	115,362	2,887	102	995	5	206,964	19,952
	March	85,280	25,807	59,473	114,097	2,805	99	981	5	203,267	19,951
	Apr.	84,482	25,009	59,473	112,744	2,768	78	979	4	201,055	20,266
	May	83,469	25,510	57,959	109,074	2,780	118	922	4	196,367	20,211
	June	83,007	26,121	56,886	105,767	2,721	71	832	3	192,401	20,417
	July	80,568	24,515	56,053	107,060	2,654	73	788	2	191,145	20,359
	Aug.	80,551	24,526	56,025	108,410	2,617	88	806	2	192,474	20,463
	Sept.	77,476	23,745	53,731	106,050	2,623	78	752	2	186,981	20,702
	Oct.	75,602	23,338	52,264	101,279	2,571	97	696	1	180,246	20,555
	Nov.	74,125	23,365	50,760	99,775	2,606	139	649	-1	177,293	20,845
	Dec.	74,572	23,698	50,874	99,845	2,692	89	640	-1	177,837	21,370
2012	Jan.	71,491	21,864	49,627	97,959	2,677	84	644	0	172,855	21,159
	Feb.	69,384	21,229	48,155	95,491	2,591	73	635	-1	168,173	21,016
	March	67,212	20,506	46,706	98,588	2,495	73	646	0	169,014	21,082
	Apr.	67,927	20,999	46,928	98,991	2,513	75	649	0	170,155	21,292
	May	66,623	20,668	45,955	91,696	2,621	71	596	0	161,607	21,430
	June	64,266	20,113	44,153	87,437	2,500	74	572	0	154,849	21,439
	July	63,964	20,196	43,768	91,035	2,471	73	608	-1	158,150	21,554
	Aug.	62,600	19,354	43,246	91,795	2,408	69	621	-1	157,492	21,731
	Sept.	62,643	19,742	42,901	92,632	2,357	621	639	9	158,901	21,687

Source: Bank of Greece.

¹ Including savings deposits in currencies other than the euro.

² This aggregate is calculated on a consolidated basis with the other euro area countries and thus does not include domestic MFIs' holdings of debt securities up to two years issued by euro area MFIs.

³ As in all other euro area countries, Greece's M3 can no longer be calculated accurately, since part of the quantity of euro banknotes and coins in circulation in each country is held by residents of other euro area countries (as well as non-euro area residents). Owing to these technical problems, the compilation of the Greek M0, M1, M2 and M3 was discontinued in January 2003.

⁴ Since January 2002, banknotes in circulation are calculated on the basis of Greece's key for subscription to the ECB's capital, excluding the percentage (8%) of issued banknotes assigned to the ECB.

Table 9 Greece: deposits of domestic firms and households with OMFIs, by currency and type

(outstanding balances in million euro; not seasonally adjusted)

			Breakdown	by currency		Breakdown by type	
End		Total		In other	Sight	Savings	Time
of per	iod	deposits	In euro	currencies	deposits	deposits	deposits
2007		197,238	173,498	23,740	25,019	73,562	98,657
2008		227,253	200,638	26,615	21,827	67,328	138,098
2009		237,341	217,257	20,084	26,140	75,811	135,390
2010		209,521	191,988	17,533	22,865	66,706	119,951
2011		174,137	160,789	13,348	19,601	53,439	101,097
2010	Jan.	232,889	212,593	20,296	24,210	75,628	133,051
	Feb.	229,685	210,105	19,580	23,797	74,853	131,035
	March	227,649	209,164	18,485	23,494	74,292	129,863
	Apr.	222,577	204,905	17,672	23,353	72,943	126,280
	May	220,106	201,634	18,472	23,058	72,069	124,979
	June	216,766	197,432	19,334	24,374	70,595	121,797
	July	212,253	194,139	18,114	22,525	69,797	119,932
	Aug.	213,003	194,153	18,850	22,217	69,371	121,415
	Sept.	212,903	195,238	17,665	23,619	67,785	121,499
	Oct.	211,515	194,029	17,486	22,398	67,813	121,303
	Nov.	209,128	190,743	18,385	22,524	66,082	120,522
	Dec.	209,521	191,988	17,533	22,865	66,706	119,951
2011	Jan.	205,438	188,543	16,895	22,063	65,552	117,823
	Feb.	202,815	186,494	16,321	21,057	64,428	117,330
	March	199,086	183,277	15,809	20,829	62,102	116,156
	Apr.	196,678	181,243	15,435	20,098	62,080	114,499
	May	191,815	176,699	15,116	20,333	60,569	110,914
	June	188,108	174,095	14,013	21,071	59,446	107,592
	July	187,143	173,435	13,708	19,941	58,552	108,649
	Aug.	188,574	174,786	13,788	20,211	58,493	109,871
	Sept.	183,128	169,563	13,565	19,615	56,210	107,304
	Oct.	176,323	163,782	12,541	19,202	54,699	102,422
	Nov.	172,759	160,232	12,527	18,695	53,236	100,828
	Dec.	174,137	160,789	13,348	19,601	53,439	101,097
2012	Jan.	168,873	156,194	12,679	17,468	52,178	99,227
	Feb.	164,308	152,079	12,229	17,014	50,621	96,673
	March	165,283	152,988	12,295	16,593	49,077	99,613
	Apr.	165,877	153,387	12,490	17,230	49,317	99,330
	May	157,367	145,599	11,768	16,679	48,459	92,229
	June	150,513	139,435	11,078	15,982	46,543	87,988
	July	153,825	142,488	11,336	16,174	46,129	91,522
	Aug.	153,328	142,185	11,143	15,490	45,545	92,292
	Sept.	154,246	143,326	10,920	15,949	45,154	93,143

