

The mixed success of EU-IMF adjustment programs in Europe – why Greece was different

Aleksandra Riedl,
Maria Silgoner,
Angelika Knollmayer¹

The comparison of the economic, financial and fiscal conditions in four EU-IMF financial assistance countries shows that Greece's economy was hit much harder during the crisis than Ireland, Portugal or Spain. While Greece has fallen back into recession and still depends on financial help from the international community, the adjustment programs appear to have been more successful in the other three countries.

The ongoing calamities of the Greek economy are partly the result of especially adverse starting conditions marked by manifold structural problems: Departing from a fairly low level, private debt in Greece surged rapidly. Economic growth in the pre-crisis years was thus credit-financed and consumption-based. This also applies to Ireland and Spain, which started with already comparatively high household debt levels. But in contrast to the latter two countries, credit growth in Greece was also high in the public sector, providing a strong procyclical stimulus to disposable incomes. This boosted domestic demand, whereas the performance of exports remained weak: As a consequence of rapidly growing unit labor costs, the export sector in Greece lost competitiveness, just as in Ireland, Portugal or Spain. It is the plurality of imbalances that makes the Greek case unique.

The severity of the recession in Greece was also the result of the extremely strong and frontloaded consolidation efforts made in the middle of a balance sheet recession. These were prompted by the more stringent fiscal requirements in the Greek adjustment programs as compared to the other countries' programs. Austerity measures seriously curbed domestic demand and could not stop debt from rising. Tight credit conditions and wage cuts additionally weighed on domestic demand and thus aggravated the recession.

Overall, the past years have shown that it was important and right to support countries in economic and financial difficulties. But experience with the Greek case has also taught us the limits of established forms of support which were not sufficiently underpinned by investment programs to support domestic demand.

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In the course of the global financial crisis, several euro area (EA) countries experienced serious financial tensions and called for financial assistance from the countries of the European Union (EU) and the International Monetary Fund (IMF). The first country to seek assistance was Greece in 2010. According to the original plan, the country was to receive a total of EUR 110 billion in the form of IMF funds and bilateral loans from other euro area countries subject to strict conditionality (European Commission, 2010).

With the foundation of the European Financial Stabilisation Mechanism (EFSM) and the European Financial Stability Facility (EFSF) in 2010 and the subsequent launch of a permanent rescue fund in the form of the European Stability Mechanism (ESM) in 2012, further requests for assistance were channeled through a formalized and institutionalized setting.

¹ Oesterreichische Nationalbank, Foreign Research Division, aleksandra.riedl@oebn.at, maria.silgoner@oebn.at, angelika.knollmayer@oebn.at. The views expressed in this paper are exclusively those of the authors and do not necessarily reflect those of the OeNB. The authors would like to thank Andreas Breitenfellner, Martin Gächter, Paul Ramskogler, Thomas Reininger, Lukas Reiss, Doris Ritzberger-Grünwald and Helene Schuberth (OeNB) as well as two anonymous referees for helpful comments and valuable suggestions.

In November 2010, a financial assistance package of EUR 85 billion for Ireland, whose oversized banking sector had been strongly hit by the bursting of the housing bubble, was primarily financed by the EFSM, the EFSF and the IMF (European Commission, 2011a). In May 2011, a package of loans totaling EUR 78 billion was granted to Portugal to give the country the necessary room for maneuver for putting its public finances back on a sound footing (European Commission, 2011b).

A second rescue package for Greece totaling EUR 130 billion was announced in fall 2011 (European Commission, 2012a), as the original expectations for growth and fiscal developments proved too optimistic. It was formally agreed in March 2012.² The set of required prior actions included a haircut on privately held public debt (private sector involvement, PSI). Later in 2012, Spain asked for financial assistance and was allocated EFSF and ESM funds of up to EUR 100 billion specifically to finance measures to bail out the Spanish banking sector, which had been strongly hit by the burst of the housing bubble (European Commission, 2012b). The conditionality attached to the support included bank- and banking sector-specific policy measures. In the end, the financial needs of Spain turned out to be much smaller (EUR 41 billion). A joint EU-IMF program with a financial package of EUR 10 billion for Cyprus was agreed in April 2013. The economy and especially the banking system in Cyprus had suffered from spillover effects from Greece, resulting in particular from the PSI program (European Commission, 2013).

While the economies of Ireland, Portugal and Spain appear to have managed to reverse the decline in economic activity and display decreasing unemployment rates, ameliorating fiscal figures and moderate financing conditions, Greece is stuck in a dramatic situation marked by high financial market tensions, recurring recessions and deteriorating fiscal data. As a result it became clear that Greece once more needed financial assistance. The third adjustment program with total ESM funds of EUR 86 billion over the period 2015–2018 was agreed in August 2015 (European Commission, 2015b). It is meant to lift Greece on a sustainable growth path again, extending the previous program which expired at end-June 2015.

The aim of this study is to find explanations why the financial assistance programs appear to have been successful in the cases of Ireland, Portugal and Spain, while Greece still depends on financial help from the international community. We conclude that the depth of the recession and the ongoing fiscal difficulties experienced by Greece result from unfavorable starting conditions, but also from enormous, frontloaded consolidation efforts made by Greece in the middle of a balance sheet recession.

This paper is structured as follows: Section 1 describes the recent economic conditions in the EU-IMF program countries Greece, Ireland, Portugal and Spain³. In section 2 we discuss how the starting conditions before the crisis differed among the four program countries. Section 3 compares the design of the adjustment programs in terms of consolidation targets. In Section 4 we discuss how the fiscal consolidation and credit supply constraints contributed to the slump of domestic demand that caused Greece to fail to meet the fiscal targets set out in the adjustment program. Section 5 concludes.

² Accordingly, the first program ended ahead of schedule.

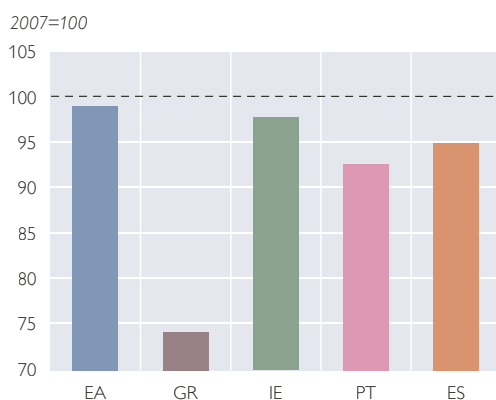
³ Cyprus is excluded from this analysis due to data limitations.

1 Renewed deep recession in Greece exacerbates social hardship

Whereas pre-crisis growth in Greece was prosperous (about 4% on average 1999–2007) just as in Spain (4%) or Ireland (6%), Greece's economy was hit much harder during the crisis than the other program countries. Between 2008 and 2014, economic output contracted by an average of 4% a year in Greece. Just like Ireland, Portugal or Spain, Greece experienced a severe balance sheet recession, as high private indebtedness caused individuals and companies to pay down debt rather than to spend or invest. The severity of the balance sheet recession is evident in the negative growth rates of loans to private households and companies in Greece since 2011 (chart 8), reflecting credit supply constraints.

Chart 1

Real GDP (2014)



Source: Eurostat.

Chart 2

GDP growth



Source: Eurostat; forecasts: European Commission, November 2015.

