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Macroeconomic Management and the post EMU Need for Structural Reforms in Greece

- **EMU membership has restricted the tools for domestic macroeconomic management and has elevated the need for structural reforms to top priority.**
- **Prior to EMU, bond and FX markets used to punish the economy for disequilibria or inappropriate policies whereas post EMU, the previous market crises are transformed into cumulative imbalances, which are less apparent to Greek policy makers and the public.**
- **The major imbalances of the Greek economy is the lack of competitiveness, a large public debt, which is expected to rise further due to the demands of financing the pension system, and a high rate of unemployment, a low level of employment and income inequality.**
- **Structural reforms ought to continue more aggressively in the markets of goods and services as well as the public sector and, after they become acceptable to the public, move into aspects of the labor market.**

1. Introduction

The Greek economy has undergone twelve years of uninterrupted impressive economic growth that every single year was higher than the corresponding average growth in the EU-15 countries. Some analysts believe that the growth success will continue without any new major policy initiatives, as inertia and the benign global environment are powerful forces to push the economy forward. Others question the sustainability of the previous trend. They point to a number of shortcomings. On the demand side, consumption growth may slow down as consumer debt has already reached 43% of GDP and disposable income has failed to increase uniformly across the population. Investment demand may also taper off as the EU structural funds dwindle and the pre-EMU euphoria in the business community is long gone. On the supply side, they point to the lack of competitiveness, which arises from a number of factors such as the low quality of public tertiary education, the minimal investment in new technologies, innovation and research, the unstable and burdensome tax system, a large bureaucracy and widespread corruption, the inflexibilities in the labor market, or the lack of competition in many sectors of the economy. All these factors result in noncompetitive products and services in world markets and keep pushing the country's current account deficit up.

The present article focuses on the topic of structural reforms and argues that structural reforms have become a necessary condition for Greece to keep its economy growing. While EMU membership has made structural reforms necessary, it has also made their importance invisible to the public. Prior to joining EMU, domestic disequilibria would manifest themselves in the financial markets in the form of a strong pressure on the domestic currency to devalue and the monetary authorities to increase interest rates. The incipient crisis would push policy makers to alter direction in their economic policy.

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Post EMU, the disciplining role of financial markets has disappeared and this absence results in cumulative disequilibria that have adverse long term growth consequences and are not clearly understood by the public or policy makers.

The rest of the article is organized as follows: Chapter 2 briefly describes the benefits and costs of Greece joining EMU. Chapter 3 explains three major imbalances in the Greek economy. Chapter 4 discusses the issue of structural reforms as a way to address the imbalances. Chapter 5 concludes.

2. Greek Macroeconomic Policy inside EMU

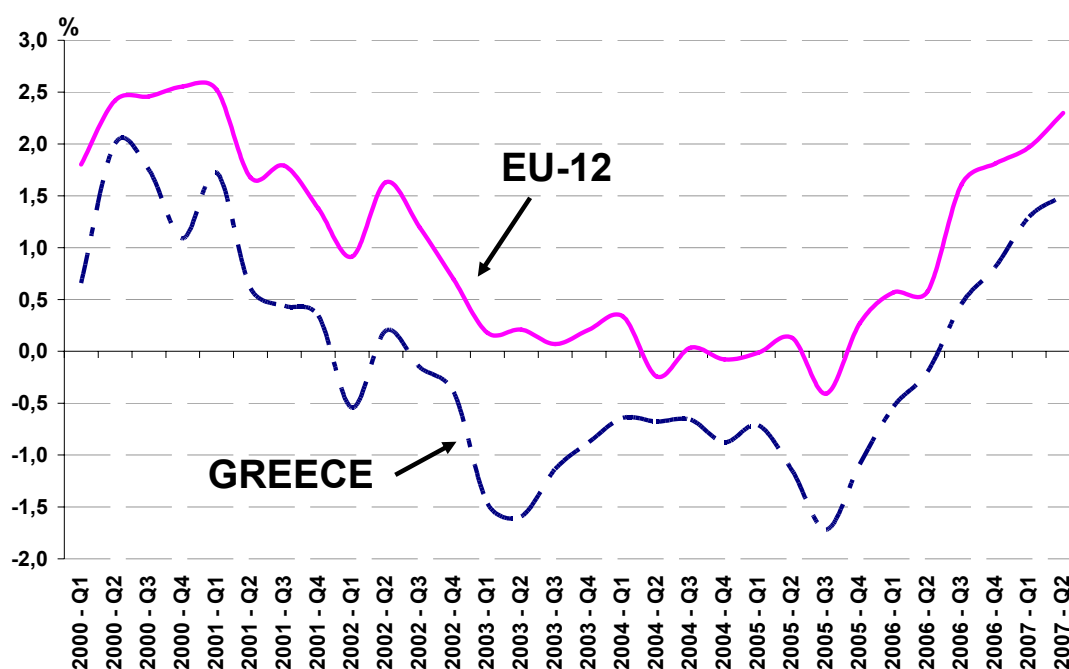
Greece's membership in EMU has brought benefits but has also imposed substantial restrictions on its domestic macroeconomic policy. The benefits are well known: They come from the credibility of monetary policy, which has resulted in low inflation and low nominal interest rates. The domestic government can no longer influence the course of the common monetary policy based on electoral or other considerations. Fiscal policy has also become more credible. Greece is now pressured by the Growth and Stability Pact to put a lid on the growth of general government debt relative to the growth of its economy. This is a beneficial long-run policy that would have been absent had Greece failed to join EMU. There are other benefits as well, originating from the transparency of prices across the borders or the convenience of using a common currency in trade and other cross border transactions.² Finally, there are political benefits as well, since joining EMU has solidified Greece's EU membership and elevated its political influence on Union decisions.

