The Prologue to the Greek Crisis

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Summary: This paper analyzes the prologue to the Greek tragedy—in particular, the long period of slow growth after Greece joined the European Union and the short period of very strong growth following its adoption of the euro—and deduces reform proposals. Ultimately, a growth strategy should contain three interrelated bundles of measures: First, an improvement of the institutional environment, which currently makes it difficult to do business in Greece and thus leads to too little investment. Second, a reorganization of public finances and the creation of a leaner, more efficient administration, as well as a reform of the pensions system. Third, an expansion of the industrial basis and the modern sector in order to build a strong export basis. All of these measures entail comprehensive changes to Greece's economy and Greek society, and the majority of Greeks must therefore be in favor of them. The alternative is to opt for moderate reforms and to return to the old path of low growth and a lower living standard.

- → JEL Classification: 052, E02
- → Keywords: Greece, slow growth, growth strategy, economic measures

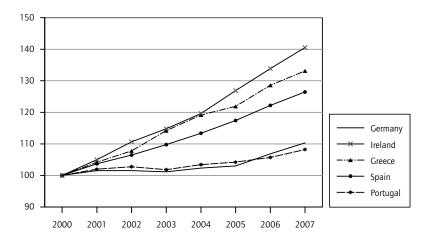
T Introduction

When Greece passed the convergence criteria in 2000 and entered the euro zone, it was the start of what looked like a success story: The country's gross domestic product (GDP) rose by 4.5 percent that year and from 2001 to 2007, it continued to increase by an average of 4.2 percent per year. In 2007, Greece's GDP was one-third higher than it was in 2000. Portugal, which has a similar economic structure, saw an increase of only 8 percent in the same time span; in Germany, then dubbed "the ailing man of Europe," the GDP rose by only 10.5 percent. (In Spain and Ireland, on the other hand, the development of the economic output was similarly successful to that of Greece, if not more so.) (Figure 1).

Before that period of growth, however, there had been a much longer phase of stagnation or very low growth after Greece became a member of the European Union (EU) in 1981.² Between 1981 and 1995, Greece's GDP rose by a total of 14 percent, i.e. by only 0.9 percent per year (Table 1, fifth column). What caused this very different growth post-accession and post-entry to the euro zone? Was the prosperity exhibited by the Greek economy between 2000 and 2007 sustainable? Focusing on these two questions will allow us to draw conclusions as to which policy options Greece has for the future of its economy and its society.

Figure 1

Development of real GDP in Greece, other GIPS countries, and Germany 2000-2007



2000 = 100. Source: Eurostat database (ESA 1995).

¹ All numbers have been rounded to whole numbers (no decimal place), or to ½ (.5). One decimal place is given for very small figures and for the convergence criteria.

² The European Union (EU) only came into being with the Maastricht Treaty; prior to that it had been called the European Community (EC). Like other authors, we use the term EU consistently.

2 Accession to the European Union in 1981

Greece's accession to the EU on I January 1981 was controversial right from the start, both among the Greeks and throughout the EU. Greece had only become a democracy in 1974, and the state was not considered stable yet; as well, its economy was much weaker than those of other EU countries (Axiopoulos 2010). Because Greece was largely agricultural and not able to compete economically, the EU Commission had initially advised against a quick accession. Moreover, Greece suffered from inflation, unemployment, and a trade deficit (Stergiou 2012). On the Greek side, both the pro-Soviet Communist party and the Panhellenic Socialist Movement (PASOK) were opposed to the accession (Trombetas 1983). In the 1981 election campaign, PASOK advocated Greece's immediate exit from the EU and NATO, using the slogan "Greece for the Greeks" (Stergiou 2012). Ten months after the accession to the EU, PASOK came to power, and although it remained in government for ten years, Greece still belongs to both the EU and the NATO to this day.

However, many of the reforms that had been agreed upon with the accession were never implemented in Greece (Bitros and Karayiannis 2013). Instead, PASOK carried out a series of "reforms" that ended up further weakening the country's public administration instead of improving it. Most crucially, competition for recruitment to the civil service was abolished and the emphasis shifted to social criteria over candidates' qualifications. In addition, General Directorates were abolished and the experienced top-grade civil servants were replaced with inexperienced political appointees. Furthermore, a large number of new government agencies, departments, and "institutes" were created, causing the number of state employees to multiply within only a few years (Valinakis 2012).

3 Low economic growth between 1981 and 1995 ...

In the 15 years following the accession to the EU, the Greek economy grew by an average of only 0.9 percent per year, whereas Spain's economic output grew by 2.5 percent, Portugal's by 2.7 percent, and Ireland's by 4 percent per year (Table 1, fifth column). This development in Greece was due to stagnation in the five years after its accession (Table 1, second column), which coincided with a general recession in all EU states. However, even in the ensuing economic upturn of 1986–1990, as well as in the subsequent five years, Greece's GDP rose by only a paltry 1.2 percent per year.