After six years of deep recession, GDP in Greece was about one-quarter lower than before the crisis (2007), as shown in chart 1. By comparison, Ireland, Portugal and Spain succeeded in already recouping some of the output losses, returning to 98%, 93% and 95% of 2007 GDP, respectively. The latter three countries appear to be on a sound recovery path, as shown in chart 2. According to the European Commission's autumn 2015 forecast, these countries will grow by 6.0%, 1.7% and 3.1% in 2015, respectively. By contrast, GDP in Greece is expected to contract by 1.4% in 2015 and by 1.3% in 2016.

As a consequence of the economic depression, social conditions in Greece have worsened rapidly. Like in Spain, the unemployment rate tripled during the crisis (chart 3). At 25%, it is the highest rate in the EU. As in Spain, youth unemployment comes to more than 50%. Given these prospects, many Greeks, especially young job seekers, are leaving the country. Since 2010, the population has declined by 2.5%. At 36%, the share of people at risk of poverty or social exclusion is higher than in any other euro area country (chart 4)⁴.

⁴ It has to be stressed that the corresponding poverty threshold levels are defined relative to a country-specific income level, which itself had declined far more strongly in Greece than in the other countries up to 2013.

2 Starting conditions: imbalances and weaknesses in boom years

Several euro area countries experienced a period of prosperous economic growth in the years ahead of the financial crisis. Today we understand that much of this boom was based on unsustainable economic developments and internal and external imbalances. These were especially pronounced in the program countries covered in this article:

- The enormous housing boom in pre-crisis years in Ireland and Spain rapidly drove up construction activities and domestic demand. Growth was credit-financed and consumption-based. With the start of the crisis, these developments proved unsustainable.
- Ireland, Portugal and Spain had all lost competitiveness, as visible in rapidly increasing unit labor costs and mounting current account deficits in the years before the crisis.
- Portugal had high public debt and deficit ratios already before the crisis, and did not use the strong decline in interest rates to significantly reduce debt ratios before the crisis.

Greece was a special case because it experienced all of these imbalances simultaneously and showed multiple weaknesses already before the crisis. This multi-dimensionality of imbalances, especially in areas where no quick-fix solution can be reached in the short term, makes the Greek case especially challenging.

2.1 Pre-crisis growth: consumer-driven and credit-financed

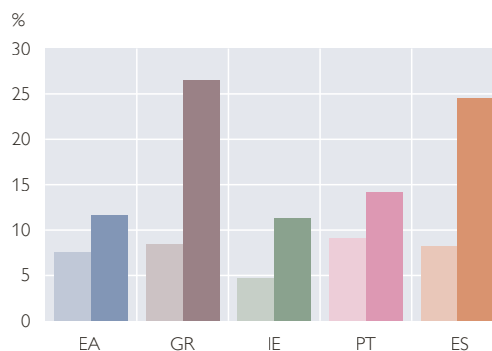
During the first years of monetary union, Greece experienced strong consumer-led and credit-financed growth. Starting from a fairly low level, debt of households surged rapidly, rising from 17% of GDP in 1999 (compared to about 50% in Spain or Ireland⁵ and 62% in Portugal) to 52% in 2007 (chart 5). Growth of loans to households averaged 28% in the 1999–2007 period, by far exceeding that in Ireland (21%) or Spain (17%, chart 6).

This expansion of private debt happened on the back of the liberalization of the banking sector (Brissimis and Vlassopoulos, 2009; Brissimis et al., 2014), as well as the unprecedented decline in interest rates. Yields on ten-year government

⁵ For Ireland this figure refers to 2001 due to data limitations.

Chart 3

Unemployment rate (2007 and 2014)



Source: Eurostat.

Chart 4

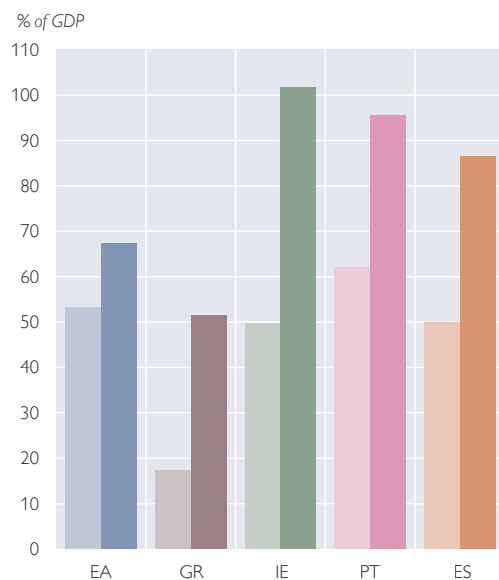
People at risk of poverty or social exclusion (2007 and 2013)



Source: MIP Scoreboard.

Chart 5

Households' financial liabilities (1999 and 2007)

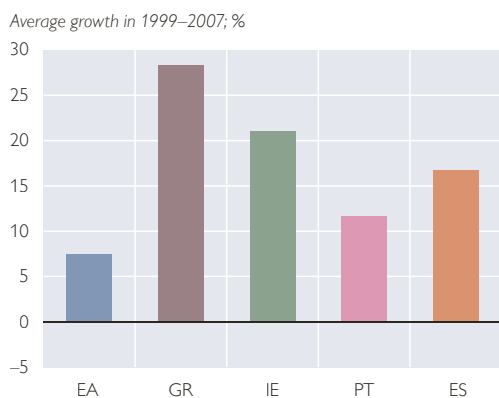


Source: Eurostat.

Note: Households and nonprofit institutions serving households. Ireland: first data point refers to 2001.

Chart 6

Growth of loans to households



Source: ECB.

bonds – an important benchmark for retail interest rates – declined by more than 10 percentage points in Greece, when comparing the first decade of monetary union with the six years before⁶. In Ireland, Portugal and Spain this decline was only 3 to 5 percentage points. Increasing inflation rates also contributed to the decline in real interest rates (chart 7).

The decline in interest rates made it easier to finance house purchases. Just as in Ireland or Spain, a real estate bubble developed in Greece (chart 9). Housing prices jumped by 110% between 1999 and 2007/2008; in Spain and Ireland, they shot up by 150%⁷. Construction work activities for housing in Greece, Ireland or Spain grew by an annual average of 6% to 8% in the years 1999 to 2007 and boosted GDP growth.

But the decline of interest rates and the credit expansion also fueled domestic demand more generally, as illustrated by chart 10. Growth of private consumption and investment (green and dark blue bars) was strong and thus the dominant contribution to GDP growth in Greece and Spain. As investment in Greece was primarily directed into the non-ICT sector (including housing), the benefits for the longer-term growth potential are rather small.

With the start of the financial crisis, the burst of the housing bubble and the refinancing difficulties of banks, the high level of private debt in the program countries became unsustainable. Banks increasingly had to cope with

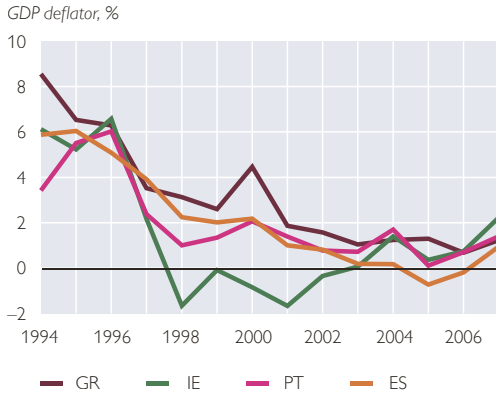
nonperforming loans and reduced lending to restore their balance sheets. Credit supply became scarce, especially for smaller companies. Individuals and companies needed to pay down private debt rather than spend or invest. In Greece, the negative growth rates of loans to households and companies observed since 2011 (chart 8) aggravated the decline in domestic demand (see section 4.2).