The costs of joining EMU arise from the possibility that the domestic business cycle or inflation can be different from the prevalent trends in the Eurozone and yet the country cannot utilize its own independent monetary policy.³

² A number of Greek authors have discussed these topics in articles or books. See, for example, the books in Greek by Alogoskoufies & Lazaretou (2002) or by Sachinidis & Hardouvelis (1999).

³ Exchange rate policy is another lost tool for domestic macroeconomic authorities.

Figure 1:
Real Interest Rates in Greece and the Eurozone, 2000-2007



Note: The real rate of interest is calculated as the difference between the quarterly average three month interbank rate and the yoy past inflation rate of the particular quarter (used as a proxy for expected inflation).

Source: Eurostat, ECB, Greek Statistical Agency, author's calculations.

These costs are higher, the more divergent is the structure of the Greek economy and the shocks that hit it from the corresponding ones in the Eurozone in the sense of Mundell's (1961) "Optimum Currency Area." Briefly, recall that a country is closer to the currency area (1) the larger its bilateral trade with the other members of the currency area relative to its total trade (Frankel and Rose (1998)), (2) the more similar are the external shocks that hit the country and the rest of the currency area, (3) the higher is the labor mobility between the country and the rest of the countries in the currency area, and (4) there is an effective fiscal redistribution mechanism across the country and the remaining countries of the currency area that would respond to asymmetric shocks.⁴ Based on economic reasoning

⁴ In the past, the Greek authorities made the decision to work towards becoming members of EMU without seriously considering these economic conditions. When evaluating those economic conditions, observe the following: First, currently only 44% of Greece's trade takes place with the rest of the Eurozone. Second, by being located at the outskirts of Europe, Greece is frequently hit by different external shocks than the rest of the Eurozone countries. Third, there is high cross border labor mobility but mainly with the former Eastern Block countries, not so much with the Eurozone countries.

alone, the call is ambiguous on whether Greece should have joined EMU or not. Yet, Bayoumi & Eichengreen (1998) rank Greece quite high in year 1995 – 6th among 15 European countries – in a possible monetary union with Germany.

The inability to control domestic monetary policy leaves the economy vulnerable to negative idiosyncratic shocks. If, for example, domestic investment drops because of pessimistic entrepreneurial expectations, the domestic monetary authorities do not have the ability to reduce interest rates. Conversely, if Greek consumers go on a borrowing binge, driving up aggregate demand and overheating the economy, domestic monetary authorities can only use regulatory tools to contain the excitement, but not interest rates. If the ECB responds to the current subprime crisis (see IMF (2007b, Chapter 1) by reducing interest rates, then it would overheat the Greek economy, despite the fact that the subprime crisis has not involved directly any Greek financial players.

Fourth, there is a fiscal redistributive mechanism in the EU, which Greece has utilized but not in response to macroeconomic shocks.

In the years following EMU entry, Greece has already faced a substantial asymmetry relative to the rest of the Eurozone. Greece was obliged to follow an expansionary fiscal policy due to hosting the Olympic Games in year 2004. This expansionary fiscal policy pushed up aggregate demand in the years leading up to 2004 and resulted in both higher domestic inflation and growth. The optimal monetary policy should have been a restrictive one.⁵ Yet, Eurozone-wide monetary policy was expansionary at the time. In fact, from May 2001 to June 2003 the ECB was reducing rates. Ironically, because of the higher inflation in Greece, monetary policy was even more expansionary in Greece than in the rest of the Eurozone. Figure 1 plots the real short-term interest rate in Greece and the Eurozone from year 2000 to the present. Greece had negative real interest rates in the period 2002-2006.

Another cost of joining EMU, which is less transparent but more serious, is the inability of financial markets to discipline domestic economic policy. This is because the presence of the common currency has alleviated the domestic exchange rate and interest rate crises of the past. In the past, domestic disequilibria would feed into unusual adjustments in exchange rates and interest rates. Nowadays, the domestic disequilibria do not affect the Eurozone-wide interest rates or the value of the currency. Hence, domestic disequilibria are allowed to persist without the existence of an automatic corrective mechanism that can counteract them. For example, today's large current account deficit does not initiate pressures for devaluation of the domestic currency. The absence of a negative reaction by the financial markets to domestic disequilibria removes a warning signal from policy makers' antennas as well, making them more sluggish to respond to the original sources of disequilibrium. Thus disequilibria are allowed to cumulate for a long time, making them even harder to correct as times passes.

Once inside EMU, an economy can be protected from asymmetric shocks if it develops the flexibility to respond

⁵ In the language of modern macroeconomics, the optimal Taylor (1993) rule for Greece had larger response coefficients.

on its own to negative idiosyncratic shocks; hence, the need for structural reforms, which would make the economy more flexible and more capable of being close to equilibrium. Economists have coined this need as "TINA," meaning "There Is No Alternative." Next, we describe the Greek economy's major imbalances in order to understand better the need for structural reforms.

3. Imbalances in the Greek Economy

We now turn our attention to three major imbalances in the Greek economy, which have to have priority in the design of economic policy. These imbalances are the lack of competitiveness, the high level of current and future debt and the high income and wealth inequality.

3.1 Lack of Competitiveness

Lack of competitiveness is probably the deepest problem in the Greek economy as it is spread everywhere, in all aspects of economic life. It originates from weaknesses at the micro and macro economic level and especially the inability of the public sector to impose a framework of incentives, rules and regulations, which would be obeyed voluntarily and would not impose a cost to entrepreneurship and innovation.

