Eurobank EFG Economic Research

Eurobank EFG

Greece: Macro Monitor

A Quarterly Review of the Greek Economy

December 2008

Global financial crisis weighs on Greek growth outlook

- **Domestic economic activity is expected to decelerate in both 2008 and 2009** weighed down by tighter credit conditions and a significant deterioration in global growth dynamics. We now expect real GDP growth to come in at 2.9% this year, before sliding further to 1.0%-1.7% *(interquartile range forecast)* in 2009.
- **Domestic inflation spiked sharply higher in the first three quarters of 2008,** fuelled by higher input costs and accelerated wage growth. Yet, retreating demand-side pressures, lower energy prices and favorable base effects are likely to facilitate some moderation in year-on-year CPI during the last quarter of this year. In 2009, we see disinflation accelerating, with the average annual CPI rate retreating below 3.5%.
- Despite expectations for an improvement in budget revenue growth in late 2008, we see **upside risks to the 2.5%-of-GDP target for the budget deficit this year**, especially if efforts to crack down on tax evasion and reduce discretionary spending fail to yield the expected results. Meeting the 2009 fiscal deficit target of 2.0%-of-GDP also appears challenging, in view of pronounced downside risks to the domestic economic outlook and the new budget's optimistic revenue-growth projections.
- **A certain portion of the more recent *(Dec. 2008)* spike in the Greek bond yield spreads appears to be country-specific** i.e., not fully explained by developments in other Eurozone-periphery government bond markets. If the current yield-spread levels persist for the greater part of H1 2009, then the *incremental* fiscal impact – i.e., via higher interest costs on new debt – could *ceteris paribus* be in the order of € 150-200mn next year *(or between €750-1,000mn over a period of 5-6 years).*

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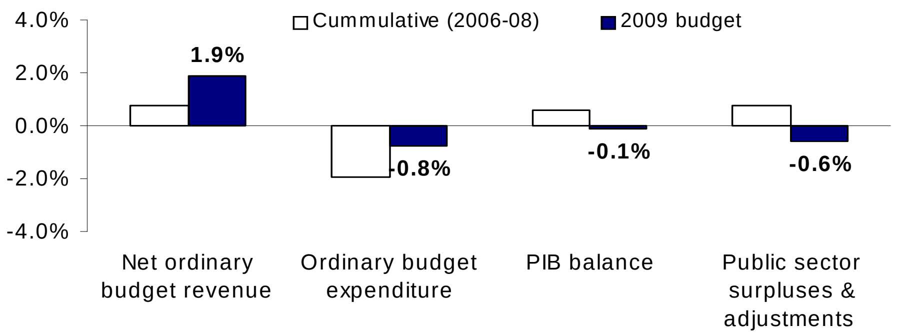
Read also in this issue:

- A brief presentation of the main results of our special estimation and simulation **analysis on the potential implications of a reduction in credit availability on the real rate of growth** of the Greek economy.
- A special focus on the recent **developments and outlook of the Greek tourism** sector.

Contribution to the cummulative adjustment in the Greek general government budget balance (ppts of GDP)



Greece: key macro indicators

GDP growth & components	2008	2009F (1st scenario)	2009F (2nd scenario)
GDP (constant prices)	2.9	1.0	1.7
Private Consumption	2.1	1.6	1.8
Public consumption	2.7	2.5	2.5
Gross investment	-0.1	-1.0	0.5
Domestic demand	1.8	1.1	1.6
Exports g&s	2.8	-1.0	0.5
Imports g&s	-0.5	0.0	0.5

	2007	2008	2009F
National CPI (average)	2.9	4.4	3.0
Budget deficit (% GDP)	3.5	3.0	3.0
C/A deficit (% GDP)	14.2	14.0	12.0
Unemployment rate	8.3	9.0	9.2

Source: Realised (offical) data & EFG Eurobank forecasts

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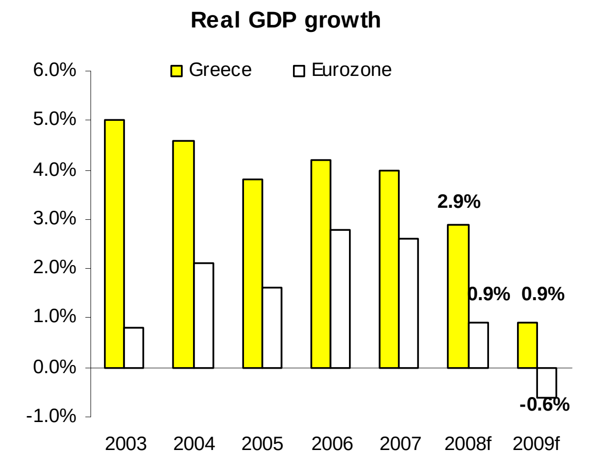
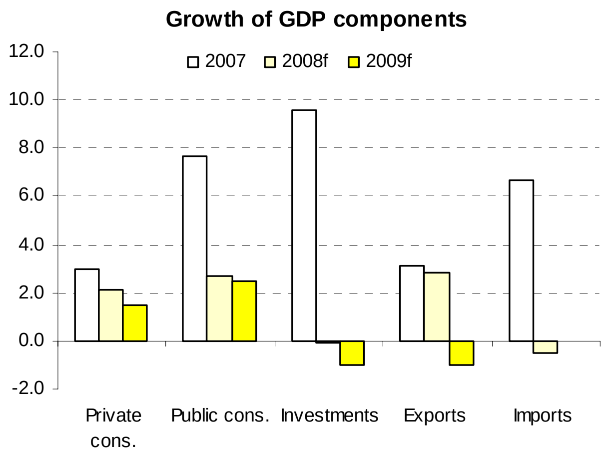
Macroeconomic Overview

Domestic economic activity remains on a decelerating path, weighed down by tightening credit conditions and a significant deterioration in global growth dynamics. According to the latest national accounts statistics, Greek GDP recorded real growth of 3.3% YoY in the first three quarters of 2008 *(seasonally adjusted data)*, after rising by 4.2% YoY in the same period a year earlier. Data for Q4 2008 is not yet available, but we expect the general dynamics of GDP components witnessed in H1 to continue in the last quarter of this year. Namely, contracting growth in fixed investments, chiefly as result of worsened conditions in the residential construction sector and decelerating, though still positive, growth of private consumption. Preliminary data for January-September showed gross fixed capital formation contracting by 13.5% YoY, after rising by 7.4% YoY in the same period a year earlier along with a pronounced slowdown in final consumption growth to 2.6% YoY, from 3.9% in 2007. On a more positive note, the overall external sector recorded an improvement, but this was mainly the result of a sharp deceleration in the growth of imports of goods and services *(1.3% YoY vs. 7.6% YoY in the same period of 2007)* rather than higher exports *(4.3% YoY vs. 2.7% YoY)*.

For the year 2008 as a whole, we forecast real GDP growth to decelerate to 2.9%, from 4.0% in 2007 and against our earlier growth projection of 3.1%. Private consumption in the first three quarters of this year continued to derive support from wealthy growth in household disposable incomes as a result of higher average nominal pre-tax earnings, declining unemployment, lower income tax rates and higher social transfers *(17.9%-of-GDP in 2008 vs. 17.3%-of-GDP in 2007)*. Yet, full-year private consumption growth is expected to ease to 2.1% YoY, weighed down by tightened credit conditions and the recent nose-diving of consumer sentiment. Gross Investment is also expected to decelerate in 2008, mainly reflecting a further decline in residential investment *(-32.7% YoY in Q3)* due to tighter credit and a saturation of housing demand after strong gains in recent years. Activity in the residential sector is likely to remain stagnant at best in the remainder of this year and, again, during the greater part of 2009, but a gradual recovery is possible thereafter as the stock of issued, but not yet used, building permits remains high and fundamentals in the sector continue to be generally favorable. With regard to price developments in the residential sector, the most recent data shows that the first half of this year witnessed a continuation of the deceleration trend in the general level of prices that began in early 2006. Yet, home prices remain at relatively satisfactory levels, as building costs continue to rise at above-inflation rates and constructors are not currently facing urgent liquidity problems. According to Bank of Greece data covering a number of residential areas outside Athens, the average growth of home prices was 2.3% YoY in H1 2008 compared to 3.8% YoY last year. In Athens, residential prices recorded average growth of 3.5% in 2007, while the general cost index for the construction of new residential building rose in H1 2008 by 4.5%, following growth of 4.4% in the prior year.



Source: National statistics, EC, Eurobank EFG

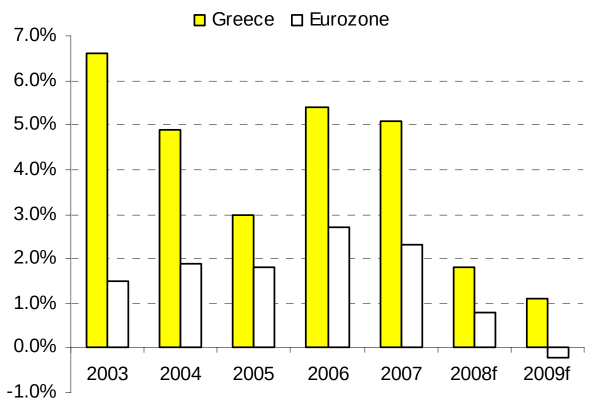


Source: National statistics, EC, Eurobank EFG

In view of the continuing decline in building permits *(-15.8% YoY cumulatively in January-October 2008)* and the marginal rise in cement production over the same period, total investment in the construction sector is expected to register negative growth this year after rising by 1.9% YoY in 2007. On a more positive note, business investment *(+10.3% YoY in 2007)* is expected maintain small positive growth, assisted by healthy corporate balance sheets, recent tax cuts, EU structural funds and the implementation of projects aiming to reap the benefits of the new investment law and new regulatory framework for public-private partnerships. Public investment is expected to growth at a rate slightly higher than 2% vs. 1.7% in 2007. Looking ahead, the prospects of business investment are clouded by a significant degree of uncertainty due to global economic slowdown and the lingering credit crunch. With regard to external sector developments, the contribution of net exports is likely to become marginally positive this after subtracting some 1.5ppts off GDP growth in 2007.

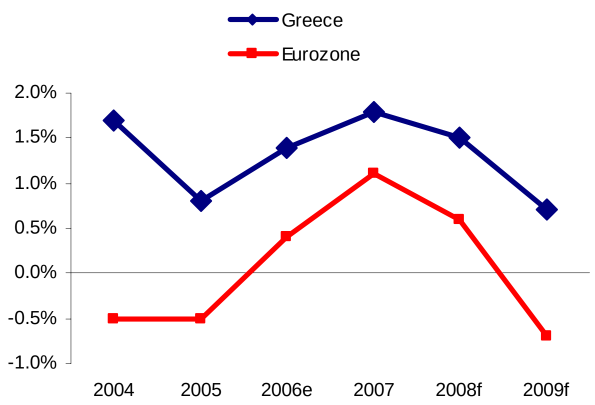
According to the European Commission's Autumn 2008 forecasts, the Greek economy is expected to grow by 2.5% next year, a rate slightly lower than that envisioned in the country's new budget plan. Eurobank EFG´s revised baseline forecasts for 2009 are distinctly more downbeat, envisioning a significant deceleration in domestic economic activity. Specifically, under a scenario in which domestic credit expansion does not retreat below 10% YoY next year, growth in Euro zone returns to positive territory in H2 2009 and the majority of trading-partner economies in New European avoid a hard-landing *(i.e., protracted and pronounced recession)*, we see Greece's GDP growth easing next year to a rate falling between our inter-quartile forecast range of 1.0%-1.7% YoY. Main downside risks to our projections include a less favorable growth trajectory in major trading-partner economies and a bigger-than-expected deceleration in domestic consumption and investments, as a result of tighter domestic lending conditions. These are likely to outweigh continuing real wage gains, lower income taxes and higher social benefits, while public consumption growth will need to decelerate further in order to prevent a significant overshooting of the, admittedly ambitious, 2009 budget targets. On a more positive note, the Greek economy can continue to rely on such shock absorbers as its below-average reliance on exports, incoming structural funds and support to household purchasing power from lower oil and food inflation. We expect domestic demand to rise by slightly more than 1.0% YoY next year, with the external sector exerting a broadly neutral contribution to overall GDP growth. Meanwhile, the persistent and widening ULC growth differential vis-à-vis main trade partners will likely erode competitiveness further and result to a relatively subdued performance of exports of goods. On the other hand, the growth of transportation services *(mainly from shipping)* is likely to retreat sharply from its strong pace in recent years, while tourist receipts will be negative affected by the significant slowdown in major partner economies. With regard to domestic demand developments, we expect residential investment growth to decline further this year, while business investment will likely record broadly stagnant growth, deriving some support from relatively healthy corporate balance sheets, EU structural funds and the expected implementation of projects aiming to reap the benefits of the new investment law and new regulatory framework for public-private partnerships.