Table 1

Economic growth¹ in Greece, the other GIPS countries, and Germany 1981–2009

	1981²-1985	1986-1990	1991-1995³	1981-1995	1996-2000	2001-20074	20085,6	2009 ⁶
Greece	0.1	1.2	1.2	0.9	3.7	4.1	-0.4	-4.4
Ireland	2.5	4.7	4.6	4.0	9.6	5.5	-2.6	-6.4
Spain	1.4	4.5	1.5	2.5	4.1	3.8	1.1	-3.6
Portugal	0.9	5.7	1.7	2.7	4.1	1.5	0.2	-3.0
Germany	0.0	3.3	2.0	2.2	1.9	1.6	1.1	-5.6

¹ Annual growth rate of real GDP in percent.

Source: World Bank database.

4 ... due to low investment

One major reason for this was that investment showed a strong negative growth of 2.2 percent per year, i.e. that less and less capital was accumulated (Table 2, third column). Because of this, the capital per worker did not improve and labor productivity stagnated over a period of 15 years (Table 2, fourth column). In contrast, the other GIPS countries and other European countries saw a rise in labor productivity ranging from 1.5 percent in Portugal to 3 percent in Ireland. At the end of the 15-year period, these states' productivity therefore increased by almost 30 percent and 60 percent, respectively, enabling a much higher economic growth.

After profits "collapsed" due to a multitude of regulations, there was a lack of incentives for domestic and foreign companies to invest. For example, the rules governing dismissals were very restrictive, ranging from limitations on dismissals to large severance payments (Manessiotis and Reischauer 2001, Burtless 2001). In 1982, an automatic wage indexation system was introduced, under which low wages were fully indexed to past inflation at four-month intervals, while average and high wages were partially indexed (ibid.; Bryant, Garganas and Tavlas 2001). Accordingly, high inflation rates led to high pay rises, which combined with stagnating productivity resulted in a substantial rise in (nominal) unit labor costs in manufacturing amounting to 17.5 percent per year (Table 2, fifth column). Unit labor costs had multiplied more than tenfold in the space of 15 years, and had thus increased much more than in the other GIPS states. In addition, heavily regulated and inflexible product markets contributed to the low profit margins.

^{2 1981:} Accession of Greece to the EU.

^{3 1994:} Second stage of the Maastricht Treaty.

^{4 2001:} Accession of Greece to the Euro zone; 2007: End of Greece's real estate boom.

⁵ October 2008: Escalation of the financial crisis.

^{6 2008} and 2009: Anticyclical fiscal policy in Greece and other industrial countries.

Table 2

Comparative economic performance of Greece 1980-1994¹

	Annual growth of GDP	Annual growth of fixed investment ²	Annual growth of productivity ³	Annual percentage increase of unit labor costs in manufacturing	
Greece	0.8	-2.2	-0.1	17.4	
Ireland	3.5	0.3	3.2	1.7	
Portugal	2.8	2.9	1.6	11.1	
Spain	2.4	2.8	2.6	6.8	
Total EU-15	2.0	1.7	1.8	3.1	
	Annual consumer price inflation rate	General government deficit as a percent of GDP	Current account balance as a percent of GDP	Annual unemployment rate	
Greece	18.3	-10.3	-3.5	7.3	
Ireland	7.0	-7.2	-3.1	14.2	
Portugal	14.6	-5.3	-2.6	6.9	
Spain	8.6	-4.4	-1.5	18.0	
Total EU-15	6.4	-4.6	-0.2	9.0	

¹ This looks at the time period 1980–1994, rather than, as in Table 1, 1981–1995 (though this does not lead to significant differences in growth rates).

Sources: OECD, Historical Statistics 1970–1999 and Economic Outlook, cited after Bryant, Garganas, and Tavlas (2001: 4).

5 Strong increase in government activity and fiscal deficits

After Greece joined the EU, the Greek government increased its spending very quickly without increasing its receipts accordingly. Between 1980 and 1990 alone, the percentage of public spending in the GDP increased by 18.5 percentage points to a total of 48 percent of the GDP, while the percentage of public receipts only rose by 5 percentage points to 32 percent of the GDP (Table 3, 1990s column). This resulted in very high fiscal deficits—up to 16 percent of the GDP in 1990—leading to a rapidly increasing public debt and high interest payments.³

Consequently, the rapid increase in spending was largely caused by a strong expansion in debt service and public transfer payments to households (Table 3). In particular, there was an increase in health expenditure and pension payments without a matching increase in social security contributions. The backdrop for this was a highly fragmented social security system consisting of more than 300 separate funds that were poorly managed, as well. As a consequence, one must

² The fixed investment includes equipment investment, housing construction and other construction, as well as other fixed investments.

³ GDP per person employed.

³ The public debt increased from around 30 percent (1980) to 80 percent (1990), and then to 110 percent of the GDP (1995). The strong increase of the debt service from 2 percent (1980) to 11 percent of the GDP (1995) was not only due to the rising public debt, but also to higher interest rates (Manessiotis and Reischauer 2001: 119, 111). (Another contributing factor was that from 1988 onward, the public sector's borrowing requirement was increasingly financed by the sale of treasury bills to the non-bank public.)