Table 1 presents some indicative statistics from the 2007 World Bank's annual survey on the ease of doing business.⁶ Greece is disappointingly ranked 100th among 178 countries in the overall ease of doing business. To start a business in Greece, one needs to overcome twice as many obstacles as in the OECD countries, whereas the cost is almost five times larger (Panel A). The obstacles in imports and exports are also onerous (Panel B). The relationship with the tax authorities is also very complicated (Panel C). In the labor market there is a lot of rigidity as well (Panel D).

⁶ The answers to this survey are comparable across countries as they do not depend on perceptions, or a sense of optimism and pessimism by domestic households or businesses. See Hardouvelis and Thomakos (2007) for a discussion of the comparability problems in the consumer sentiment survey.

Table 1:
Ease of Doing Business

Panel A		
	Greece	OECD
Starting a Business		
Procedures (number)	15.0	6.0
Time (days)	38.0	14.9
Cost (% of income per capita)	23.3	5.1
Closing a Business		
Time (years)	2.0	1.3
Cost (% of estate)	9.0	7.5
Panel B		
Trading Across Borders		
Documents for export (number)	5.0	4.5
Time for export (days)	20	9.8
Cost to export (US\$ per container)	998	905
Documents for import (number)	6.0	5.0
Time for import (days)	25.0	10.4
Cost to import (US\$ per container)	1.245	986.1
Panel C		
Paying Taxes		
Payments (number)	21.0	15.1
Time (hours)	264.0	183.3
Total tax rate (% profit)	48.6	46.2
Panel D		
Employing Workers		
Difficulty of Hiring Index (0-100)	44.0	25.2
Rigidity of Hours Index (0-100)	80.0	39.2
Difficulty of Firing Index (0-100)	40.0	27.9
Rigidity of employment (0-100)	55.0	30.8
Firing costs (weeks of wages)	24.0	25.7

Source: World Bank, Doing Business in 2007

Another indicator of the lack of competitiveness is the complete lack of FDI inflow into Greece (Table 2). FDI is not needed for domestic financing or investment, but it is nevertheless a signal of how foreigners perceive business opportunities in Greece. A second variable, more important to the potential future growth, is the current account deficit, which has skyrocketed to 12.1% of GDP in 2006 (Figure 2). According to a recent IMF study (2007a), the deficit cannot simply be explained by the higher rate of economic growth in Greece. It is also related to lack of competitiveness.

Some analysts argue that the current account deficit is not a problem as it is easily being financed. This argument ignores the fact that the financing of the deficit implies either a higher external debt or the gradual sale of domestic capital to foreigners (in the form of stocks, real estate or other assets). *Ceteris paribus*, future domestic residents will have a lower standard of living either because they would have to repay the external debt or because they will lose full ownership of the domestic capital, hence they will forgo part of the return to capital.

3.2 High Government Debt

The ratio of general government debt to GDP is very high in Greece, standing substantially above the EU-15 average and signaling that past fiscal policy has been weak, cumulating deficits (Figure 3). The ratio is expected to rise even further in the future due to the aging population and the demands imposed on the government budget by the existing structure of the pension system. These pressures are evident in the data of Table 4. Pension expenses are projected to rise from 12.9% of GDP in 2004 to 23.2% in 2050. Health expenses are also expected to rise from 5.1% of GDP in 2005 to 6.8% in 2050. The old age dependency ratio is expected to rise from 26.8% in 2005 to 60.4% to 2050!

The expected rise in government debt is going to affect negatively the country's rating and, hence, the interest rate it would have to pay for its debt. Table 4 presents data published recently by Standard & Poor's.

According to S&P's own calculations, the debt-to-GDP ratio is expected to skyrocket above 400% and the country's rating to become speculative as early as 2030! Greece has the highest debt-to-GDP ratio among the 32 countries that Standard & Poor's analyzes.

3.3 Inequality

A third major imbalance in the Greek economy is the observed inequality in incomes, which is the largest among the EU-15 countries. One indicator of inequality is the ratio of the average income in top 20th income percentile to the average income in the bottom 20th percentile. In 2005 this ratio was 5.8 in Greece, compared to 4.8 in the EU-15. Another indicator is the percentage of households in danger of poverty, namely the households whose income is lower than 60% of the median household income in the country. That percentage is 20% in Greece and only 16% in the EU-15. What is more worrying is the inability of Greek social policies to make a big difference in the poverty rate. When calculating disposable income by including pensions but excluding social transfers, the percentage of the households in danger of poverty is 23% in Greece and 26% in the EU-15. After social transfers, there is a drop of only 3 percentage points in Greece, compared to a corresponding drop of 10 percentage points in the EU-15.⁷

One source of inequality is the high unemployment rate and low employment rate of women and the youth. Table 5 presents the statistics for the end of 2006. There is very little academic work in Greece that tries to explain these large percentages and find the underlying causes.