Real domestic demand growth (yoy)



Source: National statistics, EC, Eurobank EFG

Output gap relative to potential GDP



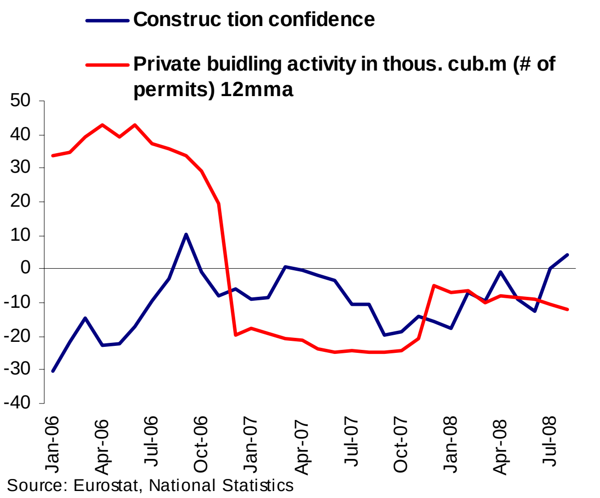
Source: EC Autumn 2008 forecasts

With regard to more high-frequency indicators of domestic economic activity, retail sales *(volume terms)* posted average year-on-year growth of -0.4% YoY in January-September 2008, after rising by 2.9% YoY in the same period in 2007. Separately, registrations of new passenger cars declined by 4.1% cumulatively in the first nine months of this year after growing by 5.3% YoY in the same period a year earlier. Extensive industrial action by trade unions ahead of the passage in parliament of a new law for reforming the social security system negatively affected retail sales early this year. Sales recovered somewhat in the second quarter, but the overall picture points to a further retrenchment of consumer spending as a result of tighter credit conditions and the brad-based economic slowdown. With regard to expectations of domestic consumers and retailers, the EC retail trade confidence indicator for Greece hit a 10-year low in November, reflecting worsened conditions in the domestic retail market, while the consumer confidence index dropped in the same month to its lowest point on record, tracking the nose-diving of relevant indicators of consumer vigor in the euro area.

In the industrial sector, total output in the first nine months of 2008 contracted by 2.2% yoy cumulatively, weighed down by weaker manufacturing and lower mining and power production. Manufacturing output growth declined by 2.6% yoy over the same period, affected by soaring input costs, decelerating export orders, a two-week transport strike by truckers in May and a spoiled seed-oil scandal that temporarily shut down manufacturing of by-products like margarine and other processed food. Reflecting these negative developments, the index of business expectations in manufacturing declined in November to levels not seen since the early 80s, while the Greek purchasing managers´ index (PMI) slipped below the boost-burst threshold of 50 in October. On a more positive note, the PMI manufacturing index for Greece remained above both the Eurozone average level and the 50 mark during the first three quarters of the year, despite worsening external conditions and sharp rise in input costs. This strong performance was driven by healthy domestic demand conditions and strong exports to new fast-growing markets in the broader region.

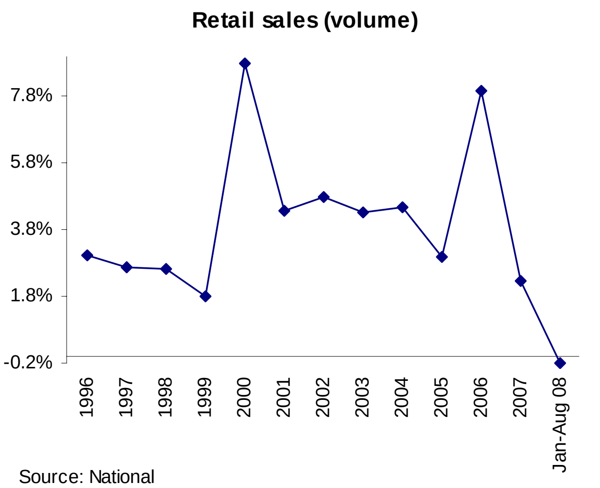
In the domestic labor market, the unemployment rate retreated further hitting 7.2% in the second quarter of 2008, from 8.1% in Q1 2007, but weakening domestic demand and worsening external conditions are likely to put upward pressure on the jobless rate in the coming months. Employment in Greece continues to lag that in the EU-15, reflecting persisting structural rigidities in the domestic labor market as suggested by the high unemployment among youngsters and women as well as the low level of part-time employment

From a medium-term perspective, economic prospects remain generally favorable though, given the severity and duration of the global credit crunch, we view the balance of risks as being skewed towards lower-than-previously-anticipated growth ahead.



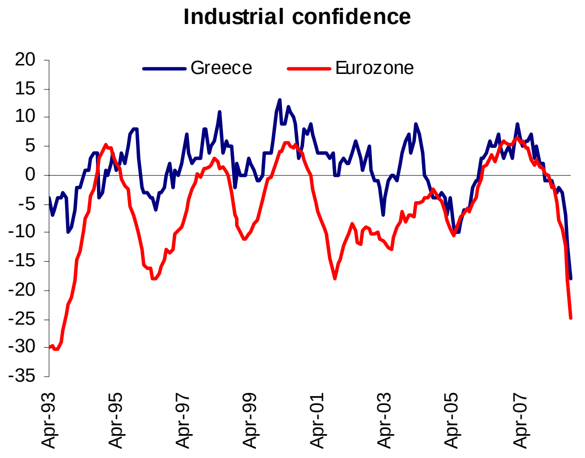
Source: Eurostat, National Statistics

Source: EC

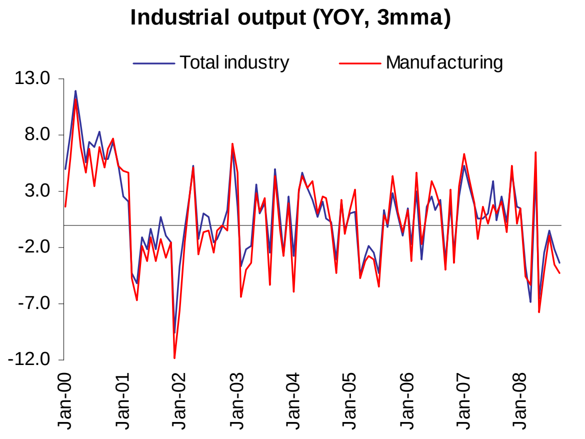


Source: National

We now forecast sub-2.0% annual GDP growth rates over the coming 2-3 years. Variations in the composition of future growth compared to this year's outcome are likely to be marginal, with economic activity remaining mainly demand-driven. Strong productivity gains thanks to heavy investment in infrastructure in recent years, a further expansion of the Greek shipping fleet and the implementation of several large-scale energy interconnection projects in the natural gas, electricity and oil sectors are likely to continue supporting domestic growth as well as the export orientation of the economy. On a less positive note, the external sector will likely remain a drag on economic growth, restraining the economy's debt-servicing capacity and posing risks to medium-term economic growth. Such risks may become particularly pronounced in the period ahead, given a more difficult external environment and the fading out of exceptional factors that supported growth in recent years, including the collapse of domestic interest rates post-EMU entry and the hosting of the 2004 Olympic Games.



Source: Eurostat



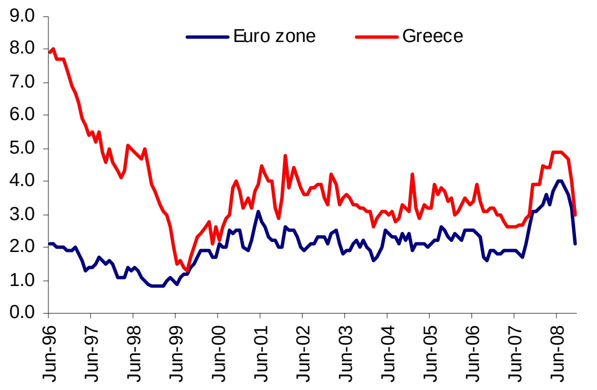
Source: National Statistics

Inflation

A new significant rise in world energy and food prices, high wage growth and second-round effects from past increases in input costs put sharp upward pressures on domestic inflation in the first seven months of 2008 (*CPI hit a seven-year high of 4.9% YoY in June-July)*. These factors more-than-counterweighed the disinflationary effects from the stronger euro, moderating domestic demand and declining business-sector profitability over the same period[1]. Similar trends were also recorded with regard to core inflation, which accelerated in the first months of this year, hitting 3.8% YoY in August, from 2.8% YoY in late 2007. For the whole year, we continue to expect a significant rise in annual year-on-year CPI to 4.4%, from 3.0% in 2007 and an average annual rate of 3.3% in the period 2001-2007. The supply-side shocks that affected the global economy in late 2007 and, again, during the first half of this year, had a pronounced effect on the Greek economy, owing both to less-than-satisfactory competitiveness conditions in key sectors of the domestic economic activity and the high oil-dependency of the domestic production base[2]. These effects were exaggerated by a further acceleration in the growth of domestic unit labor costs (ULCs).

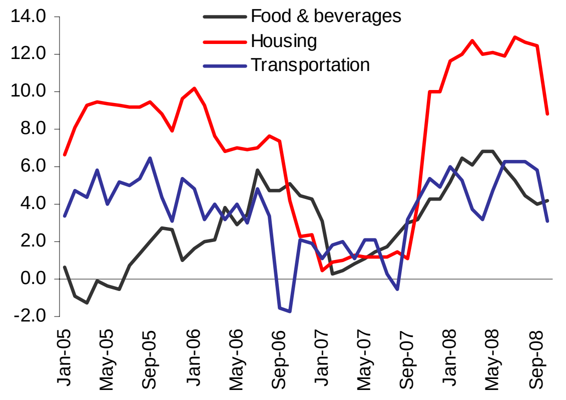
According to BoG estimates, the rise in the non-agricultural-sector ULCs was 5.3% YoY in 2008, compared to 4.2% YoY in 2007. The acceleration has been mainly the result of higher before-tax earnings growth *(6.7% YoY this year vs. 5.4% YoY in 2007)*. More specifically, according to the 2008 budget plan, gross per-head wage outlays in the public sector are projected to rise by 8.8% YoY this year, following growth of 4.5% YoY in 2007. In the business sector, the most recent collective round of negations between social partners for the setting of minimum wages in the private sector concluded with an agreement for average wage increases of 6.2% YoY and 5.7% YoY in 2008 and 2009, respectively.

Harmonised CPI (yoy)



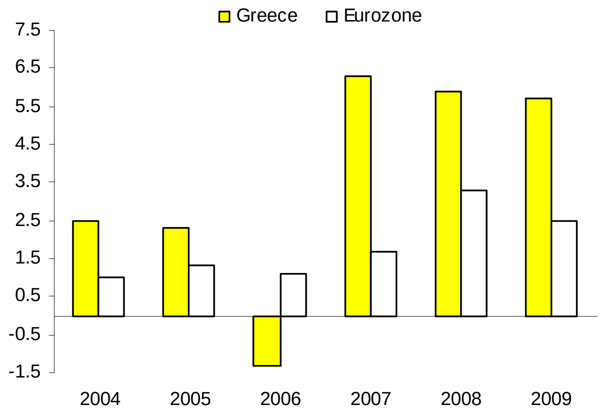
Source: Eurostat

Selective Greek CPI sub-indices (yoy%)



Source: National Statistics

ULC growth, whole economy



Source: EC, autumn 2008 forecasts

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[1] According to the most recent data, the profit margins of listed domestic companies in the Athens Stock Exchange (ASE) have declined this year after rising in 2007. For the first half of 2008, a sample of 255 listed non-financial companies showed a 20.3% YoY rise in total turnaround along with a 7.7% YoY decline in pre-tax profits. If one excludes from the sample two refineries that recorded significant growth in profitability and sales, then the realized growth in total turnaround falls to 10.7% YoY, while the decline in pre-tax profits amount to 13.6% YoY.