Table 3

Government expenditure and receipts in Greece, the other GIPS countries, and Germany

1980-1995

	1980	1985	1990	1995⁴	1995 minus 1980
	as a percent of GDP			as a percentage point	
Government Expenditure					
EU average	45.9	49.7	48.0	50.8	+4.9
Selected EU member states ¹	42.2	48.9	45.1	46.3	+4.1
Greece	29.7	42.3	48.2	49.2	+19.5
1. Government consumption	13.6	16.3	15.3	15.3	+1.7
Public employee compensation	9.5	11.6	12.7	11.3	+1.8
2. Transfers	11.5	16.8	16.2	16.8	+5.3
To households	9.4	14.3	15.2	15.1	+5.7
To enterprises	2.1	2.5	1.0	1.7	-0.4
3. Debt service ²	2.0	4.9	10.2	11.1	+9.1
Gross fixed capital formation and other capital expenditure, including capital transfers received	2.6	4.3	6.6	6.0	+3.4
Government Receipts					
EU-14 average	42.5	45.2	44.9	45.1	+2.6
Selected EU member states ¹	33.8	38.5	38.9	39.5	+5.7
Greece	27.0	30.6	32.1	39.1	+12.1
1. Direct taxes	14.0	16.3	17.2	20.0	+6.0
Personal income and wealth + corporate income	4.6	4.6	5.5	7.4	+2.8
Social security contributions	9.4	11.7	11.7	12.6	+3.2
2. Indirect taxes (consumption taxes and other taxes)	11.1	12.6	13.2	13.5	+2.4
3. Other current resources	1.9	1.7	1.7	2.9	+1.0
4. Capital transfers received	-	-	-	2.7	-
Public Deficit ³					
EU-14 average	-3.4	-4.5	-3.1	-5.7	-2.3
Selected EU member states ¹	-8.4	-10.4	-6.2	-6.8	+1.6
Greece	-2.7	-11.7	-16.1	-10.1	-7,4
For information: Net EU transfers ⁵		1981-85	1986-90	1991-95	1981-95
(average of 5-/15-year-period)		1.5	3.2	4.3	3.0

¹ Ireland, Italy, Portugal, and Spain.

Sources: Ministry of National Economy 1998 and 2000, and ESA 1979 and 1995 (cited after Manessiotis and Reischauer 2001: 112).

² Excluding amortisation payments.

³ Own calculation.

⁴ ESA 1995.

⁵ Gross inflow minus national contribution to EU budget (cited after Sparos, 2001, 282).

Of this: two thirds transfers to farmers and one third grants to the ordinary and the investment budget as well as grants to public enterprises (cited after Vassilios and Reischauer, 2001, 139).

assume that many employees did not pay their full social security contributions, or paid none at all, and that many pensioners received multiple and/or excessively high pensions that they were not entitled to (OECD 1997). Government expenditure on civil servants increased strongly—their share in the GDP rose by 3 percentage points between 1980 and 1990—because their number increased strongly and they saw significantly larger increases in wages than did the private sector (Manessiotis and Reischauer 2001: 107). According to Stergiou (2012), the rapid increase in public spending and the resulting fiscal deficit must be seen in conjunction with the clientelism of PASOK (and later Nea Dimokratia).

The fiscal deficits contributed substantially to the high inflation rates in Greece, or at least hindered the restoration of price stability after the oil price shock of 1973/74 (Garganas und Tavlas 2001). Between 1980 and 1994, the average inflation rate amounted to over 18 percent, and was thus significantly higher than in the other GIPS states (Table 2, lower table, second column). Like other European central banks, the Bank of Greece adopted a policy of monetary targeting to tackle inflation, but often ended up exceeding its targets for M3. Consequently, monetary growth in the 1980s remained at rates that accommodated inflation.⁴

The need to finance the large fiscal deficits was a major reason for the high monetary growth rates. The public sector enjoyed preferential access to credit at subsidized rates in order to keep borrowing costs down. For example, until the mid-1980s the real rate of interest on twelve-month treasury bills was negative (ibid.). Additionally, the government exerted direct influence on monetary policy. Finally, the empirical results of Garganas and Tavlas (2001) strongly suggest that during the 1980s, the increase in the fiscal deficits caused the increase in M3. In effect, the money supply was not specified exogenously by the Bank of Greece, but was rendered endogenous (Garganas 1992).

6 Foreign trade did not profit from EU entry

Due to the above-mentioned structural weaknesses—overregulation of the economy, (too) low investment, and (too) high price and wage increases—Greek foreign trade did not profit from the common European market, in marked contrast to the foreign trade of the other GIPS countries. Consequently, Greece's openness in international trade—the sum of its export and import quota—decreased from about 45 percent to less than 35 percent of its GDP between 1981 and 1995. The decisive factor for this change was the marked decrease in the export quota (from around 19 percent to less than 9 percent of the GDP), while the import quota remained relatively stable. In addition, Greece saw a decline in its share of world trade, whereas Ireland, Spain, and Portugal managed to increase their shares (Tsaveas 2001).

