Asymmetry, Austerity and Anxiety: The Approach to the Greek Debt Crisis

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1 Introduction

In this chapter, we analyse how much of the problem in exiting from the Greek debt crisis stems from the asymmetry of the arrangements that have been put in place, not just for Greece but for the whole of the euro area. We explore how the problem arose, the response to it and the degree of misapprehension of its likely effects, before suggesting a way out.

Individual countries facing adverse shocks in the euro area are both much more constrained than countries outside in how they can reduce the impact and much less able to get assistance than are regions in

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C. Floros and I. Chatziantoniou (eds.), *The Greek Debt Crisis*,
DOI 10.1007/978-3-319-59102-5_2

national monetary union. Not merely is there a single monetary policy run by the European Central Bank (ECB) with the objective of price stability in the euro area as a whole and hence a single external exchange rate policy but fiscal policy, the second major tool of adjustment available to governments is also constrained. The constraint does not come only through the original Stability and Growth Pact (SGP) but is further reinforced by the Treaty on Stability, Coordination and Governance in the Economic and Monetary Union (fiscal compact or TSCG) and associated measures introduced from 2012. Inside national monetary unions, all fiscal systems aim at offsetting the impacts of adverse shocks and situations to groups of their citizens, whether based on geography, industry, age or income. Similarly, the European Union's (EU) process of assessment of the structural problems facing Member States, the Macroeconomic Imbalances Procedure,[1] is asymmetric, focusing almost exclusively on the downside discrepancies. While the social and regional funds are a specific help to the disadvantaged and the European Stability Mechanism (ESM) exists to help those Member States in financial distress, the primary responsibility for solving the problem lies with the distressed and disadvantaged and is not spread equally across the EU as a whole.

As is clear, the crucial issue in our analysis is asymmetry. Member States that are not facing fiscal problems do not need to take any action, while those with substantial deficits as a result of the Global Financial Crisis (GFC) need to reduce them before their debt rises to unsustainable levels.[2] Member States that have already reached the point of unsustainability, in the sense that they are having to borrow from the EU/IMF (International Monetary Fund) as markets are effectively closed to them, have an especially harsh task as they have to eliminate their deficits rapidly according to a timetable laid down by the European Commission (EC), ECB and IMF (widely referred to as the 'troika'). This asymmetry is particularly pernicious, as reducing a deficit by cutting expenditure and worse still raising taxes creates a downward spiral in which the Gross Domestic Product (GDP) falls, thereby raising the debt ratio for constant levels of debt, which then requires further cuts to start bringing the debt ratio down. If the less stressed economies were to expand, then the whole euro area would tend to grow faster, reducing the debt spiral for those most affected.[3]

Within a country, the impact is also asymmetric. Those with higher incomes and wealth can absorb a shock without reducing their consumption and quality of life. Those on low incomes with little savings have no option but to cut back as they have little opportunity to borrow except on Dickensian terms. This concentration of the process of adjustment on retrenchment rather than equally on expansion is labelled 'austerity'. We explore how these pressures bite in the EU and the consequences this has for the Member States that have to follow the route of austerity. We define 'austerity' not simply as the downside adjustment cost but as the cost that is borne over and above a symmetric response. We show, in particular, how understanding of these problems has evolved over time in the light of experience and that while some of the horrific unemployment and other social consequences of the 1929 crash have been avoided by learning the lessons other lessons have not been learnt.

However, focusing on the fiscal problem alone is mistaken as most of the countries that are in difficulty face a competitiveness problem as well, so this is the subject of the second section of this chapter. As a facet of their rapid expansion before the crisis, these countries' price levels rose above those in many of their competitors. We look at the asymmetric problem this raises. Lowering relative prices, particularly through lowering relative wages, is much more difficult to do than achieving the same relative outcome by allowing wages in the more competitive areas to rise faster. The problem is not restricted to Greece and other 'Southern' countries, Ireland, the Baltic States and even Finland have faced the same difficulties. We, therefore, provide a comparison of Greece with them.[4] Without the benefit of their own monetary policy or exchange rate policy, these countries have to adjust by a combination of reducing relative prices and altering the structure of their economies towards new growth opportunities even where fiscal constraints are not so tight.[5] Here, we see some striking differences from Greece. Emigration has been much more important in helping adjustment in Ireland[6]; labour market flexibility has also assisted the position in the Baltic States. In many ways, Finland is the most interesting contrast as it has already been through this process in the early 1990s. This time, however, there is no new Nokia on

the horizon to help provide the stimulus. In many cases, structural change occurs through closing down the old first and hoping that the new will fill the gap rather than the new driving out the old, which would have much more favourable consequences for unemployment and the fiscal balance.

In the third section, we move on to a further aspect of asymmetry. One of the main problems of the asymmetric requirements for fiscal and relative price adjustments is that people themselves respond asymmetrically, being much more cautious in downturns so a much larger stimulus is needed to achieve the same effect as when an economy is doing well and people are more optimistic. The initial adverse shock and the stream of subsequent bad news create uncertainties and anxiety for people, especially for those least able to cope. This leads to caution and makes recovery more difficult until sentiment changes. We follow the approach of Tom Sargent in suggesting that while economies drop rapidly from optimism into pessimism, the reverse process is slow unless there can be a clear favourable shock.[7] This means that we get two sets of parameters explaining behaviour, one for the upside of the economic cycle and another for the downside. While allowing more variable parameters across the cycle might be more realistic, we do not have sufficient data.

The extent of these anxieties is difficult to measure beyond these changes in behaviour. We can see fairly clearly from spreads in financial markets how likely lenders think it is that they will not be paid back. We can also estimate the expected loss given default. We can show to a limited extent which groups in society are most affected, particularly through unemployment and other indicators of inequality and deprivation but it is difficult to get more direct indicators of well-being except through direct surveys, such as those of happiness (see, e.g. Anand 2016).

We conclude by suggesting a way forward for joint action to address the debt problems of the euro area that is symmetric, reduces the need for austerity and its adverse consequences, thereby offering a route to reducing anxiety. Regrettably, it can only be a better path towards solution and not a guaranteed success.

2 The Fiscal Problem

The detail of the sovereign debt crisis that has gripped Greece since 2009 and its causes have been widely summarised (see, e.g. Lynn 2010; Manolopoulos 2011; Mitsopoulos and Pelagidis 2012; Panagiotarea 2013; Pappas 2014; Christodoulakis 2015; among others) so we do not repeat it. The key issues are fourfold.

- First, Greece started the crisis period with a high level of outstanding government debt, which was around 127% of GDP in 2009 (see Table 3). It, therefore, quickly encountered borrowing constraints.
- Second, the Greek economy does not appear to be very flexible, so that a severe adverse shock results in considerable unemployment with a rapid increase in the fiscal deficit in the short run and only a slow recovery thereafter. The non-fiscal route to change is therefore harsh.
- Third, the troika made considerable mistakes in underestimating the adverse impact.[8] Hence, instead of solving the problem once and for all by decisive action in May 2010, they needed to negotiate two more settlements in March 2012 and August 2015, and even so it is not clear at the time of writing whether this last will succeed.
- Fourth, agreeing to such painful changes, as is necessary for a democracy, is politically very difficult. Since much of the blame for inaction and actions has been placed on the main two political parties, PASOK and New Democracy, their support has fallen away rapidly and they have been replaced by parties which focus on the popular protest—Golden Dawn on the right and Syriza on the left—to the extent that Syriza was voted into power in 2015. In the face of such political weakness, promises to pay back sometime in the future lack credibility and it rapidly becomes difficult to borrow. As a result, lenders, including the troika, have not merely demanded to see quick results but have been unwilling to see debt levels rise substantially.[9]

This has, therefore, meant that Greece has faced relatively high adjustment costs compared to other countries and has had to concentrate the

reforms and fiscal changes up front rather than be able to spread them over a longer period of time (see Figs. 6, 7, 8, 9, 10 in the Appendix 2, which set out the experience of Greece compared to Cyprus, Ireland, Italy, Portugal and Spain).

2.1 The Three Packages for Greece

The magnitude and the persistence of the Greek debt crisis are striking. What is more striking is that, although austerity measures failed to bring Greece to a recovery and growth path, as the IMF admitting in early 2012, more austerity measures have imposed by the international lenders. The implementation of those measures is a prerequisite for receiving bailout loans the majority of which went to repaying older debt rather than to productive investments that could drag the Greek economy out of its current situation (see, e.g. Varoufakis and Holland 2012; Christodoulakis 2015).

So, one of the main problems with the three support packages for Greece is that they concentrate on being able to roll over existing debt and on budgetary consolidation to try to prevent the debt rising further. The fiscal measures are not focused on a programme of public investment in infrastructure, human skills and innovation that would get the economy growing again. Indeed, consolidation reduces such investment. While the fiscal measures are supplemented by requirements for structural change, which should help the Greek economy become more flexible, both in the sense of altering the structure of industry and in making firms and labour markets more efficient and lower cost in order to boost competitiveness, their implementation involves further costs in the interim.