⁶ The comparison of the ten years after the introduction of the euro with only six years before in chart 7 is due to data limitations as the available series only starts in 1993.

⁷ Portugal did not experience a similar construction boom, as its market had already been saturated.

Chart 7

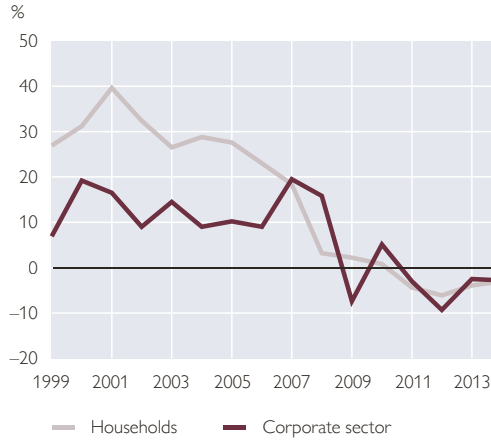
Real long-term interest rates



Source: European Commission.

Chart 8

Credit growth in Greece: households and corporate sector



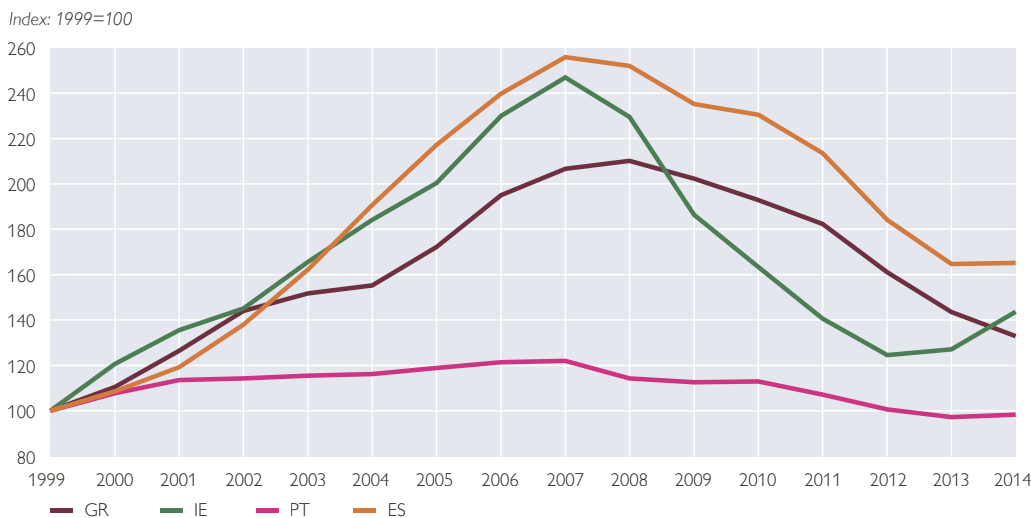
Source: ECB.

2.2 Unit labor cost growth contributes to loss of competitiveness

Chart 10 shows that – unlike Ireland, Portugal and the euro area as a whole – Greece recorded a negligible contribution of exports to GDP growth (burgundy bars) in the period 2001–2007. This was primarily the result of the low price and cost competitiveness of the Greek export sector. In parallel to the credit-financed domestic demand boom, unit labor costs increased by a yearly average of 3.6% in the pre-crisis years 2001–2007 (chart 11). The public sector contributed to these dynamics, given its traditional leading role in collective wage setting. Among the program countries, only Ireland posted higher unit labor cost increases. As a result, Greece lost almost 30% of price competitiveness between 2001 and 2009, if mea-

Chart 9

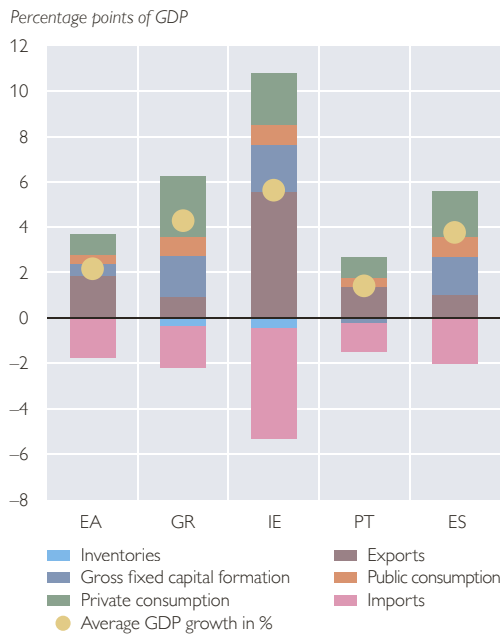
Residential property prices



Source: ECB.

Chart 10

Average contribution to GDP growth (2001–2007)



sured by the real effective exchange rate (REER) based on unit labor costs (chart 30). This added to the already unfavorable euro entry exchange rate in 2002 that had put a strain on competitiveness from the very beginning of euro area participation (Coudert et al., 2013).

But cost dynamics are not the only source of weak competitiveness. The broadly based Global Competitiveness Index of the World Economic Forum (Schwab, 2014; chart 12), which summarizes aspects related to institutions, infrastructure, macroeconomic environment, education, market efficiency, market size and innovation, ranked Greece 81st among the 144 covered economies in its 2014–2015 report. Spain or Portugal reached a far better ranking (35 and 36); Ireland ranks 25th.

Furthermore, Greece’s export sector focused on the cyclically rather sensitive medium- to low-tech sector. This exposed exports far more to the negative effects of the global recession during the crisis years. By contrast, Irish exports of pharmaceutical products or ICT services benefited from increased demand even during crisis times (Byrne and O’Brien, 2015).⁸ Also the regional focus of exports proved a weakness in recent years as several of Greece’s key export destinations (Turkey, Italy, Cyprus, Bulgaria)

Chart 11

Unit labor costs

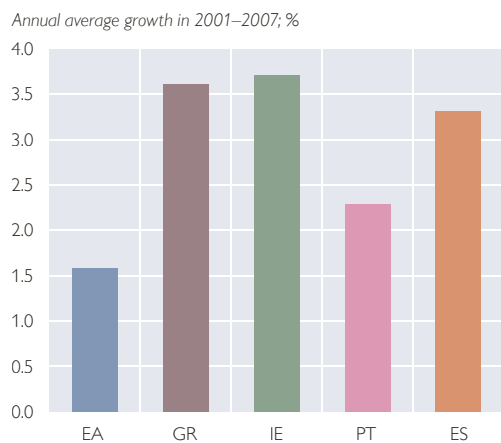
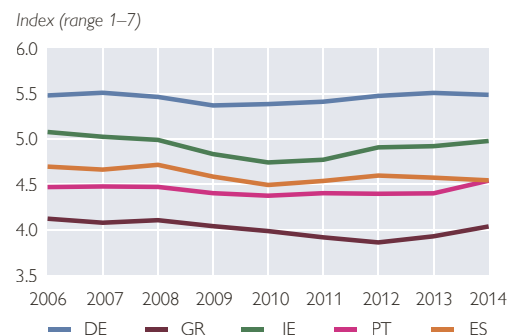


Chart 12

Global Competitiveness Index



⁸ The good export performance of the Irish economy is partly the result of corporate tax policy: During the 1980s and 1990s, the Irish government attracted multinationals through low corporate tax rates. These multinationals are highly export-oriented and have an export focus on the United States and the United Kingdom, both of which recovered much more quickly from the global financial crisis.

suffered from low growth or high risk themselves.