[2] Food prices contributed around 0.99ppts to the overall rise in Greek CPI in January-August 2008, while the corresponding contribution to the average Euro zone inflation was 0.92ppts. Fuel prices added 1.43ppts to domestic CPI over the corresponding period vs. 1.08ppts in the Euro zone. The weight of food and energy prices in the Greek CPI index is 22.3% compared to 19.9% in the Euro zone.

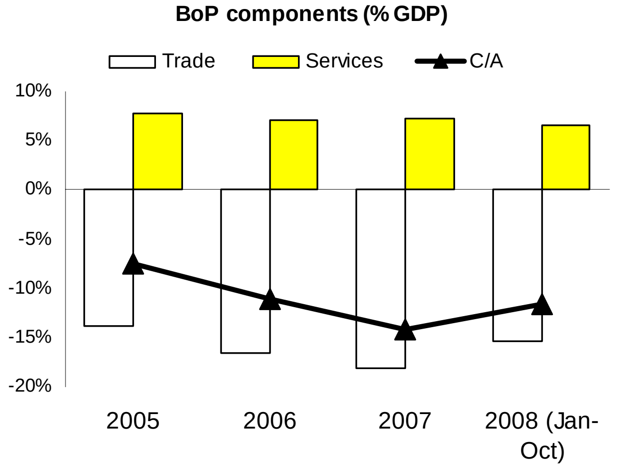
In a sectoral level, the wage agreements reached so far in the non-banking private sector have not deviate much from the aforementioned rates. In the euro area, per-head wage costs *(including employer contributions)* have also accelerated this year, pushing average ULC growth to an estimated 3.3% YoY, from 1.5% YoY in 2007 *(Autumn 2008 Economic Forecasts).* As a result, unit labor costs in Greece continue to grow at a much faster pace that in the rest of the euro area, thus contributing to the corresponding inflation differential[3]. Recently, this differential was exacerbated by certain transitory factors, including the sharp spike in world food and energy prices in the period July 2007-July 2008, which particularly affected the Greek economy, thanks to its relatively higher dependency on oil.

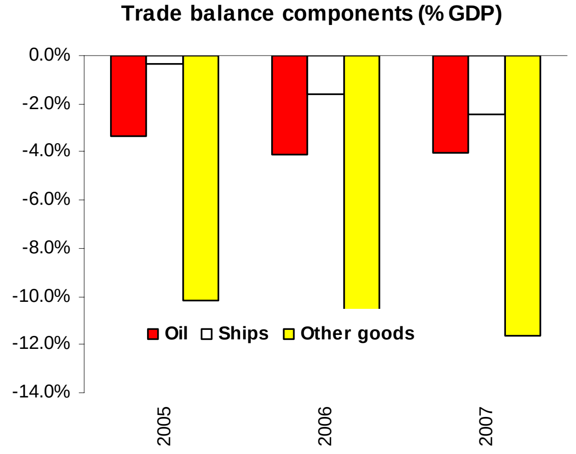
On a more inter-temporal basis, Greece's inflation differential vis-à-vis trading partners is also the result of more persisting factors, including pronounced demand-side pressures in recent years, inadequate competitiveness conditions in key domestic goods and services markets and acute labor-market rigidities. Notwithstanding the sharp rise in the food and energy components in January-July 2008, a small deceleration was noted in the domestic prices of industrial goods excluding food and energy products as well in the prices of services over the same period. Furthermore, the sudden reversal in world oil prices since August and favorable base effects have allowed domestic inflation to resume its downward trend during the last couple of months *(headline CPI eased to 3.9% YoY in October).* For next year, we see disinflation accelerating, with the average annual CPI rate retreating towards 3.0%. It has to be noted, however, that the forecasts for the evolution of domestic inflation in the coming 12-months-period are surrounded by significant uncertainty due to the high degree of ambiguity regarding the current state of the world economy as well as the future trajectory of the prices of oil and other base commodities.

[3] The Greek-Euro zone harmonized consumer inflation differential stood at 0.8ppts in October, same as in January 2008 and compared to 1.2ppts in January 2007.

Balance-of-payments
BoG´s settlement data for the first nine months of 2008 revealed a further deterioration in the current account balance, which saw it deficit rising by around 16.7% YoY to €24.6bn *or 10%-of-estimated GDP.* This was mainly on the back of year-on-year increases in the deficits of the trade and, to a less extent, the income account balances. These were only partly outweighed by higher surpluses in the balances of services and current transfers. A higher oil-imports bill vs. a year earlier accounted for around 78.5% of the €4.34bn widening in the trade deficit in January-September 2008, while the contributions of the net payments for purchases of ships and the trade balance excluding oil and ships were 3% and 18.6%, respectively. With regard to the trade balance excluding oil and ships, export receipts grew by 17.0% YoY, while the corresponding import bill rose by 8.1% YoY. In the services balance, the corresponding surplus expanded by 8.7% YoY, thanks to higher receipts from merchant shipping *(+22.5% YoY).* Net travel receipts rose marginally in the first three quarters of this year as travel spending in Greece by non-residents showed a limited increase *(4.0% YoY),* while travel spending abroad by residents grew by 12.5% YoY. Also on a positive note, a significant increase was recorded in the surplus of current transfers, thanks to higher net EU transfers to general government[4]. Finally, the income account deficit expanded by around 17.8% YoY due to higher net interest, dividend and profit payments, reflecting the sharp rise in public and private-sector external indebtness in recent years. *The combined gross external debt of the public and private sectors stood at around 130%-of-GDP at the end of 2007.*

From the funding side, direct investment in the January-September 2008 period showed a net inflow of €1.12bn, while a net inflow of €17.97bn was also recorded under portfolio investment. The buyout of 19.99% of Greek telecom company OTE by Germany´s Deutsche Telokom accounted for the greater part of net inward FDI realized in the corresponding period. According to most recent Bank of Greece projections, the full-year current account deficit is projected to stabilize at around 14.0%-of-GDP in 2008, after reaching 14.2% -of-GDP in 2007[5]. Looking further ahead, weakening domestic demand, the likely stabilization of oil prices at levels significantly lower than recent highs and an expected improvement in the ships balance may contribute towards a small decline in the current account deficit ratio net year. However, we maintain that a more sustainable improvement in the years ahead requires a radical shift in the overall balance-of-payments dynamics. Enhanced fiscal consolidation and supply-side reforms to boost productivity and raise competition in domestic product and labor markets are the more obvious avenues via which such a shift can occur in the years ahead if an eventual economic hard-landing is to be avoided.





[4] Net (current and capital) transfers from the EU amounted to €4.5bn in the first seven months of 2008 and are expected to exceed €5.5bn in the whole year 2008, assisted by the acceleration in the rate of absorptions of funds under the CSFIII program as well as down payments under the 4th CFS program.

[5] Bank of Greece also sees the combined deficit of the current account and capital transfers balances to reach 12.9%-of-GDP in 2008, from 12.2%-of-GDP in 2007.

Permanent and transitory drivers of the current account deficit

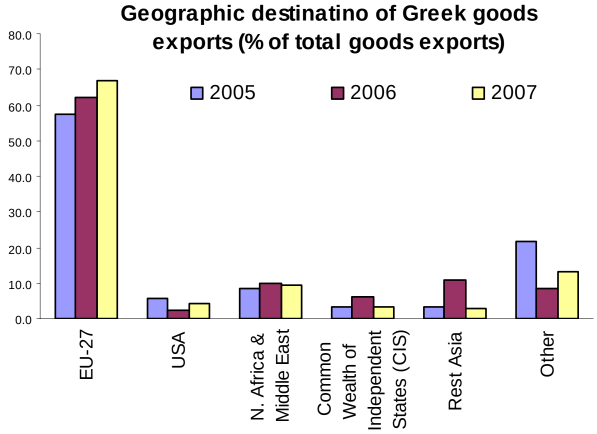
Despite higher inflation relative to euro area trading partners**,** Greece has enjoyed rising exports growth in recent years. This was thanks to a shift to higher value-added goods and services exports and a reorientation of exports from mature industrialized countries towards the fast-growing neighboring emerging markets. This has facilitated the stabilization of Greece's share in world non-oil trade, following sharp declines in the latter part of the last decade. Revenues from non-fuel goods exports to neighboring Balkan economies *(as % of total Greek export receipts)* rose to 22.3% in 2007, from 10.5% in 1995. The respective total bill for imports from these countries *(as % to total import receipts)* was 6.7% in 2007 compared to 3.7% in 1995. Despite this rise in trade volumes, however, the share of Greek exports to Balkans as a percentage of total exports to these economies remains relatively stable *(ca 1.6%),* though greater than the corresponding share of Greek exports to industrialized countries *(ca 0.2%).* On the other hand, Greece's market share in the EU15 market has continued to decline, although it appears to have stabilized in other industrialized countries. With regard to the export of services, the demand for Greek tourist services in important traditional markets e.g., Germany, France and Scandinavian countries remained strong in recent years, while the last decade has witnessed strong tourist inflows from new important markets, including Russia, China and CEE. Separately, Greece's net receipts from shipping services *(mainly merchant shipping)* amounted to 4.5% of GDP annually in the period 2004-2007, while the average annual growth of such revenues over the corresponding period was around 20% YoY. This buoyant growth relates to the sharp rise in international freights as well as the modernization and enlargement of the Greek fleet. *(In the first half of 2008, the Baltic Dry Index rose 61% YoY, while Baltic Dirty Tanker Index grew 32% YoY).* However, in the second half of this year international freight rates nosedived, more so these for dry cargo, reflecting an abrupt slowdown in global trade and the deepening in the financial crisis. Furthermore, economic growth in trading-partner economies in the Balkans and, more broadly, in the Central Eastern European region is expected to decelerate sharply in the period ahead, lessening the demand for Greek exports of goods.

Despite the relatively satisfactory performance of exports in recent years, buoyant domestic demand and eroding international competitiveness has led to higher import growth and a sharp widening in the current account gap. As we have noted in the past, this situation can not be sustained indefinitely, given that the accumulated competitiveness loss reflected in the current account deficit threatens to undermine the economy´s medium-term growth potential. To aggravate things further, the very anemic growth of inward FDI implies that the financing of the external imbalance has been increasingly taken up by external borrowing. Greece's gross external debt currently exceeds 130%-of-GDP, by far the highest ratio in the EU-13. In effect, the country is spending its future capital now in order to finance a consumption rate which surpasses that of domestic production, while participation in EMU appears to have contributed to the lack of full awareness of the problem, as it has removed both concerns about the financing of external debt, and the warning bells of devaluations.

Exports of goods & services excl oil and ships (% GDP) - Settlement data

Source: BoG, Eurobank EFG

Geographic destinatino of Greek goods exports (% of total goods exports)

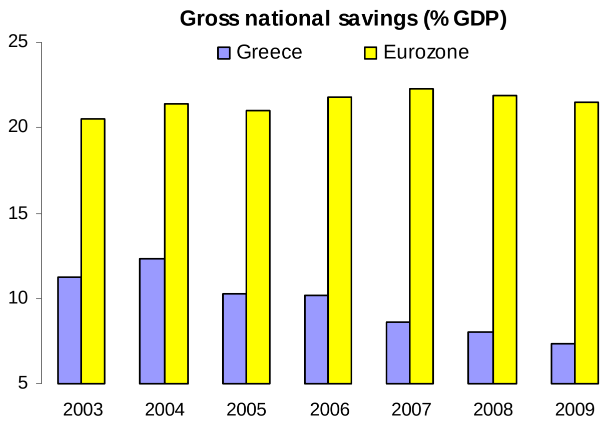


Source: EC

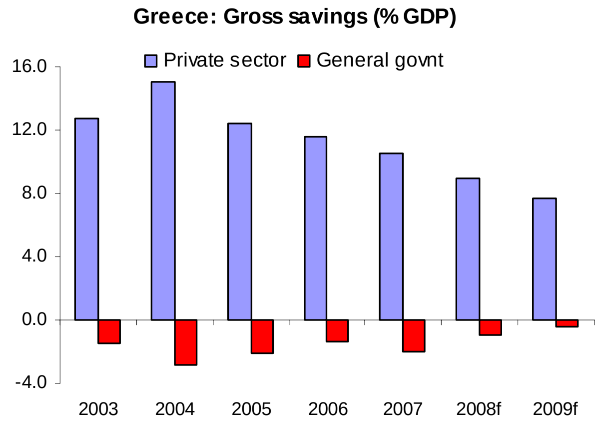
However, the loss of autonomy in the exercise of the monetary and exchange-rate policies renders the correction of the divergence more cumbersome, to the extent that instead of adjusting one price, i.e., the exchange rate, a range of prices of goods, services and factors of production will now need to be adjusted, so as to prevent a further significant loss of competitiveness.