Furthermore, privatization of state-owned enterprises in Greece, which was requested by the troika in order to release financial assistance funds to the Greek government, failed to generate enough revenues as the country was in deep recession and the assets were sold at depressed prices or proved unsaleable (see Christodoulakis 2015). Kallianiotis (2013) argues that moderate privatization under normal market conditions can increase efficiency and productivity but under financial

distress it can lead to unemployment and dependency on foreign capital and owners. The author also shows that privatization beyond an optimal level makes social welfare negative. Tsafos (2013) suggests that Greece's assets are worth about twice its debt, so the country is solvent and the debt problem could be solved if one wished to sell assets (under normal conditions). However, he also points out that these assets provide socially desirable goods and services but operate at a loss. Selling them, therefore, would not solve the problem as either welfare is reduced because the services are not provided or the government has to continue to subsidize the operation, so the deficit issue is not addressed by privatization. Thus, privatization may not be the right answer in some cases but it may be in others. The IMF report of 2013 admitted that privatization outcomes were disappointing.[10]

The first financial assistance package worth EUR 110 billion was approved in May 2010, where EUR 80 billion came from the euro area Member States while EUR 30 billion was provided by the IMF. Initially, it was agreed that Greece would receive tranches between May 2010 and June 2013 only after implementing the necessary reforms that were expected to put Greece into a sustainable debt path. One major priority was to bring Greece's government deficit from around 15% of GDP to below 3% by the end of the economic adjustment programme in 2013. Those reforms related to tax increases and budget cuts, as well as freezes in wages and pensions for three years.[11]

It is clear that both the Greek government and international lenders underestimated the impact of the first package on the Greek economy. Initial projections showed a relatively limited recession and rapid return to significant growth, which enabled the EU/IMF forecasters at any rate to predict that the debt ratio would peak and then decline, not merely permitting Greece to service its loans but actually start repaying them.[12] Perhaps to some extent, this was simply that the authorities believed their own rhetoric and that they were not going to repeat the disaster after the 1929 stock market crash, when neither monetary policy nor fiscal policy did much to offset the shocks.

However, the forecasting error appears to have two components. The first is that raising taxes is likely to be both a fairer and less damaging route to eliminating deficits than is expenditure cuts as they fall mainly

on the richer in society who have the scope to cut back on expenditure without extreme hardship. Second, the degree to which traditional multipliers might change was also underestimated. Hence, cuts of a given size were expected to have a much greater impact on deficits (and hence debt) than they actually did (Christodoulakis 2015). The first package was also extraordinary in that initially the EU lent to Greece at penalty rates rather than taking advantage of its AAA credit rating to lend at low rates even after covering their costs.

It, therefore, became obvious that a second round of measures in Greece was going to be needed as the first package offered far too little to stop debt rising and turn the economy around so that debt could actually begin to fall at least in relation to GDP. In particular, Greece needed additional funds and more time to stabilize its economy, restore market confidence and improve its competitiveness compared to other EU countries. Arguably, if the lenders had realized the degree of downward pressure they were requiring, they might have offered a different package, which kept the structural reforms upfront but slowed the fiscal aspect especially with a weaker requirement to raise taxes. Thus, in March 2012, a new financial assistance package was approved, cancelling the previous package agreement, by euro area finance ministers and the IMF. It was worth EUR 164.5 billion, where 144.7 billion came from the European Financial Stability Facility (EFSF) and the rest from the IMF. Moreover, a deal was agreed with private investors, the so-called Private Sector Involvement (PSI) agreement, to reduce Greece's debt. Tranches would be paid out between March 2012 and December 2014. Again, Greece had to commit to implementing additional reforms, which were front loaded, in order to receive financial assistance.[13]

The second package made a further mistake. It was judged that unless there was a degree of forgiveness, there was no way that Greek debt could begin to fall without unacceptable hardship. The problem for any government is that while it might achieve primary balance in the sense that tax receipts are large enough to pay for government expenditures, it will not stop debt rising in absolute terms until it can also cover the servicing costs. The higher the debt level the greater those costs and hence the greater fiscal retrenchment is necessary even just to stabilize the debt ratio let alone stabilize the debt. In this case, even though the IMF and

the other official holders of Greek debt did not accept any write-downs, they were able to persuade the bulk of private sector debt holders to accept a write-down of 53.5%.

The mistake was that the Greek banks were major holders of the Greek debt that was to be written down. With a Greek economy in sharp decline, rapidly increasing unemployment and business failures, the main banks were already vulnerable to substantial non-performing loans. To wipe out a substantial portion of asset values and collateral values for loans through the debt, write-down simply meant that the banks then had to seek recapitalization from the government if they were not to fail, since, like the government itself, it was not possible for them to raise capital through the markets. Similarly, the social security funds were having to pay out at a high rate because of the downturn and needed to draw on the government virtually euro for euro as a result of the write-down in the value of their assets. Thus, from EUR 137.9 billion by which the Greek debt was supposed to be reduced, eventually only EUR 51.5 billion was removed from the stock of the Greek bonds (Christodoulakis 2015).

Taking these two together, the net fiscal gain of EUR 51.5 billion was insufficient to turn the tide of rising debt, meaning that Greece would need a third package as the second one, like the first, was insufficient for the task in hand because of severe miscalculations over its likely impact. A bigger write-down would have been needed to do this, almost certainly involving the public holdings of Greek debt, if agreement was to be achieved. In practice, therefore, this would have constituted a default. A solution without such a default would again have either had to include greater consolidation, bringing forward some of the measures imposed in the third package or required some more generous rescheduling to enable the recovery. Overall, while Greek government debt was written down with one hand, it was increased with the other and the dip in the debt ratio to GDP only lasted for a year. As can be seen in Table 3, the Greek government debt-to-GDP ratio reached 172% in 2011. It dropped to 159.6% in 2012 and then increased to 177.7% in 2013.

Compared to other periphery euro area Member States, Greece's fiscal position, in terms of both deficit and debt levels, was much worse at the onset of the financial crisis in the autumn of 2008. After the implementation of

fiscal and structural measures agreed as part of the two support packages, the country's GDP contracted by 25% between 2008 and 2013, while unemployment reached around 30% in 2013 and a staggering 60% among young people, a percentage comparable to that of Spain. Consequently, the aggregate demand shock outweighed the expected positive impact on competitiveness via the supply side. This is not surprising as the growth model of Greece was based on consumption rather than investment all through the way up to the crisis. As Stiglitz (2015) puts it 'forecasts have been wrong not because EU countries failed to implement the prescribed policies, but because the models upon which those policies relied were so badly flawed. In Greece, for example, measures intended to lower the debt burden have in fact left the country more burdened than it was in 2010: the debt-to-GDP ratio has increased, owing to the bruising impact of fiscal austerity on output. At least the International Monetary Fund has owned up to these intellectual and policy failures'.

For Stiglitz, 'austerity' is simply the fiscal consolidation measures. In a sense, this is an over pejorative term for what was required. Greece had got itself out of long-run fiscal balance even on the basis of previous trends and hence a degree of consolidation would have been required without the GFC. That adjustment would have been a simple clawing back of the earlier excess. That would only be 'austere' in so far as it was unduly concentrated in the early years of the crisis. There are no objective rules for how fast one should return to sustainability in this narrow sense. It would be unrealistic to postpone all of it to the next up phase but a progressive programme over five years or so might have sufficed. But this implies that all the calculations were correct.

The third financial assistance agreement worth EUR 180 billion between Greece and troika was reached in August 2015 under the conditionality of continuing the structural reforms in the country (see Arghyrou 2015).

At that point, there was little opportunity for any further relief without a write-down of the officially held Greek debt (not the new loans that had been made in the first and second packages). This is what the IMF has advocated, possibly assisted by the fact that it is not holding it, but the EU authorities have vigorously resisted.[14] The ECB in particular is holding a substantial amount of such debt (above EUR

18 billion or 6% of its total debt as of 2015) and is very reluctant to make losses as in many respects, it has been forced into taking a position because the politicians have been unable to take a strong stand on the subject.[15]

Each stage in the crisis has reflected the unequal bargaining power between a single borrower and the international lenders (Dyson 2014). Unless Greece was realistically prepared to default, ultimately it could do relatively little to alter the terms in its favour. At times during the bargaining, particularly for the third package, it looked as if the lenders might overplay their hand. Throughout the argument, default and leaving the euro area had been equated. It is not clear that this is necessarily the case, although the Greek government would have to balance its books until new lending could be agreed in the event of default. Moreover, it would forego the opportunity to see a substantial external devaluation in its relative prices if it did not leave the euro area. The Greek banking system would also probably collapse and there would be a rush into cash as there was while the third package was being negotiated. Indeed, the ECB's refusal to advance any more, despite collateral being available, was presumably one of the factors leading the Greek government to give in at the end in 2015.

More equitable outcomes would be possible if the troubled countries act as a group because then they have a realistic threat that they could bring the euro area down which the lenders do not want to see. To some extent, an individual country might be able to rely on a domino theory, which suggests if they fail then that will bring other countries nearer to default but such arguments are hypothetical and may turn out not to be persuasive. Not a 'chicken game' a country might want to play.

2.2 Greece Compared

2.2.1 An Overview

In this subsection, we compare Greece to other euro area countries that entered into a financial assistance programme, i.e. Ireland, Portugal, Spain and Cyprus. Table 1 shows the dates when agreement on

Table 1 Agreement on and exit from an economic adjustment programme dates

	Ireland	Portugal	Spain	Cyprus	Greece
Agreement on financial assistance programme with troika	November 2010	May 2011	June 2012	March 2013	May 2010
Exit from financial assistance programme	December 2013	May 2014	January 2014	March 2016	–

receiving financial assistance and its conditionality was reached between each country and the troika as well as the dates of exiting such a programme. In order to receive financial assistance, those countries had to implement austerity and structural measures such as public expenditure cuts, especially those related to the social welfare system, tax increases, as well as pension system, labour and product markets reforms among others. All the countries with exception of Greece managed to exit their respective economic adjustment programmes successfully and resume raising funds for their needs on the markets.[16]

Overall, what all countries had in common before the euro area sovereign debt crisis broke out was that the common currency membership provided the peripheral countries with easy access to foreign funds mainly from German and French banks, which were invested in the domestic real estate or other services sectors rather than the real sector as investing in the latter was less profitable. Private debt reached dangerous levels but these were not addressed by the EU nor by the national governments (Panagiotarea 2013).

Table 2 shows the government budget deficit as a percentage of GDP for the five countries that received financial assistance as well as for Italy—a country that had high debt levels but nevertheless managed to persuade the markets that it would be able to repay its debts—and Germany—an overall surplus country as a benchmark to compare.