These weaknesses in terms of competitiveness may to a large extent explain the huge current account deficits in the pre-crisis years. In 2007, the Greek current account deficit reached 16% of GDP (chart 13). The other program countries experienced similar problems, but not of the same magnitude. Also, even before the crisis, Greece’s export sector was rather small: goods exports represented only 10% of GDP in 2007 (chart 14). This compares to about 20% in Portugal and Spain and almost 50% in Ireland. Even if services are taken into account, the openness of the Greek economy remains low: In 2007, exports of goods and services were only 23% of GDP in Greece as compared to around 25% in Spain, 30% in Portugal and 80% in Ireland.

The large current account deficits made the Greek economy dependent on external financing and thus especially vulnerable to sudden shifts in market sentiment. Furthermore, the weak export sector was unable to step in as growth engine during crisis times, when domestic demand collapsed.

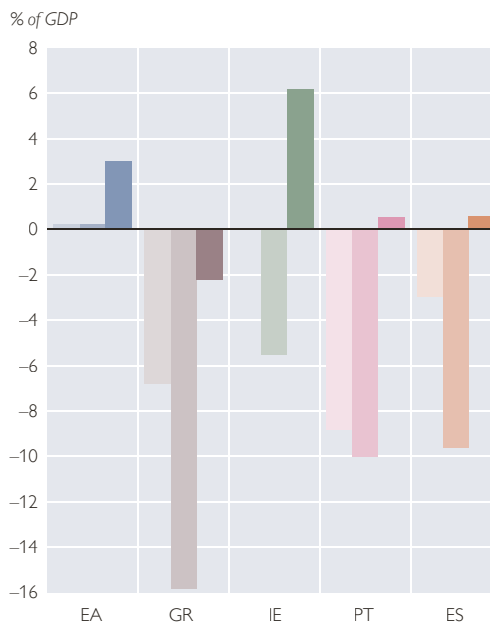
2.3 Good economic times were not used for fiscal consolidation

Even after years of prosperous economic growth, Greece started the crisis with adverse fiscal conditions. Chart 15 compares average GDP growth in the pre-crisis years 2005–2007 with the average fiscal balance over the same period.

It shows that Greece did not sufficiently use good economic conditions for fiscal consolidation so as to be prepared for forthcoming bad times. While Ireland and Spain at least realized moderate budget surpluses and succeeded in reducing their respective debt ratios to 24% and 36% by 2007 (chart 17), Greece and Portugal posted fiscal deficits in times of decent economic growth. Take as a case in point the year 2006, when Greece posted GDP growth of 5.8% but had a fiscal deficit of 6.1% of GDP. In structural terms, i.e. adjusted for cyclical and one-off factors, the Greek deficit was as high as 8.5% on average over the 2005–2007 pe-

Chart 13

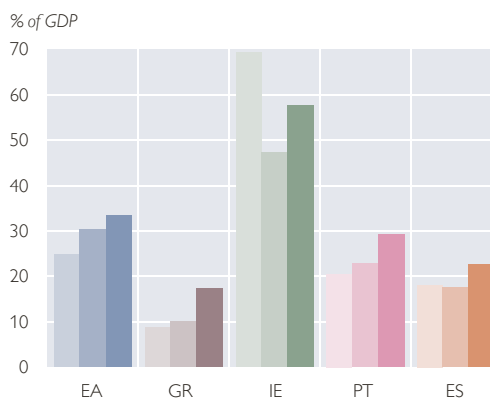
Current account (1999, 2007 and 2014)



Source: European Commission.

Chart 14

Exports of goods (1999, 2007 and 2014)



Source: Eurostat.

riod⁹. The deficit originated mainly from the spending side (transfers and public wages). As a result, the public debt-to-GDP ratio was already as high as 103% of GDP at the outset of the crisis, far above the 60% limit set out by the Stability and Growth Pact (chart 17).

Fiscal policy therefore was procyclical before the crisis, providing a stimulus to disposable income and consumption, on top of the impetus provided by private credit growth. Furthermore, governance was weak. The Global Corruption Barometer, which measures the average perception of corruption across six public institutions, ranked Greece second (after Mexico) in 2010/11 (OECD, 2013). Tax evasion was also widely spread, as shown by the high estimated share of the shadow economy in Greece (Schneider et al., 2015; chart 16). The buoyant domestic demand could thus not be used efficiently to increase fiscal revenues.

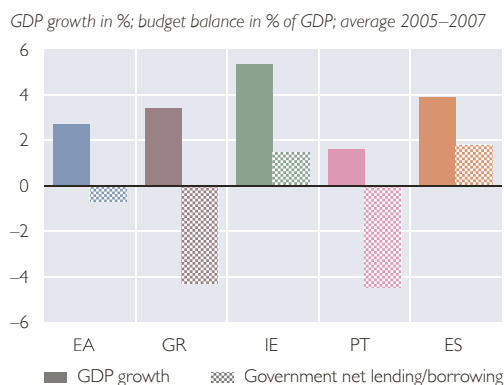
3 Greek consolidation requirements especially rigorous

The previous sections illustrated that the starting conditions in Greece were especially adverse when compared with other program countries. The economy suffered from a multitude of problem areas, while the other program countries presented certain specific weaknesses. Moreover, many of Greece’s weaknesses such as tax evasion, widespread corruption and its lack of competitiveness were difficult to approach with a quick fix solution.

With the start of the financial crisis, the fiscal situation and financing conditions for Greece deteriorated quickly. In 2010, the year of the first adjustment program, the public debt ratio had already climbed to 146% of GDP (chart 17). The rapid debt increase was the result of rising budget deficits and high debt service costs, but also of substantial upward revisions of fiscal data by the Greek authorities. As a consequence of deteriorating fiscal data but also of the changing risk perception of financial market participants, yields for long-term bonds reached more than 10% (chart 18). By 2012, the year of the second program for Greece,

Chart 15

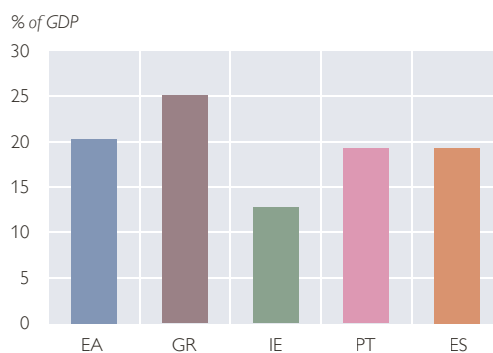
Fiscal consolidation in good economic times: GDP growth and budget balance



Source: Eurostat.

Chart 16

Shadow economy (2007)



Source: Schneider, F., K. Raczkowski and B. Mróz (2015).