The crucial question is how to minimize the cost of adjustment and not whether there will be a cost. Analyses which foresee a moderation of external deficit on the basis of economic conjuncture appear to be too reassuring. True, part of the deterioration in recent years has been due to net purchases of ships by Greek ship-owners and higher net oil imports *(11.2%and 28.4% of the current account deficit in Jan.-Sept. 2008, respectively)*. Yet, the trade balance, excluding fuel and ships, has also been on a steadily deteriorating trajectory since 2000 as was also the case with the incomes balance. The latter has traditionally counterbalanced trade deficits, but it is now in a deficit itself due to higher net interest, dividend and profit payments as a result of the ballooning public and private-sector external debt in recent years. The transfers balance is also feeling the effects of the increase in remittances of foreigner workers living in Greece.

From a more inter-temporal perspective, the deterioration in the external imbalance has been the outcome of a rapid growth of domestic investment and declining national savings, which have boosted the corresponding imbalance from around 10.5%-of-GDP in 2001 to over 15%-of-GDP presently[6]**.** On the other hand, domestic investment has been outpacing the EU averages in both growth and level-to-GDP terms since 2001, assisted by enhanced macroeconomic and financial stability as well as the collapse of domestic interest rates post EMU entry. On the other hand, the domestic saving rates have been lagging behind the corresponding EU average, reflecting high public-sector deficits and a rising private-sector propensity towards consumption. In fact, the household sector has accounted for most of the increase in the saving-investment gap since 2001, owing to strong credit-driven consumption and a pick-up in housing demand. On a more positive note, the domestic corporate sector has been mostly in a surplus saving-investment position in recent years, reflecting the strong profitability in the shipping and banking sectors.



Source: EC autumn 2008 forecasts



Source: EC autumn 2008 forecasts

This widening gap between domestic savings and investment relates to the deteriorating price competitiveness. This is, in turn, because Greece continues to run a positive inflation differential of one percentage point or more vis-à-vis the Euro area and since devaluation is no longer an option, inflation differences are accumulated, resulting in a significant real appreciation. The latter has been eroding the price competitiveness of Greek exports in recent years, despite the steady rise in productivity. As we noted in our *July 2008, Greek Macro Monitor*, our calculations suggest that, excluding the impact of oil prices and ship purchases, the current deficit has to decline by 5.4 percentage points of GDP in order to become sustainable, i.e. to prevent further increases in the external debt[7]. With an estimated elasticity of

[6] Total domestic savings amounted to 9.5%-of-GDP in 2007 compared to 11.1%-of-GDP in 2006 and 10.3%-of-GDP in 2005. The corresponding euro-area averages were 22%, 21.3% and 20.7%. On the other hand, gross fixed capital investment in Greece was 25.7%-of-GDP in 2007 compared with 25.8%-of-GDP in 2006 and 23.4%-of-GDP in 2005. The corresponding percentages in the Euro zone were 22.1%, 21.6% and 20.8%, respectively

[7] High Current Account Deficit: The Most Important Problem Facing the Greek Economy in the Medium-term. *(Pages 32-34)*

BoP with respect to GDP of 0.21%, this implies a required real depreciation of 25%, based on very mild assumptions.[8] This is tantamount to a return of the real exchange rate to its 2001 level, when the country adopted the common currency.

Although Euro zone membership effectively secures the adequate financing of the country's external deficit and debt, the wide current account gap poses a threat to the medium-term growth prospects of the economy. Given that now more than 70% of the current account deficit is financed by external borrowing, the servicing of the accumulated gross external debt absorbs considerable domestic resources. Rising indebtedness also raises the susceptibility of domestic households to sudden, unanticipated shifts in market sentiment that could instigate higher borrowing costs. The latter risk is particularly relevant in the current environment of elevated funding costs due to the global credit crunch and the lingering crisis in world financial markets.

[8] For example, if real oil prices remain constantly above the pre-2007 levels, the required depreciation will be significantly higher.

Money & credit

The Greek component of the Eurozone's M3 growth excluding currency in circulation accelerated further in January-September *(+17.9% YoY in September 2008 vs. 14.7% in Q4 2007),* a development that can be partly attributed to the ongoing shift of funds from longer-maturity instruments not included in the M3 definition *(such as fixed income mutual funds)* to instruments included in M3 *(e.g., deposits with maturities of up to two years).* The first nine months of this year also saw a continuation of the rising trend in domestic deposit and repo interest rates that started from the second quarter of 2007 amid a significant tightening of money market conditions due to the global credit crunch. This rising trend was further magnified by the 25bps ECB rate hike in July 2008 and it also reflects the drive of domestic banks to increase their deposit base. In the period January-September 2009, the average deposit rate in Greece rose, leading to a further widening in its spread from the corresponding average euro area rate.

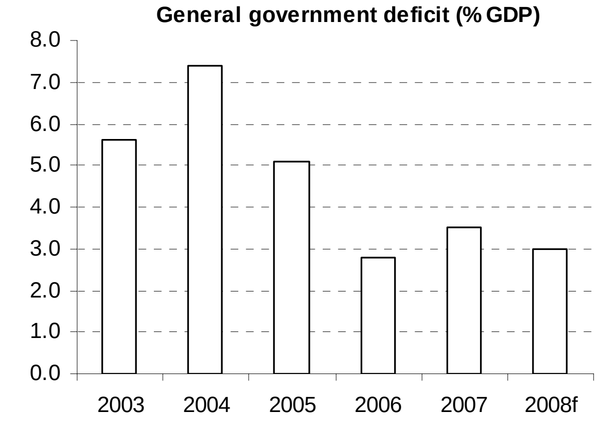
The annual growth of total monetary financial institutions *(MFI)* loans to the domestic economy accelerated in the first three quarters of 2008, reaching 18.1% YoY in September *(Q4 2007: +13.1% YoY).* This was mainly due higher lending to the general government. *(The latter recorded negative growth last year, mainly because of declining MFI holdings of government securities).* Private-sector credit continued to grow at double-digit, though declining, rates, reflecting the confluence of higher growth of MFI loans to domestic businesses and decelerating lending *(mainly mortgage lending)* to domestic households. More specifically, the annual growth of MFI credits to domestic businesses *(loans, corporate bonds and securitizations)* was 22.7% YoY in September, compared to ca 19% in late 2007. MFI lending to domestic businesses has been on a rising trend since mid-2005, reflecting increased funding needs for operations and investments and, more recently, expectations for tighter lending conditions in the coming months.

On the other hand, the growth of credit to households continued its gradual decent that started in 2007, yet remaining in double-digit territory *(19.7% YoY in September '08 vs. 20.2% in July '08 and around 24% in mid-2007).* This slowdown has occurred in an environment of slower domestic economic activity in the first months of 2008 as well as increased interest charges, though from historically low levels. Mortgage credit growth stood at 16.4% YoY in September, compare to 21.4% YoY in December last year, while consumer loans grew by 20.7% YoY, compared to 22.4% YoY at the end of 2007. The sharp tightening of credit conditions since last October and weakening demand dynamics are likely to induce a further deceleration in private-sector credit in the Q4, and more pronouncedly, in 2009. Yet, we maintain as a working assumption that total MFI credit growth will not decelerate to levels below 10% YoY next year, given the recent signs of improvement in global liquidity conditions and the a package worth $28bn in capital injections and credit guarantees by the Greek government to support the domestic banking sector.

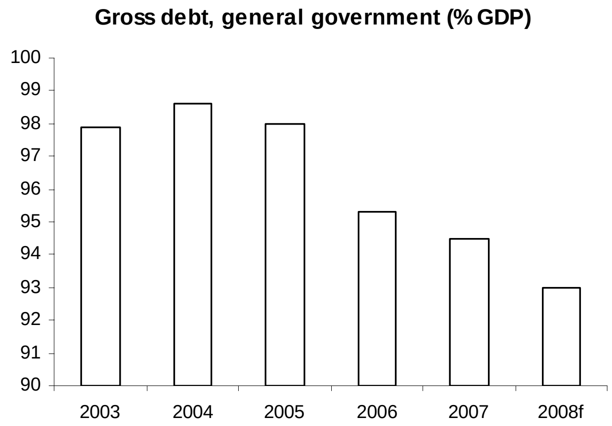
Current fiscal developments

According to the latest available data, the January-July 2008 deficit of the central government budget stood at 4.3%-of-GDP, against a full-year target of 3.4%-of-GDP and a 3.5%-of-GDP outcome in the same period a year earlier. This deterioration was due to an unforeseen widening in the deficit of the ordinary budget and higher-than-projected public investment expenditure. Current revenue rose by 6.7% YoY in the first seven months of this year against a full-year growth target of 13.1% YoY, reflecting lower-than-expected receipts from direct and indirect taxation. The shortfall of direct tax revenues relative to initial budget projections *(6.1% YoY realized growth in January-July vs. projected growth of 11.1% YoY in FY 2008)* was the result of: i. a 13.2% YoY decline in corporate-income tax receipts, partly because of a further reduction in the main tax rate to 25% from 29%, applied to incomes earned in 2007. ii. a 20.7% YoY drop in the receipts from inheritance taxes due to changes in applied taxation introduced in January 2008 . iii. a 0.7% YoY decline in receipts from property taxes. With regard to indirect tax revenues, the recorded shortfall in receipts relative to 2008 budget targets *(6.9% YoY growth in January-July vs. 14.1% YoY targeted)* was chiefly the result of decelerating domestic economic activity over the same period and, to a certain degree, continuing tax avoidance. The shortfall was mainly driven by lower-than-expected VAT revenues, which rose by 8.7% YoY in the first seven months of the year, compared to a full-year target growth of 14.5% YoY and a 10.1% YoY rise over the same period a year earlier. Year-on-year declines were also recorded in tax receipts from real estate and stock market transactions, car registrations and the consumption of tobacco products. On a more positive note, a considerable increase *(21.6% YoY)* was recorded in receipts from the special consumption tax on fuels. The government expects budget receipts to improve in the second half of 2008, when the new unified tax framework on real estate transactions, the equalization of a special consumption tax rates on heating oil and motor fuels and a new round of settlements of outstanding tax liabilities will start to bring additional revenues to state coffers.