Table 2 Government budget deficit as percentage of GDP

	Ireland	Portugal	Spain	Cyprus	Greece	Italy	Germany
2007	0.3	−3	2	3.2	−6.7	−1.5	0.2
2008	−7	−3.8	−4.4	0.9	−10.2	−2.7	−0.2
2009	−13.8	−9.8	−11	−5.5	−15.2	−5.3	−3.2
2010	−32.3	−11.2	−9.4	−4.8	−11.2	−4.2	−4.2
2011	−12.5	−7.4	−9.5	−5.7	−10.2	−3.5	−1
2012	−8	−5.7	−10.4	−5.8	−8.8	−2.9	−0.1
2013	−5.7	−4.8	−6.9	−4.9	−13	−2.9	−0.1
2014	−3.8	−7.2	−5.9	−8.9	−3.6	−3	0.3
2015	−2.3	−4.4	−5.1	−1	−7.2	−2.6	0.7

Source http://www.tradingeconomics.com

Table 3 Government debt as percentage of GDP

	Ireland	Portugal	Spain	Cyprus	Greece	Italy	Germany
2007	23.9	68.4	35.5	53.9	103.1	99.7	63.6
2008	42.4	71.7	39.4	45.1	109.4	102.3	65
2009	61.8	83.6	52.7	53.9	126.7	112.5	72.5
2010	86.8	96.2	60.1	56.3	146.2	115.3	81
2011	109.3	111.4	69.5	65.8	172	116.4	78.4
2012	120.1	126.2	85.4	79.3	159.6	123.3	79.6
2013	120	129	93.7	102.5	177.7	129	77.2
2014	107.5	130.2	99.3	108.2	180.1	132.5	74.7
2015	93.8	129	99.2	108.9	176.9	132.7	71.2

Source http://www.tradingeconomics.com

As can be seen in Table 2, while Greece may be in the most difficulty as a result of the GFC it by no means faced the worst shock. The impact on Ireland, for example, resulted in a deficit of 13.8% of GDP in 2009, over 32% in 2010, and still over 12% in 2011. The increase in the debt ratio by almost 100 percentage points from 23.9% of GDP in 2007 to 120.1% of GDP in 2012 (see Table 3) also exceeded that in Greece. In 2015, the countries with the highest debt to GDP ratio were Greece (177%), Italy (133%) and Portugal (129%).

What is noticeable, however, is that the impact of the crisis on growth is much shorter lived in the case of Ireland compared to Greece; while in 2014 all the countries, with the exception of Italy and Cyprus, exhibited signs of positive growth (see Table 4).

Table 4 GDP growth

	Ireland	Portugal	Spain	Cyprus	Greece	Italy	Germany
2007	5.5	2.5	7.2	9.4	3.3	1.5	3.3
2008	−2.2	0.2	3.3	8.3	−0.3	−1.1	1.1
2009	−5.6	−3	−3.3	−1.8	−4.3	−5.5	−5.6
2010	0.4	1.9	0.2	3.4	−5.5	1.7	4.1
2011	2.6	−1.8	−0.9	2.2	−9.1	0.6	3.7
2012	0.15	−4	−2.6	−0.4	−7.3	−2.8	0.4
2013	1.4	−1.1	−1.1	−7.2	−3.2	−1.8	0.3
2014	5.2	0.9	0.9	−3.7	0.7	−0.4	1.6
2015	Na	1.5	3.8	0.2	Na	Na	1.7

Source Datastream

Table 5 Total unemployment

	Ireland	Portugal	Spain	Cyprus	Greece	Italy	Germany
2007	4.7	8	8.2	3.9	8.4	6.1	15
2008	6.4	7.6	11.3	3.7	7.8	6.7	13.1
2009	12.1	9.4	17.9	5.3	9.6	7.7	13
2010	13.9	10.8	19.9	6.2	12.7	8.4	12
2011	14.7	12.7	21.4	7.9	17.9	8.4	11.3
2012	14.7	15.6	24.8	11.8	24.4	10.7	10.6
2013	13.1	16.2	26.1	15.9	27.5	12.1	10.3
2014	11.3	13.9	24.4	16.1	26.5	12.7	9.7
2015	9.4	12.4	22.1	15	24.9	11.9	9.2

Source Datastream

In Ireland, unemployment rose close to 15% in 2011 but it was less than 10% by 2015, while the respective figures for Greece were approximately 18 and 25%. Unemployment in Spain is comparable to that of Greece, being at around 22% in 2015; while unemployment in Germany during the same year was around 9% (see Table 5).

Table 6 shows the 10-year government bond yield. As can be seen, in 2012, the borrowing cost for the Greek government reached 22.5% compared to 10.5% for Portugal, 7% for Cyprus and 5.9% for Spain. The long-term government bond yield for Ireland was only 2.4% in the same year. By 2015, with the exception of Greece, the 10-year government bond yield was the highest for Cyprus at 4.5% and much lower for the remaining countries. On the contrary, the long-term government bond yield for Greece in the same year was close to 10%.

Table 6 Long-term government bond yield (10 years)

	Ireland	Portugal	Spain	Cyprus	Greece	Italy	Germany
2007	4.3	4.4	4.3	4.5	4.5	4.5	4.2
2008	4.4	4.5	4.4	4.6	4.8	4.7	4.0
2009	3.9	4.2	4.0	4.6	5.2	4.3	3.3
2010	3.2	5.4	4.3	4.6	9.1	4.0	2.8
2011	3.3	10.2	5.4	5.8	15.8	5.4	2.7
2012	2.4	10.5	5.9	7.0	22.5	5.5	1.6
2013	2.0	6.3	4.6	6.5	10.1	4.3	1.6
2014	1.5	3.8	2.7	6.0	6.9	2.9	1.2
2015	0.8	2.4	1.7	4.5	9.7	1.7	0.5

Source Datastream

2.2.2 Ireland

Overall, the Irish economy has clearly turned the corner and while the population has had to undergo considerable hardship, the country appears to have returned to a sustainable path as opposed to Greece.

In part, the explanation lies in the different nature of the shock from that in Greece but it also lies in the resilience and flexibility of the Irish economy. Ireland had experienced an extended period of rapid economic growth (see Fig. 8 in Appendix 2) accompanied by a major boom in property prices involving increasingly risky construction projects. As the boom collapsed and the global crisis struck in late 2008, it became clear that there were crippling losses in the banking system. The Irish government initially reacted by trying to stem the panic by guaranteeing all bank deposits and debts. The extent of the losses turned out to be a factor of ten greater than the government initially anticipated, with the nationalization of the Anglo Irish Bank alone costing Irish taxpayers 25 billion euro.[17]

Ireland hoped to avoid an approach to the troika but the ECB-placed constraints on how the country could finance the losses, in particular, not allowing Ireland to pass the losses to bondholders many of whom were outside the country, particularly elsewhere in the euro area (Blyth 2013). The result was that the Irish taxpayer shouldered the losses rather than sharing them with the private sector across the EU, thus reflecting the weak bargaining power of a small country in a crisis. Thus, while the

impact was similar to that in Greece with increased state ownership of banks and increased indebtedness for the country as a result of the agreement with the troika, the result was direct in the Irish case, reflecting a change of attitude by the time of the second agreement with Greece.

What also made Ireland different from Greece though is that an earlier crisis in the 1980s resulted in a redesign of the country's economic policy through a series of four-year 'corporatist' agreements between the government, unions and employers, whereby government reforms and investment were paired with wage restraint, dramatically improving competitiveness, leading Ireland to be labelled the Celtic Tiger. The new economic regime included light regulation and low taxation and focused on attracting foreign direct investment (Murphy 2014).

In the present crisis, wages have had to be reduced but a substantial portion of the workforce has simply emigrated (see Glynn et al. 2015) something which is also traditional for Ireland since the potato famines of the mid-nineteenth century. Thus, Ireland has much more flexibility in the labour market both through wages and mobility and much greater structural flexibility in the real economy than Greece, as well as the willingness to turn the fiscal position round rapidly. Nevertheless, Ireland showed that a noticeable portion of the austerity was imposed involuntarily by the troika. And although they provided funding, the total initial fiscal cost was higher than it would have been in an independent Ireland.

2.2.3 Portugal

After Ireland and Greece, Portugal was the third country that applied for financial assistance from the troika. Like Greece and Cyprus, Portugal had also struggled with high deficits and debt levels since its admission to the euro area. But, as opposed to Greece and Cyprus, Portugal implemented various austerity measures well before the start of the 2008 financial crisis. Nevertheless, those austerity measures did not convince the international markets, which feared contagion and a potential euro area break up after the debt crisis erupted in Greece.

What made things worse for Portugal was that the top three rating agencies downgraded its credit status even after the government signed

a Memorandum of Understanding (MoU) with the troika in accepting financial assistance worth EUR 78 billion under the conditionality of implementing measures related to fiscal consolidation, its banking system and structural reforms to improve its competitiveness in late 2011. One of the trigger points of Portugal's credit rating downgrades, as in the case of Ireland, was related to the country's banking problem. In particular, one of its private banks, the Banco Português de Negócios (BPN) was nationalized while the Banco Privado Português (BPP), received rescue funds due to their large registered losses associated with bad investments and accounting fraud (de Sousa et al. 2014).

Furthermore, more than 80% of foreign investment in the period between 1995 and 2007 period went to the real estate sector rather than to manufacturing or other productive activity. Thus, as in the case of other peripheral countries, the contribution of overseas capital to productivity growth was very small. And, as in Greece, the reduction of unit labour costs was mainly due to job cuts (Felke and Eide 2014). The country managed to exit its financial assistance programme in May 2014.

2.2.4 Spain

Compared to Greece, Portugal and Cyprus, Spain never ran a government deficit of more than 3% during the period 1998 and 2007 while its public debt to GDP stood at below 40% when the crisis broke out (see Tables 8, 9 in Appendix 1).

