The Greek Economy: Waiting for the Policy Response

Economic Analysis & Markets Division

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Macroeconomic Outlook

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	2008	2009	2010	2011	IMF	Piraeus Bank
					2012	
Real GDP Growth (YoY % change)	-0.2	-3.25	-3.5	-6.9	-4.8	-6.0 to -7.0
Nominal GDP						
(billion €)	232.9	231.6	227.3	215.1	203.7	201 to 203
(YoY % change)	4.6	-0.5	-1.9	-5.4	-5.4	-5.5 to -6.8
Inflation	4.2	1.2	4.7	3.3	-0.5 (HICP)	1.0 to 2.0
GDP Deflator rate	4.7	2.8	1.7	1.6	-0.7	0.2 to 0.5
Unemployment rate (% of labour force)	7.6	9.5	12.5	17.7	19.4	21.0 to 23.0
Current Account Deficit						
(billion €)	34.8	25.8	23.0	21.1	15.2	16.0 to 17.0
(% of GDP)	14.9	11.1	10.1	9.8	7.5	7.9 to 8.5
General Government Primary Deficit						
(billion €)	11.2	24.1	10.7	4.7	2.0	4.0
(% of GDP)	4.8	10.4	4.7	2.2	1.0	2.0
General Government Debt						
(billion €)	263.3	299.7	329.5	355.6	332.4	334
(% of GDP)	113.0	129.4	145.0	165.3	163.2	165 to 167

Source: ELSTAT, MinFin, Bank of Greece, IMF Country Report No. 12/57, Piraeus Bank Calculations

Turning a recession into a crisis

- By the end of 2011, we had already expressed the view that the consensus forecast for an easing of recessionary pressures to -3% in 2012 (up from -6.9% in 2011) was too optimistic for a number of reasons. From a purely technical perspective, the prospects of the Greek economy were negative because of the negative momentum that it was carrying into in 2012 and the negative effects of the fall in economic activity in the rest of the Eurozone.

- In addition to these technical considerations, on a more theoretical level, our pessimism was based on the fact that, in our assessment, the Greek authorities have very limited scope to exercise fiscal and "monetary - credit" policy in order to manage the recession and to create the necessary conditions for recovery.

- As a result, fiscal adjustment and internal devaluation are taking place in an environment of very tight monetary conditions. These conditions are a result of the flight of deposits and growing real and nominal interest rates. In this stifling environment, invoking structural reforms – irrespective of how necessary they are – as the sole way of kick-starting the recovery process reflects either ignorance or a lack of will to introduce any actual pro-growth measures.

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A possible way out

- Based on the above analysis, and taking into consideration the need for further fiscal adjustment, it is clear that the stabilization of the Greek economy should be based on the remaining components of economic activity.

- First, internal consumption should be stabilized at current – already depressed - levels. A further reduction in consumption as a percentage of GDP can be achieved if private spending either remains constant or increases at a slower rate than other components of GDP.

- Emphasis should be given to investment. By this, we mean not only the Public Investment Program – which currently is being used as a tool of fiscal policy and not as a means of achieving growth – but private investment, too. Perhaps the greatest failure of the existing economic adjustment policy programme, is that it completely ignores the destructive influence on any investment activity of the credit contraction, and especially the high and growing level of real interest rates. In an economy which has been in recession since 2008, shrinking by 7% in 2011 and which is expected to shrink by a similar rate in 2012, it is impossible to have any sound investment activity while credit growth is contracting by 4.7% and real interest rates remain at levels above 5%.

- Finally, the external sector is of particular importance as it is linked to the external balance. Despite the fact that exports have improved significantly, and the balance of goods and services (excluding oil and ships) is already in surplus, the export effort has just begun since – even at current prices – Greek exports are still below their 2008 levels.

Outlook Revision (I)

- At the beginning of the year we were forecasting a recession to the tune of 5%. Taking into account the downward revision of Q4-2011 GDP data (which according to our calculations create a negative carry-over effect of approximately 3.5%), the Q1-2012 provisional data (-6.5% YoY) and the impact of new fiscal measures for 2012, which amount to 1.5% of nominal GDP, ignoring any second-round effects, we revise our GDP estimates for 2012 downward to -6.5%.

- The risks associated with this forecast are evenly balanced. If the implementation of the Second Economic Adjustment Programme remains on track and the flow of EU funding for structural projects materializes, then a more positive outcome is possible.

- If, on the other hand, the implementation of the programme does not go smoothly, and there are new “horizontal” tax measures and renewed uncertainty regarding troika funding and Euro membership, then a much worse outcome looks certain.

Outlook Revision (II)

- While we are already seeing a deceleration in inflationary pressures (due to positive base effects as last year's indirect tax hikes are beginning to drop out of the index), inflation adjusted for taxes has regained momentum. That, in addition to higher fuel and energy prices, will prevent a faster decline in prices.

- The GDP deflator will end-up lower (approximately 0.3%) because of the massive dampening pressure that the public sector deflator exerts on the overall index.

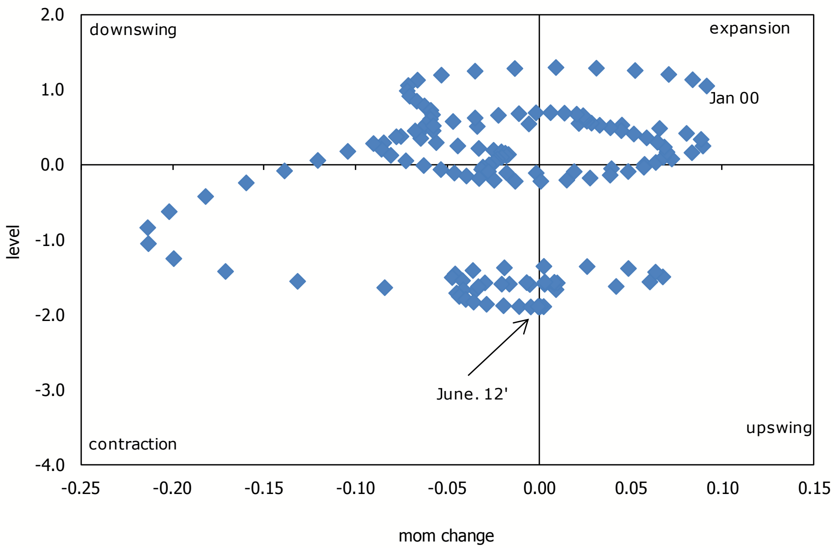
- Unemployment will continue to rise and will range between 21% and 23%. If jobseekers stop dropping out of the labour force at the same rate as they are doing now, then the total rate of unemployment could rise further.

- The current account deficit will decline further to €16.5 bn. We estimate that the trade and services balance (excl. oil and ships) will improve further by €3.5 bn and interest payments will be €3bn lower due to PSI plus and lower rates on official sector loans. This will be partially balanced by higher net payments for oil.

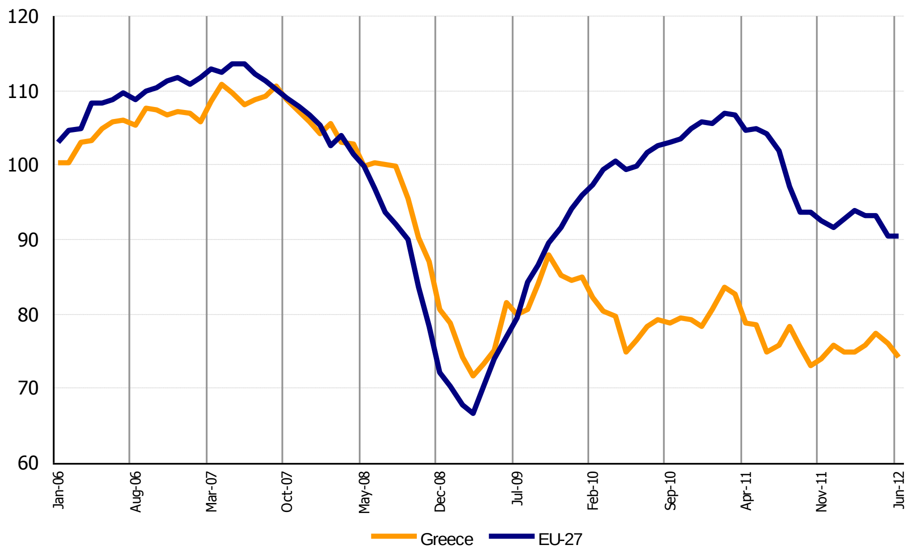
- On the fiscal front, we estimate an overrun in the general government's primary deficit target to the tune of € 2.0 bn, bringing the total primary deficit to € 4.0 bn. This trend, in addition to the downward revision of GDP in current prices, will bring general government debt to 166% of GDP.

According to our mapping of the business cycle, Greece remains in contraction. Nevertheless, the pace of economic contraction appears to be moderating.

Economic Climate Tracer



Economic Sentiment Indicator
(1990-2011=100, sa)

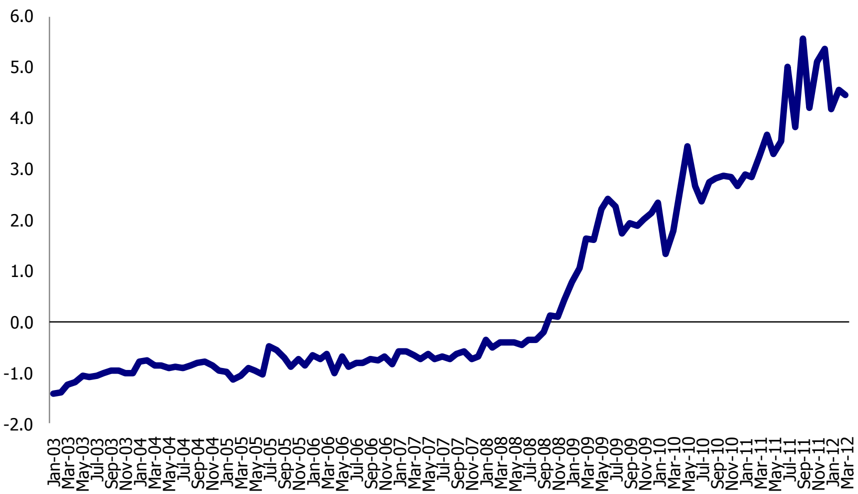


Source: European Commission, DG ECFIN, Piraeus Bank Calculations

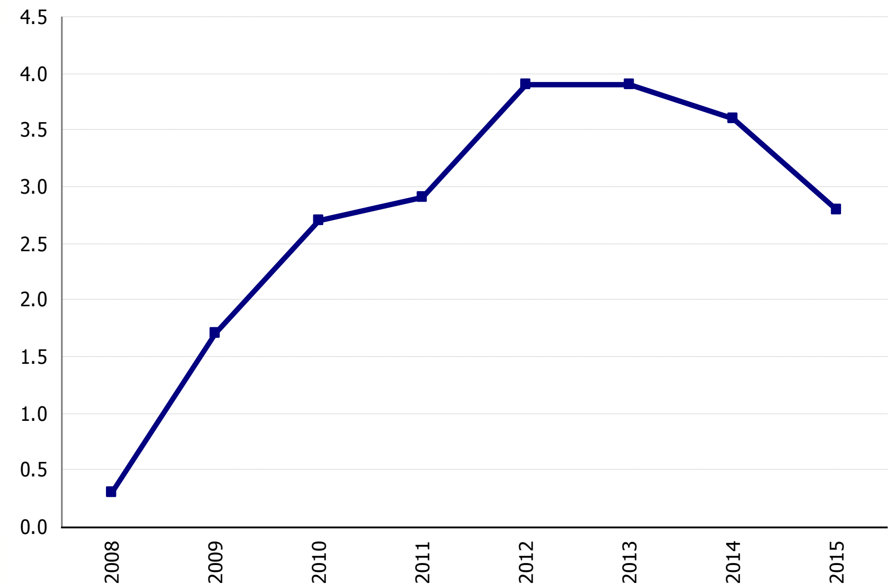
Business Cycle (II)

Our Financial Distress Index (FDSI), which reflects the conditions of liquidity and solvency not only of the banking sector, but of the Greek economy as a whole (i.e. financing needs of the Greek Government, current account deficit, credit bureau data and changes in loans and deposits), continued to climb to new record levels. These record levels of the FDSI indicate that the liquidity stress of the Greek economy has deteriorated even further, moving well into a “crisis” zone.