⁹ Spain was the only country that posted a structural budget surplus of 0.9% of GDP over the 2005–2007 period. Ireland and Portugal had structural deficits of 6.5% and 3.7%, respectively (IMF data).

yields had skyrocketed to more than 40% just before the implementation of the PSI program, while the public debt ratio had climbed to more than 170% by end-2011.

From today’s perspective it appears evident, that the adverse starting conditions, the multiple weaknesses, the high and rising level of public indebtedness and the mechanisms of a “self-fulfilling” liquidity crisis (potentially degenerating into a solvency crisis) (De Grauwe, 2015) would have required an early, tailored and well-balanced long-term adjustment program beyond the conventional channels. This would have needed to include realistic fiscal targets, incentives for reform and earmarked funds for investment to bring the economy back on a sustainable growth path. Early and ample debt relief would have supported fiscal sustainability, however, at high costs via spillover effects.

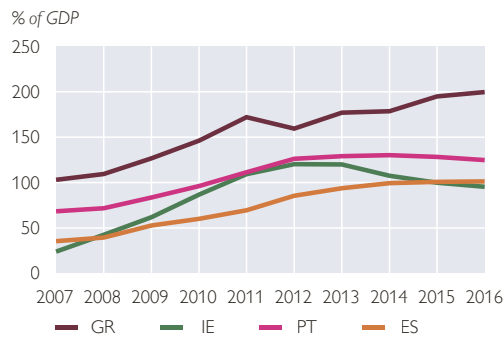
However, a comparison of the adjustment programs of the years 2011 and 2012 (Ireland, Portugal, second program for Greece) shows that the fiscal objectives for Greece were actually much more stringent than in the other countries: The fiscal objectives outlined in the second economic adjustment program for Greece were subordinate to the ultimate goal of reducing the public debt ratio to below 120% of GDP¹⁰ by 2020. Starting from a debt ratio of more than 170% in 2011, this implied a reduction by 50 percentage points in less than a decade (chart 19).

Achieving this objective would have required a primary surplus of over 4% per annum in the period from 2014 through 2020. There are only very few countries that managed to post primary surpluses of this magnitude over such a time-horizon. None of these countries did so during or right after a major balance sheet recession. The fulfillment of these fiscal targets was thus highly unlikely from the outset.

The consolidation targets for Portugal and Ireland were much less stringent. The adjustment program for Portugal just required a reduction of the public debt ratio by 10 percentage points until 2020 and did not require the achievement of a

Chart 17

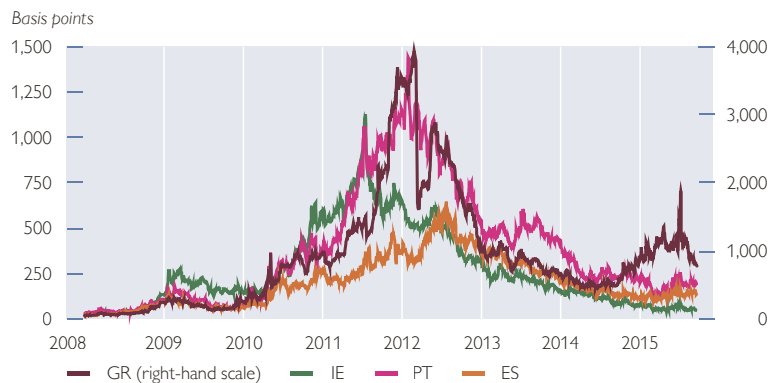
Gross government debt



Source: AMECO.

Chart 18

Spread of ten-year government bond yields vis-à-vis Germany

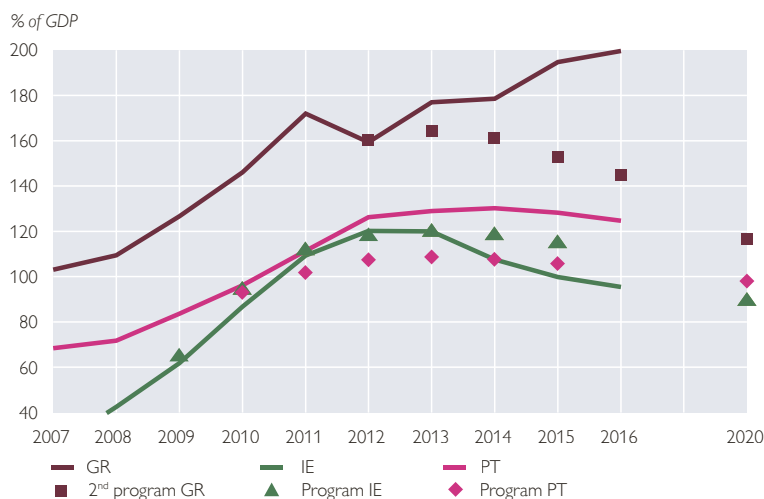


Source: ECB.

¹⁰ The 120% debt sustainability threshold defined for Greece is a country-specific target and for the first time officially appeared in the statement issued after the Euro Summit on October 26, 2011 (European Council, 2011). The standard IMF debt sustainability analysis uses a benchmark public debt ratio of 85% of GDP for advanced economies (IMF, 2013).

Chart 19

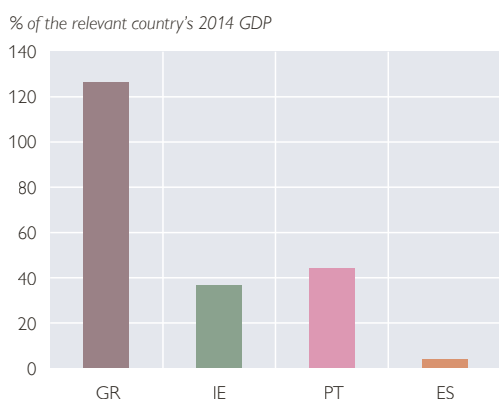
Government debt and program forecast



Source: Eurostat.

Chart 20

Size of rescue programs



Source: European Commission.

primary budget surplus. In the case of Ireland, the fiscal goals mainly focused on the 3% deficit threshold.¹¹

The more stringent consolidation requirements imposed on Greece may have their political origin in the fact that creditors insist on more action on the part of the recipient country if the size of the rescue package is larger and if financing conditions are more favorable. After all, the initial public debt ratio was far higher in Greece than in the other program countries and as a result the size of the required bailout funds was also larger (127% of national GDP for both Greek programs versus roughly 40% in the case of Ireland or Portugal and 4% for Spain; chart 20). The financing conditions granted to Greece were also very favorable (long maturities and grace periods, low interest rates). But the attempt to meet the ambitious requirements set out in Greece's program in the middle of a balance sheet recession had disastrous consequences for economic growth.

4 Frontloaded consolidation efforts and credit crunch smothered domestic demand

Taking a closer look at the actual design of the Greek adjustment programs and the undertaken consolidation efforts, their high economic and social costs come as no surprise.