The weak export quota was mainly due to low investment. For foreign firms especially, Greece was not considered an attractive location and thus drew significantly less foreign direct investment (FDI) than did Spain and Portugal, and much less than did Ireland (Bosworth and Kollintzas 2001). Among the causes were the rigidity of Greece's over-regulated labor markets and the lack

⁴ In the first seven years after the introduction of monetary targeting of M3 (1983–1989), the money supply grew by an average 24 percent per year (Garganas and Tavlas 2001: 52).

of transparency of its bureaucracy, which exacerbated uncertainty for firms and complicated their business activities (OECD 1993). However, without the input from foreign firms, it was difficult for Greece to gain the funds and management skills needed to expand its small manufacturing base and make its export sector more competitive.

In addition to this, price and wage increases in the double figures led to a significant deterioration in Greek firms' monetary competitiveness. Between 1980 and 1994, the rise of the unit labor costs in manufacturing was seven times the EU average, and devaluations of the drachma did not fully compensate for this competitive disadvantage.

7 Reforms and the Maastricht Treaty

The Maastricht Treaty, which came into effect in November 1993, gave Greece the possibility of entering the future European Monetary Union (EMU), but also required reforms in order for the country to meet the convergence criteria.

A tightening of income and monetary policy had already lowered the inflation rate from over 20 percent to 11 percent between 1990 and 1994. It is important to note, however, that in 1989, inflation had been as low as 13 percent, and it was the second oil crisis in 1990, among other things, that induced the rapid increase. In connection with this, the public debt ratio had exceeded 16 percent of the GDP.

The government reacted with an extensive reform of collective bargaining. The automatic wage indexation, introduced in 1982, was repealed and collective bargaining was freed from direct government control through the abolition of compulsory arbitration panels (Burtless 2001).⁶ As a result, the real wages of blue-collar workers in the manufacturing sector fell by 7.5 percent between 1991 and 1993 (Garganas und Tavlas 2001).

At the same time, a restrictive monetary policy was introduced. The monetary target for M₃ was reduced by 11 percentage points in the space of only four years—after M₃ growth had overshot its target range in 1992 and 1993—and 1994 saw an M₃ increase of just 8.8 percent.

Between 1995 and 2000, the Bank of Greece continued its policy to attain price stability, while also pursuing a hard-drachma policy. In 1995, the bank announced a specific exchange rate target for the first time that limited the year-to-year devaluation of the drachma (against the ECU) to between 1 and 3 percent (1995 to 1997), and did not fully compensate for the inflation differentials between Greece and the other EU countries. In March 1998, Greece joined the European Exchange Rate Mechanism and devalued the drachma by 12.3 percent (ibid.).

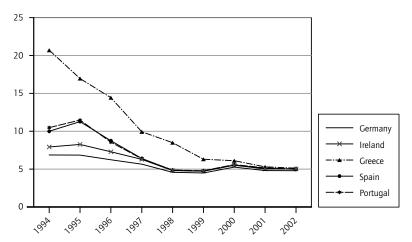
In Greece, which has historically exhibited the EU's highest interest rates, long-term interest rates decreased especially strongly: from more than 20.5 percent in 1994 to 5.5 percent upon en-

⁵ The OECD study (1993) estimated that Greece saw less than two billion U.S dollars of direct investment in the 1980s, compared to 46 billion U.S. dollars in Spain, and 6.5 billion U.S. dollars in Portugal.

⁶ From 1975 to 1990, half of all collective bargaining agreements were imposed by compulsory arbitration panels.

Figure 2

Long-term interest rates¹ in Greece, other GIPS countries, and Germany 1994²–2002



¹ Long-term interest rates for assessing convergence in percent.

Source: Eurostat database (convergence criteria).

try to the euro (Figure 2). Combined with a public debt in excess of 100 percent of the GDP,7 this led to a decrease of 6 percentage points in interest spending, to 6.5 percent of the GDP.8 Consequently, hardly any reforms were necessary to reduce the budget deficit by 6 percentage points as well, down to 4.5 percent of the GDP. Only between 1997 and 1999, the reference period for entry to the euro, was the decrease of Greece's fiscal deficit higher than its interest savings. This decrease was reached exclusively by way of (temporarily) higher public revenue, rather than through savings. The public revenue rose from 41 percent of the GDP in 1995 to 46.5 percent in 1999, only to drop back to 41 percent of the GDP in 2001. However, other highly indebted European countries, first and foremost Italy, profited similarly from sinking interest rates in consolidating their budget and fulfilling the criteria of the Maastricht Treaty.

In 1998, when the first decisions were being made as to which countries would join the EMU, Greece was unable to fulfill any of the convergence criteria. However, the country managed to

² Start of the second stage of the European Monetary Union.

⁷ The public debt in Greece stood at 80 percent of the GDP in 1990, at 107 percent in 1994, and at 104 percent in 1999.