Greek Financial Distress Index



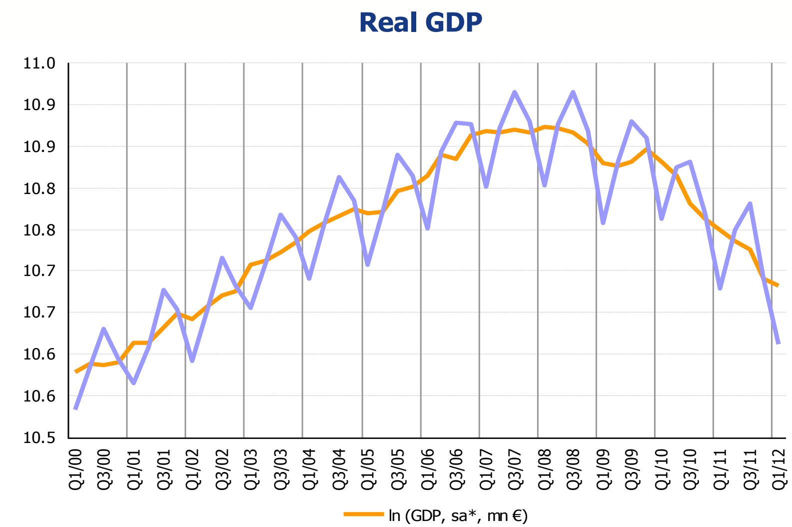
Average Real Interest Rate
(nominal rate minus change in GDP deflator, %)



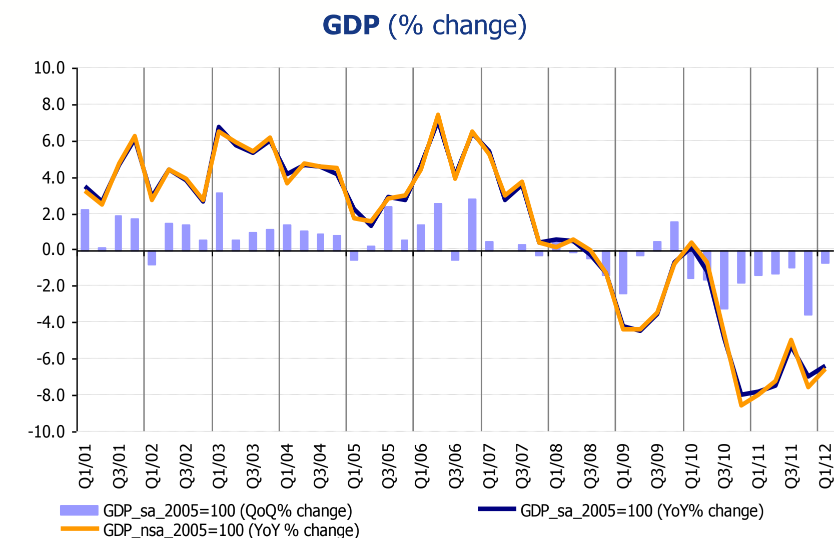
Source: European Commission DGECFIN, Hellenic Statistical Authority (ELSTAT), Bank of Greece, Teiresias, Bloomberg, Ministry of Finance, IMF Country Report 12/57 - Debt sustainability analysis, March 2012, Piraeus Bank research calculations

Seasonally adjusted GDP estimates

In 2011 real GDP contracted by 6.9% from -3.5% in 2010. According to our estimates for GDP on a seasonally adjusted basis, we calculate that the sharpest QoQ decline occurred in Q4 (-3.6% QoQ). Despite this sharp drop in Q4, GDP continued to decline in Q1-2012 by 0.7% QoQ.



Note: Seasonally adjusted data according to PrB estimates

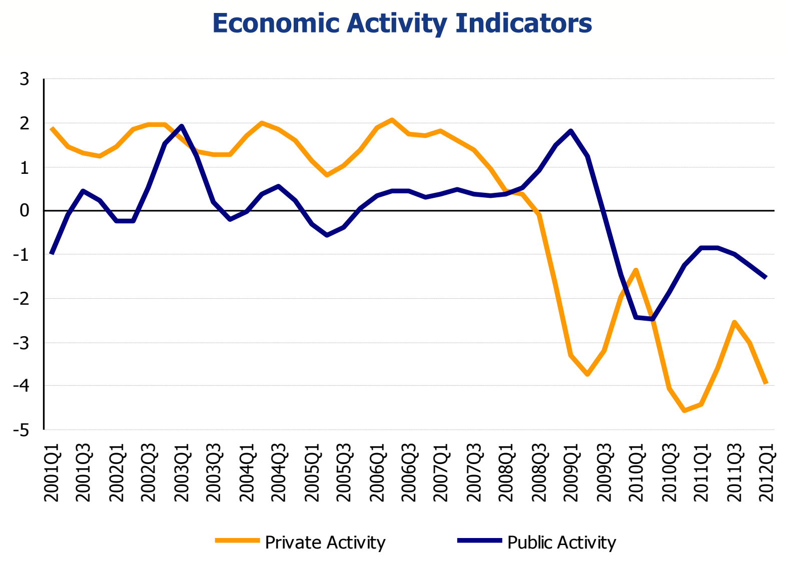


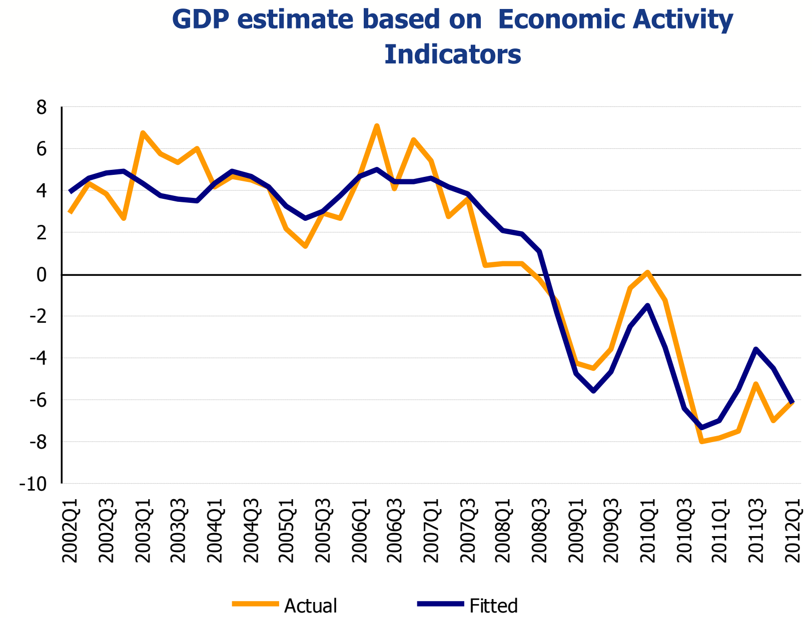
Note: Seasonally adjusted data according to PrB estimates

Source: ELSTAT, Eurostat, MInFIN,Piraeus Bank Research

Economic Activity Indicators

According to our economic activity indicators, the sharp drop in economic activity in both Q4-2011 and Q1-2012 can be attributed to the synchronized decline in both private and public economic activity.

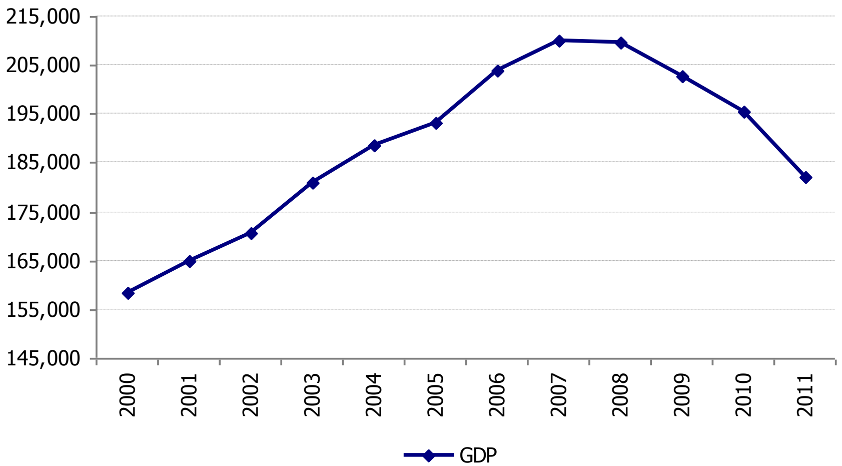




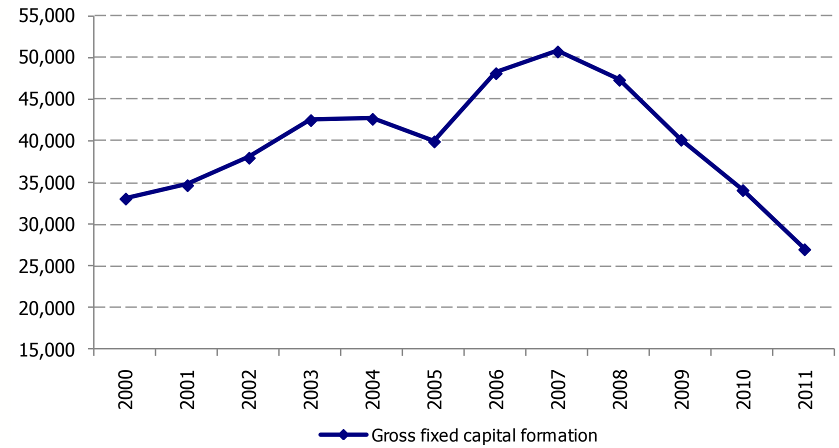
Source: Eurostat, ELSTAT, MinFin, Piraeus Bank Calculations

GDP components – The levels show the real extent of the recession (I)

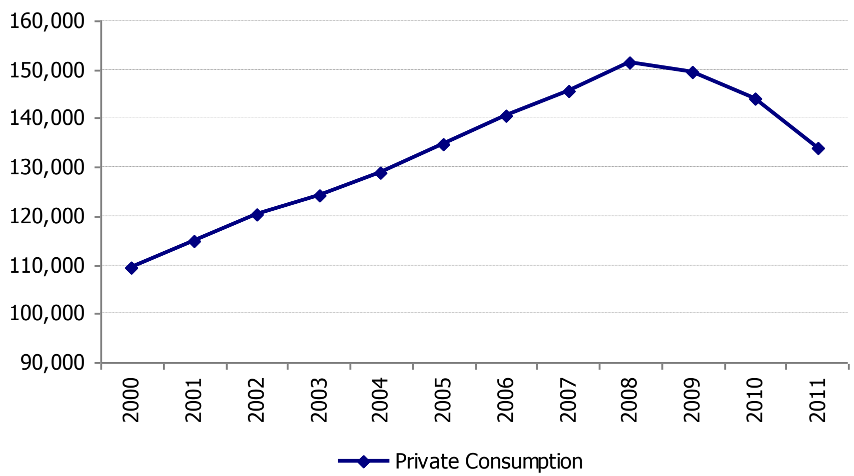
GDP (€ mn)



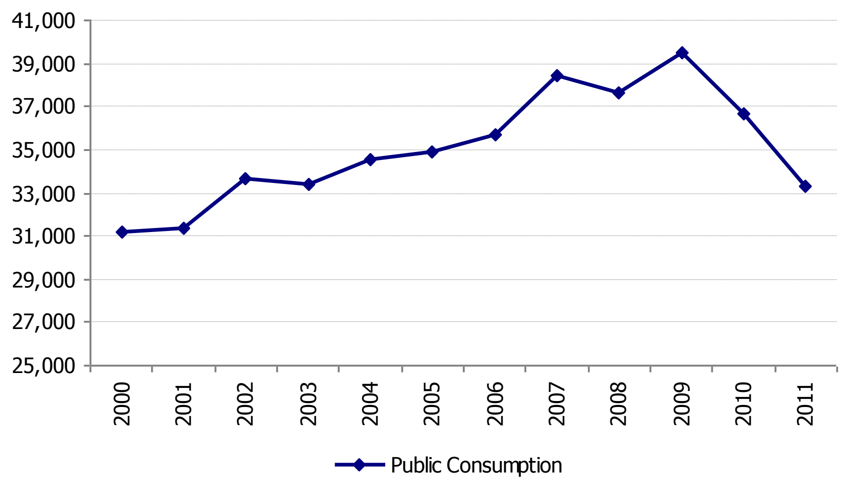
Gross Fixed Capital Formation (€ mn)



Private Consumption (€ mn)



Public Consumption (€ mn)



Source: ELSTAT, Piraeus Bank Research calculations

GDP components – The levels show the real extent of the recession (II)

Source: ELSTAT, Piraeus Bank Research calculations

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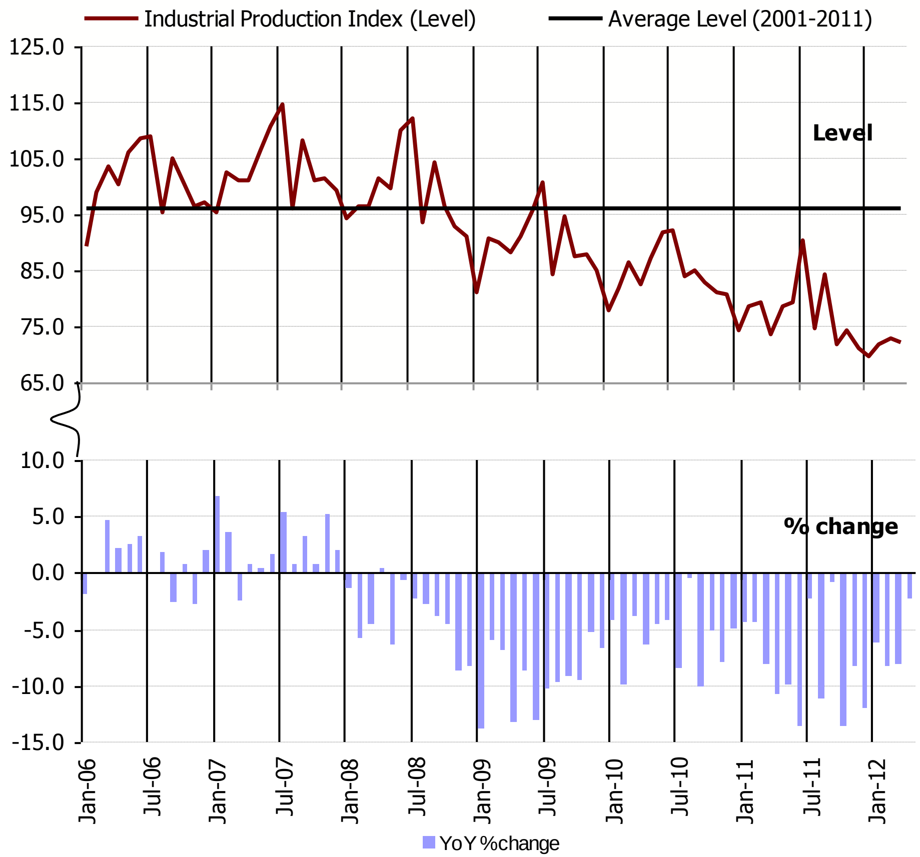
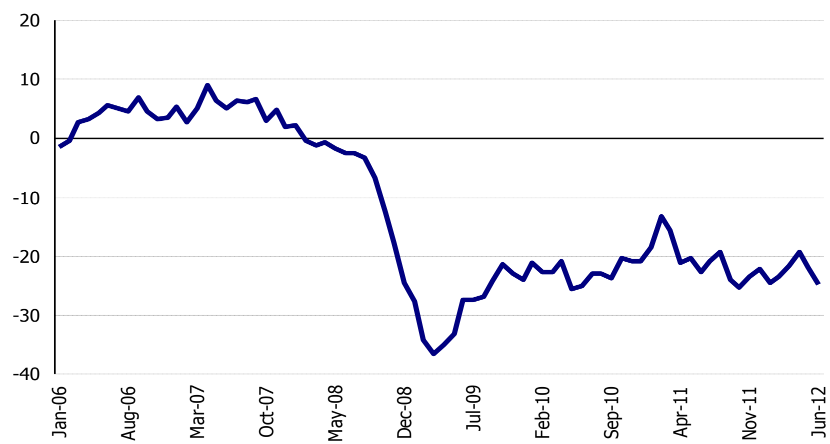
Industrial production
(YoY % change & level)



Industrial production declined by 8.6% in 2011, in comparison with -5.9% in 2010. This result can be ascribed to the sharp contraction of the manufacturing sector by 9.6% (2010: -5.1%). Confidence has stabilized at low levels, without showing any signs of improvement.