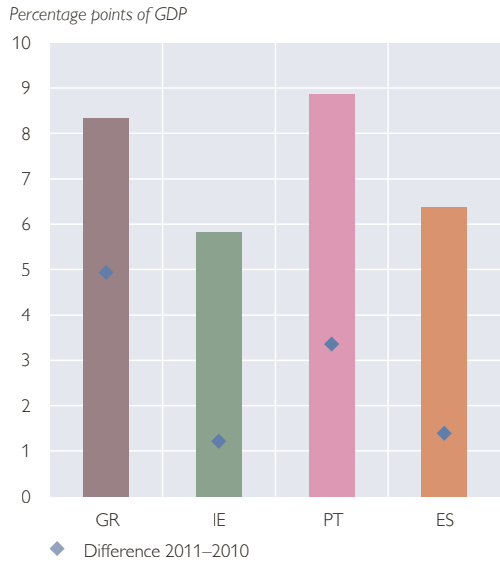
4.1 Consolidation in Greece was vast, frontloaded and largely revenue-based

Chart 21 shows the actual extent of austerity in the four program countries. The size of fiscal consolidation achieved in Greece over the period 2011–2014, measured by the difference between the structural primary balance of the years 2014 and 2010, was enormous, coming to 8 percentage points of GDP, a value that was only topped by Portugal (9 percentage points). If we look at the period 2010–2014, Greece's cumulated consolidation effort is even more impressive: at 14 percentage points of GDP, it by far surpassed that of the other three countries (7 to 9

¹¹ Spain is not discussed here because it did not have a fully-fledged fiscal adjustment program.

Chart 21

Size of fiscal consolidation over the period 2011–2014¹



Source: European Commission.

¹Difference of structural primary balance: 2014 minus 2010.

Chart 22

Revenue- versus expenditure-side measures (2011–2014)



Source: European Commission; OeNB calculations.

Note: Revenues and expenditures are cyclically adjusted; one-off measures and interest rate payments are excluded.

percentage points)¹². Without rising tax evasion and tax shortfalls, the adjustment might have been even more sizeable.

The recent literature (e.g. Baum et al., 2012) finds that fiscal multipliers, i.e. the negative effects of consolidation measures on economic growth, tend to be higher during recessions. Koo (2015) adds to this literature by emphasizing the role of balance sheet recessions, in which the multipliers are even higher: if households and companies experience liquidity constraints this limits their propensity to increase consumption and investment even in view of improved fiscal sustainability.

These arguments would point against the frontloading of consolidation measures. By contrast, the Greek adjustment path shows a very pronounced pattern of frontloading austerity measures, much more so than in the other program countries. This is visible from the diamonds in chart 21, which show the adjustment in 2011, the first year of the indicated period. In Greece this adjustment added to the already sizeable consolidation progress in the year 2010 (not shown in the chart, see footnote 12). Overall, Greece realized a fiscal adjustment of 11 percentage points in 2010 and 2011, when the recession was at its peak. It is thus not surprising that consolidation measures crushed domestic demand in Greece, aggravating the depth of the recession.

Chart 22 complements this analysis by splitting total consolidation efforts (diamonds) up into the contribution of revenue- (solid bars) and expenditure-side measures (shaded bars). Generally, the empirical literature is quite inconclusive

¹² Official European Commission data only start in 2010. Figures for 2009 are based on OeNB calculations (according to European Commission methodology; one-off measures of 2009 are taken from the 2014 European Commission spring forecast), and are thus not included in charts 21 and 22.

about the most efficient and “growth-friendly” way of fiscal consolidation. On the one hand, historical analysis of successful consolidation episodes shows that in these cases the emphasis was put primarily on expenditure-side measures (Alesina and Ardagna, 2009; Giavazzi and Pagano, 1990). This is why international organizations such as the IMF (2010) or the OECD (Sutherland et al., 2012) generally recommend an expenditure-side focus to improve the sustainability of consolidation measures.

A more recent strand of literature, however, argues that this “golden rule” may not necessarily apply to all countries and may not be appropriate for economies in the midst of a (balance sheet) recession (e.g. Koo, 2015). More generally, the fiscal effects may be country-, episode- and instrument-specific so that there is no universally valid rule about the most effective type of consolidation.

Chart 22 shows that in Greece and Portugal revenue-side measures accounted for about half of the consolidation outcome seen in the period 2011–2014, while they made only a minor contribution to consolidation in Ireland or Spain. Recent research on the failure of the first two Greek adjustment programs has come to the conclusion that the focus on revenue-side measures contributed considerably to the economic slump. Hondroyiannis and Papaoikonomou (2015) for example argue that rising multipliers during the crisis in Greece originated primarily on the revenue side. The revenue-side measures shifted the tax burden toward low-income groups with high marginal propensity to consume, magnifying the contractionary effect of tax increases on the economy. The spending measures by contrast appear to have had rather limited effects on economic activity, given their rather low effectiveness. Overall the specific policy mix of Greece’s austerity program may have aggravated negative economic consequences.

The focus on the revenue side may at least partly have been the result of weak governance. Actually the first adjustment program for Greece (European Commission, 2010) specified that planned fiscal adjustment would rely primarily on expenditure cuts. Expenditure-side measures are typically much harder to enforce and are often heavily opposed by lobby groups. Rapanos and Kaplanoglou (2014) for example attribute the greater success of the adjustment program in Cyprus to the fact that it has stronger institutions than Greece¹³.

4.2 Credit crunch aggravates consumption and investment slump

Credit growth was the main engine of domestic demand growth in the pre-crisis period. With the start of the financial crisis, deteriorating balance sheets and the refinancing difficulties of the financial sector, banks severely restrained credit supply to meet capital requirements.¹⁴ Chart 8 shows that credit growth was negative both for households and the corporate sector from 2011 onward; especially small companies had difficulties obtaining financing. Individuals and companies needed to pay down private debt rather than spend or invest. The liquidity constraints of the private sector also amplified the economic costs of austerity measures. The credit crunch thus substantially aggravated the economic slowdown.

¹³ The analysis covers aspects related to governance, property rights, security, accountability, corruption, the efficiency of public administration and business climate.

¹⁴ Actually, the Greek banks had entered the crisis with relatively strong capital buffers (European Commission, 2011c).

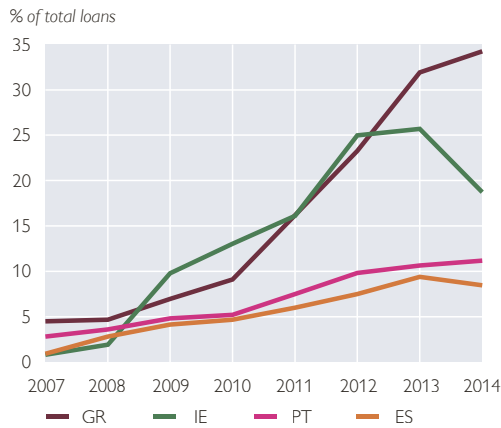
On the asset side, Greek banks suffered from a sharply mounting share of nonperforming loans, the result of the deep recession and the bursting real estate bubble. The increase of the nonperforming loan ratio was comparable to the Irish case, but in contrast to the latter it has not yet started to revert (chart 23). Moreover, Greek banks had a higher exposure to the domestic public sector than the banks in other program countries. From 2003 to 2007, the share of banks' domestic sovereign exposure in total assets had declined by about half in Greece and Spain to 9% and 4%, respectively, and had remained low in Portugal and Ireland at 2% and 0.5%, respectively. From end-2007 to end-2011, it rose in all four countries, by 3 percentage points in Greece and 3.5 to 4 percentage points in the other countries. Only in the case of Greece, the adjustment program required PSI. The implementation of the PSI program in early 2012 thus had significant consequences for the balance sheets of the Greek banks. The ensuing bank recapitalization focused only on the largest banks. Moreover, other financial institutions were strongly affected, in particular pension funds that held Greek government bonds and subsequently had to adjust pension payouts.