⁸ For the period from 1994/95 onwards, we are using (revised) Eurostat data, which are largely available from 1994 onwards. (For the interest expenditure, data is only available from 1995 onwards.) How strongly and how often the Greek statements about budget deficits have been revised can be seen in Table 1 in Bofinger (2011). In 2001, for instance, the deficit was revised three times, from 1.4 to 6.1 percent of the GDP; in 2003 it was revised six times, from 1.7 percent to 6.2 percent of the GDP.

⁹ In the reference period between February 1997 and January 1998, Greece had an HICP inflation of 5.0 percent (as opposed to the demanded reference value of 2.7 percent), and a long-term interest rate of 9.8 percent (as opposed to 7.8 percent). Its budget balance was –4 percent of its GDP (as opposed to –3 percent) and its public debt was at 108.7 percent of its GDP (as opposed to 60 percent) (EMI, 1998). In addition, Greece only became a member of the European Exchange Rate Mechanism in March 1998.

achieve such substantial progress that two years later, its inflation rate (at 2.0 percent) was lower than the reference value, as were its long-term interest rate (at 6.4 percent) and its budget balance (at 1.6 percent of its GDP) (ECB 2000).¹⁰ Only its public debt, at 104.4 percent of the GDP, was significantly higher than the 60 percent demanded by the reference criteria (which, however, was also true for several other EU countries). In 2001, Greece became the twelfth member state of the euro zone.

In the 1990s, Greece implemented a series of reforms, not least with regard to its joining the euro: It deregulated collective bargaining, introduced a monetary policy aimed at more price stability, restructured its financial markets, and deregulated product markets formerly dominated by publicly owned companies.

However, as we will argue in the policy recommendations section, these reforms had to be continued in order to arrive at sustainable economic growth, and broadened to include other areas of the Greek economy. This is what our analysis of the long period of slow growth following Greece's EU entry shows. Firstly, the institutional framework that hindered investment, especially FDI, had to be improved. Increasing efficiency and transparency in public administration was especially important, as was continuing the deregulation of labor and product markets. Secondly, a reform of the public sector, which had grown a lot after the accession to the EU, had to be tackled in order to achieve "sustainability of the fiscal position" as demanded in the ECB's convergence report (2000). Thirdly, the Greek export sector had to be expanded and its competitiveness had to be improved. This was the only way to achieve sustainable economic growth.

8 Accession to euro zone and economic growth

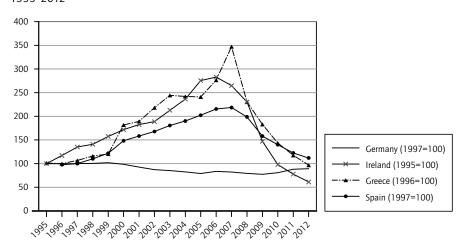
Between 1996 and 2000, the GDP increased by an average of 3.7 percent per year, a significantly stronger growth than in the 15 years after accession to the EU (Table 1). Bryant, Garganas and Tavlas (2001) as well as Bosworth and Kollintzas (2001), see the reason for this development in the impending accession to the euro zone and the reforms carried out to facilitate it. The sinking interest rates, however, also played a major role, leading to a rising demand for real estate: During the period in question, housing investment increased by 80 percent; between 1996 and 1999, by 20.5 percent; and in 2000, once entry to the euro zone was secure, by a further 50 percent. (On the other hand, companies' investments in plants and equipment, i. e. all investment exclusive of housing investment, increased by only about 30 percent in the same period.)

The property boom continued after Greece's accession to the euro zone. Between 1999 and 2007, real estate investment nearly tripled, and its share in the GDP rose from 6 percent to 12.5 percent. There were several reasons for this: Interest rates for mortgage loans were at a historic low, and the Greek banks were generously giving out credit. They attracted a lot of capital from other European countries (Sinn 2014, Smeets and Schmid 2014), and securitization of mortgage loans allowed them to displace the risk to third parties (Neubäumer 2008, Erber 2011). Consequently, sub-prime borrowers also received mortgages. Finally, the Greek property market received

¹⁰ In 2004 it was revealed that the numbers for the budget deficits had been manipulated, and that Greece had not met the 3 percent criterion between 1997 and 1999.

Figure 3

Housing investment¹ in Greece, Spain, Ireland², and Germany
1995–2012



1 For Greece, housing investment from 2012 are estimates.

2 In Ireland, the share of housing investment in the GNP is about 2 percent higher. Due to high net payments to non-residents for earned and investment incomes, Ireland's GNP is roughly 15 percent lower than its GDP.

Source: Eurostat database (ESA 1995).

another boost through the housing buyers' tax legislation changes that were being discussed in the media and used as a sales argument by property agencies. Between 2005 and 2007, housing investment increased by another 44 percent (Triantafyllopoulos and Kandyla 2010) (Figure 3).