Industrial confidence indicator (sa)

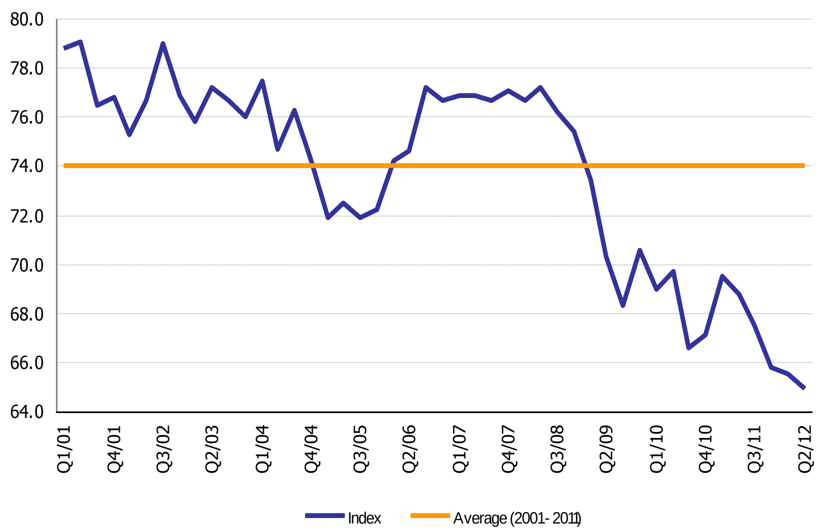


Source: ELSTAT, European Commission, DG ECFIN, Piraeus Bank Calculations

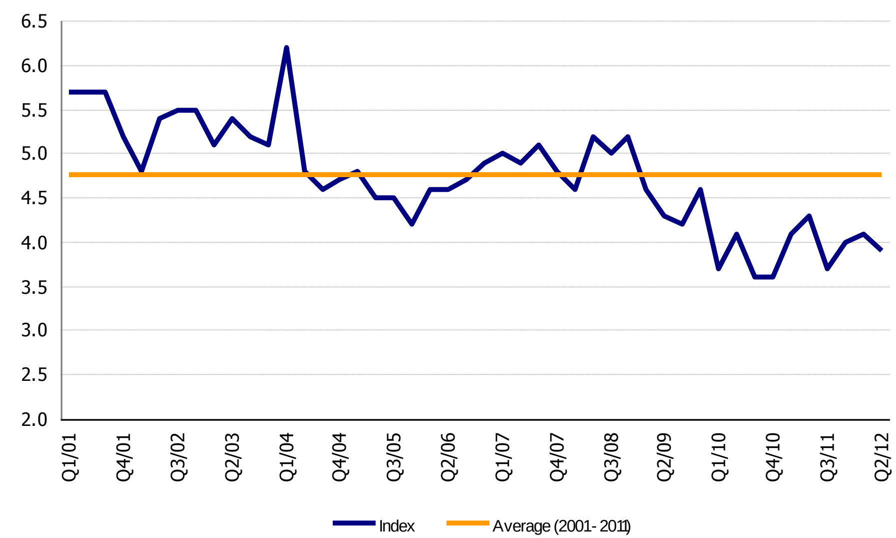
Business Environment - Manufacturing Sector (II)

Both the level of capacity utilization and the duration of production assured by current order books are below their respective long-term averages.

Level of Capacity Utilization in Manufacturing Industry (%, sa)



Duration of production assured by current order-book levels in Manufacturing Industry (months, sa)



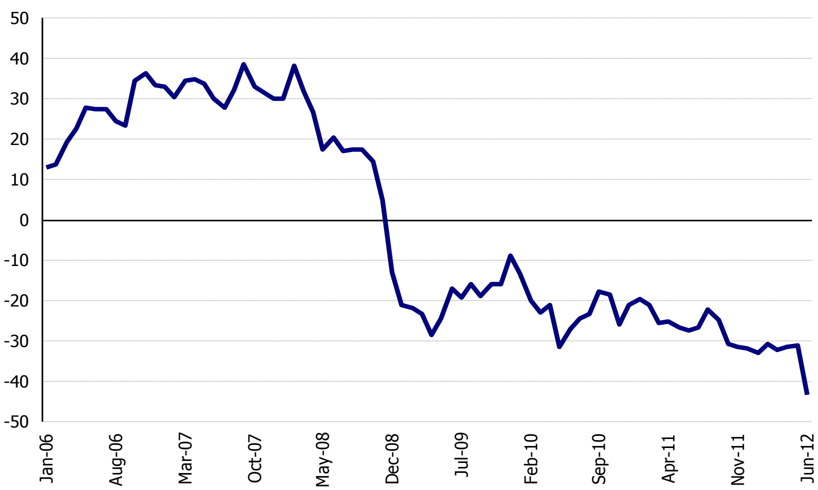
Data collected in January, April, July and October each year

Source: European Commission, DG ECFIN, Piraeus Bank Calculations

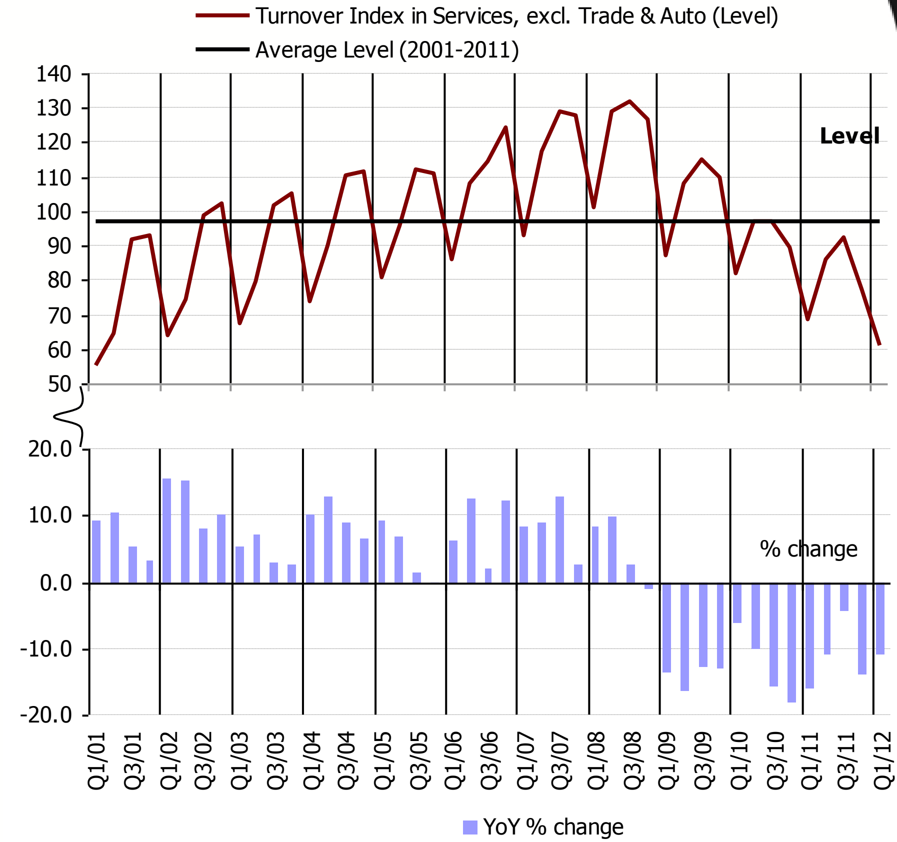
Business Environment - Services

At current prices (turnover data) the contraction of the Services sector's output has shown some signs of moderation. Nevertheless, the sharp contraction during the last 3 years has driven confidence to record low levels.

Services confidence indicator (sa)



Turnover Index in Services (excl. trade & auto)
(YoY % change & level)

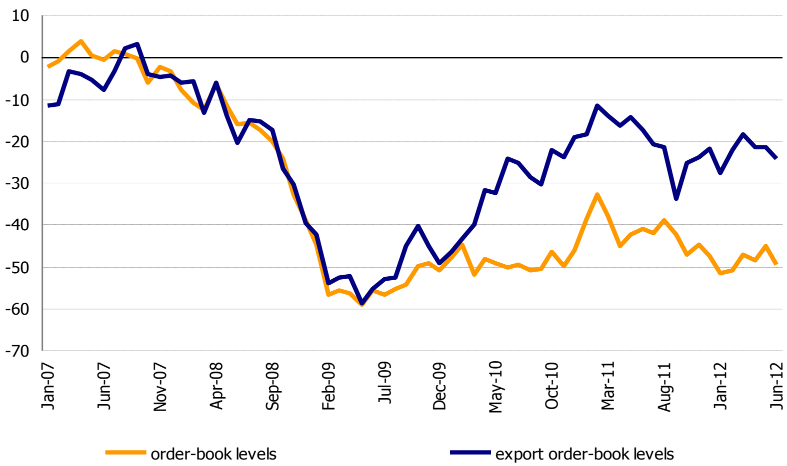


Source: European Commission, DG ECFIN, Eurostat, Piraeus Bank Calculations

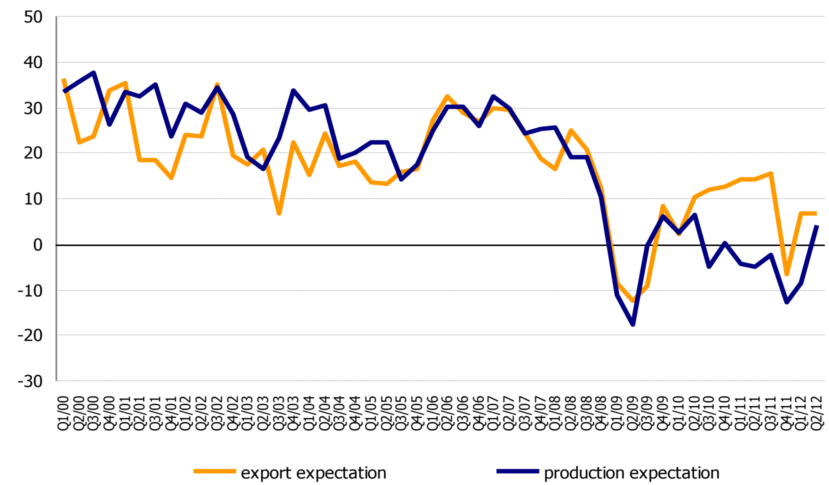
External Sector (I)

Industrial companies rely on external demand in order to maintain their sales and production levels.