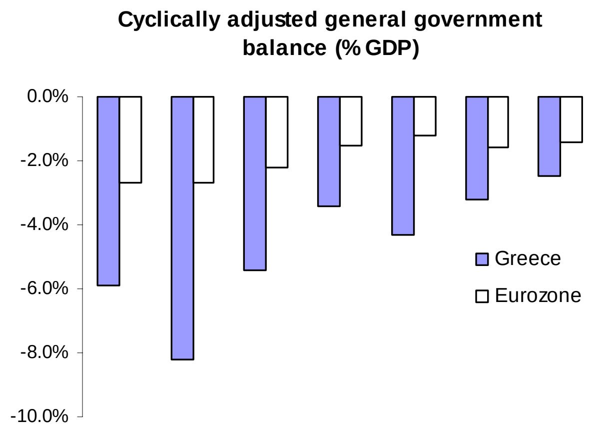
On the spending side, current expenditure inclusive of tax rebates rose by 10.9% YoY in January-July 2008, overshooting a 5.6% YoY full-year growth target. This was mainly on the back of higher-than-projected primary outlays *(+13.8% YoY vs. targeted full-year growth of 5.2% YoY)*, as a result of unforeseen public wages and pensions costs as well as higher social transfers to lower-income social groups and to the social security system. Interest rate costs rose in the first seven months of the year by 1.3% YoY, while according to 2009 budget estimates, full-year interest rate expenditure is projected to rise by 7.2% YoY as a result of the sharp rise in Greece´s sovereign



Source: Realizations & Euorbank EFG forecasts



Source: Realizations & Eurobank EFG forecasts



Source: EC

borrowing cost in recent months. *(Note that the 10-year Greek government bond yield differential over the corresponding German benchmark stood at a decade high of around 200bps at the time of writing).* In the public investment budget (PIB), the January-July deficit was €2.36bn *(1.0%-of-GDP)* i.e., around 40% wider from the same period a year earlier. This was because of higher-than-projected investment outlays *(+13% YoY)* due to the acceleration in the pace of implementation of public works, while PIB receipts declined by 2.8% YoY in the first seven months of the year.

The 2008 budget plan foresaw a general government budget deficit of 1.6%-of-GDP. This was recently revised to 2.5%-of-GDP, while the government has introduced a series of measures aiming to increase the transparency of fiscal accounts, broaden the tax base and improve the control of budgetary expenditure. The new framework, which was voted into law in September, extends in the following three directions: i. a number of special expenditure accounts will, from now on, be included in the central government budget, as a means of increasing spending transparency and accountability ii. a number of new rules are introduced to better control expenditure at the general government level *(e.g., in public hospitals, local governments, social security funds)* iii. a range of new tax measures are taken to further broaden the tax base and improve revenue collection. Among other items these include, a new round of settlements of outstanding tax liabilities to the state with favorable terms for tax payers, the taxation of dividends as well as profits from stock market transactions etc. According to Finance Ministry calculations, these new measures will yield around €4.1bn, some €3bn of which will be in the form of extra tax revenues. The greater part of additional tax receipts is expected to be collected next year, while an estimated amount of €700mn will be added to current year's budgetary revenues. We see upside risks to the 2.5%-of-GDP deficit target. Among the reasons supporting our view, the 10.7% YoY official forecast for the growth of current revenue this year remains rather optimistic, given the likely impact of the deepening credit crunch in recent months and the recent riots in Athens and other Greek cities that impacted retail trade activity – and thus, VAT revenues - during the Christmas shopping season.

Secondary government bond market

As a result of the deepening global credit crunch and heightened risk aversion following the Lehman Brothers debacle in September 2008, investor demand for longer-dated euro bonds and sovereign debt securities fell to its lowest level since the introduction of the euro. Another notable recent development in the euro area government bond markets has been the flight-to-quality-driven decline in bond yields as well as the sharp *bull-steepening* in the term structure of interest rates. Yet, the strong rally in major government bond markets in recent months, massive central bank liquidity injections and the 175bps cumulative reduction in ECB policy rates since October have not prevented a concurrent sharp widening in Eurozone-periphery bond yield differentials against core markets. This widening in yield spreads has been driven by a number of fundamental and technical factors, including: i. a general re-evaluation of risk on the part of global investors. ii. tight liquidity conditions in the intrerbark markets, hindering the financing of investment positions in Eurozone-periphery bond markets and iii. forced sales by hedged funds and other leverage players to raise liquidity.

The recent widening in bond yield differentials has particularly pronounced in the secondary market for Greece government securities (GGB), where the 10-year GGB/Bund yield spread hit post-EMU entry highs beyond 220bps in mid-December. This spread stood at just 32bps at the start of the year and at 75bps at the end of August 2008 and its recent sharp rise may not be fully explained by the concurrent widening in yield differentials experienced in other periphery markets such as Italy, Ireland, Portugal and Spain. Our econometric analysis of the long-term relationship and short-term dynamics between the Greek and Italian bond yield differentials against Germany suggests that as much as 50-60bps of the most recent widening in Greek spreads may be attributed to country-specific developments. Our analysis also shows that this estimate is somewhat lower – at 22 basis points or 10% of the spread - if a broader set of Eurozone-periphery bond yield differentials and certain other variables is used to explain the Greek spread[9]. Apart from sovereign-credit rating considerations, we suspect that these may also include perceived fiscal-related risks in view of the country's burgeoning debt levels and, more recently, rising domestic political

[9] These estimates are as of December 15. At the time, the 10-year GGB/Bund yield spread stood at around 225bps.

uncertainty due to the eruption of domestic violence following the killing of a teenager by a policeman[10,11].

On one hand, a sharper-than-officially-expected slowdown of the Greek economy next year could undermine the attainability of fiscal targets, especially since these are based on rather optimistic assumptions regarding the growth of budgetary revenues. This, in turn, could further restrain a further material reduction in the debt ratio in an environment of ultra-tight global financial conditions and a generalized investor aversion to sovereign debt of countries exhibiting large macroeconomic imbalances and heavy external financing requirements. On the other hand, the recent riots in Athens and other big cities have not only inflicted significant damages in main commercial districts but have also severely disrupted retail-trade activity in the important Christmas season[12]. This could not only means lower VAT revenues to state coffers but also unforeseen budgetary costs as the government has already announced a package of measures aiming to compensate those affected *(shop owners, employees etc)* by the damages. Apart from these considerations, the *incremental* impact of the recent widening in the Greek bond yield spreads on the 2009 central government budget - *i.e., via higher interest costs on new debt* – could in the order €150-200mn. *(An up to €1bn in net present-value terms assuming, an average maturity of newly issued debt is between 5-6 years).* This estimate is based on *ceteris paribus* type of analysis and assumes that the current level of GGB spreads will persist for the greater part of H1 2009, where the main volume of the state funding program is traditionally implemented[13]. Of course, any additional burden to the Greek 2009 budget due to higher interest paid on new debt will also depend on more general market conditions and the prevailing yield levels in core Eurozone bond markets in the following months.

Tighter funding conditions and the underperformance of the 2008 fiscal deficit target resulted in both higher-than-projected interest payments and an overshooting of this year's public borrowing *program (estimated to reach €42bn vs. €37bn expected initially).* Looking ahead, the recent rise in borrowing costs, if sustained, may negatively affect fiscal targets and further complicate the execution of next year's funding program. The 2009 budget plan implies that the latter will reach around €45bn in 2009. Apart from the execution of the government´s borrowing program, next year will also see the issuance of a significant volume of state-guaranteed debt *(expected to exceed €10bn)* and these will take place in an environment of ultra-tight global credit conditions and increased supply pressures. *(According to some estimates, the total issuance of government securities in the euro area will rise to as high as €650bn in 2009, from €530bn this year, while the issuance of state-guaranteed debt may exceed €1.5trn)*. According to the 2009 budget guidelines, the finance ministry will aim to maintain the ratio of fixed-to-floating rate debt issues at 75/25 percent. Yet, under the present unfavorable conditions in international debt markets, the Greek borrowing program for next year will aim to maintain maximum flexibility with regard to timing and the type of issued securities. A preference for the issuance of shorter-maturity instruments such as T-bills and, of fixed coupon-bonds, new 2- and 5-year benchmarks via syndicated issues or private placements is likely in Q1 2009.

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[10] Greece´s foreign currency long-term debt is currently rated A1 (outlook positive) by Moody´s, A (outlook stable) by S&P and A (outlook stable) by FITCH. These ratings are amongst the lowest in the Euro zone and recent statements by ratings agencies suggest that they are unlikely to go down much further, if at all.

[11] The recent rise in Greece's perceived political and sovereign credit risk is also reflected in the sharp widening in its 5-year CDS spread, which currently stands at around 245bps vs. 172bps for Italy and 48bps for Germany.

[12] According to some preliminary estimates, the total cost of restoring the damages in Athens alone, due to the recent riots may exceed €200mn. Moreover, according to Greek retailers association (SELPE), recent riots may cost retailers up to €1.5bn in lost sales, implying an estimated amount of €300mn in lost VAT revenues for the state.

Greece's 2009 budget plan
Main targets & assessment

Greece's 2009 budget plan targets a decline in the general government budget deficit to 2.0%-of-GDP against an initially expected 1.8%-of-GDP and an estimated deficit of 2.5%-of-GDP this year

The new budget is framed on a relative benign domestic macroeconomic environment, forecasting easing inflationary pressures and a deceleration of real GDP growth to 2.7% from 3.2% in 2008

A rise of 1.9ppts-of-GDP in ordinary budget revenue is expected to be the sole contributor to the overall fiscal adjustment next year

Meeting the 2009 budget targets appears to be a challenging proposition, in view of past fiscal performance and an exceptionally adverse external environment as:

a. **The fulfillment of the 15% YoY growth target for net ordinary budget revenue will need a significant strengthening of efforts to reduce widespread tax evasion**

b. **The target for primary expenditure growth needs to be thoroughly respected, with particular emphasis given to the containment of central government operating outlays**

c. **There appear to be downside risks to the 2.7% GDP growth forecast for next year in view of the expected softening of domestic demand growth and a highly adverse external economic environment**

If successfully executed, the 2009 budget constitutes a step forward in the direction of attaining a more sustainable fiscal position in the medium-term. Yet, important challenges to this goal remain, including: (i) expenditure pressures due to large interest payments and amortization costs (ii) the need to run sizeable public investment budgets (PIBs) in the years ahead in order to facilitate the absorption of EU structural funds, (iii) widespread tax evasion hindering efforts to maintain a strong pace of revenue growth without resorting to additional indirect taxation, and (iv) in a more medium-term perspective, the need to generate the necessary surpluses to deal with rising social security-related costs

In mid November, the Greek government unveiled its final budget plan for fiscal year 2009, which is expected to get parliamentary approval by the end of the year. The new budget foresees a drop in the general government budget deficit to 2.0%-of-GDP from 2.5%-of-GDP expected in 2008. *(At the central-government level, the overall shortfall is expected to decline to 3.4%-of-GDP, from 4.4%-of-GDP projected this year).* The initial draft budget for next year presented back in September targeted a somewhat lower shortfall *(1.8%-of-GDP),* while according to the most recent data released by the Eurostat, Greece´s 2007 general government deficit is being revised upwards to 3.5%-of GDP from a previously estimated 3.4%-of-GDP and an initially reported outcome 2.7%-of-GDP. Commenting on the 2007 deficit revision, a European Commission spokesman said recently that the Commission was going to write a report to the council of EU finance ministers, which would effectively constitute the start of an EU excessive deficit procedure *(EDP).* However, such a report, will not necessarily lead to further disciplinary steps against Greece, provided that the Commission forecasts on 2008 and 2009 Greek deficits remain below 3%-of-GDP.

In detail, the 2009 budget plan predicts: i. growth of 15% YoY in net ordinary-budget revenues compared to a *downwardly-revised* estimate of 10.1% YoY this year ii. a rise of 9.1% YoY in ordinary-budget spending against growth 8.5% YoY in 2008 iii. an €850mn cut back in public investment spending to €8.8bn and iv. a further reduction in the public debt-to-GDP ratio to 91.4% from 93.1% expected this year. The main macro assumptions underling the new budget include: i. a deceleration in real GDP growth to 2.7% next year from 3.2% expected in 2008 and ii. a fall in the average annual CPI to 3.0% in 2009 from 4.3% this year. Interest expenditure in 2009 is projected to reach €12bn *(4.6%-of-GDP)* compared to €11.3bn *(4.6%-of-GDP)* this year.

Table A shows the 2009 budget's main figures expressed in million euros and in percentage-of-GDP-terms, respectively, while graph A depicts the main contributors to the targeted fiscal adjustment *i.e., the expected decline in the general government budget deficit by 0.5ppts-of-GDP to 2.0%-of-GDP.* As illustrated in graph A, higher ordinary budget revenue is expected to be to be the sole contributor to the projected adjustment in the general government budget deficit next year to the tune of 1.9ppts-of-GDP. On the other hand, a lower surplus in the overall balance of public utilities & and other adjustments i.e., the so-called *while whole* of the budget, higher primary expenditure and a further rise in the deficit of the public investment budget (PIB) budget are expected to hinder fiscal consolidation. Although the latest data on budget execution show an underperformance of revenue collection relative to budget targets, the government expects budgetary receipts to improve in the later part of this year and in 2009, as the new unified tax framework on real estate transactions, the equalization of a special consumption tax rates on heating oil and motor fuels as well as the settlement of past outstanding tax liabilities to the state will start to bring additional revenues to state coffers.