In Spain, the problem arose from the bursting of its real estate and construction market bubbles, which ended up in a banking crisis. Spanish banks were heavily involved in the construction sector, so when the crisis hit the construction industry, this affected the whole financial system (Guardiola and Guillen-Royo 2015). In October 2008, the Spanish government provided a 71 billion euro guarantee fund for its banking sector. Shortly after that, the Spanish government implemented austerity measures to reduce the country's public deficit and regain the trust of the international financial markets in order to lower its bond interest rates as did the next new government after the elections in late 2011 (Kickert and Ysa 2014).

After one of the largest banks Bankia was nationalized in May 2012, Moody's downgraded several Spanish banks, which led to an increase in the risk premium on Spanish debt and consequently the country's funding costs. In June 2012, troika and Spanish government reached an agreement about a bailout of the Spanish banking sector with a EUR 100 billion loan. The main aim of the bailout was to recapitalize and restructure the Spanish banking system (Kickert and Ysa 2014). In this case, austerity had already been imposed 'voluntarily' by the Spanish government, and overall indebtedness was not extreme. However, it was not easy to break the vicious circle between sovereign debt and bank debt. Nevertheless, the country exited its economic adjustment programme successfully in January 2014.

2.2.5 Cyprus

Cyprus, like Greece and Portugal, had a history of fiscal deficits, but, in order to join the euro area, the country applied fiscal discipline and achieved a surplus of 3.5% and a debt to GDP ratio of 48.9% by 2008. The problem was that the country's banking sector was very large compared to the country's GDP. For example, in 2012, its banking sector had liabilities of 800% of GDP. This meant that Cyprus was financing its deficits via foreign capital inflows, which in turn made the country vulnerable to inflow reversals (Phylaktis 2015).

International markets stopped financing the Cypriot government in May 2011. Nevertheless, the government asked for assistance from Troika only in June 2012 after the Cypriot banks made substantial losses as a result of the PSI scheme in Greece, since they held substantial amounts of Greek government debt. The impact of the PSI was estimated at 23% of the country's GDP. On the one hand, the banks did not have enough capital to cover losses while on the other hand, the government could not provide any financial support because it did not have access to the markets. An agreement between the troika and Cyprus was reached only in March 2013. This time the troika had to take a different approach as taxpayer financing of the losses was implausible. The initial rescue plan included a bail in of both insured and

uninsured depositors in all Cypriot financial institutions (Phylaktis 2015).

The country's banking system was funded mainly by depositors, deposits constituting 71% of banks' liabilities. 60% of those deposits belonged to non-residents. Up until then the first €100,000 of any depositor's claim in the EU was regarded as inviolable as it was insured. Thus, although the burden might not have fallen so strongly on ordinary Cypriots as taxpayers, it would fall on them as depositors instead. The bailout was rejected by the Cypriot Parliament and the new deal now required the bailing in of just the uninsured depositors of their two largest banks. Moreover, profitable Cypriot bank branches in Greece had to be sold at a loss (Phylaktis 2015). Eventually, the country managed to exit the economic adjustment programme in March 2016.

2.3 Fiscal Asymmetries

A fundamental asymmetry that a less than optimal currency area creates is that countries that are on the upside, with a strong balance of payments, good competitiveness and sound public finances, have no real compulsion to act when the system is under strain, whereas those on the downside, with balance of payment and fiscal deficits, high debt and poor competitiveness, have no choice but to act. Restoring sustainability for such weaker countries is an unpleasant process involving reductions in real wages, budgetary consolidation and unemployment, which may be long-lasting. This applies inside and outside monetary union, but the tools available inside are more limited unless of course the boundary of the monetary union is matched by a fiscal union as well. While the new measures in the six-pack, the two-pack and the TSCG all move in the direction of more sustainable and prudent fiscal policy in the euro area they come nowhere near a fiscal union where the better off regions automatically assist those in difficulty.[18]

The EU has recognized the general problem with the new macroeconomic imbalance procedures, requiring countries not to get too out of line with their partners and to adhere to common minimum standards. However, with the exception of the real exchange rate and

the current account balance, these monitored imbalances only relate to the downside. Even in the case of the current account balance, the imbalance limits are not symmetric (+6% compared with −4%). The position that the weaker have to adjust rather than the stronger is thus institutionalized.

However, the macroeconomic indicators are not all of the same nature as some are more macroprudential in character, relating to the size of private sector debt, the growth of private sector credit, house price growth and growth in total financial sector liabilities. Acting on these upside indicators would limit the rates at which real convergence might occur but would also reduce the chance of a financial crisis. Here, the idea that one should also limit contractions in these variables is more difficult as the process itself is highly asymmetric. Credit contractions tend to be slower than credit expansions. Moreover, in downturns, there is huge pressure to avoid a credit crunch as those businesses in temporary trouble need to borrow more to survive not less. The same applies to avoiding a 'collateral crunch' through falling asset prices.

In the EU, banks have been required to raise their equity ratios in the light of the analysis of the causes of their weakness in the crisis. Since it has been difficult to raise equity on the market and indeed existing shareholders are unlikely to be enthusiastic about seeing their holdings diluted, banks have been deleveraging, particularly by reducing foreign lending (Goodhart 2016). This has not merely affected Greece directly through its own banks but indirectly through the restrictions on lending in its markets and the lower subsequent increase in incomes elsewhere in the EU, e.g. reducing tourism.

The requirements for Greece and any other country to be suitable for being in a currency are twofold according to Optimum Currency Area (OCA) theory. The first requirement is to limit their exposure to asymmetric shocks by being similar to their partners in economic structure, openness and intraregional trade, and degree of specialization. The second is to facilitate the adjustment to any asymmetric shocks that do occur. These include homogeneity of preferences to guarantee efficient crisis management, factor mobility and transfer payments to overcome economic shocks (see Jager and Hafner 2013, for more detailed analysis).[19] The problem is that the euro area is far away from being an

optimal currency union. The adjustment is smoother when the Member States of the union have flexible labour markets and a federal fiscal system to act as stabilizer. The euro area lacks both (Goodhart 2007).

The SGP was designed to try to make sure that Member States never got near the boundaries of fiscal and debt sustainability. The Excessive Deficit Procedure (EDP) was designed to act as a deterrent. In normal times, countries should organize their fiscal balance such that when there are downward shocks they do not get a worse deficit than 3%, because they know that, if they have to adjust in the down phase, it will be very painful. The problem comes when the deterrent does not work and countries do nevertheless have to adjust in the down phase and reduce their deficit during a time when they need to stimulate their economy, thus making the situation more difficult instead. This problem was made even worse by admitting countries, such as Greece, that had debt ratios well above the level that offered a substantial cushion against the consequences of an adverse shock. Furthermore, since the EDP itself was effectively abandoned after France and Germany threatened to break the limits, it ceased to have value as a deterrent and performance worsened (Mayes and Virén 2011).

Thus, the deterrent having not worked, the euro area was faced with having to decide what to do in circumstances it thought would not occur, namely, that some Member States were so indebted they could not manage to continue to finance their debt in financial markets even if they took exceptionally drastic measures to try to reduce their deficits (Tables 8, 9, in Appendix 1, show the government deficit and debt to GDP ratios, respectively, for the 19 euro area countries, covering the period 1995–2015).[20] In the initial period, when the GFC was at its full force in the last quarter of 2008, the global reaction through the G20 on the UK's initiative was to agree on general fiscal expansion, over and above the increases that would occur as the result of automatic stabilizers as tax revenues fell and social expenditure demands rose with declining activity and rising unemployment. By 2010, when the Greek sovereign debt crisis emerged, countries were already retreating from those exceptional measures. Not only were they worried by how rapidly their debt was increasing and the consequences this was having for debt ratings but they were seeing signs that the worst was over and the

world economy was recovering. With interest rates at zero and quantitative easing in some countries, there were worries that the rebound might be so strong that it could become inflationary, so there was a tendency to ease up on the level of stimulation. Indeed, in May 2011, the ECB actually started raising interest rates. Hence, there was reluctance on the part of euro countries without a debt constraint to contemplate an expansion that was additional to their domestic needs. The focus was simply on what should be done to address the danger of default by Greece.

Thus, while the other euro countries helped by providing temporary lending under strict conditionality to give Greece time to return to a sustainable fiscal position, there was little discussion of a fiscal solution, certainly not involving any direct fiscal transfers. The EUR 315 billion (Juncker) plan for investment was not proposed until 2015, and it is still not clear how much of that will be additional investment. The normal response inside a nation state to such problems would not merely be automatic fiscal transfers to help the disadvantaged but an investment programme to help restructuring, providing both physical infrastructure and development assistance for business start-ups, retraining, etc. Monetary policy and consequently exchange rate policy would still be aimed at what was appropriate for the country as a whole and not specifically for the distressed region.

The impact on the distressed countries and Greece, in particular, has therefore been harsher than it would be the case for a region in a full economic and monetary union or for an EU country that was not part of the euro area. While one can of course argue that these countries had already benefitted substantially from their membership of the euro area with low rates of interest, higher demand for their exports and lower transactions costs (but higher inflation), this does not entail that putting the adjustment burden so firmly on them was either the most efficient solution or the most equitable one.

There has been considerable argument for a greater participation by creditors both in expanding their own economies and in restructuring the debt further (see Kregel 2011; Panagiotarea 2013, for example). The more telling argument is that it is actually in those countries' own interests to act in this way. Krugman (2015) argues that 'we're increasingly

seeing that the problems of the euro extend well beyond the troubles of southern European debtors. Economic performance has also been very bad in several northern nations with good credit ratings and low borrowing costs—Finland, Denmark (which is not in the euro but shadows it), the Netherlands. We're seeing the classic problems of asymmetric shocks in a currency area that isn't optimal'.