Source: Bank of Greece.

1 Other Monetary Financial Institutions (OMFIs) comprise credit institutions (other than the Bank of Greece) and money market funds.

Table 10 Money market interest rates

(percentages per annum; period averages)										
Perio	d	Overnight deposits ¹	1-month deposits ²	3-month deposits ²	6-month deposits ²	9-month deposits ²	12-month deposits ²			
2007		3.87	4.08	4.28	4.35	4.41	4.45			
2008		3.87	4.28	4.64	4.73	4.76	4.83			
2009		0.71	0.89	1.22	1.43	1.54	1.61			
2010		0.44	0.57	0.81	1.08	1.22	1.35			
2011		0.87	1.18	1.39	1.64	1.82	2.01			
2010	Jan.	0.34	0.44	0.68	0.98	1.11	1.23			
	Feb.	0.34	0.42	0.66	0.96	1.10	1.23			
	March	0.35	0.41	0.64	0.95	1.09	1.22			
	Apr.	0.35	0.40	0.64	0.96	1.10	1.23			
	May	0.34	0.42	0.69	0.98	1.12	1.25			
	June	0.35	0.45	0.73	1.01	1.15	1.28			
	July	0.48	0.58	0.85	1.10	1.25	1.37			
	Aug.	0.43	0.64	0.90	1.15	1.29	1.42			
	Sept.	0.45	0.62	0.88	1.14	1.29	1.42			
	Oct.	0.70	0.78	1.00	1.22	1.36	1.50			
	Nov.	0.59	0.83	1.04	1.27	1.41	1.54			
	Dec.	0.50	0.81	1.02	1.25	1.39	1.53			
2011	Jan.	0.66	0.79	1.02	1.25	1.41	1.55			
	Feb.	0.71	0.89	1.09	1.35	1.54	1.71			
	March	0.66	0.90	1.18	1.48	1.72	1.92			
	Apr.	0.97	1.13	1.32	1.62	1.86	2.09			
	May	1.03	1.24	1.43	1.71	1.93	2.15			
	June	1.12	1.28	1.49	1.75	1.95	2.14			
	July	1.01	1.42	1.60	1.82	1.99	2.18			
	Aug.	0.91	1.37	1.55	1.75	1.92	2.10			
	Sept.	1.01	1.35	1.54	1.74	1.90	2.07			
	Oct.	0.96	1.36	1.58	1.78	1.94	2.11			
	Nov.	0.79	1.23	1.48	1.71	1.88	2.04			
	Dec.	0.63	1.14	1.43	1.67	1.84	2.00			
2012	Jan.	0.38	0.84	1.22	1.50	1.69	1.84			
	Feb.	0.37	0.63	1.05	1.35	1.53	1.68			
	March	0.36	0.47	0.86	1.16	1.35	1.50			
	Apr.	0.35	0.41	0.74	1.04	1.22	1.37			
	May	0.34	0.39	0.68	0.97	1.12	1.27			
	June	0.33	0.38	0.66	0.93	1.08	1.22			
	July	0.18	0.22	0.50	0.78	0.93	1.06			
	Aug.	0.11	0.13	0.33	0.61	0.74	0.88			
	Sept.	0.10	0.12	0.25	0.48	0.62	0.74			
	Oct.	0.09	0.11	0.21	0.41	0.53	0.65			

Source: Bloomberg. 1 Euro overnight index average (EONIA). 2 Euro interbank offered rates (EURIBOR).