The result was that many new jobs were created in the building sector, with the number of gainfully employed individuals in this industry increasing by about 30 percent between 2000 and 2007. Combined with disproportionate wage increases, this led to a 90 percent rise in (nominal) incomes among building sector workers. This additional income led to multiplier processes, i.e. they incurred a rise in demand for the production of consumer goods.

Furthermore, Greek households financed additional consumption by credit card and consumer loans. This is evidenced by the fact that the consumption quota increased by 3 percentage points up until 2008, and thus 72 percent of the Greek GDP was spent on consumer goods (16.5 percentage points more than the average for euro zone countries). The "cause" was (once again) high capital inflows from other euro zone countries, which in turn led to Greek banks granting generous loans with low interest rates. There was "excessive lending" to the private sector (SVR 2011, Neubäumer 2011) to such an extent that in 2008, its debts were twice as high as those of the Greek state. As evidenced by the low aggregate saving ratios, which in 2007 and 2008 were negative, at –3 percent and –7 percent respectively (i. e. the sum of consumer spending exceeded the sum of the disposable incomes), private households were living "beyond their means."

9 Weakening pressure for reform—strong increase of the government share

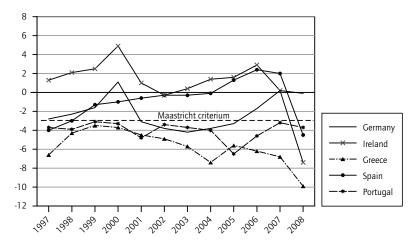
After accession to the euro, easy access to cheap loans weakened the pressure to lower public spending and increase public revenue through reforms. For instance, the Greek government was unable to implement a plan for reforming the pension system (Vlachantoni 2005) that had been put forward as early as 2002, because members of the governing party refused their consent. They argued, instead of implementing steep cuts into the pension system, the government should take out more low-interest loans.

Consequently, the share of public spending in the GDP increased by a further 2 percentage points, to 47.5 percent, despite strong economic growth; in the stagnation year of 2008, the share further increased, to 50.5 percent. This was mainly due to the rising pension costs and the enlargement of public administration (Neubäumer 2015, 2016). After Greece joined the Euro, the already high number of public employees increased by almost a quarter, and their wages were raised substantially. This explains why expenditure on public administration rose by 75 percent between the time Greece joined the euro and 2008. Furthermore, with 130,000 soldiers Greece's armed forces were "inflated" (in comparison, Germany only had 200,000 soldiers), which led to defense expenditures of 3 percent of the GDP.

On the revenue side, the tax quota quickly fell again from 26 percent (1999) to 22.5 percent (2001) after entry to the euro zone had been achieved. High tax losses were (and are) caused by the extensive shadow economy (about a quarter of the economic output; estimated annual tax

Figure 4

Public balance¹ in Greece, other GIPS countries, and Germany
1999-2008



1 Public balances given in percent of the GDP.

Source: Eurostat database (ESA 1995).

loss of 30 billion euro), large-scale tax evasion and tax fraud, and failure to collect tax debts by an inefficient and corrupt financial administration (Landeszentrale 2015).

The consequence was a consistently high fiscal deficit: On average, the budget deficits stood at 6 percent of the GDP from 2000 to 2007, and exceeded the Maastricht criterion of 3 percent of the GDP (Figure 4). Therefore, the Greek government not only followed a pro-cyclical fiscal policy, but also lived "beyond its means."

IO Strong growth due to capital influx rather than investment

Greece's success story following its entry to the euro zone was based on a demand-side boom caused by high capital inflows from other euro countries: The strong economic growth was the result of the (foreign) credit-financed housing boom, additional credit-funded consumption, and a substantial increase in public expenditure (Neubäumer 2015).

The steep increase in GDP, however, did not result from innovations and firms' expansion of their capital stock. One indicator of this is that firms' fixed investment¹¹ averaged only 14.2 percent of GDP during the growth phase, and thus 0.7 percent percentage points less than it did in the year of the euro zone entry. Production capacities increased only relatively marginally.

Accordingly, Greece increasingly had to import goods and services in order to satisfy the rising demand. Between 2001 and 2007, the country's import quota rose from 36 percent to 38 percent, whereas its export quota stagnated at around 24 percent. In 2007, Greece's current account deficit reached 14.5 percent of the GDP—that is, domestic production was increasingly less able to meet the absorption. In addition, the strong economic growth was mainly due to higher production of non-tradable goods, such as housing construction and services for residents, rather than tradable goods that would have provided an alternative to importing, or an opportunity for exporting.

All in all, Greece did not achieve sustainable growth after its euro zone entry. Instead, its GDP was "inflated" in 2007 due to high capital inflows that led to a demand-side boom. Therefore, a sharp fall of its GDP was "preprogrammed" as soon as capital flows from other euro countries "dried up," resulting in this Greek tragedy: From 2007, the GDP fell as quickly as it had risen after the euro entry, dropping to the 2001 level by 2013.

We see the main cause of this development in the fact that many of the factors that had led to the low investment, minimal productivity progress, and very weak growth in the 15 years after the EU accession had not improved. Even though reform measures were started in the 1990s, they were insufficient, and were not continued after Greece joined the euro zone.