On the spending side, the 2009 draft budget targets a slight deceleration in primary-expenditure growth to 8.0% YoY from an *upwardly revised* estimate of 9.7% YoY this year. In percentage-of-GDP-terms, primary outlays are projected to rise to 20.4%, from an estimated 20% in 2008, thus exerting a negative contribution to the overall fiscal adjustment in 2009. Interest expenditures are expected at 4.6%-of-GDP next year, boosted by the higher cost of government funding as a result of the global credit crunch. In 2008, interest costs are expected to overshoot initial targets by €800mn *(0.3ppts-of-GDP),* while primary expenditure will also exceed initial estimates by €598mn i.e., an amount equivalent to 0.2ppts-of-GDP, mainly as a result of higher-than-expected wage costs. Note that around 85% of Greece's 2008 public-borrowing program was competed by the end of August and thus, the execution of this year's budget was not overly affected by the recent sharp widening in Greek government bond yield spreads. Pension- and public wage-related costs are projected to rise by 10.2% YoY, reaching 46.7% of primary expenditure in 2009, while social security and health-related costs are expected to increase by 12.9% YoY, amounting to 26.8% of primary expenditure. Finally, central government operating and consumption costs are budgeted to grow by 4.5% YoY next year, after falling by an estimated 0.6% YoY in 2008. This discretionary category of primary expenditure has been consistently overshooting budgetary targets in recent years.

In the public investment budget (PIB), revenues are projected to decline by 27.9% YoY in 2009 after rising by an estimated 5.2% YoY this year, mainly on the back of lower inflows from the EU structural funds. However, public investment expenditures are also expected to decline next year, leading to a 12.8% YoY rise in the overall PIB deficit. In percentage-of-GDP terms, the PIB deficit is projected to come in at 2.0% next year, up from 1.8% expected in 2008, thus placing an estimated burden of 0.1-0.2ppts-of-GDP to the overall targeted fiscal consolidation.

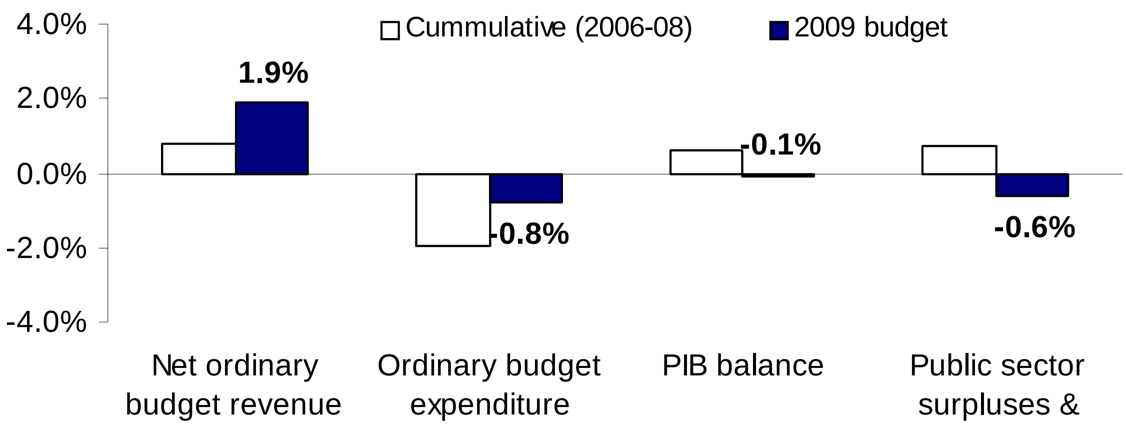
With regard to state borrowing needs, according to most recent official forecasts, the central government debt is estimated to rise to €273.56bn or 105.1%-of-GDP in 2009 from €259.6bn or 105.6%-of-GDP in 2008. The euro-denominated part of next year's central government debt is projected to amount to 104.5%-of-GDP. At the general government level, gross public debt is expected to reach €237.93bn or 91.4%-of-GDP at the end of 2009, from 228.87bn 93.1%-of-GDP in end-2008. Despite the expected decline in the debt-to-GDP ratio, a further rise in the debt level is expected next year. The latter has continued to rise in recent years driven by the financing needs of the central government budget, the assumption of debts incurred by social security funds, local governments and other public entities as well as the implementation of the country's defense program. As for the impact of the recently announced €28bn support program for the domestic banking system, this is expected to add a maximum €5bn to public debt in the years 2008 and 2009. The total cost of servicing the debt of the central government including amortization is estimated to rise to €37.33bn or 14.3%-of-GDP in 2008, from €31.93bn or 13%-of-GDP in 2007. Meanwhile the downward trend post EMU-entry in the ratio of interest payments-to-GDP appears to have been halted this year, with the new budget projecting this ratio to reach 4.6% both this year and the next from 4.3% in 2007 and 5.1% in 2004.

Meeting the 2009 budget targets appears to be a challenging proposition, in view of past fiscal performance and an exceptionally adverse external economic environment. First, reaching the *admittedly ambitious* budget revenue growth target for 2009 will need a significant strengthening of efforts to reduce widespread tax evasion. As we noted earlier, the overall fiscal consolidation projected for next year is expected to be exclusively driven by a further sharp rise in ordinary budget revenue. The latter's contribution to overall fiscal consolidation is expected to be to the tune of 1.9ppts-of-GDP, compared to a positive contribution of just 0.8%-of-GDP in the three-year period 2006-2008. In addition, the 15% YoY projected growth in 2009 net ordinary-budget receipts implies a much higher elasticity with respect to nominal GDP than that realized in recent years. *(It is also expected to take place in an environment of slowing economic activity and reduced tax rates for domestic households and businesses)*[1]. Specifically, the elasticities of total tax revenues and VAT receipts with respect to nominal GDP are projected at 2.28% and 1.82% in 2009 compared to average rates of 1.06% and 1.16% in the prior 5-year period. Additionally, we see downside risks to the new budget´s projection of 2.7% GDP growth next year in view of the expected softening of domestic demand growth and a highly adverse external environment. Third, the target for primary expenditure growth needs to be respected, with particular emphasis given to the containment of central government operating expenditure.

From a more inter-temporal perspective, the 2009 budget, if successfully executed, constitutes a step forward in the direction of attaining a more balanced budget position in the medium-term. However, important challenges to this goal remain, including: (i) expenditure pressures due to large interest payments and amortization costs. Greece's public debt-to-GDP ratio remains amongst the highest in Euro zone, in an environment of persisting upward pressures in funding costs. (ii) the need to run sizeable public investment budgets (PIBs) in the years ahead in order to facilitate a smooth absorption of EU structural funds, (iii) widespread tax evasion hindering efforts to maintain a strong pace of revenue growth without resorting to additional indirect taxation. *(The ratio of indirect-to-direct has remained broadly stable at 1.4 in the period 2001-2008, while the 2009 budget plan projects a decline in this ratio to 1.28)*. (iv) the need to generate the necessary surpluses for meeting rising social security-related costs in the years ahead. An intensification of efforts to broaden the tax base and reduce tax avoidance, renewed emphasis on containing budgetary expenditure as well as social security and public administration reforms need to be the authorities´ response to the challenges facing fiscal consolidation in the period ahead.

TABLE A: 2009 budget (in EUR mn)				% GDP		
1. Ordinary Budget	**2008b**	**2008f**	**2009b**	**2008b**	**2008f**	**2009b**
a. Gross ordinary revenue	58,070	57,340	64,200	23.7%	23.3%	24.7%
a1. Tax reimbursements	2,550	3,200	3,300	1.0%	1.3%	1.3%
a2. Special revenue			1,372			0.5%
a3. Net revenue (a-a1+a2)	55,520	54,140	62,272	22.6%	22.0%	23.9%
b. Expenditure	59,058	60,456	65,978	24.1%	24.6%	25.4%
b1. interest	10,500	11,300	12,000	4.3%	4.6%	4.6%
b1a. Special expenditure			882			0.3%
b2. Primary expenditure (b-b1-b1a)	48,558	49,156	53,096	19.8%	20.0%	20.4%
2. Ordinary budget balance (1a3-b)	-3,538	-6,316	-3,706	-1.4%	-2.6%	-1.4%
3. Public Investment Budget						
a. Revenue	4,532	5,130	3,700	1.8%	2.1%	1.4%
b. Expenditure	9,300	9,650	8,800	3.8%	3.9%	3.4%
4. PIB balance (3a-3b)	-4,768	-4,520	-5,100	-1.9%	-1.8%	-2.0%
5. Central government balance (2+4)	-8,306	-10,836	-8,806	-3.4%	-4.4%	-3.4%
6. Public sector surplus & adjustment	4,280	4,705	3,540	1.7%	1.9%	1.4%
6a. Public utility & other surpluses	7,165	8,405	4,925	2.9%	3.4%	1.9%
6b. Transfers to social security	-3,013	-3,453	-575	-1.2%	-1.4%	-0.2%
6c. Defense expenditure	-1,400	-1,800	-2,200	-0.6%	-0.7%	-0.8%
6d. Adjustments	1,528	1,553	1,390	0.6%	0.6%	0.5%
7. General govnt balance (5+6)	-4,026	-6,131	-5,266	-1.6%	-2.5%	-2.0%
Nominal GDP (EUR bn)	245,449	245,815	260,248			

Contribution to the cummulative adjustment in the Greek general government budget balance (ppts of GDP)



Focus I

The Impact of Credit Deceleration on GDP Growth

(Written by Dr Tassos Anastasatos, Senior Economist, Eurobank EFG)

The ongoing global financial crisis has raised concerns about an imminent deceleration of credit growth. Greece is no exception to this. Greek banks faced with international scarcity of liquidity – albeit not solvency doubts - have moved to restore risk elements in their balance sheets. Credit-, market-, country- and systemic-related risks are all being reassessed. Predominantly, lack of confidence in the interbank market and the increased cost of funding, motivate banks to limit their dependence on that market for raising funds. Correspondingly, loan allocation is becoming more cautious. The Bank of Greece was initially extending calls for prudence to be exercised and risk assessment to be prioritized. To date, no explicit restrictions have been imposed. As the crisis deepens though, concerns about a possible credit squeeze take centre stage, as this would have severe repercussions for economic growth. Fears of deflation and recession worldwide have shifted monetary authorities´ focus from the containment of longer-term inflation expectations to measures aiming to restore credit lines to the economy, businesses and households alike. In Greece, the recent introduction of a €28bn support package for the domestic banking sector was accompanied by instructions by the Bank of Greece to participating banks not to dispose raised liquidity to their foreign affiliates.

Our own assessment is that fears over the real economic implications of the lingering financial crisis are well founded. Estimation and simulation analysis conducted by Eurobank EFG Research verifies that an abrupt slowdown of credit in Greece would severely affect domestic economic activity**.** Strong domestic growth over the last decade was to a large extent driven by the enlargement of domestic demand, which in turn was enabled by ample credit availability to corporations and households. If this situation is reversed, then the country risks entering a prolonged and painful economic slowdown, if not recession. There are several reasons why such a slowdown could be more severe than in other developed economies. Such reasons include, *inter alia*:

1. The fact that Greece's fiscal deficit is already very close to the 3% of GDP threshold implies that counter-cyclical fiscal policy is not an option for alleviating recessionary pressures. Greece cannot benefit from the discretion allowed for some countries as regards to the implementation of Growth and Stability Pack, for the additional reason that the interest-rate spreads in which the Greek state borrows in international markets have recently surged, making it relatively more expensive for the country to fund its large public debt.
2. The current account deficit still stands at the record levels of ca 14% of GDP and adjustment within a crisis environment will enhance recessionary pressures.
3. Greece lags back in infrastructure, productive culture and institutions to perform crisis management. This makes the country more vulnerable to a loss of confidence (and raises the necessity of structural reforms to shield the economy from adverse shocks).