Table II Greek government bond yields

(percentages per annum; period averages)											
Period	ı	3-year	5-year	7-year	10-year	15-year	20-year	30-year			
2007		4.21	4.30	4.34	4.50	4.67	20-year	4.81			
2008		4.27	4.51	4.54	4.80	5.18		5.30			
2009		3.12	4.22	4.49	5.17	5.61		5.83			
2010		9.39	9.34	9.51	9.09	8.89		8.07			
2011		26.18	22.88	18.97	15.75	12.97		10.72			
2010	Jan.	4.72	5.40	5.61	6.02	6.50		6.36			
	Feb.	5.92	6.30	6.21	6.46	6.58		6.47			
	March	5.51	5.84	5.83	6.24	6.45		6.47			
	Apr.	7.91	7.87	7.87	7.83	7.46		7.08			
	May	8.28	8.59	8.39	7.97	8.28		7.69			
	June	9.41	9.50	9.57	9.10	9.68		9.11			
	July	11.17	10.85	10.94	10.34	10.34		9.08			
	Aug.	11.65	11.33	11.18	10.70	10.36		9.00			
	Sept.	11.63	11.65	11.76	11.34	10.49		8.89			
	Oct.	9.64	9.64	10.13	9.57	9.41		8.39			
	Nov.	13.08	12.27	12.91	11.52	10.35		9.13			
	Dec.	13.75	12.89	13.66	12.01	10.75		9.15			
2011	Jan.	13.78	12.94	13.32	11.73	10.58		8.89			
	Feb.	13.40	13.04	13.18	11.40	10.14		8.64			
	March	15.33	15.49	14.37	12.44	10.57		8.87			
	Apr.	19.11	18.04	16.30	13.86	11.27		9.40			
	May	24.28	20.87	17.86	15.94	13.19		10.52			
	June	26.48	22.83	19.04	16.69	13.97		11.54			
	July	28.96	24.37	19.66	16.15	13.73		10.98			
	Aug.	26.74	24.43	19.68	15.90	13.19		10.06			
	Sept.	31.51	28.88	22.27	17.78	13.97		10.08			
	Oct.	34.61	29.53	22.59	18.04	14.16		11.00			
	Nov.	34.08	29.31	22.50	17.92	14.20		13.76			
	Dec.	45.88	34.85	26.90	21.14	16.71		14.85			
2012	Jan.	68.08	47.04	41.84	25.91	20.10		16.91			
	Feb.	77.65	50.35	44.05	29.24	21.51		17.28			
	March ¹				19.06	17.91	16.90	15.59			
	Apr.				21.48	20.18	18.63	17.11			
	May				26.90	24.50	22.59	21.37			
	June				27.82	25.36	24.32	23.09			
	July				25.82	24.58	23.39	22.26			
	Aug.				24.34	22.73	21.10	20.33			
	Sept.				20.91	20.30	18.96	18.54			
	Oct.				17.96	17.34	16.79	15.98			

Source: Bank of Greece.
1 On 12 March 2012, following the completion of the exchange of the Greek government bonds under the PSI, the new bonds were admitted to trading.

Table 12 Domestic MFI loans to the domestic private sector by branch of economic activity 1,2

(balances in million euro)