Industrial companies assessment of order-book levels (sa, difference of % positive " above normal" –negative "below normal" answers)



Industrial companies expectations of exports* & production**(sa, difference of % positive "will increase" – negative "will decrease" answers)



** Quarterly data, collected in January, April, July and October each year*

*** The respective monthly data are being used*

Source: European Commission, DG ECFIN, Piraeus Bank Calculations

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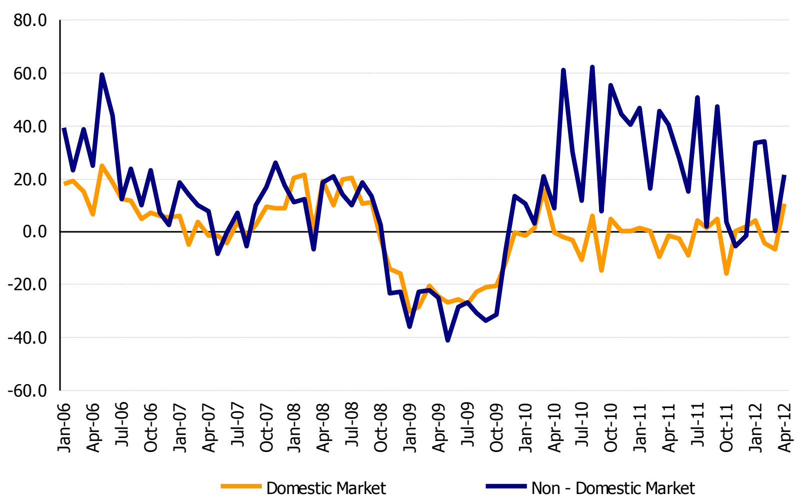
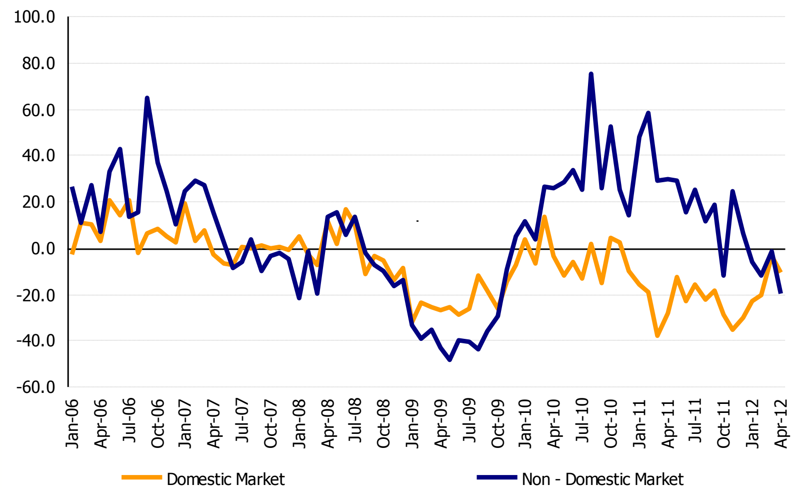
External Sector (II)

The reorientation of the Greek economy towards a more export driven paradigm has began, but it will be a long time until the transformation is complete. At the same time, the deceleration of economic growth in the EU bodes ill for further exports growth.

Turnover Index in Industry (YoY% change)



New Orders in Manufacturing (YoY% change)

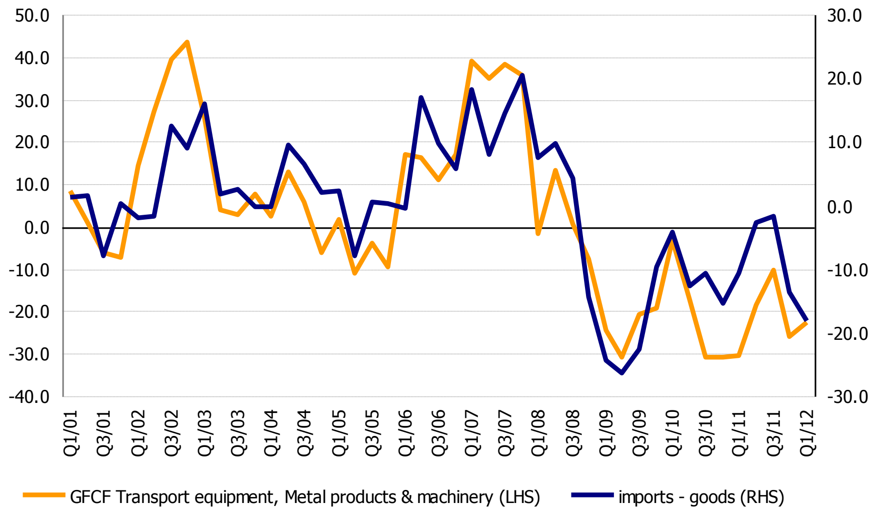


Source: ELSTAT, Piraeus Bank Calculations

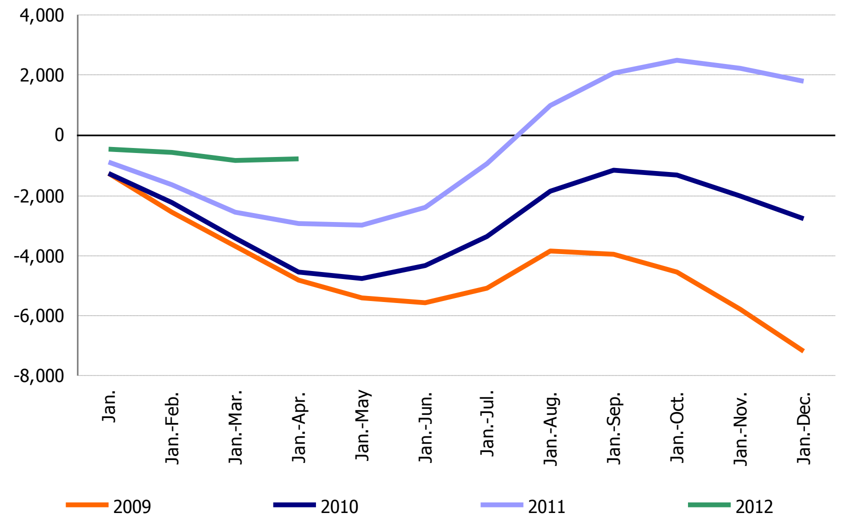
External Sector (III)

For the first time since 2000 (first available data), a surplus has been recorded in the trade (excl. oil & ships) and services balance. This recovery, though, is partly due to the decline in investment activity.

Imports of goods vs
GFCF Transport equipment, Metal products & machinery
(YoY% change, constant prices 2005, nsa)



Trade of Goods Balance (excl. oil & ships) & Services Balance (mn €)

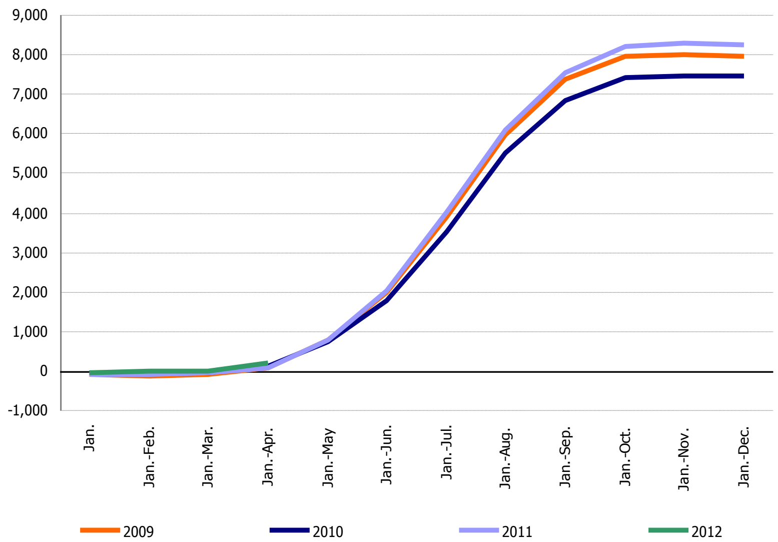


Source: Bank of Greece, ELSTAT, Piraeus Bank Calculations

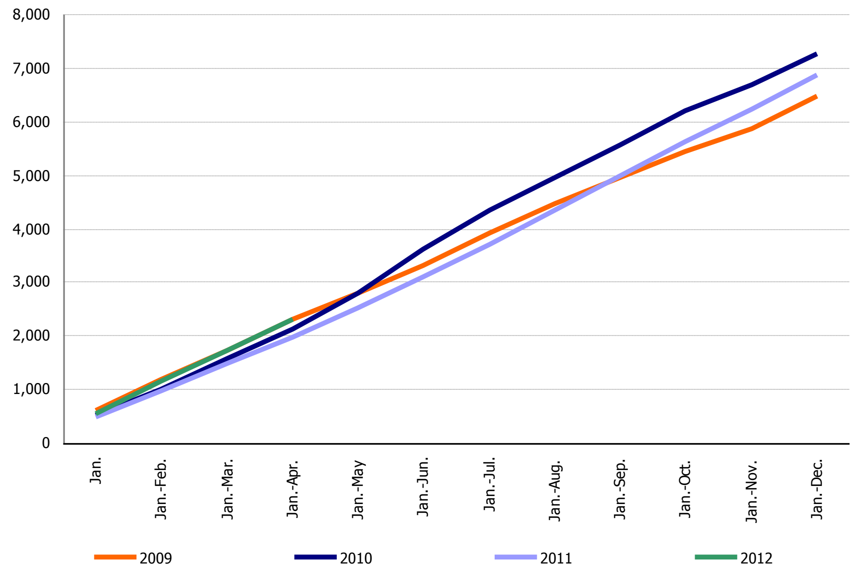
External Sector (IV)

The Services balance has always been in surplus. In 2011, the travel balance over-performed in comparison with the past 2 years, while the transportation surplus increased vs 2009 but declined vs 2010.

Balance of Payments – Travel Balance (mn €)



Balance of Payments – Transportation Balance (mn €)

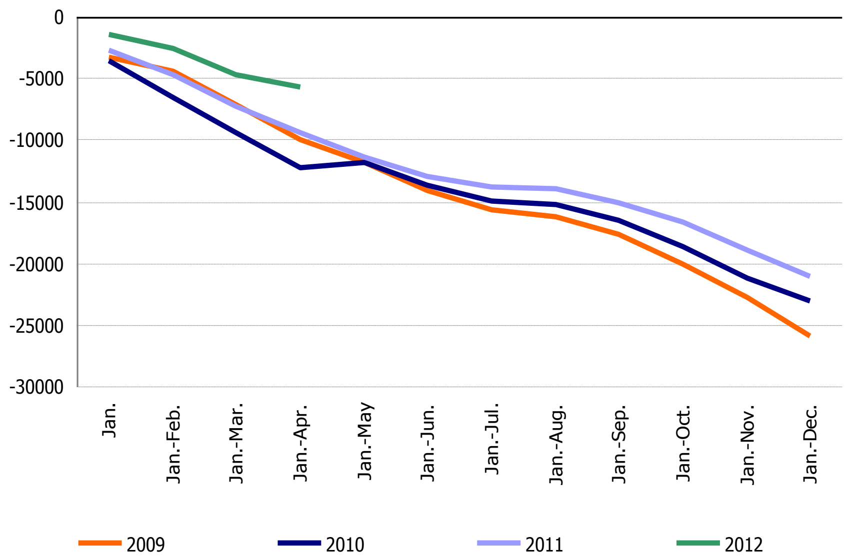


Source: Bank of Greece, Piraeus Bank Calculations

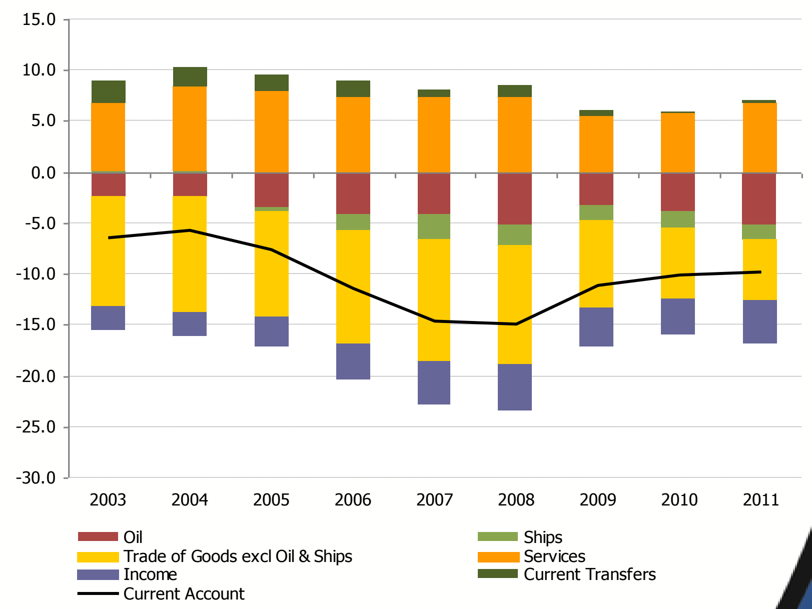
Balance of Payments

In 2011 the current account deficit fell by €1.9 bn, to €21.1 bn (9.8% of GDP) from €23 bn (10.1% of GDP) in 2010, mainly due to a decline in the trade deficit (exc. oil & ships) and an increase in the surplus of services balance.