2. Estimation and Simulation Analysis

Before presenting the main results of our estimation and simulation analysis, we need to emphasize that the latter is a partial one and should be considered as an indicative assessment rather than an exact numerical forecast. It is conducted on a *ceteris paribus* basis as it assumes that all other impacts on GDP growth are already captured. Therefore the model should be considered as a short-to-medium-term snapshot.[14]

In order to quantify the impact of credit deceleration on the rate of economic growth, the sensitivity of real growth to changes in credit growth was estimated.[15] Then, the estimated elasticity of GDP growth with respect to credit was found to be 0.081. This means that **a 10% reduction of credit causes a 0.81% reduction in the rate of real growth**.[16]

[14] An exact forecast would necessitate the development, estimation and calibration of a full Dynamic Stochastic General Equilibrium Model.

[15] The estimation was conducted on a panel that also included countries of New Europe in which Greek banks have a presence. This is intended to account for possible liquidity spillovers and also to increase degrees of freedom. A fixed effects model with White's heteroscedasticity-robust standard errors is estimated (at a yearly frequency to avoid seasonality). Post-2000 data is employed, so as to minimize the risk of incorporating structural breaks, especially the liberalization of the financial system. The preferred specification of the model regressed (the log of) real growth against (the log of absolute) total credit.

[16] If Greece is excluded from the sample, as a sensitivity test, the elasticity decreases slightly from 0.081 to 0.079. This means that the dependence of Greek growth on credit in previous years is somehow larger than that of countries of New Europe, reflecting the fact that financial liberalization happened earlier in Greece.

Accordingly, <u>two scenaria</u> of credit deceleration were simulated:

A. **The baseline scenario**: In this scenario, we assume that banks apply the rule (or the Bank of Greece enforces it) that new lending has to be financed exclusively by deposits. In addition, we assume that deposit growth in 2009 will be 8/10s of the growth rate of deposits in 2008.[17] At the end of 2007 the loans to deposits ratio was €196.477bn / €198.645 bn) = 0.98 [Bank of Greece data] with deposits growing at a rate of 16% and credit growing at a rate of 19.7%. Deposits would grow at 12.8% in 2009 (16% in 2008), so that deposits for 2009 will be €259.923 bn and new deposits raised in 2009 would equal €29.495 bn. So, credit would be €263.302 bn, instead of €278.231 bn that would ensue if credit keeps growing at 19% per year. Given the elasticity of real growth w.r.t. credit of 0.081, this would result in a loss of **0.46** percentage points of growth. That is, instead of a real growth of **2.7%,** provisionally forecasted by Eurobank Research at 15th of September,[18] real growth would be **2.2%.**

B. **The bad scenario**: In this scenario, we assume that Banks are being forced to lower their loan-to-deposit ratio down to unity. This will hold in addition to the previous constraint that new loans in 2009 will be no greater than new deposits raised in this year. In addition, we assume that deposit growth in 2009 will be 6/10s of the growth rate of deposits in 2008 (deeper recession). Then, deposits would grow at 9.6% in 2009, so that deposits for 2009 will be €238.615 bn, and this also would have to be the value of total credit, instead of €278.231 bn, by virtue of the rule. Given the elasticity of real growth w.r.t. credit of 0.081, this would result in a loss of **1.34** percentage points of growth. That is, instead of a real growth of **2.7%** (provisionally forecasted by Eurobank Research) real growth would be **1.4%.**

Results give an indication of the dependence of Greek economy on credit-driven domestic demand and therefore the high likelihood of a deep and protracted deceleration should a credit squeeze takes place. It is important to realize that, at a second stage, economic downturn (or recession) can feed back into credit growth.

An important finding is that the same model was able to forecast out-of-sample, with a remarkable degree of accuracy, the current recession in the Baltic States, which followed the decision of Swedish banks to limit the credit given to those markets.[19] This shows that the sensitivity of GDP to credit, which was estimated with data from a period in which economies were booming, is robust in periods when the economies are slowing. This extends further support to our methodology and thus our projections of possible real GDP losses due to expected credit deceleration. Furthermore, the fact that such an accurate forecast can be conducted by invoking just one explanatory variable, credit, shows the importance of this factor for growth.

<u>Other factors</u>, not accounted for in this partial analysis, <u>could indeed have an additional significant impact on real economic growth</u>. Such potential factors could include:

- the stance of monetary policy (e.g., assuming fiscal and incomes policies are neutral)
- the endogenous downturn of the Greek business cycle, enhanced by current account problems
- hikes in international interest rates as a result of the international financial crisis
- potential non-linearities on the interaction of involved variables
- FDI slowdowns (noting though that FDI has historically been low in Greece and does not

[17] Economic theory predicts that in times of slowdown or recession, people save relatively less, in order to sustain a smooth rate of consumption (lifetime income hypothesis). The case of the Baltic countries, which have recently entered an outright recession, provides support for this hypothesis. Estonia and Latvia, which experienced the larger slowdowns so far, also saw rapid deceleration of their deposit growth rates; Lithuania that slows now follows suit.

[18] This growth forecast seems too optimistic now but it is an appropriate benchmark as it accounted for some spillovers of the crisis but not a global meltdown or the imposition of heavy credit restrictions.

[19] The elasticity of GDP growth w.r.t. credit was almost triple in the Baltics, i.e., a 10% reduction of credit causes a 2.3% reduction in the rate of real growth. This reflects the fact that credit expansion in the Baltic States began early and it was more rapid and less diversified as to the number and nationalities of lending banks.

account for a significant part of the country's growth)

- reversals of capital inflows due to a minimized risk appetite of international investors and/or short-term liquidations to cover losses in other markets (the participation of foreign investors in the ASE capitalization has been substantially reduced)
- volatility in the exchange rates of the Euro

Focus II
Tourism sector: Recent developments and outlook

Written by Costas Vorlow, Senior Economist Eurobank EFG)

- **International tourist arrivals in Greece and travel receipts are expected to be weak in 2009**
- **The Greek tourism industry has been loosing market share in its 2nd largest market Germany and is liable to significant credit risk due to its exposure to the leveraged UK market**
- **Visitor numbers from the UK and the Eurozone in 2009 will drop, or at best, not grow as fast as in the past 3 years, due to the decelerating world economic growth**

1. Introduction

We are currently in the midst of what is widely regarded as the first major crisis of the globalized economy. Virtually no country or economic activity will be left unaffected and, understandably, the UNWTO is now downgrading the prospects of the world tourism industry. Credit conduits to domestic households and enterprises in major tourist markets have been largely frozen since September. As a result, the lingering international and domestic credit crunch may inflict a significant blow to the Greek tourism industry in the period ahead.

2. International tourist arrivals contracting

According to UNWTO´s latest estimates, growth of international tourist arrivals for the current year as a whole will average 2-3%, much lower than the growth rate recorded in 1H 2008. Next year's growth is projected to be even lower, between 0% and 2%. The deceleration in the growth of tourist inflow was particularly pronounced in southern Mediterranean Europe. Growth rates dropped by roughly 70% (from 6.9% in the 2006-07 period to 2.1% this year), whereas in western Europe the growth decline was about 65%. This was anticipated to a large extent due to the elevated costs of transportation (oil prices peaked in July), the stronger Euro and the global economic slowdown, which has intensified since 2Q 2008. Official data (Eurostat) are not yet available for international tourist arrivals in Greece in 2008, but numbers are expected to be disappointing, especially for the second half of this year. In our last Macro Monitor (July 2008, pg. 19), we had forecasted that the decline in tourist arrival from main markets outside the Eurozone, (primarily US and UK) could be as large as 10%. Anecdotal evidence coming from official and industry sources suggests that several popular destinations in Greece have witnessed significant declines in tourist arrivals from those markets.

Adding to the grim situation, the growth outlook for Greece's main tourist markets is rather depressing. USA, UK, Germany, France and Italy are all expected to register negative economic growth in 2009 (Table 1). These economies account for 50% of Greece's tourist portfolio. Only Russia is projected to grow by 3.5% in 2009, according to the latest IMF forecasts. However, according to our calculations and due to the dismal outlook for the rest of Eastern European economies for 2009, tourist arrivals from the Russian Federation alone need to more than double next year to account for the loss of tourist inflows from our "traditional" markets. At this point, this scenario appears highly unlikely, given that the economic situation in Russia is expected to deteriorate further due to the deepening of the international financial crisis and the recent collapse in oil and commodity prices.

2. The dynamics of our main markets

Visitors from the UK and Germany still form the bulk of tourist arrivals in Greece (more than 25%, see Table 1). Yet, tourist arrivals from UK and Germany have declined in recent years (Diagram 1). Arrivals from the Eurozone also account today for a smaller chunk of total foreign tourists. *(The declining trend in arrivals from the UK and the Eurozone has started in 2003-2004, while the share of German tourists has also been on a declining path since 1994).* While it is of primary importance for the Greek tourism industry to diversifying its tourist portfolio it is also essential to retain, if not improve, tourist arrivals from the Eurozone. The latter would imply a lower risk for a drop in demand of tourist services in case of a new significant Euro-appreciation phase, especially in times of economic uncertainty, such as the current one.

As we can see in Table 2 & Diagram 2, international tourist arrivals in Greek hotels have followed two distinctive growth cycles. Arrivals have grown by 34% cumulatively since 1994. However, between 2000 and 2004, there has been a decline in the number of total arrivals. Hence from that point onwards (i.e., till the end of 2007,) arrivals have grown by 38%

cumulatively, compensating for the loss of the earlier slump. Arrivals from the UK have grown more solidly, rising by 44% cumulatively over the last 14 years (Table 2), whereas arrivals from Germany shrunk by 29% over the same period. All in all, the Greek hotel industry lost 30% of its German market since 1994. Looking ahead, the current serious liquidity and leverage problems facing UK households and the risk of a further depreciation of the pound vs. the Euro may result to a considerable loss of revenue for Greek tourist destinations that rely solely on British tourists (i.e., UK visitors staying for fewer days during summer 2009 and spending less).

One could argue that in recent years total international tourist arrivals in Greece grew faster than arrivals from its main markets, hence the diminishing share of German and UK visitors as a percentage of total. This implies diversification of the tourist portfolio, which is generally welcomed, especially in countries such as Greece, where the mass “sea and sun” tourism model is now less appealing than it used to be and a break of seasonality is a desirable. Looking to the years ahead, the key question is whether Greece will continue to attract a significant number of tourists, while, at the same time, diversify further its portfolio and increase travel receipts.

Total travel receipts in Greece have been on a decelerating trajectory in the period 2004-2006, despite a higher number of foreign visitors (Diagram 2). Looking at the January-September *high-season* periods, travel receipts grew by 5.62% in 2006, shrunk by 0.47% in 2007 (growth in revenues remained flat for 2007) and have grown by 3.96% this year. Yet, receipts dropped by 1.25 YoY in September 2008, indicating an environment of weaker demand. Moreover, as Table 3 shows, the share of travel receipts in Greece’s services balance is dropping rapidly. Another matter of concern is that in 2007, receipts from international tourists where almost flat (despite a rebound in tourist inflows from our major markets) and nominal receipts for 2008 are growing at a pace roughly half of that of inflation (HICP inflation for Nov. 2008 is estimated at 3%). This implies that, over the last two years, total travel receipts have declined significantly in real terms.

4. A grim outlook for 2009

Currently, an unusually high degree of uncertainty clouds the global economic outlook and it remains unclear whether a rebound will come on time to “rescue” the 2009 summer tourism season. Diagrams 3 and 4 suggest a bleak outlook for 2009. Diagram 3 shows that growth in international tourist arrivals follows closely the economic cycle. World trade in services and goods also fluctuates in tandem with output growth, at a rate roughly double than that of the latter. Diagram 3 shows clearly that whenever there was a strong downtrend in economic (especially trade) activity, tourist arrivals in Greece experienced steep declines. Diagram 4 shows that travel receipts are also sensitive to the economic cycle. In periods of rapid deterioration in international trade activity, the growth of tourism receipts in Greece suffers significantly. The above imply that international tourist arrivals and travel receipts should be expected to be weak in 2009.