(balances in million euro)													
			Firms						Sole pro- prietors	Individuals and private non-profit institutions			
End of per	iod	Grand total	Total	Agricul- ture	Industry	Trade	Tourism	Other	and unin- corpo- rated partner- ships	Total	Housing	Consumer credit	Other
2007	Iou	215,405	111,289	3,304	21,488	27,672	5,883	52,942	- SHIPS	104,116	69,363	31,942	2,811
2008		249,661	132,458	3,856	24,873	32,985	7,032	63,713		117,203	77,700	36,435	3,068
2009		249,677	130,043	3,962	22,790	33,519	7,358	62,413	-	119,635	80,559	36,044	3,032
2010		257,846	123,244	2,060	24,269	25,355	7,355	64,205	16,483	118,119	80,507	35,081	2,532
2011		248,535	120,126	2,009	23,405	24,687	7,229	62,797	15,359	113,050	78,393	32,985	1,672
2010	Jan.	250,167	130,610	4,076	22,964	33,407	7,428	62,736	-	119,557	80,704	35,876	2,977
	Feb.	251,173	131,520	4,063	23,031	33,182	7,512	63,732	-	119,653	80,878	35,792	2,984
	March	251,062	131,392	3,987	23,042	33,202	7,639	63,522	-	119,669	81,173	35,490	3,007
	Apr.	250,982	131,529	4,014	22,992	33,103	7,665	63,755	-	119,453	81,125	35,326	3,002
	May	252,072	132,718	4,012	23,060	33,087	7,640	64,919	-	119,355	81,110	35,194	3,050
	June	260,352	126,525	2,200	25,423	26,724	7,380	64,797	13,904	119,924	81,430	36,292	2,202
	July	258,943	125,529	2,189	24,991	26,718	7,345	64,286	13,929	119,485	81,334	35,960	2,192
	Aug.	258,777	125,452	2,191	24,662	26,633	7,349	64,617	13,812	119,512	81,450	35,898	2,163
	Sept.	258,476	123,543	2,155	24,471	25,873	7,274	63,771	15,618	119,316	81,201	35,834	2,281
	Oct.	257,256	122,772	2,051	24,687	25,663	7,244	63,127	16,429	118,055	80,033	35,621	2,401
	Nov.	258,023	123,361	2,052	24,540	25,607	7,295	63,866	16,444	118,217	80,302	35,443	2,472
	Dec.	257,846	123,244	2,060	24,269	25,355	7,355	64,205	16,483	118,119	80,507	35,081	2,532
2011	Jan.	256,852	122,894	2,064	24,658	25,125	7,301	63,747	16,465	117,493	80,128	34,884	2,480
	Feb.	256,737	122,999	2,057	24,698	25,134	7,283	63,828	16,450	117,288	80,028	34,702	2,558
	March	255,374	122,173	2,124	24,854	25,407	7,404	62,383	16,355	116,846	79,823	34,454	2,569
	Apr.	253,703	121,175	2,119	25,115	25,279	7,197	61,464	16,170	116,358	79,718	34,060	2,580
	May	253,193	120,934	2,077	24,918	25,266	7,182	61,492	16,032	116,227	79,794	33,811	2,622
	June	253,486	121,372	2,031	24,862	25,245	7,224	62,009	16,027	116,088	79,800	33,598	2,690
	July	254,242	122,287	2,032	25,526	25,149	7,224	62,357	16,004	115,951	79,936	33,241	2,773
	Aug.	252,484	121,352	2,002	25,096	24,661	7,133	62,461	15,846	115,286	79,575	33,885	1,826
	Sept.	252,947	122,680	2,024	23,907	25,678	7,282	63,789	15,713	114,554	79,170	33,680	1,704
	Oct.	251,106	121,670	2,018	23,884	25,153	7,291	63,325	15,529	113,907	78,869	33,385	1,654
	Nov.	249,996	121,244	2,003	23,764	24,954	7,238	63,285	15,363	113,389	78,506	33,194	1,689
2012	Dec.	248,535 249,087	120,126 121,138	2,009 1,954	23,405	24,687	7,229 7,318	62,797 64,198	15,359 15,259	113,050 112,690	78,393 78,104	32,985 32,778	1,672 1,808
2012	Feb.	249,087	119,455	1,934	23,138	24,342	7,435	62,797	15,149	112,090	77,857	32,778	1,811
	March	245,113	118,316	1,921	23,054	24,053	7,490	61,799	15,067	111,729	77,601	32,300	1,828
	Apr.	242,708	116,365	1,921	23,034	23,643	7,490	60,332	15,007	111,729	77,381	32,300	1,818
	May	242,040	116,193	1,885	22,802	23,495	7,463	60,548	14,975	110,872	77,124	31,911	1,837
	June	240,141	114,529	1,895	22,879	23,590	7,453	58,713	15,011	110,601	77,002	31,745	1,854
	July	234,334	112,050	1,534	22,036	22,810	7,381	58,288	13,879	108,406	75,747	30,858	1,801
	Aug.	233,035	111,011	1,526	21,976	22,674	7,349	57,486	13,954	108,070	75,482	30,776	1,811
	Sept.	231,818	110,320	1,503	22,011	22,641	7,326	56,839	13,957	107,541	75,098	30,634	1,809
	,		,020	-,000	,1	,0.1	7,020	2 3,000	25,507	20.,011	. 5,050	2 3,00 1	2,009

Source: Bank of Greece.

1 Including loans, corporate bonds held by MFIs, securitised loans and securitised corporate bonds.

2 As of June 2010, loans to sole proprietors and unincorporated partnerships are recorded separately and are no longer included in credit to enterprises.