¹¹ Firms' fixed investment is calculated by subtracting housing investment from the total fixed investment.

II Sustainable growth only with fundamental reforms

For the future, the Greek economy "needs a growth strategy" (Brenke 2012)—which, as our analysis of the events preceding the "Greek tragedy" shows, should include three interdependent bundles of measures:

- An improvement in the institutional environment, which is currently impeding business dealings in Greece and leading to too little investment,
- reorganization of public finances and—in connection with this—a leaner, more efficient administration, as well as a reform of the complex and highly fragmented pensions system,
- 3. the expansion of the industrial base and the promotion of modern services and—in connection with this—the building of a broader export basis.

In order to make Greece an attractive business location, and thus an interesting asset for Greek and foreign investors, the institutional environment must first be improved, primarily in terms of the labor market and the efficiency of the public administration.

This is evidenced by the "Global Competiveness Index" by the World Economic Forum 2008/09 (Schwab and Porter 2009). Executives consider doing business in Greece problematic because of the high burden of government regulations and the non-transparency of policy-making and tax regulations, which has been accompanied by widespread corruption. This in particular has deterred new businesses and FDI. The high corruption in the public sector is evident in a corruption index of 3.8 (0 = very corrupt, 10 = high integrity) (Transparency International 2009). Thus Greece was in last place among European countries, followed by Brazil and Colombia.

In the labor market, a lack of flexibility in wage determination as well as too-high wages and non-wage labor costs (relative to productivity) have weakened firms' competitiveness. Moreover, firms are now facing rigid hiring and firing regulations, inflexible employment conditions, and a lack of cooperation and trust between workers and employers.

Secondly, a cutback and restructuring of public expenses is necessary, not only to decrease the high fiscal deficit but also to open up opportunities for more productivity-oriented public expenditures, such as investment to improve the education system and public infrastructure.

It was first and foremost the high expenditures on public administration—which reached 10.5 percent of the GDP in 2007—that had to be lowered (compared to 6.5 percent in all EU countries and 6 percent in Germany). The background was an inflated public administration: Roughly one-fifth of Greece's employees worked in public service (compared to about 11 percent in Germany). In addition, civil servants received 40 percent higher salaries than did those employed in private companies (Landeszentrale 2015).

¹² Along with Greece, Romania, Bulgaria, and Macedonia placed last among European countries. The Corruption Perceptions Index (CPI) measures the perceived levels of public sector corruption in 180 countries and territories. A composite index, the CPI is based on 13 different expert and business surveys.

Additionally, the high pension payments, which amounted to 12.5 percent of the GDP in 2008, had to be reduced. The extremely fragmented and badly managed pension system needed basic reforms—not only from a financial point of view, but also from a social and economic perspective (Börsch-Supan and Tinios 2001).¹³ It is important to stress that the equivalence between contributions and benefits was distorted. The self-employed and those employed in the informal sector profited from this, whereas those working for mid-sized and large firms in the formal sector were disadvantaged. This pension system also provided an incentive for early retirement and thus a low labor force participation (ibid., Burtless 2001).

Thirdly, the extension of the industrial base and the promotion of modern services were necessary to achieve a broader export base. Only 12.5 percent of Greece's gross value added came from industry (compared to 20 percent in the rest of the euro zone and 26 percent in Germany), and modern services only accounted for 1.6 percent of gross value added (compared to 3.7 percent in all EU countries). ¹⁴

This cannot be seen independently of Greece's special corporate landscape. A third of all employed persons were self-employed, and there were many family-based firms and few corporations. Among firms with dependent employees, small and very small firms dominated. In 2007, for instance, almost half of all jobs in the manufacturing industry were in firms with fewer than 10 employees (Brenke 2012).

Burtless (2001) sees a major reason for this in the fact that the legal framework favored (and still favours) job creation in microenterprises where the employment per euro invested is higher than it is in larger firms. In small and very small firms it was possible to minimize the burden of taxes and social security contributions, and they were not required to observe the rigid labor regulations regarding dismissals, work schedules, or limits in overtime work.

This has led to perverse incentives by discouraging the creation of capital-intensive medium-size or large firms, thus missing the opportunities of economies of scale and a higher productivity. It has also hindered innovation and technological progress, as only bigger firms can afford the high costs associated with research and development; as well, bigger firms invest (more) in employee training and usually adopt new technologies more quickly, and the overwhelming share of employment in the modern sector is wage and salary employment in medium-size and large firms (ibid.).

Therefore, a broadening of the industrial base and the modern sector could (and can) only work if the legal framework is changed and no longer discriminates against employment in medium-size and large firms. However, the building of bigger firms and thus the broadening of the export base take time.

¹³ Börsch-Supan and Tinios (2001) not only offer a comprehensive description of the Greek pension system, but also analyze its strengths and weaknesses and discuss reform alternatives.