3 The Competitiveness Problem

Many countries that are in fiscal difficulty also face a competitiveness problem. This problem is not restricted only to Greece or other Southern euro area Member States. Finland and the Baltic States, for example, also, face competitiveness related difficulties. The Maastricht convergence criteria for suitability for joining the euro area do not contain any requirement for price level convergence, simply inflation convergence. Nor indeed was there a requirement for convergence of real incomes. Thus, several countries, Greece included, joined with price and income levels well below the euro area average. Assisted by the low interest rates, both price and income levels have increased more rapidly in these countries. While ECB monetary policy was quite successful in achieving its target of a rate of inflation below but close to 2% a year for the euro area as a whole in its first decade of operation, there was no longer any focus on inflation in any of the individual Member States as there was when they had their own monetary policy. Thus, their inflation could and did differ quite significantly from the average. The same problem of an excessive rate of catch up leading to overshooting applied to the Baltic States but other countries, such as Finland, also saw their prices rise compared to that of their competitors as part of a reaction to faster growth that they could not easily control this by fiscal policy alone.

Such imbalances can develop for quite some time in a monetary union as long as they can be financed or offset by investment. Indeed, inside a single country, there will probably not be any statistics on net trade and unemployment and price level discrepancies can be enduring. In the euro area framework, however, limits can be reached and at that

point the adjustment required is no longer marginal but involves relatively substantial change. Again, any such imbalance is a two-sided phenomenon. Other countries in the euro area are running corresponding surpluses. Here also the problem of adjustment is asymmetric. The surplus countries are seeing reasonable growth and providing they do not mind accumulating assets they do not need to alter their own competitiveness downwards. This lack of convergence in competitiveness in the euro area and its consequent current account imbalances were financed by the core countries (Panagiotarea 2013). In turn, this led the banking systems in both the core and the periphery euro area countries to become highly leveraged.

Furthermore, such differences in competitiveness will tend to be fostered by differences in structure and in labour market bargaining processes. To reverse the relative change, these structures and processes also need to change and that change has to take place in the deficit countries. It is interesting that one of the main arguments suggested in favour of Finland's membership of the euro area from the outset (Pekkarinen et al. 1997) was that the removal of the opportunity to change the exchange rate would force Finnish wage bargainers to alter their behaviour to avoid losing competitiveness. To an extent this worked and in the early years of the EMU Finland's cost competitiveness remained relatively constant compared with Germany despite the faster growth rate. But this parity was increasingly eroded and then exposed by the adverse structural shocks.

Without the benefit of their own monetary policy or exchange rate policy these countries need to adjust mainly by reducing relative prices. Nevertheless, as the Governor of the Bank of Finland, Erkki Liikanen, argues, current account deficits cannot always be solved by lowering the real exchange rate through reductions in relative wages. Sometimes, structural change of their economies towards new growth opportunities is needed as well (Bank of Finland 2015). In the case of Finland, the country had to reduce its dependence on paper because worldwide usage is going down. Similarly, the decline of Nokia was not due to its being expensive but because it did not back the right technology and produce good enough products. Moreover, the worsening of the

bilateral trade balance through the sanctions that the EU is imposing against Russia cannot be solved by altering relative prices.

The Baltic States have been in a similar position to the Member States of the periphery of the euro area. They could not use monetary policy to improve their competitiveness as their interest rates were used to maintain a fixed exchange rate with the euro through their currency boards.[21] The Baltic States' GDP growth was higher in the period 2004–2006 compared to growth in the global economy but dropped significantly in the years 2008–2009. Nevertheless, those countries achieved positive GDP growth in 2010. The main channels through which the GFC was transmitted to the Baltic States were capital flows and international trade. Before the crisis, the Baltic States experienced a significant capital inflow from overseas as in the case of the peripheral countries, which was reversed after the Lehman Brothers collapse in the USA. The main source of economic growth in the Baltic States countries as in Greece was domestic demand but compared to Greece, the Baltic States were more flexible in terms of reducing wages and prices (Matysek-Jędrych 2012). By comparison with Greece and Portugal, the decrease in expenditure on imports was much more severe in the Baltic States while the improvement in competitiveness was mainly due to significant reduction in domestic demand (Lindner 2011).

One of the main problems in Greece has been its low productivity. The country's growth model has been consumption driven, which led to amassing large (mainly public) debt that proved unsustainable. The rapid expansion of the periphery countries before the crisis, which raised their price levels compared to the prices of their competitors was easy to achieve. The asymmetric problem is that lowering relative prices, through lowering relative wages is much more difficult to do than achieving the same relative outcome by allowing wages in the more competitive areas to rise faster. However, the core countries, particularly Germany, were not willing to pursue policies that would have that result. Striving to keep productivity growing and rein in costs makes sense because the euro area is not a closed economy. Germany and the other more successful countries owe a lot of their success to competing successfully in the rest of the world.

Although the Baltic States recovered faster than the peripheral euro area Member States, they still face fiscal and competitiveness problems but they have avoided some of the worst unemployment simply by emigration. It is difficult to stop real wages rising faster than in the wealthier Member States because this is part of the process of catching up. While such an increase in real wages can be offset by a matching faster growth of productivity—again a feature of catching up in some industries—in the service industries it is more difficult to increase productivity as wages are the main cost of production, which is a typical example of the Balassa–Samuelson effect.

What is, therefore, happening in the contracting states is that structural change is occurring through closing down the old and inefficient production without having anything new to replace it rather than the new driving out the old in some sort of Schumpeterian process. In the latter case, one would expect more favourable consequences for unemployment, which is an acute problem for many EU Member States. However, the increasing productivity as well as the transfer of manufacturing production to emerging markets had already created a structural unemployment problem in the EU. So the starting point for the current problems was already challenging. Thus, more people are in need of social support and benefits just at the time when the fiscal cuts reduce the existing system.

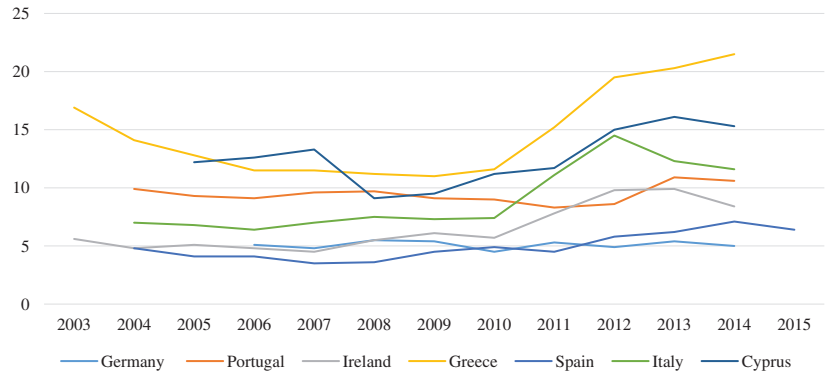
4 The Anxiety Problem

In the first section of the chapter, we discussed the euro area asymmetries that impede fiscal recovery in the region; while in the second section, we discussed the competitiveness problem and the asymmetries it creates showing that it is not restricted only to the 'South' of the euro area. However, asymmetry problems are also observed in the way people, mainly those who belong to lower income groups, react to policies depending on the state of the economy. As people are more cautious in downturns, much larger stimulus is needed to achieve the same effect as when an economy is doing well and people are more optimistic. This, in turn, makes recovery more difficult to occur.

But rather than stimulating the economy, the peripheral euro area countries resorted to austerity measures during a downturn due to their debt problems. This has created a range of anxieties for people, additional to those created by the economic crisis itself, due to the uncertainty of people's future financial and social state, which, in turn, has further hampered recovery and has had an enormous impact on the country's population health. Greece, for example, has been introducing austerity measures that hit the majority of the population for six consecutive years. Constant negative news about new austerity measures has created uncertainties and anxiety for people, especially for those least able to cope. The problem is that within the population the burden of austerity is not born equally. The middle class has been gradually evaporating and the number of poor and materially deprived has been substantially increasing (Balourdos 2014). On the other hand, those who are well off did not need to change their lifestyle or their standards of living, thus, widening the gap between rich and poor and raising the chance of social unrest.

D'Errico et al. (2015) find a significant distributional effect due to the crisis observing an increase in inequality in most of the euro area countries and thus recommending customized policies to tackle the problem. For example, using a new inequality measure, they find that the rise of inequality in Greece, Ireland, Italy and Portugal has been larger than previous studies indicate. They also show that labour income is a major source of income for the lowest income percentiles. This implies that austerity measures, which reduce wages and pensions unevenly, affect the lower income population more than the higher income population which has alternative or additional sources of income. Furthermore, austerity measures have created new forms of poverty such as the new poor, severe poor, near poor, materially deprived and persistent poor (for more details, see Balourdos 2014).

Figure 1 shows the materially deprived as a percentage of total population in Greece, Cyprus, Ireland, Portugal, Spain, Italy and Germany. As can be seen in this figure, the percentage of materially deprived increased in most countries with exception of Germany. In the case of Greece, this percentage substantially increased from 2010 and onwards



Source: Eurostat

Fig. 1 Material deprivation (in percentage terms of total population). *Source* Eurostat

reaching around 22% in 2014 (comparatively, the average of materially deprived in the euro area in the same year was less than 9%).

As income obtained through labour is usually the main source of earnings for lower socio-economic groups, it is clear how vital employment is for the vast majority of this population. Bergiannaki and Dimitrakopoulos (2014) find that the risk of premature death increases by 63% for someone being unemployed. They also find that the psychological burden of being unemployed among others increases stress levels, anxiety and frustration, which in turn increases the risk of mental disorders. In Greece, for example, suicides and the use of drugs among people who were unable to repay debt increased as did violence, homicide and theft. Overall, findings show that poor population health is related to wealth inequality (see, e.g. Gelormino et al. 2014; Nowatzki 2014). Thus, policies should aim to reduce inequality rather than simply poverty (Navarro 2014a).