Table 13 Greece: bank rates on new euro-denominated deposits of euro area residents

(percentages per annum, period averages unless otherwise indicated)

Period		Overnight deposits ^{1,2}	Deposits by households Savings deposits ²	Deposits with agreed maturity up to one year	Overnight deposits ²	Deposits with agreed maturity up to one year	Average rate on total deposits
2007		1.22	1.14	3.95	1.03	3.94	2.20
2008		1.26	1.17	4.87	1.09	4.48	2.89
2009		0.63	0.56	2.74	0.50	1.65	1.71
2010		0.43	0.38	3.26	0.35	2.53	1.91
2011		0.47	0.40	4.18	0.41	3.55	2.44
2010	Jan.	0.43	0.37	2.18	0.37	1.21	1.35
	Feb.	0.44	0.38	2.35	0.36	1.29	1.44
	March	0.43	0.38	2.61	0.38	1.61	1.58
	Apr.	0.43	0.37	2.98	0.36	1.71	1.75
	May	0.42	0.37	3.42	0.38	2.06	1.96
	June	0.43	0.38	3.61	0.32	3.37	2.11
	July	0.43	0.38	3.71	0.31	3.40	2.16
	Aug.	0.43	0.38	3.66	0.32	3.14	2.12
	Sept.	0.43	0.38	3.61	0.33	2.98	2.09
	Oct.	0.44	0.38	3.68	0.34	2.98	2.12
	Nov.	0.44	0.38	3.65	0.35	3.27	2.11
	Dec.	0.44	0.38	3.68	0.36	3.29	2.15
2011	Jan.	0.44	0.38	3.74	0.34	3.40	2.18
	Feb.	0.44	0.38	3.75	0.34	3.23	2.18
	March	0.45	0.39	3.76	0.41	3.39	2.21
	Apr.	0.46	0.39	3.88	0.38	3.56	2.29
	May	0.46	0.40	3.95	0.35	3.52	2.32
	June	0.47	0.41	4.10	0.42	3.38	2.39
	July	0.47	0.40	4.29	0.45	3.82	2.51
	Aug.	0.47	0.40	4.31	0.44	3.54	2.51
	Sept.	0.47	0.41	4.37	0.43	3.65	2.55
	Oct.	0.48	0.41	4.50	0.44	3.75	2.62
	Nov.	0.48	0.41	4.62	0.43	3.64	2.68
	Dec.	0.48	0.41	4.88	0.48	3.76	2.81
2012	Jan.	0.47	0.41	4.79	0.41	4.03	2.78
	Feb.	0.47	0.41	4.86	0.46	4.08	2.83
	March	0.47	0.41	4.94	0.53	4.43	2.89
	Apr.	0.47	0.41	4.96	0.47	4.37	2.92
	May	0.48	0.42	4.90	0.46	4.26	2.91
	June	0.48	0.42	5.01	0.46	4.17	2.94
	July	0.47		4.82	0.40	4.29	2.86
	Aug.	0.47	0.42	4.56	0.40	4.04	2.72
	Sept.	0.46	0.41	4.60	0.45	4.19	2.75

Source: Bank of Greece.

1 Weighted average of the current account rate and the savings deposit rate.

2 End-of-month interest rate.

Table 14 Greece: bank rates on new euro-denominated loans to euro area residents

(percentages per annum, period averages unless otherwise indicated)