¹⁴ Industry excluding building (data for 2008, Eurostat); modern services include services for the IT sector, technical and science-oriented services for firms, and research and development (data for 2009 taken from Brenke 2012).

Fundamental change in Greek society or weaker growth and a lower living standard

The implementation of such a comprehensive growth strategy would lead to a fundamental change not only in the Greek economy, but also in Greek society. The "omnipresent" state (and the widespread corruption connected with it) would be pushed back, the privileges of a number of social groups would be reduced, and employment in larger firms would increase (even at the expense of very small businesses). Such far-reaching reforms can only be implemented successfully if the majority of Greeks and their politicians not only accept them, but also actively pursue them.

The alternative is to implement only moderate reforms in order to return to the path of low growth. This would entail slow changes to increase the efficiency of the public sector, improve the institutional environment, and avoid a further rise in pension payments, and will only lead to slightly higher investment. Therefore, to opt for this alternative is to opt for a lower standard of living. Portugal can serve as an example: Its economic structure¹⁵ was similar to Greece's, and in 2000, the country had the same per capita income as Greece (14,500 euros). Afterwards, however, the Portuguese economy grew at a rate of only 1.5 percent per year, so that by 2007, its per capita income of 15,100 euros was one-fifth lower than Greece's was.

Even if it opted for modest reforms, Greece would not be able to avoid cutting its public expenditure (and increasing taxes). This is due to the fact that its government activity was oriented towards a GDP that was "inflated" by a (foreign) credit-financed demand. This was also the case in Portugal; however, its GDP and its government expenditures had risen far less.

All in all, with low growth rates of 1.5 percent or 1.2 percent respectively, it would take Greece 16 or 20 years to arrive at the per capita income of 2007.

13 Summary

The low growth in Greece in the 15 years after its accession to the EU in 1981 was caused by (too) low investment from foreign and local firms and the resulting stagnation in productivity. The background to this situation comprised a large number of regulations that led to inflexible product and labor markets, and caused profits to "collapse." In addition, firms' business practice was hindered by the lack of transparency of the bureaucracy coupled with high corruption. As well, the expansion of government activity led to a steep rise in money supply and high inflation rates. Because of the automatic wage indexation system, this resulted in increasing pay rises and high unit labor costs. As a consequence of these structural weaknesses, foreign trade did not profit from the common market with the other EU countries; on the contrary, Greece's export quota and its share in world trade sank.

In the 1990s, Greece—not least with regard to its joining the euro—implemented a series of reforms: It deregulated collective bargaining, introduced a monetary policy aimed at more price

¹⁵ In Portugal, agriculture and tourism were of similar importance as they were in Greece. However, the country also manufactured low-price products ("extended work bench") and therefore its manufacturing industry had a somewhat higher share of the gross value added than did Greece's (12.7 percent compared to 10.5 percent; Brenke 2012).

stability, restructured its financial markets, and deregulated product markets formerly dominated by publicly owned companies. These measures led to a decrease in the high inflation rates, long-term interest rates, and the state's interest payments. This contributed to Greece being able to largely fulfill the convergence criteria for entry to the euro in 2000.

However, the reform processes were not continued after the euro entry. The strong economic growth from 2000 to 2007 was caused by capital inflows from other euro countries and historically low interest rates. Firstly, housing investment nearly tripled and, together with steep rises in wages in the building sector, caused multiplier processes. Private consumption received an additional boost from credit card and consumer loans. Secondly, the Greek government increased its expenditures significantly more than the GDP, not least due to access to low-interest state loans, accepting a steep rise in public debt and a high fiscal deficit. The result was a demand-side boom. The high growth was not due to innovation and a broadening of capital stock, and additional production was largely limited to non-tradable goods, such as housing construction and services for residents.

For these reasons, Greece did not achieve long-lasting growth after joining the euro zone. Instead, the substantial increase in the Greek GDP up until 2007 was the result of a real estate bubble and a large rise in government expenditures, both (mostly) financed by foreign loans. Therefore, a sharp fall in GDP was "preprogrammed" as soon as capital flows from other euro countries stayed out. This led to the Greek tragedy. From 2007, the GDP fell as quickly as it had risen after the euro entry, dropping to the 2001 level by 2013.

For the future, Greece has to decide whether it will choose a growth strategy containing three interrelated bundles of measures:

- an improvement of the institutional environment, which obstructs doing business in Greece and thus leads to too little investment;
- a reorganization of public finances and—in connection with this—a leaner, more efficient administration, as well as a reform of the highly fragmented pensions system;
- and an expansion of its industrial basis and its modern sector, thus building a broader export basis.

This strategy would entail comprehensive change to not only Greece's economy, but also to its society as well. Such a reform strategy can only succeed if the majority of Greeks and their politicians actively pursue it.

The alternative is to opt for moderate reforms, i.e. slow changes to increase the efficiency of the public sector, improve the institutional environment, and avoid a further rise in pension payments. This would mean a return to the old path of slow growth of 1.2 percent to 1.5 percent per year and would lead to a lower standard of living.

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