On the liability side, the weakening conditions of the Greek banking system triggered massive deposit outflows (chart 24). These were the result of customers' concerns about deteriorating balance sheets, fiscal sustainability, a possible debt haircut and the announcement of the PSI program. Deposit outflows started in 2010 and stabilized only after the final conclusion of the second adjustment program in March 2012. This added to financing strains in the banking system. Deposit outflows intensified again at end-2014. By contrast, deposits have been more or less stable in the other three program countries since 2013.

In Greece, Ireland and Spain, the calamities of the banking system – largely the result of weak governance in the pre-crisis period – also had important fiscal consequences. In Ireland for example, the fiscal deficit climbed to 33% of GDP in 2010 as a result of the recapitalization needs of the banking system.

Chart 23

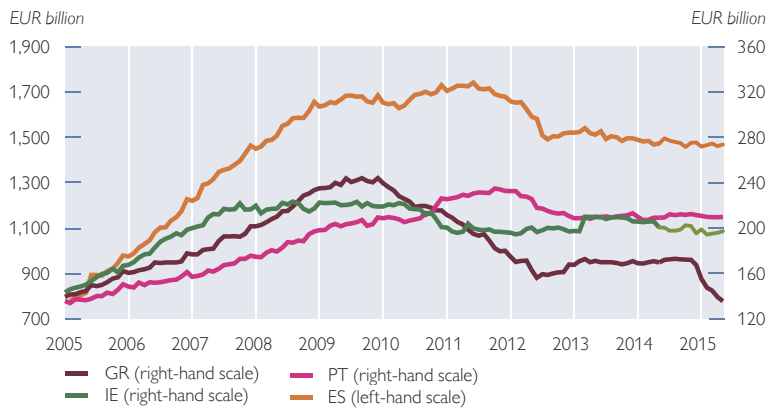
Bank nonperforming loans



Source: IMF, FSI Tables.

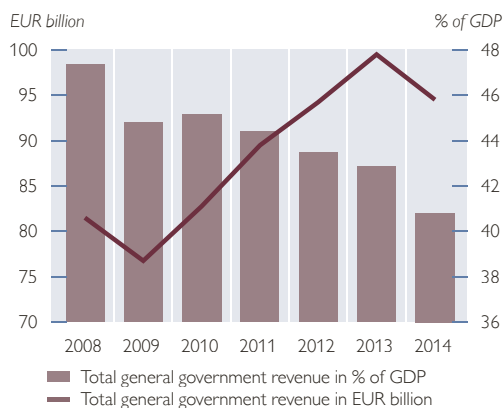
Chart 24

Deposits of general government and euro area private sector



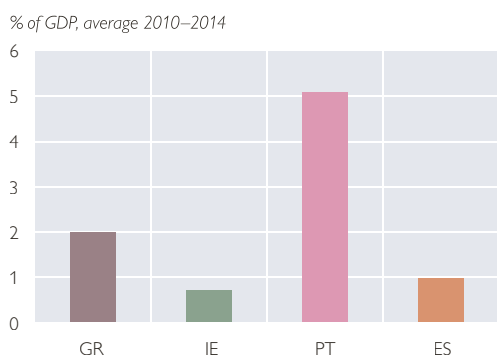
Source: ECB.

Chart 25

Fiscal revenues of Greece

Source: Eurostat.

Chart 26

Privatization revenues

Source: Eurostat.

4.3 Slump in domestic demand made fiscal targets unrealistic

Given the depth of the recession it is not surprising that fiscal targets were not met in Greece. This is illustrated here by the example of the revenue side: While Greece managed to increase its revenue-to-GDP ratio, revenues declined steadily in absolute terms (chart 25). This disappointing outcome can be attributed to the recession and the increase in unemployment, which shifted consumption away from high-taxed durable goods toward lower-taxed necessities. The recession and the tax increase furthermore promoted tax evasion and tax losses caused by delayed payments. Measures against tax evasion were of limited effectiveness.

In addition, privatization revenue also fell far short of expectations. During the first adjustment program, privatization revenue had been estimated at EUR 50 billion for the period 2010–2015. However, of this amount, less than EUR 4 billion had materialized by 2014 (2% of GDP; chart 26). As compared to the other countries, this is still considerably more than in Spain or Ireland.

A simple decomposition of the change in the debt ratio into the contribution of nominal GDP growth and that of factors impacting on the nominal debt level¹⁵ highlights the important role the recession played in Greece's failure to achieve its fiscal targets. The decomposition shows that 46 percentage points of the 68-percentage-point increase in the debt ratio between 2008 and 2014 can be directly attributed to the economic slump.¹⁶ The contribution of the recession was only minor in the cases of Ireland, Portugal and Spain¹⁷ (chart 27).

¹⁵ The change in the debt ratio (=debt/GDP) can be decomposed into a contribution from the numerator, i.e. the change in nominal debt, and the denominator, i.e. the change in nominal GDP.

¹⁶ Other factors that increased the debt ratio were interest rates (+29 percentage points), financial sector support expenditure (+20 percentage points) and the cumulated primary deficit (+18 percentage points). On the other hand, net privatization revenues and PSI together lowered the nominal debt level by more than 40 percentage points.

¹⁷ While the debt ratio-increasing effect of nominal GDP growth in the period 2008–2014 amounted to 47 percentage points or 69% of the total rise in the public debt-to-GDP ratio in Greece, the debt ratio-increasing effect of nominal GDP growth was only 4% and 3% in Portugal and Spain, respectively. By contrast, in Ireland, cumulated nominal GDP growth was positive and had a significant lowering impact on the public debt ratio.

Pressure on Greece to continue austerity is still ongoing. Under the third adjustment program, Greece agreed to target a medium-term primary surplus of 3.5% of GDP, with a fiscal path of primary balances of 0.5%, 1.75% and 3.5% in 2016, 2017 and 2018, respectively (chart 28). In other program countries, the relaxation of consolidation efforts is already visible. In Portugal, the primary balance will already reach its peak in 2015. This fiscal relaxation is likely to foster these countries' growth performance.

4.4 Numerous structural reforms with suboptimal timing and sequencing

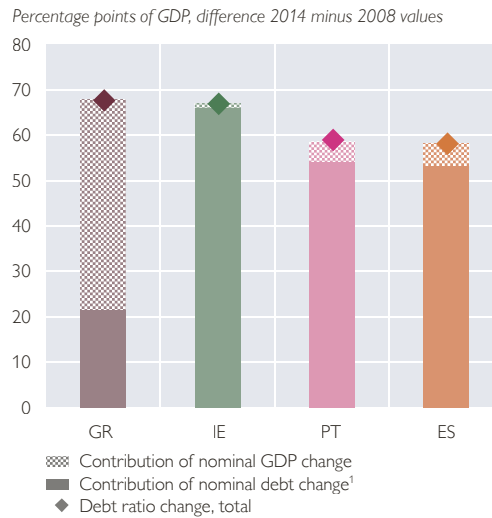
Numerous structural reforms were implemented in Greece and other program countries with the aim of making the labor and product markets more flexible so as to improve labor market performance and price competitiveness. Actually Greece was particularly active in this respect: Greece scores highest in terms of the OECD's reform responsiveness rate indicator (share of OECD recommendations implemented from 2009 to 2014). It has succeeded in markedly improving its score in all key indicator categories (reforming labor and product market regulation, lifting barriers to enterprise foundation), as also indicated by chart 27.