Current account balance (mn €)



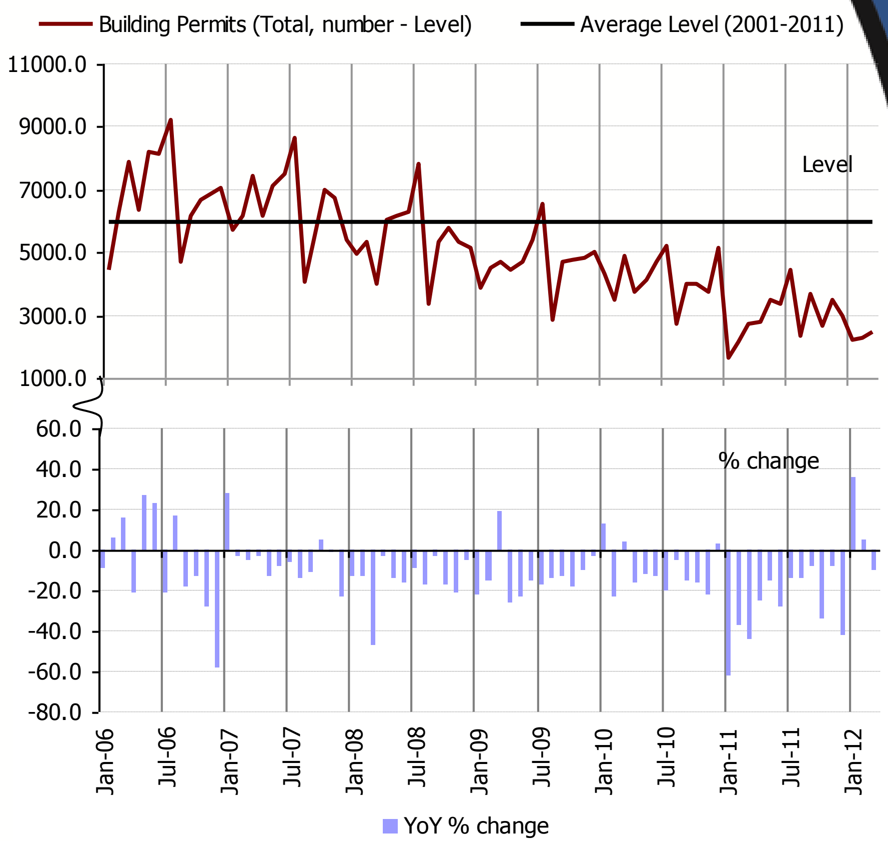
Current Account Decomposition (% of GDP)



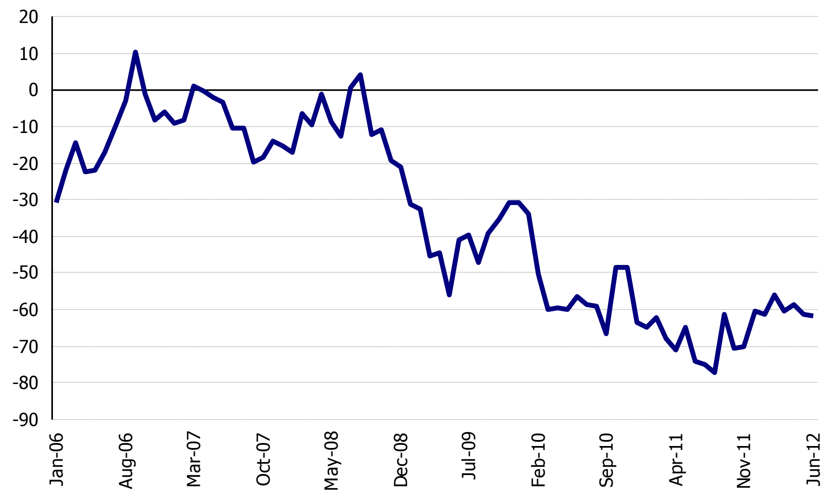
Source: Bank of Greece, ELSTAT, Piraeus Bank Calculations

The construction sector has been one of the hardest hit economic sectors. As a result, the construction confidence indicator remains extremely negative.

Building permits
(YoY % change & level)



Construction confidence indicator (sa)

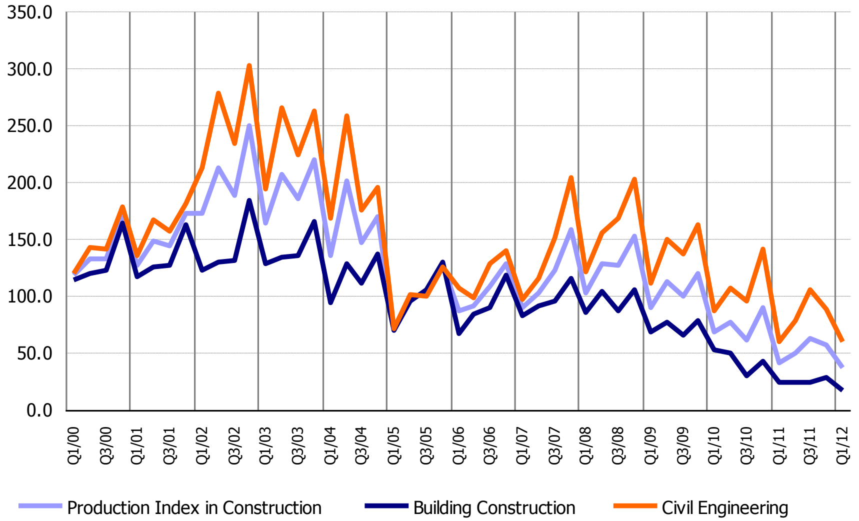


Source: European Commission, DG ECFIN, ELSTAT, Piraeus Bank Calculations

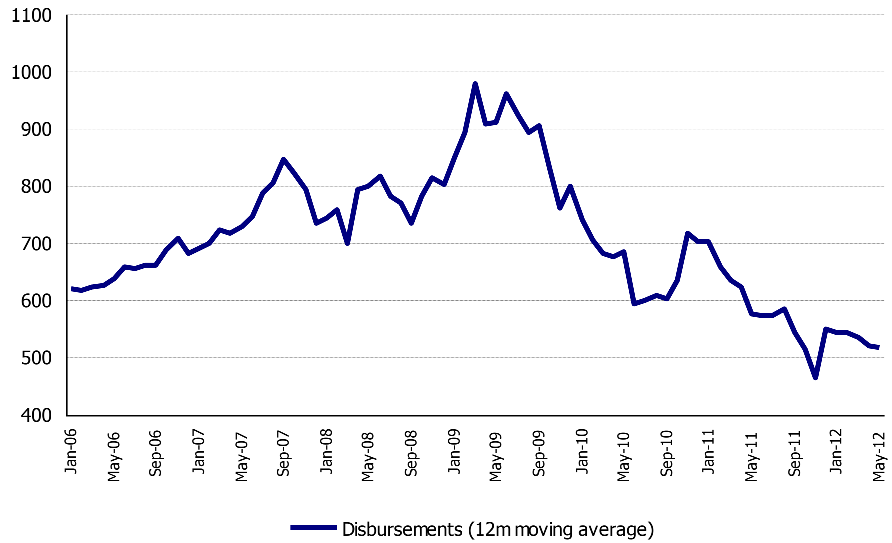
Construction – Public Investment Programme

The decline in both residential construction and infrastructure investment has pushed the Production in Construction index to very low levels. The drop in the Civil Engineering Index primarily reflects the under-implementation of the Public Investment Programme.

Production Index in Construction
(level, 2005=100)



Public Investment Programme (flows, mn €)



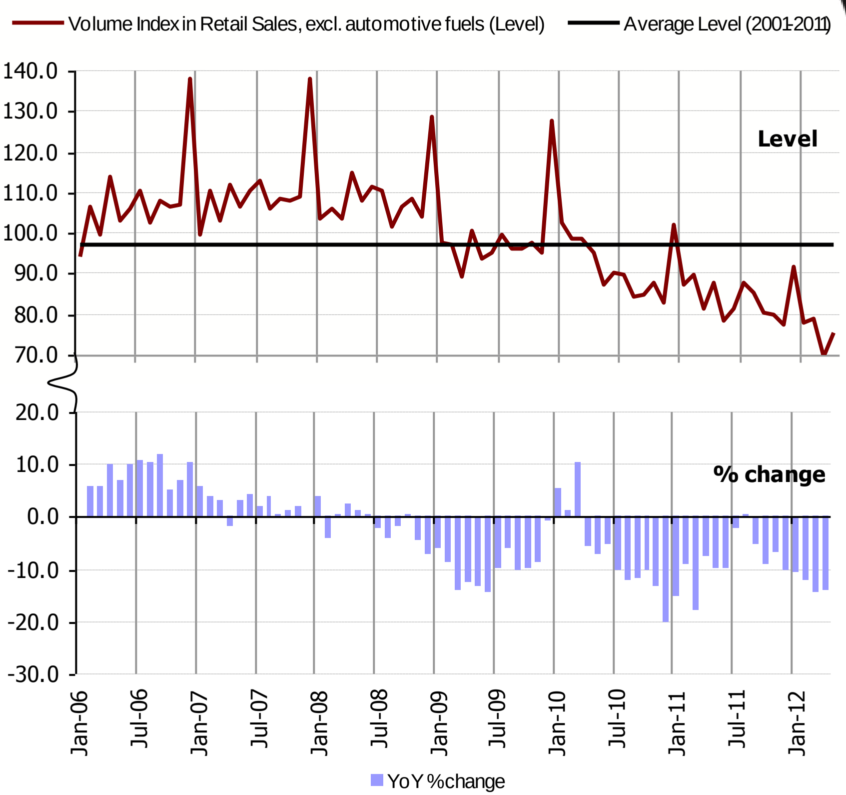
Source: MinFin, ELSTAT, Piraeus Bank Calculations

Business Environment - Retail Trade

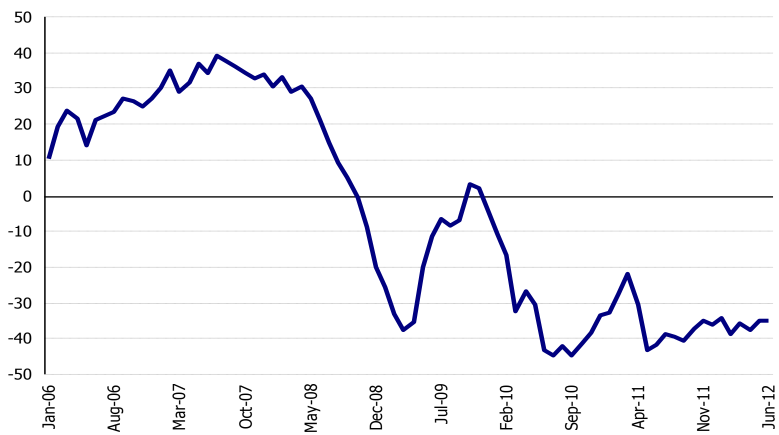
Higher indirect taxes, declines in disposable income and high unemployment have pushed consumption and retail trade to record lows.

Up to a point, such a shift away from consumption is desirable as part of the reorientation of the Greek economy.

Retail trade excl. automotive fuels
(volume, YoY % change & level)



Retail trade confidence indicator (sa)

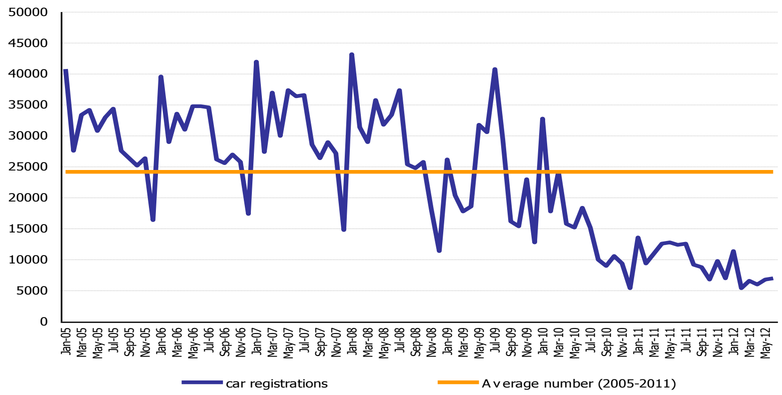


Source: European Commission, DG ECFIN, ELSTAT, Piraeus Bank Calculations

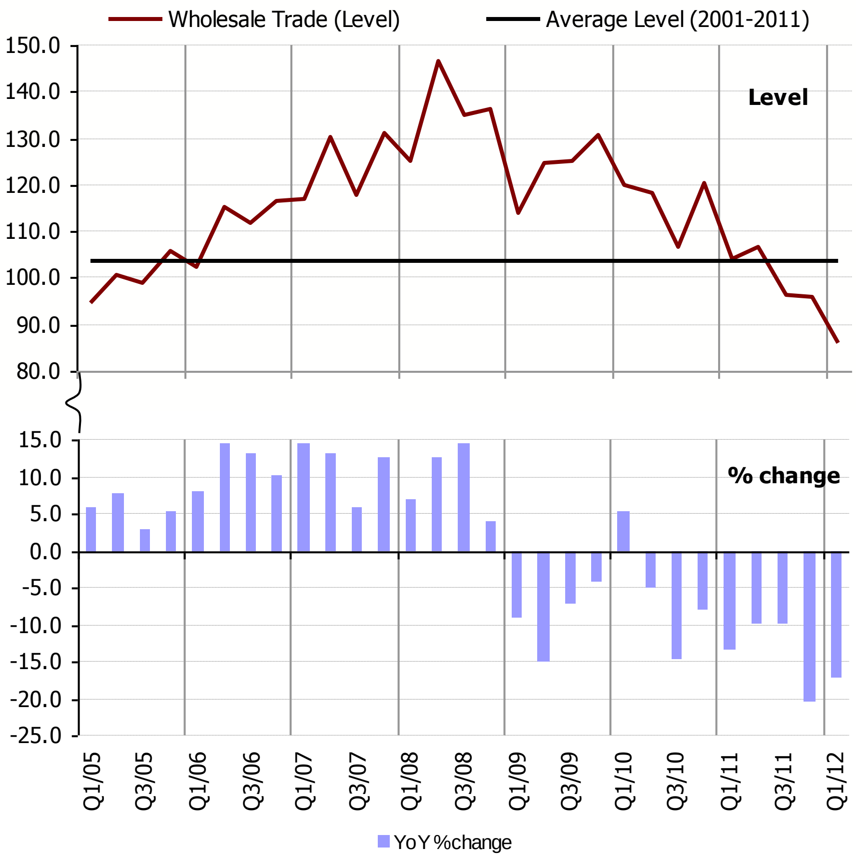
Business Environment - Wholesale Trade & Car Sales

Wholesale trade has been severely hit by the economic crisis. Also car sales are running well below their long-term average.