5. Conclusions

In 2009, The Greek tourism industry will face the repercussions of the global economic slump. The unfolding economic slowdown translates to lower travel receipts and fewer visitors. This will put a strain to profit margins and, in many cases, slash revenues. Moreover, Greece is entering the global crisis following two years during which it was unable to increase travel receipts in real terms, despite a rebound in arrivals post the 2004 Olympic Games. The outlook can be anything but rosy, with the credit crunch limiting much needed liquidity to the domestic industry, which needs to prepare for the 2009 summer season.

Table 1:

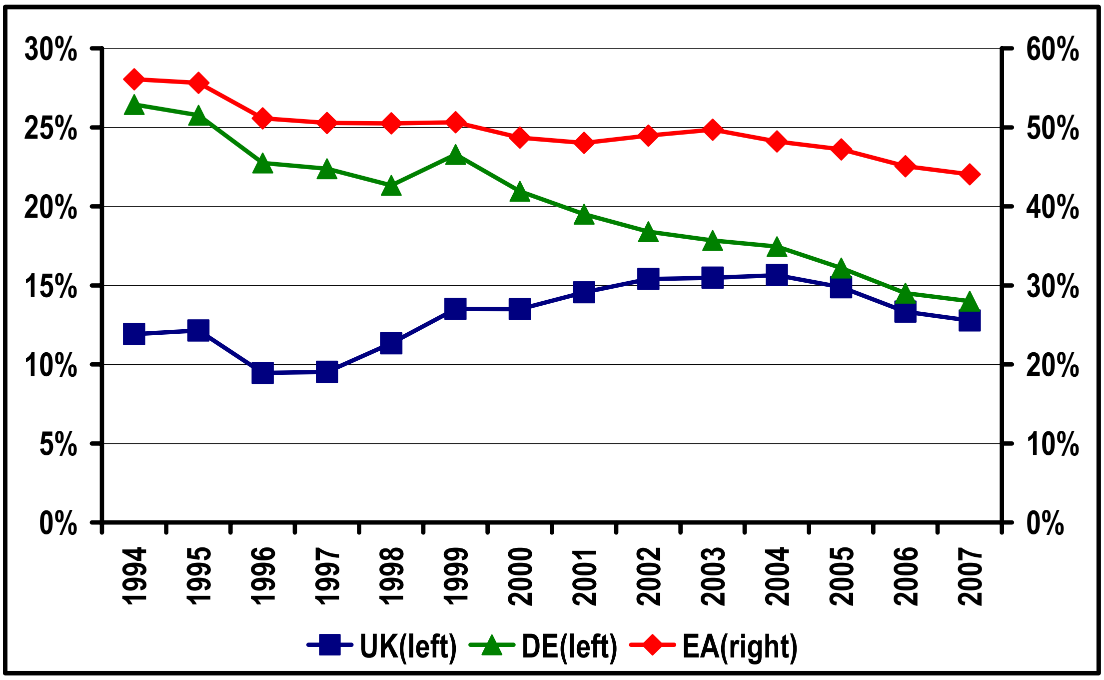
Real annual GDP growth rates (%) and demand market shares (%)				
Country	Market share**	2007	IMF 2008*	IMF 2009*
USA	8.3	2	1.4	-0.7
UK	12.8	3	0.8	-1.3
DE	14	2.5	1.7	-0.8
FR	7.6	2.2	0.8	-0.5
IT	7.8	1.5	-0.2	-0.6
RUS	3.8	8.1	6.8	3.5

* Forecast

** Tourist arrivals to hotels and similar establishments as % of total (Eurostat, 2007)

Source: Eurostat (Arrivals to hotels and similar establishments), IMF.

Diagram 1:
Visitors from the UK, Germany and the Eurozone as a % of total



Source: Eurostat (Arrivals to hotels and similar establishments).

Table 2:

Tourist arrivals growth from major markets

	World	UK	Germany
1994 to date	34.1%	43.7%	-29.1%
2003 to date	33.0%	9.7%	4.4%

Source: Eurostat, arrivals to hotels and similar establishments

Table 3:

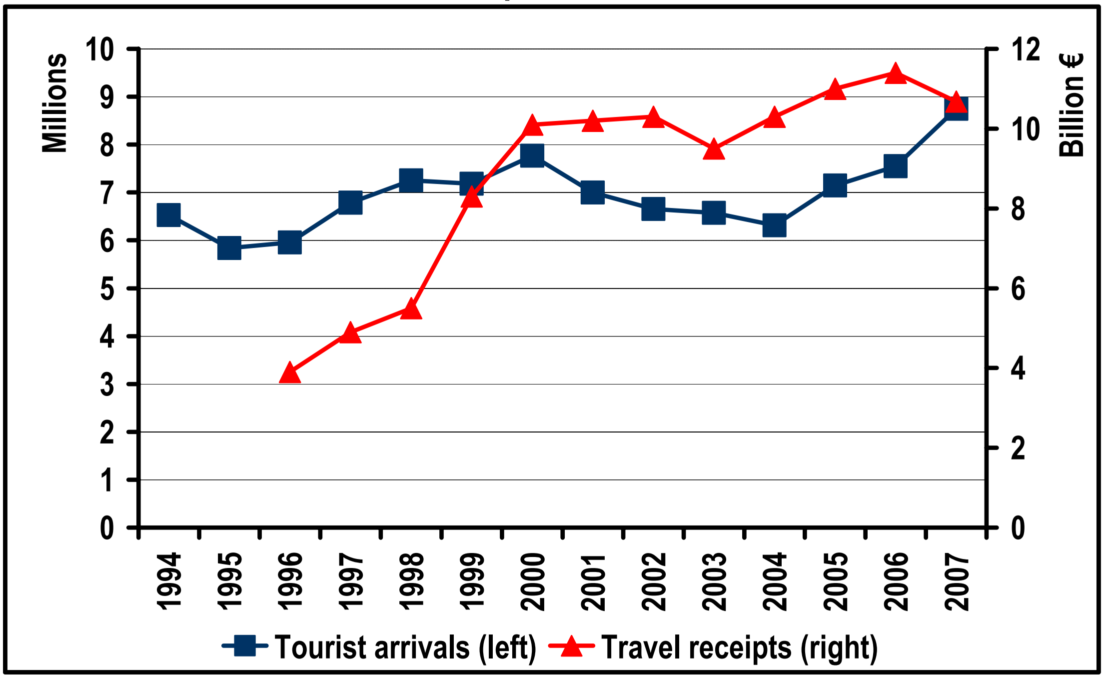
Tourism (travel) Receipts

	Jan.-Sept. (YtD)			Sept. (YoY)		
Period:	**2006**	**2007**	**2008**	**2006**	**2007**	**2008**
Tourism receipts (mil. €)	10,001.3	9,954.0	10,348.2	1,690.7	1,694.7	1,673.6
Tourism receipts as % of total receipts	44.32%	40.95%	37.57%	55.01%	50.84%	46.16%
Change from previous year (same period or month)	5.62%	-0.47%	3.96%	3.15%	0.24%	-1.25%

Source: Bank of Greece (temp. data).

Diagram 2:

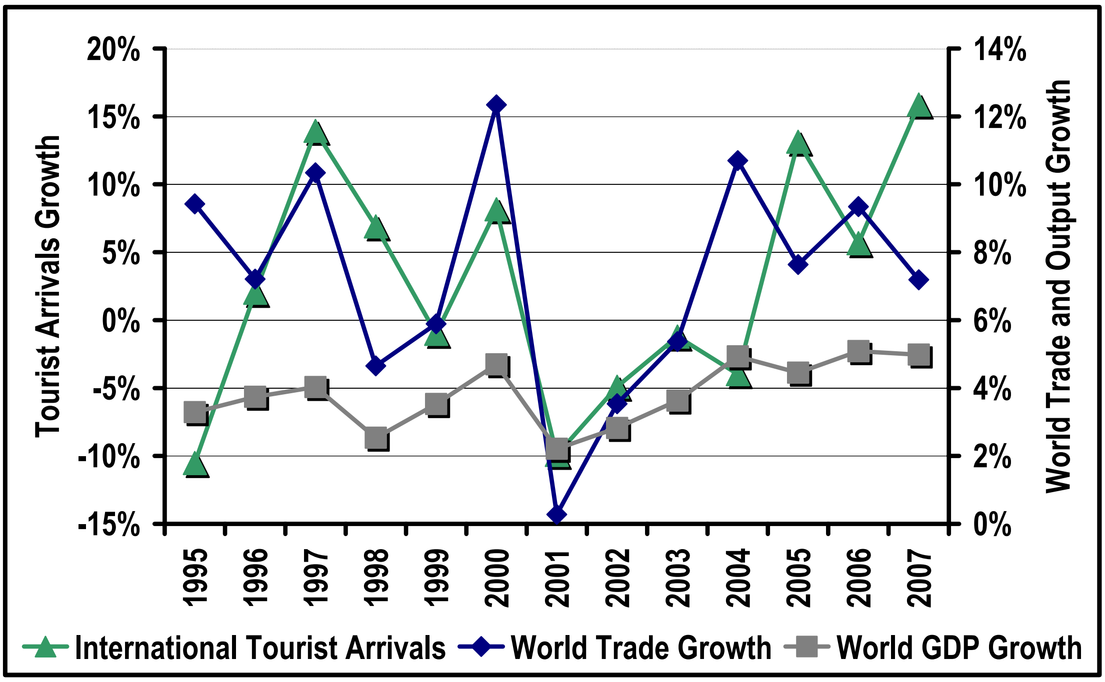
Travel Receipts vs. Tourist Arrivals



Source: Eurostat (arrivals hotels and similar establishments)

Diagram 3

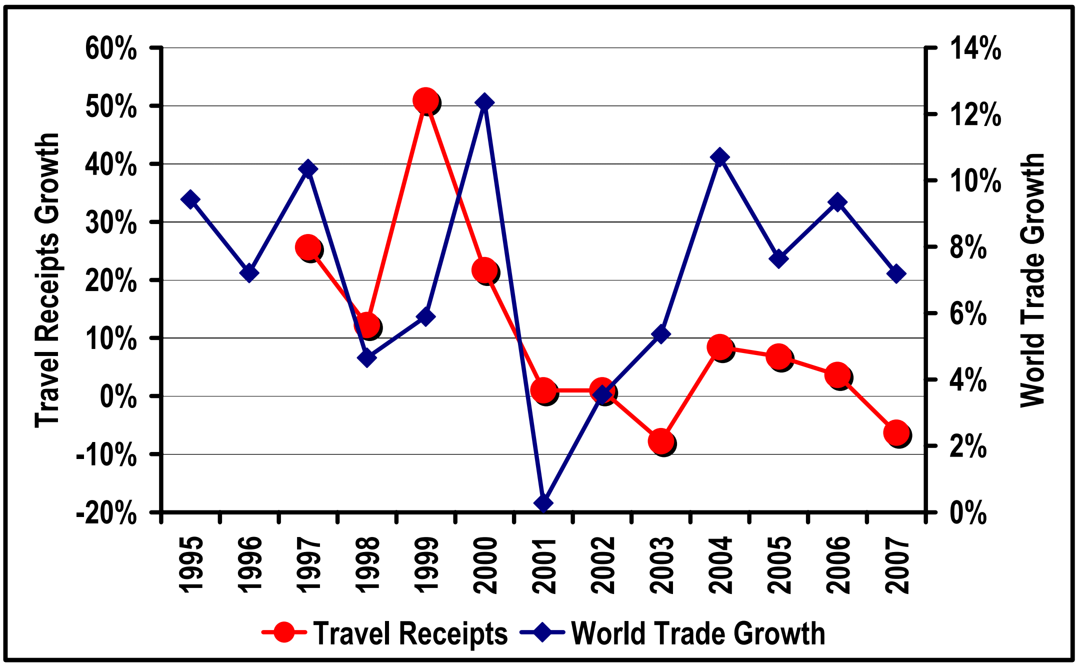
International tourists arrivals to Greece annual growth vs. World Trade growth and World GDP growth



Source: Eurostat, OECD

Diagram 4

Greek Travel Receipts annual growth rates vs. World Trade Growth



Source: Eurostat, OECD