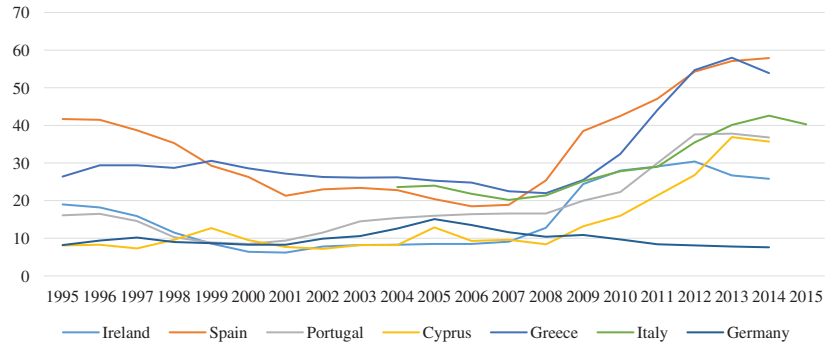
One of the many conditions imposed by the troika on Greece and other peripheral euro area countries in order for them to receive financial assistance has been labour market reforms. Research shows that these reforms have health implications for workers. Chung et al. (2014) argue that this is due to the high job insecurity, low pay, limited social benefits and powerlessness that workers feel. What is more, workers are

likely to sell their labour for less than subsistence income due to unregulated low wages, which will further undermine their economic security.

There is a huge problem of unemployment and especially youth unemployment that some EU countries face. For example, total unemployment in Greece reached almost 27% with Spain following with 24.4% in 2014 (see Table 5) while the average unemployment in the euro area in the same year was around 11.4%. The numbers for youth unemployment are more striking.

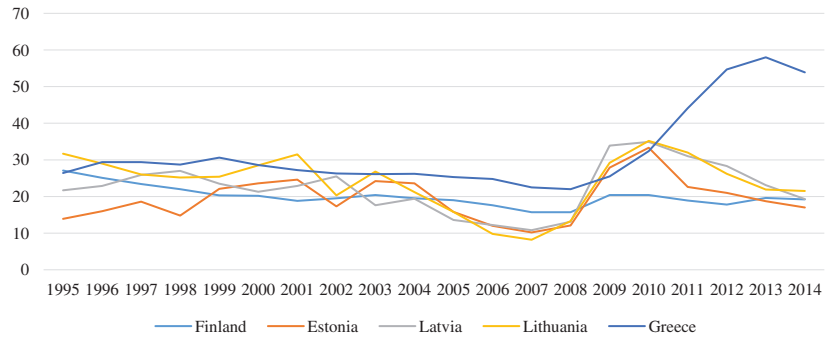
Figure 2 shows the percentage of youth unemployment for Greece, Cyprus, Ireland, Portugal, Spain, Italy and Germany. In 2013, for example, youth unemployment in Greece and Spain was slightly below 60% followed by Italy with 40.1% and Portugal and Cyprus slightly below 40%. On the contrary, youth unemployment was less than 8% in the same year for Germany; while the euro area average was 26.5%. Figure 3 also shows the youth unemployment in the Baltic States and compares it with that of Greece and Finland. As can be seen, youth unemployment started increasing significantly from 2007, peaked in 2013, and after that gradually declined.

The main argument for implementing austerity measures was that peripheral euro area countries have been living beyond their means. However, another argument is that the root cause lies in the regressive



Source: Datastream

Fig. 2 Youth unemployment (15–24) in percentage terms (1). *Source* Datastream



Source: Datastream

Fig. 3 Youth unemployment (15–24) in percentage terms (2). *Source* Datastream

tax regimes and fiscal fraud that benefit high-income and special interest groups (Navarro 2014b). Business corporations deprive governments of revenue via transferring their funds through offshore tax havens (Smith 2014). Another problem that was not dealt with before the crisis was the accumulation of debt by lower and middle income households greatly assisted by easy access to cheap credit and wide availability of household credit products on offer. Furthermore, the deregulation of the financial sector arguably contributed to the bubble in the real estate sector via speculative investments, which were funded with debt (Smith 2014). Thus, cheap funds were directed towards high yielding sectors rather than the real economy, which was less profitable (Chtouris and Miller 2014).

After the crisis, the introduction of austerity measures in conjunction with rescue packages was not accompanied by investment policies to create jobs, which would increase labour income, policies to deal with household debt overhang that is holding back consumption, and consequently provide the means for increased tax revenues for the governments (Navarro 2014b).

From a market sentiment perspective, there has been great uncertainty that spread from the periphery to the core of the euro area. Figure 4 shows increased uncertainty in the markets, proxied by the

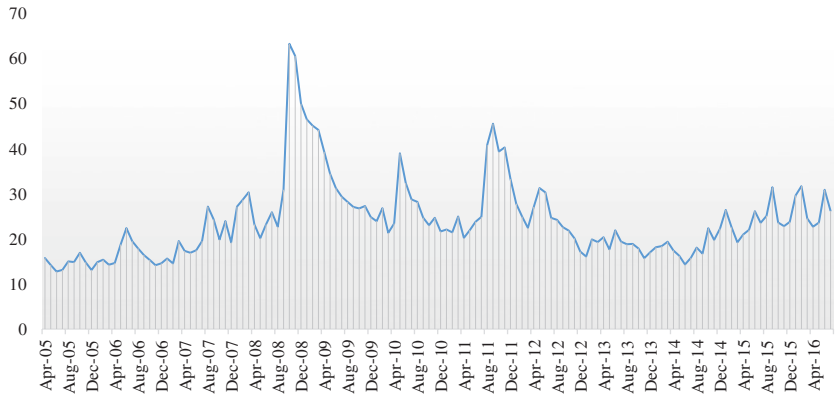


Fig. 4 EURO STOXX 50 Volatility. *Source* SIRCA

Table 7 Average annual value of the EURO STOXX 50 Volatility

Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value	14.4	16.6	19.7	33.7	33.6	26.5	30.1	24.6	18.6	18.2	24.0	27.1

Source SIRCA

volatility of the prices of the 50 European blue chip companies (EURO STOXX 50 Volatility) over the period April 2005–July 2016,[22] while Table 7 shows the average annual value of this volatility.

With weak demand driven by austerity in the periphery and greater uncertainty in the wider area, the euro area faces an increasing problem of deflation as shown in Fig. 5 (Cohen et al. 2015).

Overall, what we see is more fragmentation rather than closer integration, with centrifugal tendencies gaining stronger momentum after the recent Brexit. High unemployment, especially among young people, hampers social integration in the EU. Young (2014) emphasizes the gap between the 'Market Europe' and 'Social Europe' models as well as the absence of a European welfare system at a supranational level, which could ameliorate the tremendous impact of economic crises and subsequent austerity measures on countries' social welfare systems. Singh (2016) argues that austerity measures protect the interests of creditors but not the taxpayers who had to bail out the banks. And while 'critical social functions' are mentioned in the EU policy agenda there is no clear

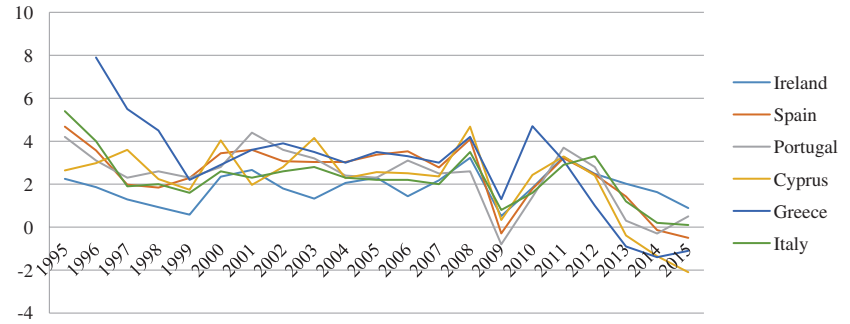


Fig. 5 Inflation rate. *Source* Datastream

strategy how they are going to be achieved. As Tombazos (2011, p. 45) puts it 'for as long as the neo-liberal principle of "competitive austerity" prevails, only "human sacrifice" will placate the centrifugal tendencies of the euro: austerity, unemployment, poverty and social frustration'.

5 A Way Forward

Any successful solution to the problems of an over-indebted borrower involves a compromise between the lenders and the borrowers.

1. The borrower has to offer a credible path forward that suggests to the lenders that they will not lose more in the future than they think acceptable.
2. The lender has to accept terms that reschedule or reduce the debt in a manner that does not lead the borrower to prefer default.

In the case of the euro area, where default and exit have been assumed to go together, the burden on the borrower has been asymmetrically high with the costs of exit. However, both parties bear the costs of default and exit, and in the case of Greece, the lenders came close to provoking Greece to choose default.

Because of this asymmetry, the costs to Greece and to a lesser extent to other countries in the periphery of the euro area, including Finland and the Baltic States, has been high. In a federal state, a much higher proportion of the costs would have been borne by the better off part of the area. Not only would incomes in the periphery not have fallen so much and unemployment would have risen less, but the average impact across the euro area as a whole would have been lower. Thus, making the transfers would provide a net benefit. Indeed, it is arguable that income levels would have been higher right across the area if expansionary fiscal policy in the countries that were not debt-constrained might have offset the transfer costs.

The most important feature in this process is that the anxieties and difficulties entailed by austerity lead to an asymmetric loss of confidence and reluctance to take risks that inhibits a recovery. At the same time, austerity cuts public sector investment and distressed banks are not merely unable to provide new loans for business expansion but have to cut back on lending (Schnabl 2016). Indeed, the focus will tend to be on 'evergreening' the existing non-performing loans to prevent the bank from failing, keeping such loans as are available away from new productive opportunities. Thus, there is little opportunity for internal sources of investment and external sources will also be weak if there is a risk of sovereign default or write-downs. Unless that cycle is broken, the prospects are not good.