Car registrations
(number of cars)



Turnover index in Wholesale trade
(YoY % change & level)

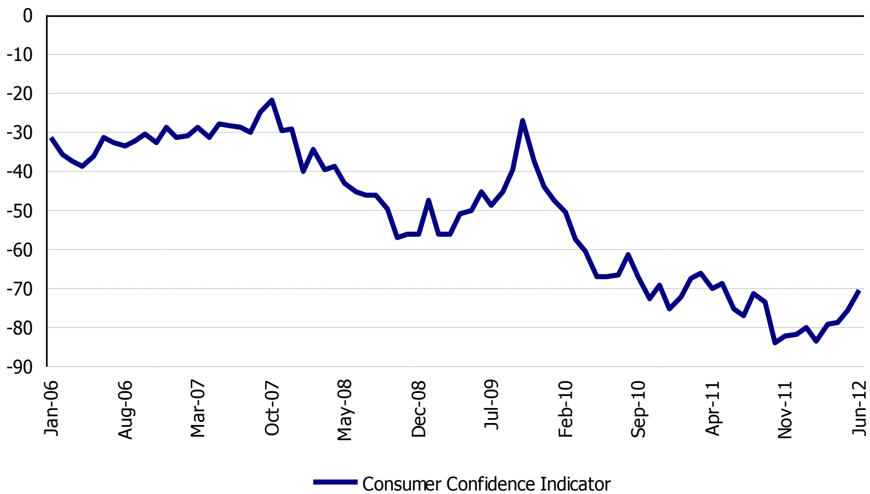


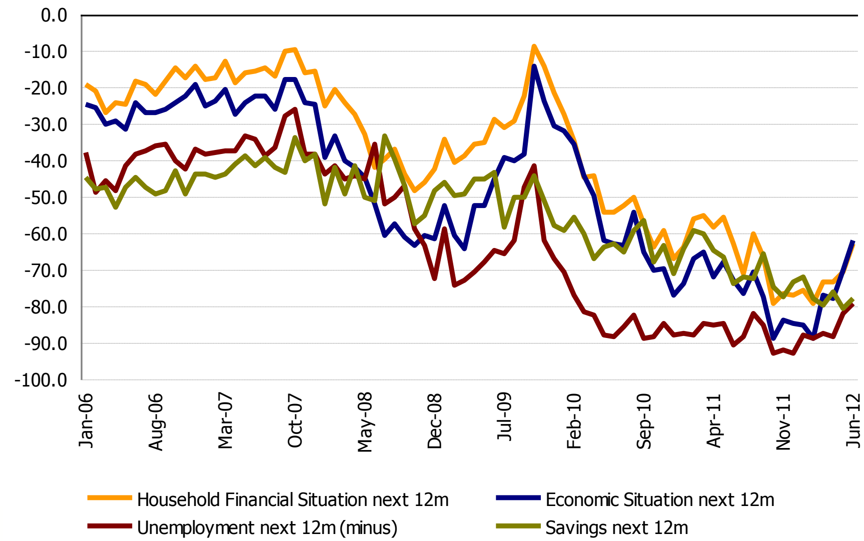
Source: ELSTAT, Piraeus Bank Calculations

Consumers - Households

Consumers are extremely pessimistic regarding every aspect of the economic environment. Estimates concerning the unemployment rate and the general economic situation have nearly reached the absolute minimum (-100) level of the index.

Consumer Survey Indicators (sa)



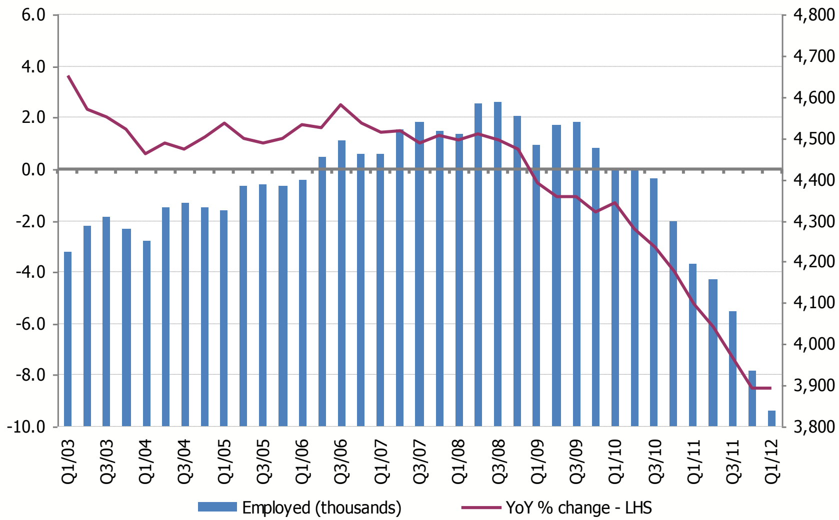


Source: European Commission, DG ECFIN, Piraeus Bank calculations

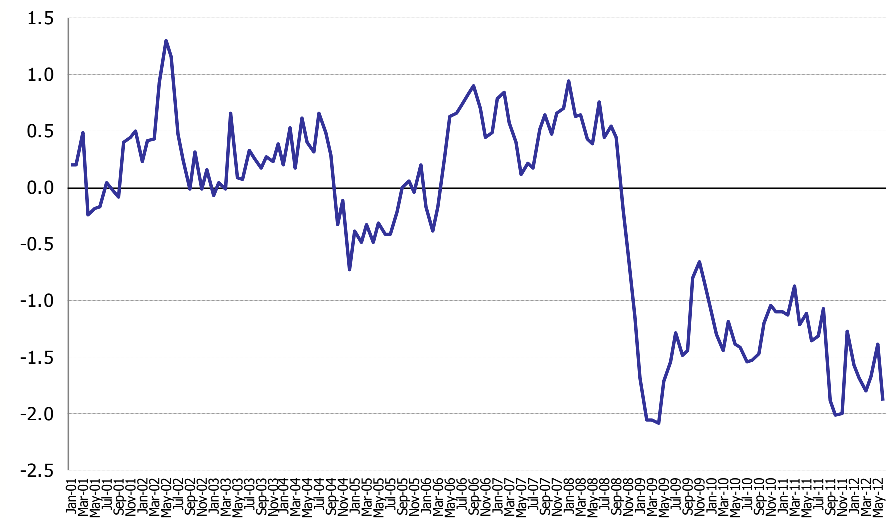
Labour Market (I)

Employment continues to decline (-8.5% in Q1/12), while hiring intentions, an index we created using the Business & Consumer Survey's employment related questions, remains extremely negative.

Employment
(YoY % change & level)



Hiring Intentions
(normalized data, sa)



Source: ELSTAT, European Commission DG ECFIN, Piraeus Bank Calculations

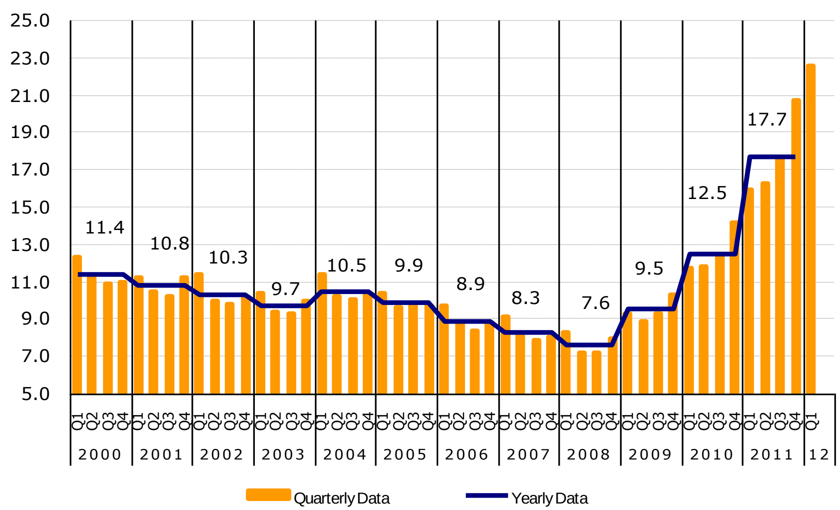
Labour Market (II)

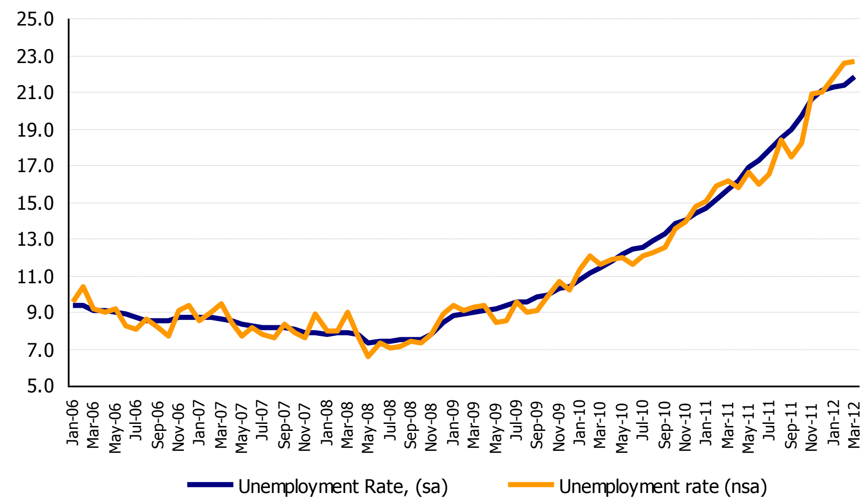
The unemployment rate climbed to 20.7% in Q4/11 due to the sustained downward trend in payrolls, driving the full-year unemployment rate to 17.7% of the labour force.

The plunge in employment of 8.5% in Q4/11 contributed to the hike in the unemployment rate. The main factor that has kept unemployment in check has been the decline in the participation rate, i.e. disappointed jobseekers dropping out of the labour force.

In Q1/12 the unemployment rate stood at 22.6%, while according to monthly non-seasonally adjusted data the unemployment rate in March reached 22.7% (vs 21.9% in sa data).

Unemployment rate



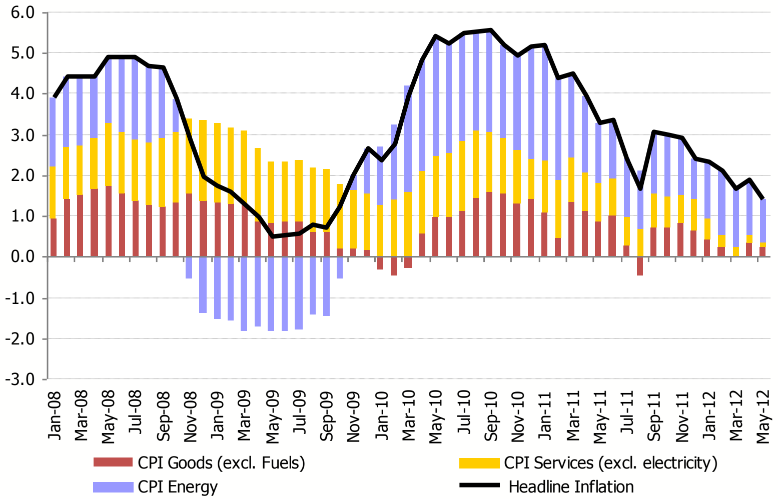


Source: ELSTAT, Piraeus Bank Calculations

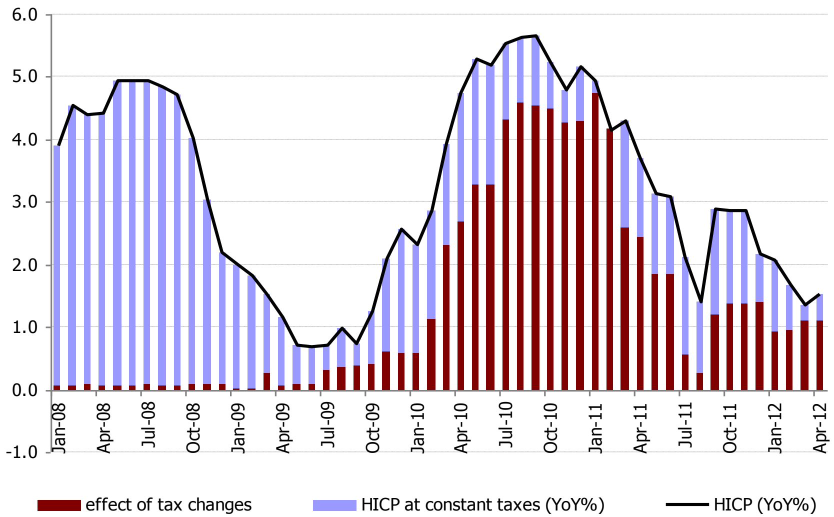
Inflation - Prices

- In 2011, inflationary pressures were still intense, despite the economic crisis. Inflation reached 3.3% down from 4.7% in 2010.
- The surge in inflation can be attributed to the spike in indirect taxes. Stripping out the effect of taxes, inflation has stabilised at approximately 1%.
- In May 2012, inflation decelerated to 1.4% from 1.9% in April, due to moderate increases in the prices of goods and services.