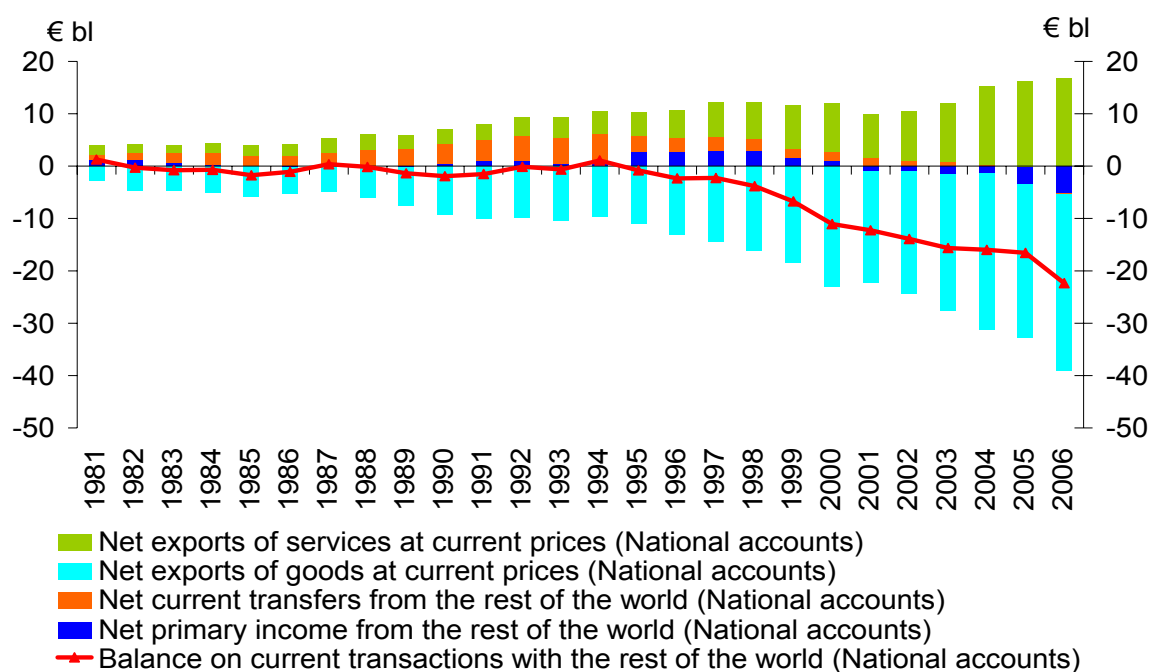
⁷ It should be noted that the indicators calculated from official sources overestimate relative poverty and inequality in Greece because they exclude sources of income such as owner-occupied rents or production of food for own use. In Greece, the percentage of households that own their own house is the second largest in the EU-15, around 80% (see Karamouzis & Hardouvelis (2007)) and in the country side, where people report low incomes, it reaches 98%. In the country side people also tend to produce a lot of their private consumption.

Table 2:
Foreign Direct Investment

	Average 2003-06 (% of total country investment)
Belgium	63.7
United Kingdom	29.4
Sweden	21.8
Netherlands	14.8
Portugal	14.4
Lithuania	13.3
France	12.8
Finland	10.3
Austria	8.6
Spain	8.0
Italy	5.6
Germany	5.3
Greece	3.2
Ireland	0.9

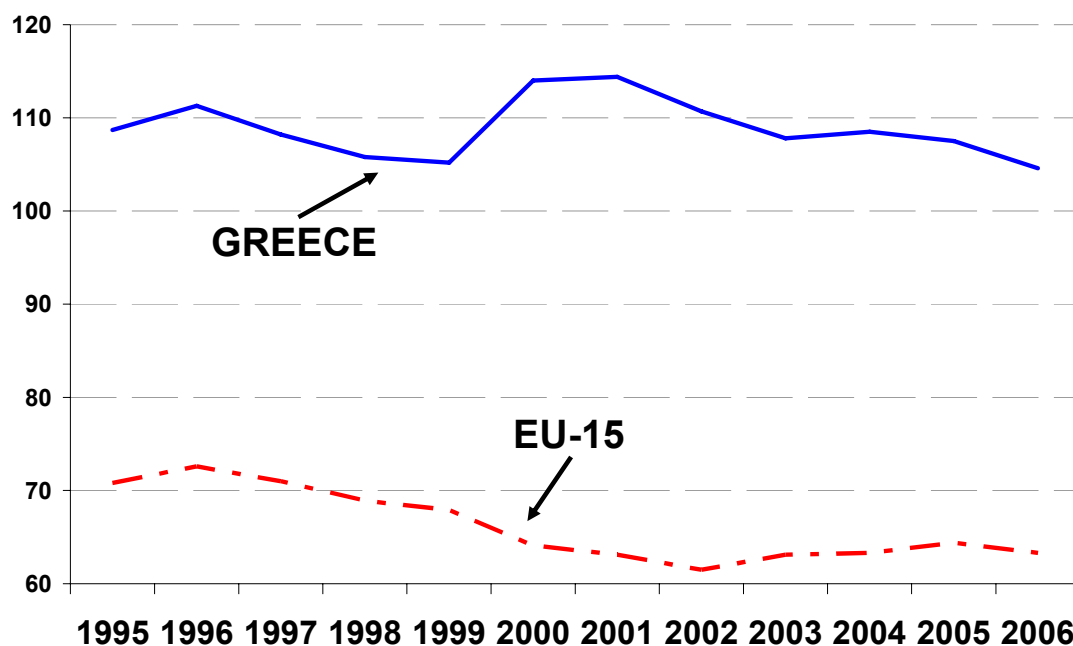
Source: EUROSTAT

Figure 2:
Greek Current Account Surplus (+) / Deficit (-)



Source: Eurostat, AMECO, author's calculations

Figure 3:
General Government Debt
(% GDP)



Source: Eurostat

Table 3:
The Increase in Future Government Liabilities

	2005	2010	2015	2025	2050
Healthcare spending as % of GDP	5.1	5.4	5.5	5.7	6.8
Education spending as % of GDP	3.4	3.1	2.9	3.0	3.1
Share of older workers 55 – 64 (% population)	10.9	12.0	13.6	17.3	17.4
Old-age dependency ratio	26.8	28.0	30.3	35.8	60.4
Number of students (in thousands, Primary - Tertiary)	1888	1768	1733	1724	1444

Source: (1) ECB Monthly Bulletin, 2007, "Challenges to fiscal sustainability in the Euro area", February, p.65
(2) European Commission, 2006, DGECFIN, "The Impact of Ageing on Public Expenditure: Projections for the EU-25 Member States on Pensions, Healthcare, Long-Term, Education and Unemployment Transfers (2004-50)".