Over the medium term, these reforms should support the growth potential of the economy. Many benefits are, however, contingent on the onset of economic recovery, which may explain why their success in Greece has been limited so far. During balance sheet recessions, structural reforms might even have a negative growth impact. Moreover, corruption and weak institutions may have delayed the implementation of many reforms.

However, to some extent the limited success of reforms in Greece may also be the result of the balance between different reforms. Chart 29 shows that in Greece the focus was primarily on labor market measures (substantial decline in the index of employment protection legislation) and to a lesser extent on product market re-

Chart 27

Contributions to change of debt ratios

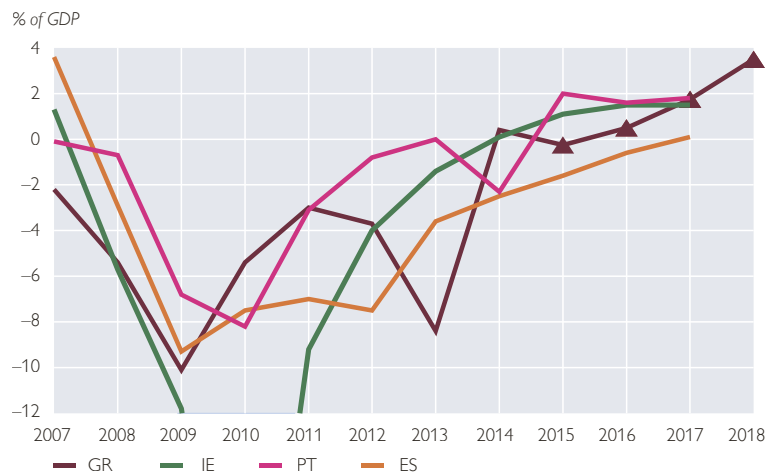


Source: European Commission, OeNB calculations.

¹ In the case of Greece, the PSI decreased the nominal debt level in 2012, thereby reducing the contribution of nominal debt changes in this illustration.

Chart 28

Primary balance



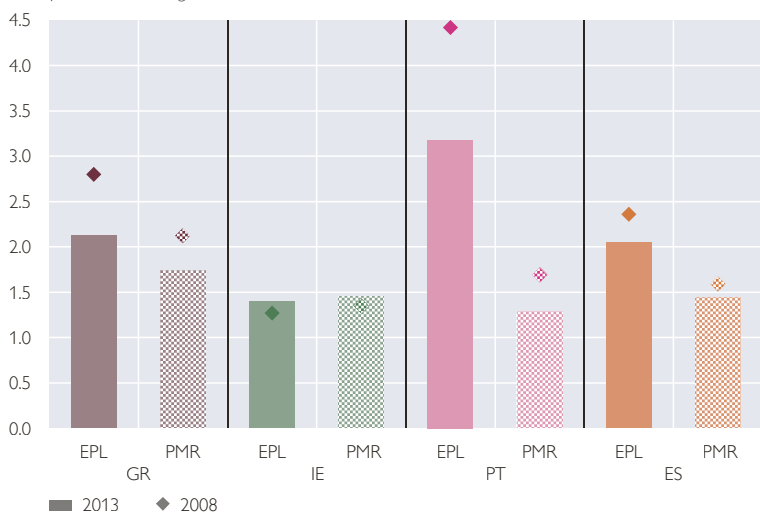
Source: Eurostat.

Note: Values for 2015–2018 for Greece (triangles) are taken from the Eurogroup statement on the ESM programme for Greece of August 14, 2015.

Chart 29

Labor and product market reforms

EPL: employment protection legislation index
PMR: product market regulation index

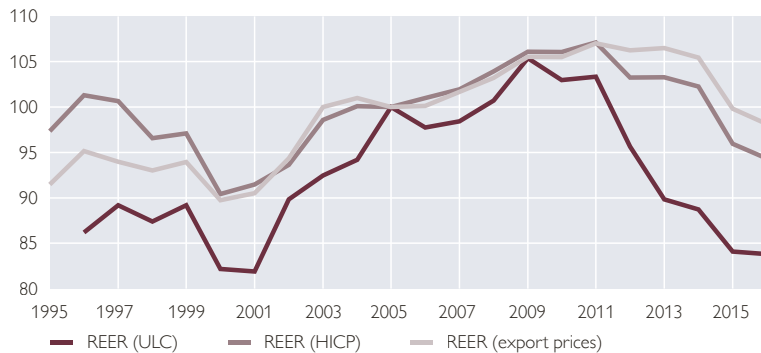


Source: OECD.

Chart 30

Real effective exchange rate (REER) in Greece

2005=100



Source: European Commission.

Note: ULC: unit labor costs; HICP: Harmonized Index of Consumer Prices.

forms (decline in index of product market regulation). As a result, real average wages contracted by 13% between 2009 and 2013, much more strongly than in other program countries, while consumer and export prices, which are more relevant to competition, decreased by far less. This is visible in chart 30, which shows the evolution of the REER based on different cost and price measures. The competitiveness gain when considering export prices is only limited.

As a result of the unfavorable balance of measures implemented by Greece, the decline in real average wages as well as the sharp increase in unemployment acted as a drag on disposable incomes and thus on domestic demand, while the benefits for exports in terms of increased competitiveness were only minor. The story is similar in Spain, which, however, has a stronger export sector.

5 Conclusions

The comparison of the economic, financial and fiscal conditions in four EU-IMF program countries shows that the ongoing calamities of the Greek economy are the result of especially adverse starting conditions, but also of the huge consolidation efforts under Greece's first two adjustment programs, which were extremely stringent, frontloaded and based on a sub-optimal mix of revenue-side, expenditure-side and structural policy measures.

The austerity program seriously dampened domestic demand. The credit crunch resulting from large deposit outflows – linked to uncertainties about fiscal sustainability – and from PSI effects, and the suboptimal timing and sequencing of reforms aggravated the recession.

From today's perspective it appears evident, that the fiscal adjustment program imposed on Greece was not viable from the beginning and thus incapable of restoring market confidence. The weak initial state of the Greek economy, the high and rising level of public indebtedness, the mechanisms of a "self-fulfilling" liquidity crisis and the severity of the recession would have called for a well-tailored program off conventional routes. Such a program should have been based on feasible fiscal targets that only kick in when the economy has already reached a certain

level of recovery. Accompanying investment programs could then have rekindled domestic demand so as to earlier restore the necessary economic conditions for a successful implementation of fiscal austerity measures. Such a program might have had the potential to quickly restore financial market trust.

Overall the past years have taught us that it was important and right to support countries in economic and financial difficulties. The combined financial and monetary support at the euro area level, together with the enormous reform efforts in the countries themselves have helped to put the economies of Ireland, Portugal and Spain back on a sound footing. But experience with the Greek case has also taught us the limits of established forms of support. This calls for a reconsideration of the framework of rescue mechanisms and an increased emphasis on country-specific circumstances when designing adjustment programs.

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