Contribution of CPI sub-indicators to inflation



Effect of tax changes



Source: ELSTAT, Eurostat, Piraeus Bank Calculations

Fiscal Sector: Budget Execution Jan-May 2012

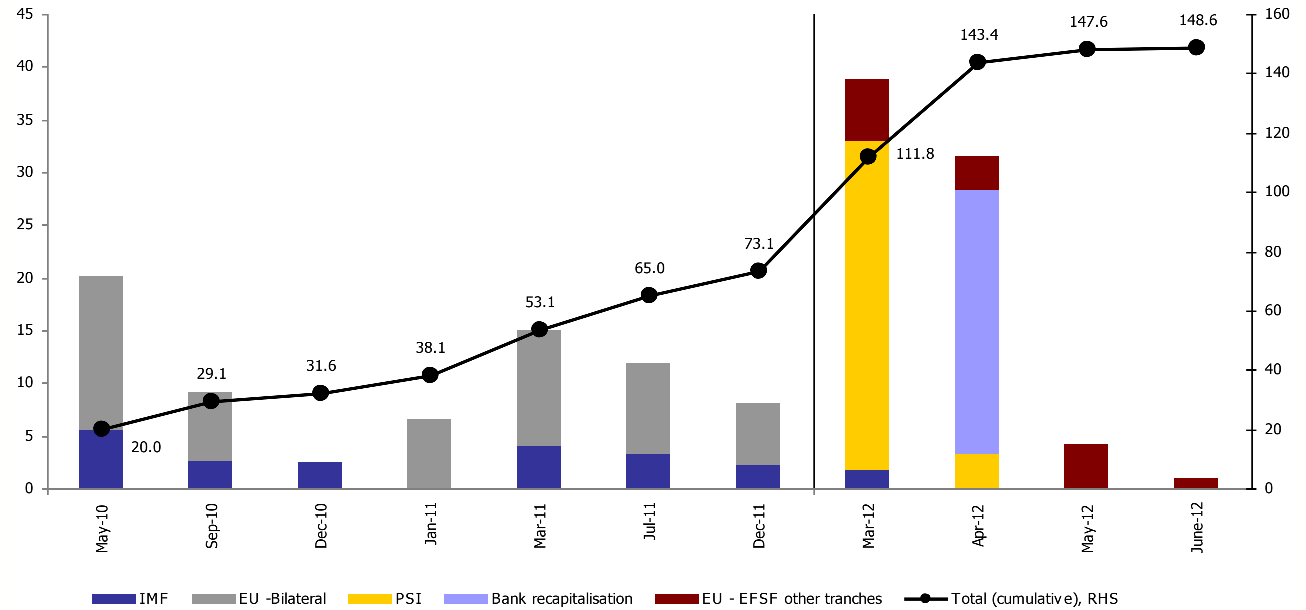
2012 Budget								
million €	2011	2012	Difference	Jan.-May 2012		2011	2012	
	Jan.-May	Jan.-May		Target 1/	Difference	Outcome 2/	Estimate 3/	Target 1/
Ordinary Budget	(1)	(2)	(2-1)	(3)	(2-3)	(4)	(5)	(6)
Net revenue	**18,358**	**18,173**	**-185**	**18,834**	**-661**	**50,091**	**51,409**	**51,409**
Revenues before tax refunds	20,592	19,404	-1,188	20,150	-746	54,217	54,949	54,949
Special revenue from licensing public rights	0	0	0	40	-40	1,157	270	270
Tax refunds	2,234	1,231	-1,003	1,356	-125	5,283	3,810	3,810
Expenditures	**27,747**	**29,243**	**1,496**	**30,753**	**-1,510**	**70,135**	**62,998**	**62,998**
Primary expenditure	21,292	20,093	-1,199	21,219	-1,126	51,548	47,685	47,685
Grants to hospitals for past debt settlement	375	392	17	390	2	435	400	400
Military procurement (on a cash basis)	64	72	8	230	-158	359	700	700
Guarantees called	172	160	-12	252	-91	1,445	1,163	1,163
to bodies classified inside the General Government	157	121	-36	193	-72	1,254	1,026	1,026
to bodies classified outside the General Government	15	39	24	59	-20	192	137	137
Net interest payments 4/	5,844	8,526	2,682	8,662	-136	16,348	13,050	13,050
Ordinary Budget balance	**-9,389**	**-11,070**	**-1,681**	**-11,919**	**849**	**-20,044**	**-11,589**	**-11,589**
PIP								
Revenue	673	1,493	820	1,758	-265	3,770	4,750	4,750
Expenditures	1,701	1,298	-403	2,735	-1,437	6,608	7,300	7,300
PIP Balance	**-1,028**	**195**	**1,223**	**-977**	**1,172**	**-2,838**	**-2,550**	**-2,550**
State Budget Balance	**-10,417**	**-10,874**	**-457**	**-12,896**	**2,021**	**-22,882**	**-14,139**	**-14,139**
State Budget Primary Balance	**-4,573**	**-2,349**	**2,224**	**-4,234**	**1,885**	**-6,534**	**-1,089**	**-1,089**

1/ Target included in the 2012 Supplementary Budget Law approved by Parliament in Feb. 2012. 2/ Total State Budget expenditures & revenues outcomes for 2011 are final however the distribution within categories will be confirmed in Q3 2012 following the submission to Parliament of the annual budget outcome review for 2011. 3/ The annual estimate reflects the macroeconomic outlook for the Greek economy and the target included in the 2012 Supplementary Budget approved by Parliament in Feb.2012. 4/ The interest expenditure for the first quarter of 2012 is analyzed as follows: a) Cash payments of approximately € 3.6 bn and b) accrued interest of approximately €4.9 bn paid via short term securities of six months maturity issued by the EFSF, to bondholders, due to the implementation of the first phase of the PSI agreement. Methodological note: The annual estimate of State Budget Revenue & Expenditure above (column 5) will be updated on a rolling basis throughout the year taking into account: a) Revisions in the macroeconomic outlook, based on quarterly economic forecast updates provided by the General Directorate for Economic Policy of the Min. of Finance, b) Fiscal developments based on infra-annual State Budget Execution data, c) Fiscal implications of changes in economic policy. Source: Ministry of Finance, Piraeus Bank calculations.

Combined Disbursements of the two Economic Programmes

Currently the combined disbursements of the two economic programmes amount to €148.6 bn, €73.1 from the first and €75.5 bn from the second. The total funds currently allocated to Greece amount €240 bn.

Disbursements of the Economic Programmes (€ bn)

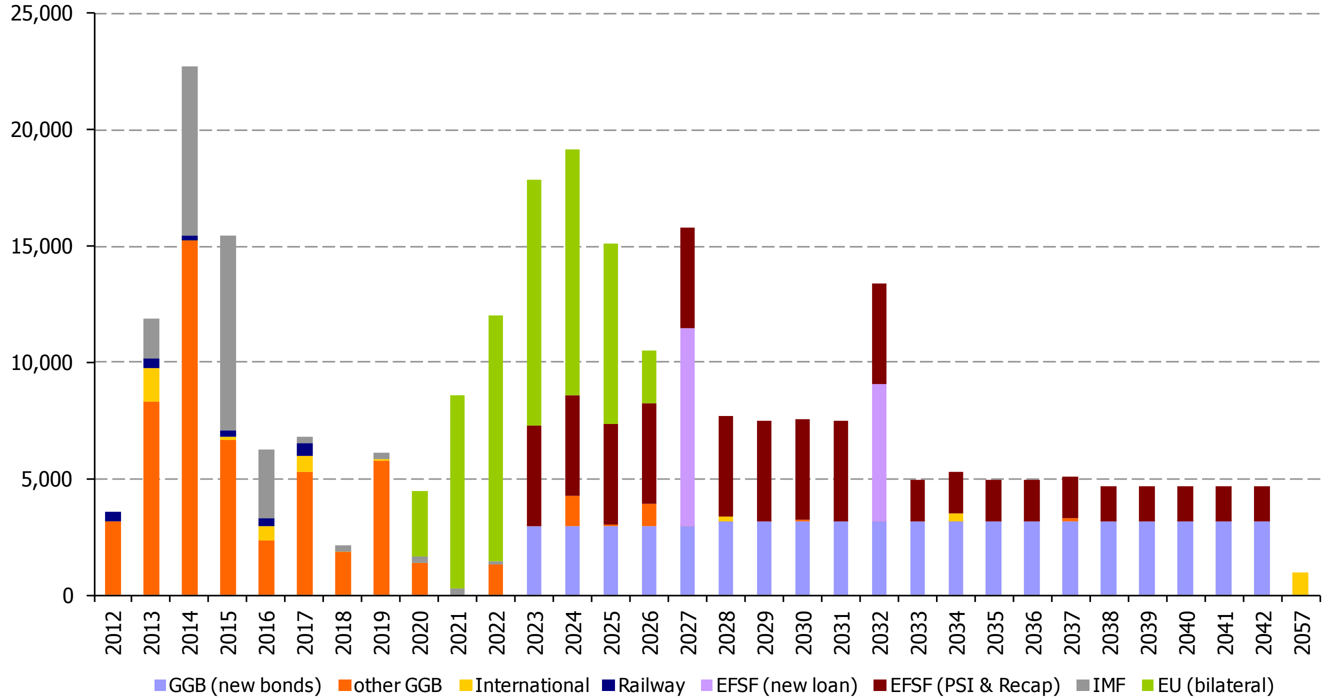


Source: MinFin, EFSF, Piraeus Bank Research calculations

Greek Government Debt Maturity Profile

After the completion of the PSI, the termination of the first economic programme and the initiation of the new Economic Policy Programme, the maturity profile of Greek Government debt spreads all the way to 2057.

Bonds and Loans Maturities (mn €)*



* Figures do not include short-term securities (T-bills) and € 19 bn related to Bank of Greece loans, special and bilateral loans, other internal and external loans and external securitizations.

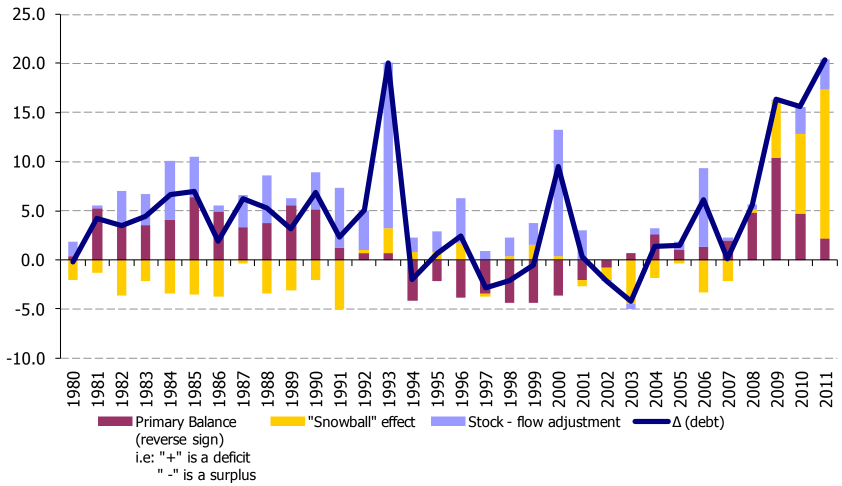
Source: MinFin, EFSF, Bloomberg, IMF Country report No12/57, March 2012, EU -The Second Economic Adjustment Programme for Greece March 2012, Occasional Papers 94/March 2012, Piraeus Bank Research calculations.

A bird's-eye view of the evolution of Greek debt

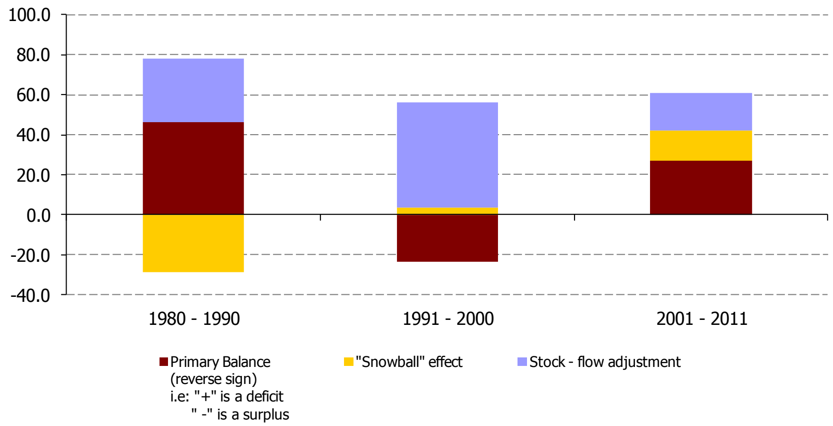
Based on the evolution of Greek Government debt since the beginning of the '80s, we can conclude that, in the past, the levels of Greek debt were driven primarily by massive stock-flow adjustments in 1993, 2000 and 2006.

From 2009 onwards, the evolution of the debt to GDP ratio has been driven by the snowball effect caused by the negative dynamics of nominal GDP vs debt servicing costs.

Driving Factors of Debt as % of GDP



Cumulative Impact on Debt Change as % of GDP



Source: Ameco Database, DG ECFIN: European Economy No.64/1997, Piraeus Bank Research calculations.

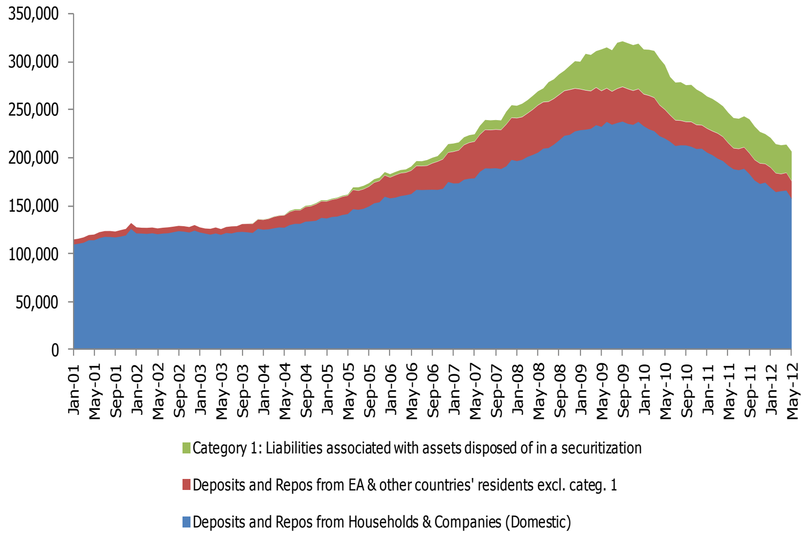
PIRAEUS BANK

Banking Sector (I)

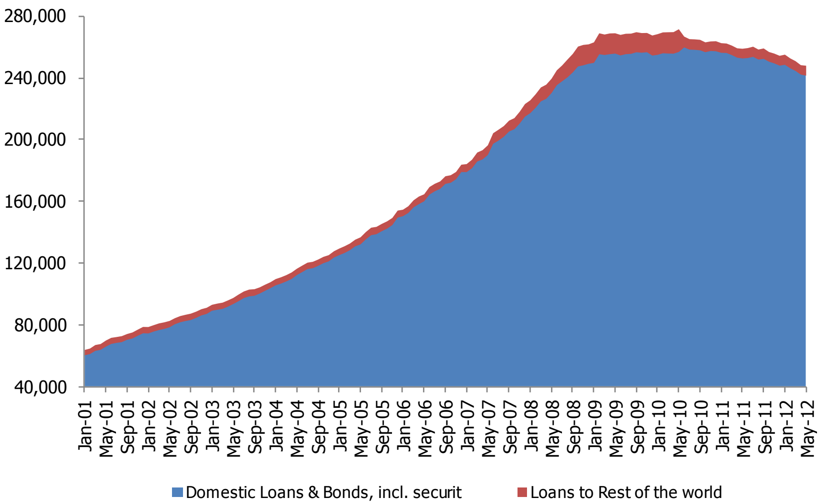
Total deposits & repos (excl. General Government) peaked at €274 bn in September 2009, but by May 2012 they had declined to €176 bn. This trend seems even stronger if we include, as part of non–euro area deposits, liabilities associated with securitization. In that case, deposits peaked at €321 bn in September 2009, but by April 2012 they had declined sharply to €206 bn.