Table 4:
Future Government Debt and Expected Future Country Rating

	General Government Debt (% GDP)					Bond Rating			
	2006	2010	2020	2040	2050	2007	2020	2030	2040
Greece	104.6	92	103	265	436	A	BBB	Spec.	Spec.
Italy	106.8	98	82	95	118	A	AAA	AA	BBB
Belgium	89.1	66	44	85	134	AA	AAA	BBB	Spec.

Source: Standard & Poor's, 2007, "What a Change a Year Makes: Standard & Poor's 2007 Global Graying Progress Report, September 19.

Table 5:
Unemployment & Employment
(end-2006)

	Unemployment		Employment	
	Greece	EU-15	Greece	EU-15
Total	8.9%	7.4%	61.0%	66.0%
Men	5.6%	6.5%	74.6%	73.5%
Women	13.6%	8.5%	47.4%	58.6%
Young (ages 15-24)	25.2%	16.0%	24.2%	40.1%

Source: Eurostat

4. Imbalances and Structural Reforms

Structural reforms are aimed at increasing productivity by improving human capital, the quality of capital and the combination of the two. The rise in productivity will increase both potential output and export activity, put a lid on inflation, improve employment opportunities and reduce unemployment. Structural reforms have another positive influence as well. They make the private sector more flexible and efficient in adjusting to external shocks, a property in dire need after joining EMU.

Structural reforms are usually carried with great difficulty for a variety of reasons (Kollintzas (2000)). There is a fair amount of uncertainty about their positive influence, plus their positive effect is likely to arrive much later than the cost some citizens occur in the short run. The time gap between costs and benefits allows the groups that are negatively affected to organize their response more effectively (Fernandez and Rodrik (1991)). Also, some structural reforms tend to affect institutional structures considered essential or "holy" by the majority of citizens,

e.g. unemployment compensation. Finally, not all structural reforms are the best policy in a given country given the other circumstances that prevail, nor can they be copied easily from one country to the other (Simitis (2005), Hardouvelis (2006)).

Structural reforms are easier to carry following an economic crisis. The crisis increases awareness about the necessity of reforms and generates an environment of urgency (Hardouvelis (2006)). During a crisis the cost of inaction is very high and visible, overwhelming the resistance to reforms (Alesina, Adraga and Trebbi (2006)). However, the sense of crisis is missing from the Greek economic environment today thanks to EMU and the common currency.⁸

⁸ The type of political system also influences the pace and durability of reforms. In a strictly proportional system, the government is more pressed for consensus building, thus reforms take longer to start but once they begin, they endure. In an "enhanced proportional system" like the one in Greece, in which the leading party earns more members of parliament than its share of votes in national elections, the government can theoretically begin reforms without the consent of the opposition parties. Reforms are easier to start but can easily be reversed

For purposes of exposition, structural reforms are now categorized into reforms in the markets for goods and services, labor reforms and reforms in the public sector.

4.1 Reforms in the markets of goods and services

There is a long literature on structural reforms in the markets of goods and services, which began with the paper of Nickell (1996). The OECD has also undertaken an extensive project for a number of years, keeping a data base on reform indicators. According to Duval and Elmeskov (2006), who use OECD data, Greece has the worst ranking among the EU-15, although it has shown some improvement from 1993 to 2003. In Greece, the deficiency in competitiveness is more pronounced in services. Table 6A and 6B present the details. The median difference over the period 01/2004-04/2007 between Greek and Eurozone inflation is 1.25 percentage points in services and 1 percentage point in goods. Transportation, energy, communication and processed foods are sectors that show the highest median differences as well. It follows that reform attention should be focused on services and on particular sectors.

The Greek governments' past efforts with structural reforms are described in the country reviews of IMF(2007b) and OECD (2007). Major challenges ahead is the competition in the utility industries, such electricity, natural gas and water, the competition in the transportation and communications sectors, as well as the liberalization of professions that have secured special privileges which impose costs to everybody else, like contract lawyers, port-authority carriers, etc. Further privatizations may help in improved competition. Parenthetically, the financial sector, often criticized by politicians for possible oligopolistic practices and obscene profitability, has become very competitive as the spread between lending and borrowing rates has shrank.

at a later date by another political party. In practice, we have observed an unwillingness in Greece to carry on with reforms, as the government is apparently sensitive to the possible punishment by the public during the following elections.

There is a dire need for public sector companies to improve their efficiency and performance as well, and a recent law takes the issue in that direction. Hospitals are notorious for not even publishing a balance sheet, something that two thirds of the city councils around Greece by mid 2007 have managed to do for their townships.

4.2 Labor market reforms

Labor market reforms can vary from employment legislation to the size of employee and employer contributions to social security, the details of job protection legislation, the size and duration of unemployment benefits, the method of wage negotiations, the flexibility of working hours, or the type of pension system. Labor market reforms is a very large topic and I will, therefore, restrict myself to a few remarks.