The difficulty of exit varies by country. The Baltic States have proven flexible. They have not faced any threat of sovereign default and hence recovery is taking place. Similarly, Ireland has been able to address its banking problems and has been able to attract new external investment, again assisted by a very flexible labour market. The position in Italy, Portugal and Spain looks more questionable but none of these countries faces the extent of the difficulties of Greece, both in the threat of continuing sovereign default and in lack of flexibility.

An approach where Greece has to change first so that it becomes more like the Baltic States and then receives assistance second is not only very onerous but is likely to be politically and socially impossible.

The Baltic States made immense changes after the collapse of the Soviet Union but the prospects of independence and the benefits of a Western-style prosperous democracy were a massive incentive to accept much greater hardship than Greece has been facing. Not only was there the prospect of major benefit but there was major public and private sector assistance for the process. Hence, while there was much greater austerity and anxiety for many, there was a clear signal that this would be a temporary problem and hence there was quickly a rush to invest in the future.

This same turn round in beliefs is necessary for Greece so that both internal and external confidence is boosted and the reinforcing process of difficulty is ended. This implies a compact for Greece that contains a list of ingredients such as the following:

1. A major reduction in the debt burden—say by applying the same haircut to publicly held Greek government debt as was 'agreed' under the PSI. This will take some pressure off the Greek budget, remove the need for further austerity, enable proper recapitalisation of the banks and create some headroom for investment in physical and human capital
2. A reinforced, monitored commitment to continue with the programme of structural change and fiscal reform in Greece so that it can:
   a. Weather further adverse shocks without threatening sovereign default
   b. Increase its potential growth rate
   c. Provide confidence to lenders that the remainder of their loans will be serviced on schedule, i.e. it entails changes in the political framework and clientilism and not simply a change in economic structure
3. An expanded programme of external investment along the lines of the Juncker Plan to help provide the infrastructure to encourage the development of private sector productive investment in Greece.

More controversially, some greater expansion of the core economies would also help. The spectre of inflation is still small, and a reduction of the pressure on extraordinary monetary policy would help a more broadly based recovery. The burden of the recovery needs to fall on those who can most afford it.

Whatever is done, it needs to have the impact of the post-war and post-Soviet Union programmes both jolting Greece out of the cycle of anxiety and deprivation and reinforcing the process of structural change so the problems are not simply repeated again in the future.

Ironically, some of the problems of implementing such a programme are not to do with Greece but with the potential success of recovery in Italy, Portugal and Spain as well. While a dramatic programme can be afforded for Greece and indeed for Portugal, Italy and Spain are much larger economies. Nevertheless, if banks can be properly recapitalised and the euro economy as a whole can begin to grow faster many of these problems will be self-solving. Anxiety and asymmetry can be reduced and austerity replaced by normal budgetary prudence. Nevertheless, the euro area will remain too diverse to meet the criteria for an OCA and the problem of how to handle major adverse shocks to individual countries will remain. While the automatic fiscal transfers of a full federal system may be politically unacceptable, the practice of handling such future shocks will have to involve a much greater contribution by those who are not adversely affected by the shock to those who are or the problems of the last decade will simply recur again in some guise or other.

6 Appendix Tables

See Tables 8, 9 and 10.

7 Appendix Figures

See Figs. 6, 7, 8, 9 and 10.

Table 8 Government budget deficit to GDP (in percentage terms)

	IE	ES	PT	CY	GR	IT	DE	FR	NT	BE	AT	LU	FI	EE	LV	LT	MT	SI	SL
1995	−2.1	−7	−5.2	−0.7	−9.7	−7.3	−9.4	−5.1	−8.6	−4.4	−6.1	2.5	−5.9	1.1	−1.4	−1.5	−3.5	−8.2	−3.3
1996	−0.3	−5.4	−4.7	−3	−8.2	−6.6	−3.5	−3.9	−1.7	−3.9	−4.4	1.3	−3.2	−0.4	−0.4	−3.2	−7.7	−1.1	−9.7
1997	1.3	−3.9	−3.7	−4.8	−6.1	−3	−2.9	−3.6	−1.3	−2.1	−2.4	3.7	−1.2	2.2	1.4	−11.8	−7.1	−2.3	−6.2
1998	2	−2.9	−4.4	−3.8	−6.3	−3	−2.5	−2.4	−0.9	−0.9	−2.7	3.6	1.6	−0.8	0	−3	−9.3	−2.3	−5.2
1999	2.4	−1.3	−3	−4	−5.8	−1.8	−1.7	−1.6	0.3	−0.6	−2.6	3.6	1.7	−3.3	−3.7	−2.8	−6.7	−3	−7.3
2000	4.9	−1	−3.2	−2.2	−4.1	−1.3	0.9	−1.3	1.9	−0.1	−2	5.7	6.9	−0.1	−2.7	−3.2	−5.5	−3.6	−12
2001	1	−0.5	−4.8	−2.1	−5.5	−3.4	−3.1	−1.4	−0.3	0.2	−0.6	6	5	0.2	−2	−3.5	−6.1	−3.9	−6.4
2002	−0.3	−0.4	−3.3	−4.1	−6	−3.1	−3.9	−3.1	−2.1	0	−1.3	2.3	4.1	0.4	−2.2	−1.9	−5.4	−2.4	−8.1
2003	0.7	−0.4	−4.4	−5.9	−7.8	−3.4	−4.2	−3.9	−3	−1.8	−1.8	0.5	2.4	1.8	−1.6	−1.3	−9.1	−2.6	−2.7
2004	1.4	0	−6.2	−3.7	−8.8	−3.6	−3.7	−3.5	−1.7	−0.2	−4.8	−1.1	2.2	2.4	−1	−1.4	−4.4	−2	−2.3
2005	1.3	1.2	−6.2	−2.2	−6.2	−4.2	−3.4	−3.2	−0.3	−2.6	−2.5	0.2	2.6	1.1	−0.4	−0.3	−2.7	−1.3	−2.9
2006	2.8	2.2	−4.3	−1	−5.9	−3.6	−1.7	−2.3	0.2	0.3	−2.5	1.4	3.9	2.9	−0.6	−0.3	−2.6	−1.2	−3.6
2007	0.3	2	−3	3.2	−6.7	−1.5	0.2	−2.5	0.2	0.1	−1.3	4.2	5.1	2.7	−0.7	−0.8	−2.3	−0.1	−1.9
2008	−7	−4.4	−3.8	0.9	−10.2	−2.7	−0.2	−3.2	0.2	−1.1	−1.4	3.3	4.2	−2.7	−4.1	−3.1	−4.2	−1.4	−2.3
2009	−13.8	−11	−9.8	−5.5	−15.2	−5.3	−3.2	−7.2	−5.4	−5.4	−5.3	−0.5	−2.5	−2.2	−9.1	−9.1	−3.3	−5.9	−7.9
2010	−32.3	−9.4	−11.2	−4.8	−11.2	−4.2	−4.2	−6.8	−5	−4	−4.4	−0.5	−2.6	0.2	−8.5	−6.9	−3.2	−5.6	−7.5
2011	−12.5	−9.5	−7.4	−5.7	−10.2	−3.5	−1	−5.1	−4.3	−4.1	−2.6	0.5	−1	1.2	−3.4	−8.9	−2.6	−6.6	−4.1
2012	−8	−10.4	−5.7	−5.8	−8.8	−2.9	−0.1	−4.8	−3.9	−4.2	−2.2	0.3	−2.2	−0.3	−0.8	−3.1	−3.5	−4.1	−4.3
2013	−5.7	−6.9	−4.8	−4.9	−13	−2.9	−0.1	−4	−2.4	−3	−1.3	0.8	−2.6	−0.2	−0.9	−2.6	−2.6	−15	−2.7
2014	−3.8	−5.9	−7.2	−8.9	−3.6	−3	0.3	−4	−2.4	−3.1	−2.7	1.7	−3.2	0.8	−1.6	−0.7	−2	−5	−2.7
2015	−2.3	−5.1	−4.4	−1	−7.2	−2.6	0.7	−3.6	−1.8	−2.6	−1.2	1.2	−2.7	0.4	−1.3	−0.2	−1.5	−2.9	−3

Source http://www.tradingeconomics.com

Notes IE Ireland; *ES* Spain; *PT* Portugal; *CY* Cyprus; *GR* Greece; *IT* Italy; *DE* Germany; *FR* France; *NT* Netherlands; *BE* Belgium; *AT* Austria; *LU* Luxenbourg; *FI* Finland; *EE* Estonia; *LV* Latvia; *LT* Lithuania; *MT* Malta; *SI* Slovenia; *SL* Slovakia. The Maastricht limit is −3% of GDP

Table 9 Government debt to GDP (in percentage terms)