(pro-		, , ,	Loans	to individua on-profit ins			Loans to sole proprietors and unincorporated partnerships ¹		Loan			
			Consumer loans		Housing loans					With a floating rate or an initial rate fixation of up to one year		
Perio	d	Loans without an agreed maturity ^{2,3}	With a floating rate or an initial rate fixation of up to one year	Average rate on total consumer loans	With a floating rate or an initial rate fixation of up to one year	Average rate on total housing loans	Loans without an agreed maturity ^{3,4}	With a floating rate or an initial rate fixation of up to one year	Loans without an agreed maturity ^{3,4}	Up to €1 million	Over €1 million	Average rate on total loans
2007		14.09	7.70	8.46	4.57	4.46			7.54	6.57	5.32	6.56
2008		14.80	8.65	8.96	5.10	4.81			7.61	6.82	5.71	6.82
2009		14.39	8.59	9.33	3.52	3.94			6.07	4.62	3.52	5.52
2010		14.18	9.79	9.53	3.42	3.67			6.25	5.53	4.27	5.63
2011		14.98	10.16	9.96	4.28	4.33	10.12	8.76	7.50	6.77	5.74	6.67
2010	Jan.	14.05	8.69	8.96	3.05	3.44			5.72	4.52	3.23	5.06
	Feb.	14.14	8.65	9.36	3.08	3.42			5.87	4.72	3.37	5.13
	March	13.84	8.94	9.27	3.21	3.53			5.93	4.98	3.71	5.24
	Apr.	13.94	8.69	9.30	3.32	3.62			6.13	5.21	3.55	5.27
	May	13.92	8.48	9.30	3.36	3.63	0.07	T 10	6.29	5.56	3.77	5.34
	June	14.28	10.31	9.45	3.26	3.50	9.07	7.43	5.94	5.47	3.89	5.50
	July	14.29	10.88	9.79	3.54	3.78	9.19	6.84	6.25	5.74	4.73	5.84
	Aug.	14.31 14.33	10.92 10.40	9.86 9.75	3.67 3.54	3.89 3.74	9.23 9.21	7.87 7.63	6.48 6.45	5.87 5.86	4.51 5.28	5.96 6.02
	Sept. Oct.	14.29	10.40	9.73	3.72	3.92	9.43	8.07	6.56	5.94	5.32	6.07
	Nov.	14.41	10.57	9.82	3.67	3.83	9.47	7.99	6.62	6.14	4.94	6.07
	Dec.	14.40	10.27	9.68	3.65	3.79	9.57	7.83	6.79	6.34	4.98	6.06
2011	Jan.	14.59	10.73	9.84	3.93	4.05	9.58	8.27	6.81	6.14	4.89	6.17
2011	Feb.	14.64	10.44	9.88	3.91	4.04	9.72	8.40	6.90	6.23	5.37	6.41
	March	14.70	9.74	9.52	4.04	4.17	9.78	8.59	7.05	6.46	5.39	6.38
	Apr.	14.74	10.65	10.15	4.25	4.32	9.91	8.63	7.26	6.46	5.55	6.57
	May	14.89	10.48	10.22	4.26	4.33	9.98	8.86	7.34	6.59	5.48	6.62
	June	14.94	10.47	10.23	4.23	4.32	10.10	8.62	7.59	6.76	5.56	6.64
	July	15.06	11.03	10.45	4.44	4.52	10.19	8.74	7.65	6.85	5.76	6.79
	Aug.	15.24	10.77	10.55	4.54	4.57	10.35	9.14	7.76	6.92	5.88	6.89
	Sept.	15.26	9.70	9.95	4.49	4.51	10.44	8.93	7.91	7.12	6.04	6.94
	Oct.	15.24	10.07	10.22	4.65	4.56	10.43	8.97	7.92	7.27	6.20	7.02
	Nov.	15.23	9.30	9.57	4.48	4.40	10.50	8.97	7.93	7.18	6.13	6.90
	Dec.	15.22	8.49	8.92	4.18	4.14	10.46	8.94	7.90	7.26	6.64	6.82
2012	Jan.	15.18	8.76	9.17	3.98	3.97	10.37	9.19	7.90	7.20	6.10	6.63
	Feb.	15.14	8.80	9.09	3.77	3.75	10.34	8.58	7.86	7.02	5.81	6.46
	March	15.11	8.19	8.66	3.62	3.53	10.31	8.22	7.80	7.02	6.16	6.38
	Apr.	15.08	8.34	8.79	3.55	3.44	10.35	7.91	7.78	6.89	6.23	6.34
	May	15.01	8.27	8.69	3.54	3.40	10.32	7.89	7.69	7.05	5.84	6.21
	June	14.96	8.16	8.54	3.42	3.33	10.27	7.79	7.69	6.92	6.55	6.29
	July	14.91	7.88	8.10	3.13	3.07	10.21	7.33	7.61	6.87	5.71	5.92
	Aug.	14.83	8.32	8.40	2.99	2.94	10.14	6.82	7.57	6.71	5.82	5.88
	Sept.	14.79	7.75	7.89	3.01	2.95	10.08	7.31	7.54	6.79	5.46	5.77

Source: Bank of Greece.

1 Associated costs are not included.

2 Weighted average of the rates on loans to households through credit cards, on open account loans and on overdrafts from current accounts.

3 End-of-month interest rate.

 $^{4\} Weighted\ average\ of\ the\ rates\ on\ corporate\ loans\ via\ credit\ lines\ and\ on\ overdrafts\ from\ sight\ deposit\ accounts.$

ISSN: 1108 - 2690