Earlier Table 1, Panel D, showed a substantial rigidity in the Greek labor market. Indeed, according to Brandt, Burmiaux and Duval (2005), who use OECD data, the intensity of labor market reforms is very weak in Greece, a lot weaker than the average intensity in the Eurozone (which is not strong either). Table 7 extracts data from their paper, which refer to the decade 1994-2004. During that period, Greece accomplished only 13.8% of the potential labor market reforms and is particularly lagging behind in pension reform.

Many of the labor market reforms are difficult to undertake as they impose costs on certain groups of citizens. Politicians tend to avoid them, passing them forward in time from government to government like a hot potato. A requirement for labor reforms is a wide public discussion on their details for which, unfortunately, there is no culture in Greece. Some of the issues have not even been researched properly. For example, no one has studied the impact of the few labor market reforms that were undertaken in the period 2000-2003.

Table 6A:
Difference between Greek and Eurozone Inflation

	Median 01/2004 – 04/2007 (%, yoy)
Services	1.25
Goods	1.00
All items HICP	1.10

Source: Eurostat, author's calculations

Table 6B:
Difference between Greek and Eurozone Inflation by sector

	Median 01/2004 – 04/2007 (%, yoy)
Services related to transport	2.60
Energy	1.90
Services related to communication	1.85
Processed food including alcohol and tobacco	1.80
Services related to housing	1.70
Non-energy industrial goods	1.45
All-items HICP	1.10
Education, health and social protection	1.05
Services related to recreation and personal care, excluding package holidays and accomodation	0.90
Services - miscellaneous	0.50
Services related to package holidays and accomodation	0.35
Unprocessed food	-2.00

Source: Eurostat, author's calculations

A second remark is that not all labor market reforms are necessarily beneficial in the Greek environment. For example, unemployment insurance benefits are already too small in Greece that it is not even worth bringing them up as a potential policy tool for reducing unemployment, although economists tend to agree on their effectiveness (Nickel et. al. (2005)). Another example is the ability of companies to fire workers more easily. Many observers believe that it would encourage companies to increase employment. This is a very contentious issue, as theory does not support it (see Lazear (1990), Leonardi and Pica (2007)), nor does the

empirical evidence. On the other hand, some research economists have managed to find evidence that the increased ability to fire does increase economic efficiency, at least in the country of their research consideration, Chile (Petrin and Sivadasan (2007)). Yet, even if economic efficiency can be improved by liberalizing the companies' ability to fire, a policy of that sort would be constrained by its negative impact on workers' welfare and deserves a more careful consideration.

A third remark is that in Greece, pension reform is a must. Earlier Tables 3 and 4 already showed the future burden

Table 7:
Labor Market reforms

Reform Intensity Indicators 1994-2004 (% of maximum possible score)						
	Denmark	EU-12	Ireland	Portugal	Greece	Spain
Summary reform intensity indicator	29.3	18.5	17.4	15.9	13.8	10.5
Active labor market policies	56	36.9	46	23	42	8
Taxes & social security contributions	13	32.8	88	25	13	19
Employment protection legislation	10	9.4	-10	17	7	17
Unemployment benefit system	42	11.5	15	8	12	8
Wage formation & industrial relations	27	2.3	-14	5	5	7
Working time flexibility & part time work	17	22.2	0	33	17	0
Early retirement, invalidity & old age pension schemes	25	25.7	0	17	-8	8

Source: Brandt, Bumiaux and Duval (2005) & Duval R., J. Elmeskov (2006)

on government finances. Indeed, with the present system intact, future governments will have a hard time balancing the budget. They would either have to cut outlays, including social programs, or increase tax rates on fewer working individuals who would support more pensioners (Table 3). In the former case the older people would object and in the latter case the younger ones. Society could easily be split in half. Postponing social security reform also implies a lower future potential growth, as future governments would be hard pressed to cut the investment component of the budget, the one which is easier to cut at times of distress. Furthermore, instituting the reforms does not only avoid the most severe future consequences but can also improve some of the current employment indicators, like the employment rates of women and the youth.

Finally, please note that in practice, reforms in the labor market tend to follow reforms in good markets (Brandt, Bumiaux and Douval (2005), which is consistent with the view expressed by Blanchard and Giavazzi (2003), who show theoretically that reforms in the markets of goods and services make it a lot easier to subsequently perform

reforms in the labor market. Thus, it is natural to expect that labor market reforms in Greece will follow the necessary reforms in the goods and services markets.

4.3 Public sector reforms

Here I restrict the discussion to reforms on the size of government, ignoring other important issues such as the distribution of expenditure and taxes, the regulatory environment, policies for companies - national champions, or corruption and bureaucracy. Table 8 shows that general government expenditure went up in the Eurozone from 30.4% of GDP in 1960, to 45% in 1980 and 49% in 1998. Subsequently, the percentage has declined slightly, reaching 47.5% in 2006.