After peaking at €272 bn in May 2010, loans have declined only slightly, to €248 bn by May 2012.

Total Deposits & Repos excl. GG (€ mn)



Total Loans & Corporate Bonds excl. GG (€ mn)



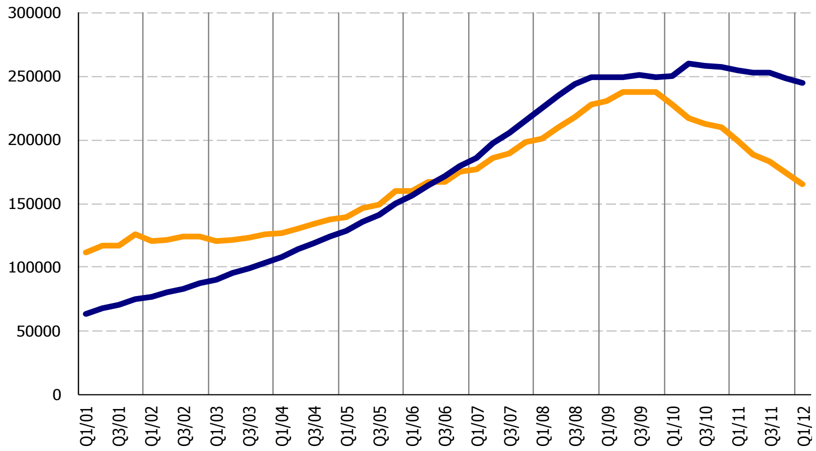
Source: Bank of Greece, Piraeus Bank Calculations

Banking Sector (II)

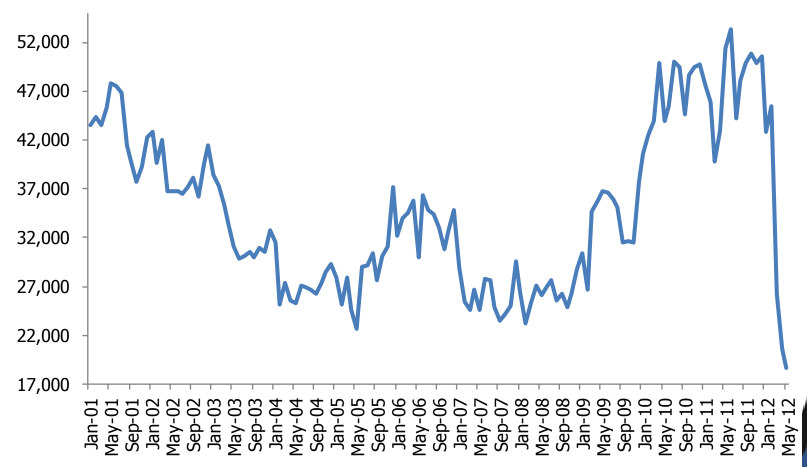
Greece experienced strong loan and deposit growth between 2000-2008. Since the beginning of the crisis, the gap between the two has continued to grow.

Moreover, both lending to General Government and Government bond holdings increased substantially between end-2010 and 2011 to €60 bn, crowding out the private sector.

Deposits & Loans, Domestic Private Sector
(stock, € mn)



Net Position with General Government*
(Assets – Deposits, € mn)



* In August 2011 domestic credit institutions registered a reduction in the value of their portfolio of Greek Government securities amounting to EUR 4 billion because of their participation in the securities exchange programme agreed by the EU Summit of 21st July 2011. In January 2012 credit institutions registered a further reduction in the value of this portfolio amounting to EUR 5.8 billion, and in March 2012 a reduction of EUR 15.2 billion.

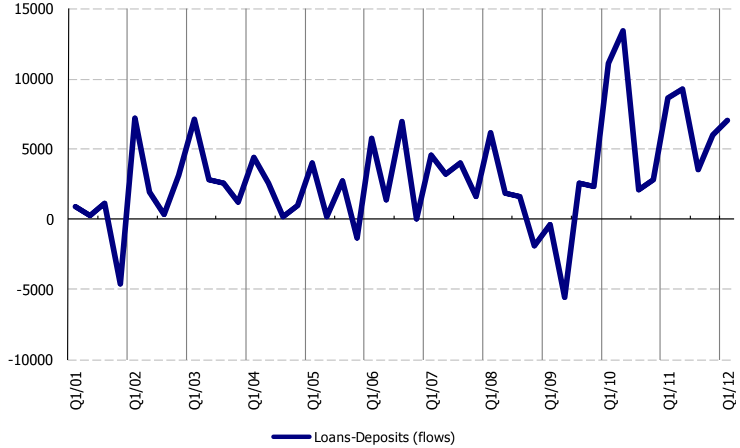
Source: Bank of Greece, Piraeus Bank Calculations

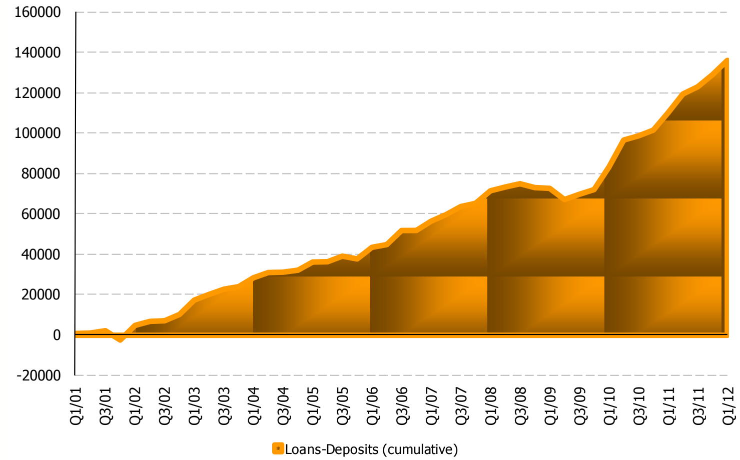
Banking Sector (III)

Given the strong domestic credit growth and Greece's economic expansion in the SEE area, the Greek banking sector has developed a funding gap.

This gap between the sources and uses of funds has been exacerbated by the recent capital flight.

Funding Gap in Domestic Private Sector (mn €)





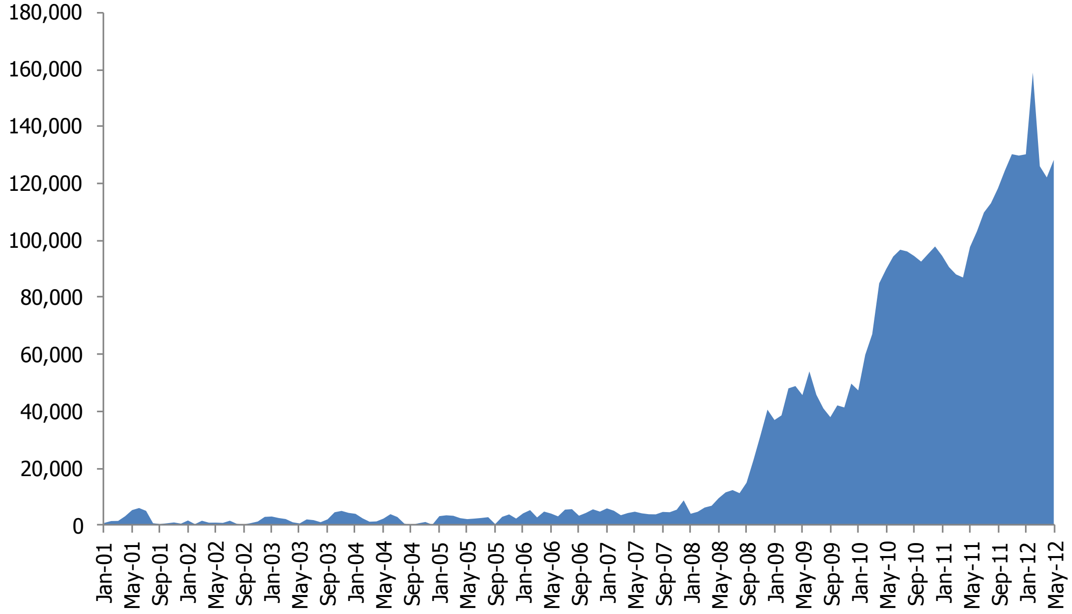
Note:
Funding Gap in Domestic Private Sector is calculated as the difference between the net flows of Loans minus the flows of Deposits & repos during the period.
Net flows of Loans are derived from changes in outstanding amounts corrected for reclassifications, loan write-offs and exchange rate variations.
Flows of Deposits & repos are derived from changes in outstanding amounts corrected for foreign exchange valuations and reclassification adjustments.

Source: Bank of Greece, Piraeus Bank Calculations

Banking Sector (IV)

Given the practical difficulties related to reducing the stock of loans and the detrimental impact that this massive deleveraging would have on economic activity, Greek banks had no option but to substitute the lost deposits with ECB funding. As a result, liabilities to the Eurosystem have increased from €4 bn in Jan 2008 to €128 bn in May 2012. An outlier was recorded in February 2012 (€159 bn), due to the PSI procedure.

Liabilities to the Eurosystem (mn. €)



Source: Bank of Greece, Piraeus Bank Calculations

Banking Sector (V)

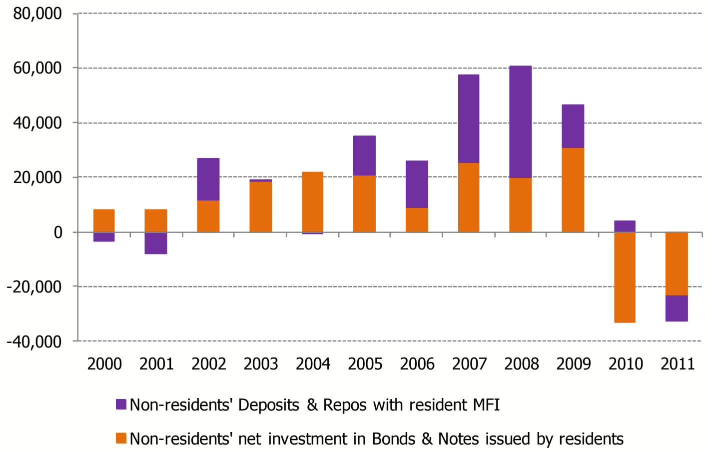
One issue that we have touched upon only briefly is that of the role of the Balance of Payments on the evolution of deposits in particular and liquidity in general.

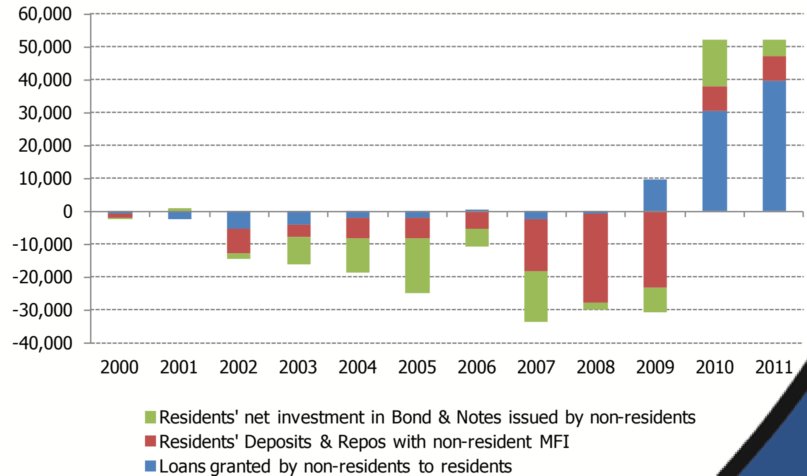
Whether a CA deficit affects the liquidity conditions in an economy depends mainly on the way it is financed:

Up until 2009, Greece serviced its financing needs by issuing (government & corporate) bonds and wholesale deposits. That is "good quality" liquidity that banks could use to grant new loans to Greek residents, create deposits, and so on.

Since the onset of the crisis, we have seen a massive reduction in this "good" liquidity which has been replaced by official lending from the "troika" loans as well as by some repatriation of intra-group corporate loans from foreign subsidiaries.

Sources of Funding (mn €)





Source: Bank of Greece, Piraeus Bank Calculations