Seven of the original 12 Eurozone countries have tackled the issue of size of general government. Belgium, Ireland, Luxembourg and Netherlands managed to cut the size of expenditures since the early 1980s. Spain, Austria and Finland did the same in the 1990s. It is, therefore, interesting to compare their achievements against the corresponding achievements of the five countries which

Table 8:
General Government Expenditure
(% GDP)

	1960	1980	1998	2006
Belgium	33.2	56.1	51.2	49.2
Germany	31.8	47.1	48.7	45.7
Greece	20.6	29	49.5	46.1
Spain	20.3	31.5	41	38.5
France	33.4	45.7	53.5	53.8
Ireland	26	46.1	34.8	34.1
Italy	28.1	43	49.6	50.1
Luxemburg	25.4	48.4	42.1	40.4
Netherlands	29.3	53.3	46	46.7
Austria	34.1	46.8	53.9	49.2
Portugal	14.7	34.8	42.3	46.1
Finland	26.3	39.1	52.8	48.6
Eurozone	30.4	45	49	47.5
United Kingdom	36.1	43.2	40	45.0
Japan	16.6	31.5	42.5	39.6
USA	28.2	33.8	33	34.5

Source: Eurostat, AMECO

have not initiated structural reforms. Here I repeat the analysis of earlier authors and calculate the average size of expenditure, general government deficit and general government debt as a percent of GDP and compare them across the two groups. Naturally, these figures are much smaller in the groups of countries that introduced reforms (Figures 4A, 4B, 4C). Thus, in 2006, average expenditure in the 7 countries with reforms was 43.8% of GDP and in the 5 countries with no reforms 48.4% of GDP. Similarly, the average surplus in the former countries was 2.7% of GDP and in the latter -1.2%. Debt was also smaller in the countries with reforms, at 48.8% of GDP, as opposed to 77.5% in the countries with no reforms.

What is more interesting is the behavior of real GDP growth, which is higher in the 7 countries that underwent reforms by approximately 1.5 percentage points (Figure 5). This positive relationship between reforms and growth is not necessarily a causal one, but is worth investigating further in a future paper.

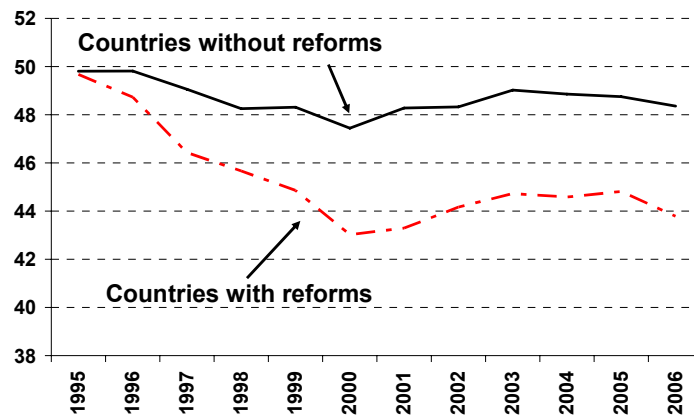
Greece is one of the five countries that have not reformed the size of their government sector. However, Greek fiscal policy was positively influenced by the effort to join EMU, and the revenue side improved substantially. The expenditure side has not improved. This asymmetry is

also evident in the work of Hardouvelis, Sampaniotis and Davradakis (2006), who find that the Greek Central Government deficit consistently turned out larger than originally projected in the budget (Figure 6)⁹. The deviation was on average -8.2% of the size of the budget in the period 1982-1993 and -3.9% in the period 1994-2005. However, the improvement in the second half came from the revenue component, not the expenditure one (Table 9).

Papoulias (2007) is pessimistic about public sector reforms in Greece, but this does not preclude academics from offering suggestions and techniques of creating and executing the government's budget, so as to minimize deviations from the budget and control expenditures. According to Rapanos (2007), the main weaknesses of the Greek budget are (a) Lack of accountability and transparency, the latter being enhanced by lack of utilization of information technology and the existence of two budgets, one for current expenditures and another for capital outlays. (b) Lack of a precise connection between

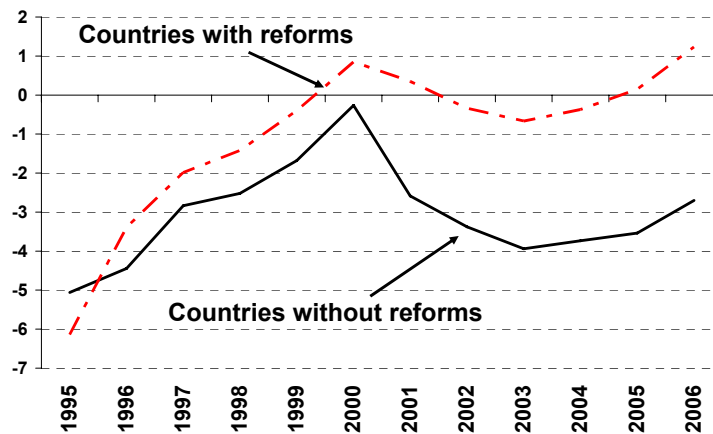
⁹ The only exception was year 1999, when Greece was being checked for adherence to the Maastricht criteria for joining EMU.

Figure 4A
General Government Expenditure in the Eurozone
 (% GDP)



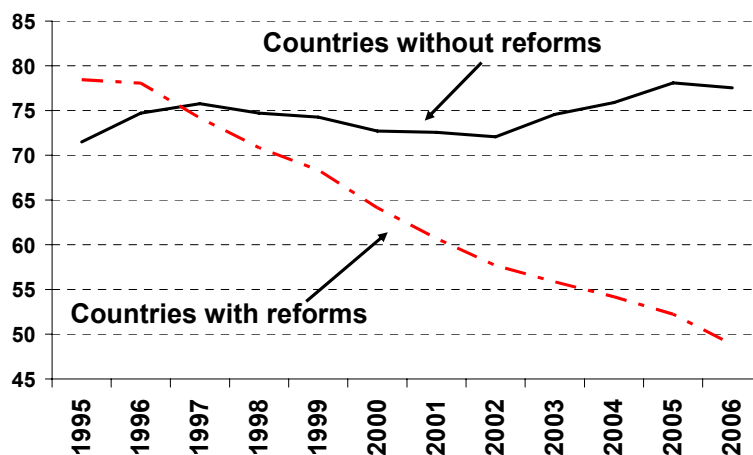
Source: Eurostat, author's calculations

Figure 4B
General government surplus (+) / deficit (-) in the Eurozone
 (% GDP)



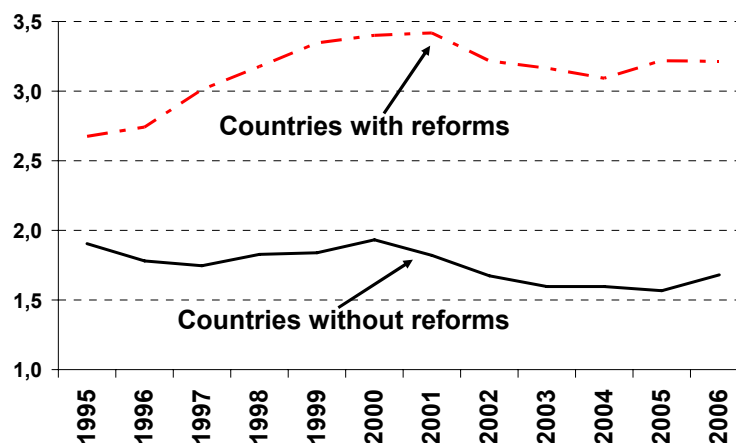
Source: Eurostat, author's calculations

Figure 4C
General Government Debt in the Eurozone
 (% GDP)



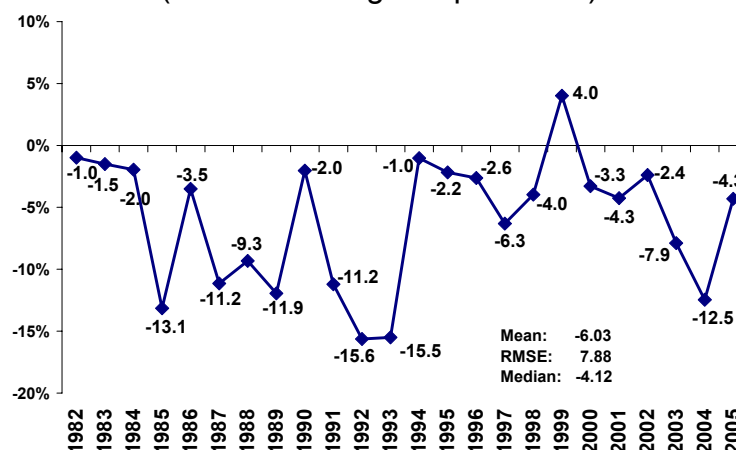
Source: Eurostat, author's calculations

Figure 5
GDP Growth in the Eurozone



Source: Eurostat, author's calculations

Figure 6
Deviation of Central Government Surplus from Projected Surplus
in Central Government's Budget
(% of total budget expenditure)



Note: The surplus is defined as revenues minus expenditure. The deviation is the difference between the realized surplus minus the projected surplus in the budget as a percent of total budget expenditure.

Source: Hardouvelis, Sampaniotis and Davradakis (2006)

Table 9:
Deviations from Projections in the Central Government's Budget

	Average Deviations: Realization - Projection as a % of total budget expenditure		
	Revenues	Expenditure	Balance
1982 – 2005	-4.14%	1.89%	-6.03%
1982 – 1993	-6.35%	1.81%	-8.20%
1994 – 2005	-1.93%	1.97%	-3.90%

Deviations in Revenues = (Realized Revenues – Projected Revenues in Budget) / Size of Budget.
Deviations in Expenditure = (Realized Expenditure – Projected Expenditure in Budget) / Size of Budget.
Deviation in Balance = Deviations in Revenues - Deviations in Expenditure.

Source: Hardouvelis, Sampaniotis and Davradakis (2006)

projects and targets on the one hand and expenditures on the other. Today there is some discussion that the 2008 budget will be written down also in the form of expenditures earmarked for specific projects. An internal budget audit committee was also created in the Ministry of Finance, which will be followed by the creation of similar committees in the other ministries and the 13 counties.

5. Conclusions

EMU membership enhanced the credibility of Greek macroeconomic policy, brought down nominal interest rates and inflation and gave the country a chance to follow a prudent fiscal policy, which would lower the debt-to-GDP ratio. Yet EMU membership has also restricted policy makers to follow the common Euro Area wide monetary policy, which may not always be optimal for Greece. As a consequence, the Greek economy has to become more flexible and able to respond to asymmetric shocks. To earn this ability, Greek policy makers have to address a number of economic imbalances, namely (1) the lack of competitiveness, (2) the large government debt, and (3) the income inequality across the population.

EMU membership has made structural reforms a necessary policy tool for adjusting to EMU wide monetary policy, earn flexibility and increase potential GDP. Yet, EMU membership has simultaneously hidden the necessity of structural reforms as it has averted economic crises, which provide warning signals to policy makers and the public. The Bond and FX crises of the past are now being transformed into cumulative imbalances that threaten future living standards without generating much anxiety among the public.

The correct strategy for structural reforms is to begin in areas where they can easily be implemented without much resistance, i.e. in the public sector and in the markets of goods and services. Experience shows that countries which pushed structural reforms in the public sector have achieved better fiscal balances and a higher potential GDP. Similarly, both theory and practice indicate that structural reforms in the markets of goods

and services make it a lot easier to subsequently initiate reforms in the labor market. Reforms in the labor market should be implemented after a lengthy public dialogue that builds consensus.

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