	IE	ES	PT	CY	GR	IT	DE	FR	NT	BE	AT	LU	FI	EE	LV	LT	MT	SI	SL
1995	78.5	61.7	58.3	47.9	98.9	116.9	54.8	55.8	73.1	130.5	68	8.1	55.1	8.2	13.9	11.5	34.4	18.3	21.7
1996	69.9	65.6	59.5	49.2	101.2	116.3	57.6	59.7	71.2	128	68	8	55.3	7.5	13.3	13.9	38.7	21.6	30.5
1997	61.6	64.4	55.2	53.2	99.3	113.7	58.8	61.1	65.6	123.2	63.2	7.9	52.2	7	10.7	15.4	46.6	22.1	33
1998	51.5	62.5	51.8	54.8	97.2	110.8	59.4	61	62.5	118.2	63.6	7.6	46.9	6	9	16.5	51.2	22.8	33.9
1999	46.7	60.9	51	55.1	98.6	109.6	60	60.2	58.2	114.4	66.4	6.7	44.1	6.5	12.1	22.7	62.1	23.7	47.1
2000	36.1	58	50.3	55.1	104.4	105.1	58.9	58.7	51.4	108.8	65.9	6.1	42.5	5.1	12.1	23.5	60.9	25.9	49.6
2001	33.2	54.2	53.4	56.9	106.8	104.7	57.7	58.2	48.7	107.6	66.5	6.6	41	4.8	13.9	22.9	65.5	26.1	48.3
2002	30.6	51.3	56.2	60.1	104.6	101.9	59.3	60.1	48.2	104.7	66.3	6.5	40.2	5.7	13.2	22.1	63.2	27.3	42.9
2003	29.9	47.6	58.7	63.5	101.2	100.4	63	64.2	49.3	101.1	65.5	6.4	42.8	5.6	13.9	20.4	69.1	26.7	41.6
2004	28.2	45.3	62	64.5	102.7	100	64.7	65.7	49.6	96.5	64.8	6.5	42.7	5.1	14.3	18.7	72	26.8	40.6
2005	26.1	42.3	67.4	63.2	107.3	101.9	66.9	67.2	48.9	94.6	68.3	6.3	40	4.5	11.8	17.6	70.1	26.3	33.9
2006	23.6	38.9	69.2	59.1	103.5	102.5	66.4	64.4	44.5	90.9	67	7	38.2	4.4	9.9	17.2	64.6	26	30.8
2007	23.9	35.5	68.4	53.9	103.1	99.7	63.6	64.4	42.4	86.9	64.8	7.2	34	3.7	8.4	15.9	62.4	22.7	29.9
2008	42.4	39.4	71.7	45.1	109.4	102.3	65	68.1	54.5	92.4	68.5	14.4	32.7	4.5	18.7	14.6	62.7	21.6	28.2
2009	61.8	52.7	83.6	53.9	126.7	112.5	72.5	79	56.5	99.5	79.7	15.5	41.7	7	36.6	29	67.8	34.5	36
2010	86.8	60.1	96.2	56.3	146.2	115.3	81	81.7	59	99.6	82.4	19.6	47.1	6.6	47.5	36.2	67.6	38.2	40.8
2011	109.3	69.5	111.4	65.8	172	116.4	78.4	85.2	61.7	102.2	82.2	19.2	48.5	5.9	42.8	37.2	69.8	46.4	43.3
2012	120.1	85.4	126.2	79.3	159.6	123.3	79.6	89.6	66.4	104.1	81.6	22	52.9	9.5	41.4	39.8	67.5	53.9	52.4
2013	120	93.7	129	102.5	177.7	129	77.2	92.4	67.9	105.2	80.8	23.3	55.5	9.9	39.1	38.8	68.6	71	55
2014	107.5	99.3	130.2	108.2	180.1	132.5	74.7	95.3	68.2	106.5	84.3	22.9	59.3	10.4	40.8	40.7	67.1	81	53.9
2015	93.8	99.2	129	108.9	176.9	132.7	71.2	96.1	65.1	106	86.2	21.4	63.1	9.7	36.4	42.7	63.9	83.2	52.9

Source http://www.tradingeconomics.com

Notes *IE* Ireland; *ES* Spain; *PT* Portugal; *CY* Cyprus; *GR* Greece; *IT* Italy; *DE* Germany; *FR* France; *NT* Netherlands; *BE* Belgium; *AT* Austria; *LU* Luxenbourg; *FI* Finland; *EE* Estonia; *LV* Latvia; *LT* Lithuania; *MT* Malta; *SI* Slovenia; *SL* Slovakia. The Maastricht limit is 60% of GDP

Table 10 EU and euro area membership years

	IE	ES	PT	CY	GR	IT	DE	FR	NT	BE	AT	LU	FI	EE	LV	LT	MT	SI	SL
EU	1973	1986	1986	1981	2004	1958	1958	1958	1958	1958	1995	1958	1995	2004	2004	2004	2004	2004	2004
Euro	1999	1999	1999	2001	2008	1999	1999	1999	1999	1999	1999	1999	1999	2011	2014	2015	2008	2007	2009

Source http://europa.eu/about-eu/basic-information/money/euro/index_en.htm

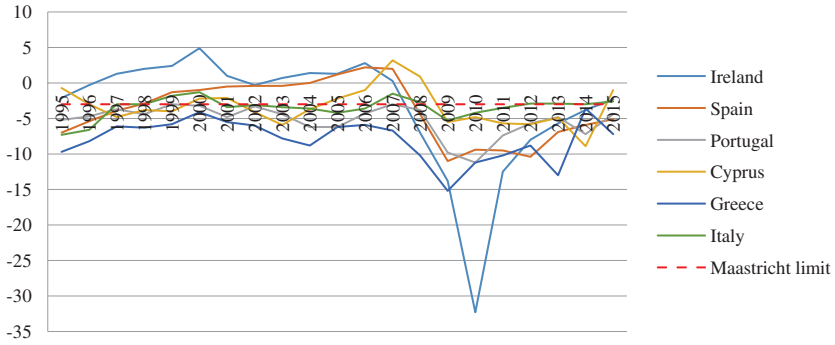


Fig. 6 Government budget surplus/deficit (in percentage terms of GDP). *Source* http://www.tradingeconomics.com

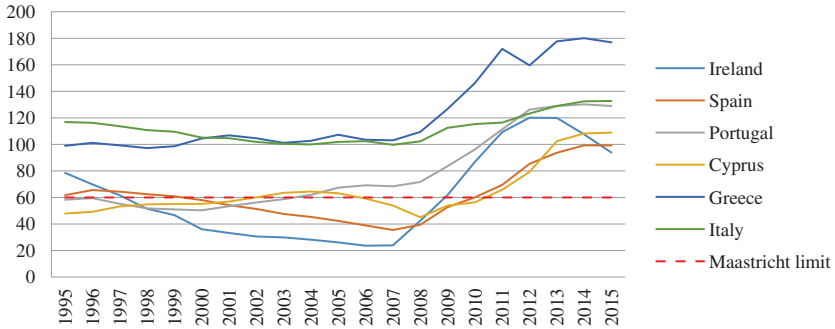


Fig. 7 Government debt (in percentage terms of GDP). *Source* http://www.tradingeconomics.com

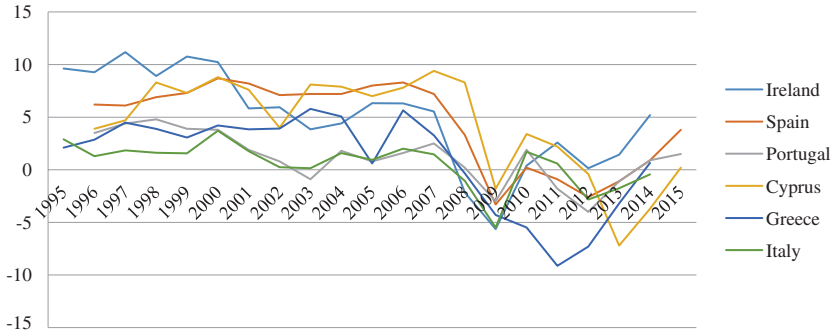


Fig. 8 GDP growth (in percentage terms). *Source* Datastream

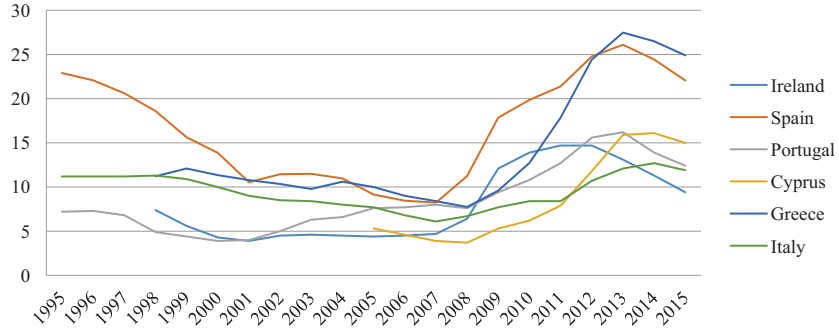


Fig. 9 Total unemployment rate (in percentage terms). *Source* Datastream

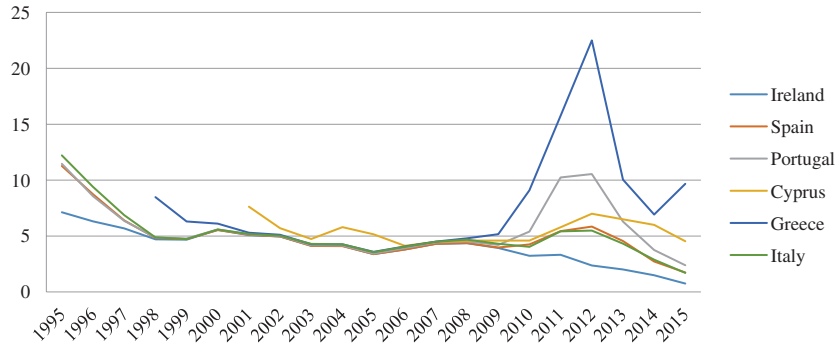


Fig. 10 Long-term government bond yield (10 years). *Source* Datastream

Notes

1. For more details see: http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32011R1176&from=EN.
2. Unfortunately, there is no purely objective measure for the limits of sustainability. They depend upon the reactions of potential lenders. When either people will not lend or the spreads become so high that a state would rather default than pay them, then the fiscal position is no longer sustainable. Lenders' views depend upon their belief about their chances of being paid back in the future (see Dyson 2014). Countries can raise the level of sustainability by having a good track record but

ultimately beliefs will depend upon the credibility of possible future governments and political opinion.

3. Of course, this will raise the government debt ratio of the less troubled countries and of the euro area as a whole at a time when the average is already quite high (on average 81% of GDP in 2015). Indeed, in other circumstances, such action could lead to inflation. But in the present depressed state of affairs, this has not been a realistic threat.
4. The Baltic States have turned around and seem set on a renewed growth path, albeit not as rapid as the pre-crisis rate. Finland, on the other hand, is still struggling and the government has been negotiating with the trade unions to help regain competitiveness.
5. The Baltic States, especially Estonia, have constrained themselves to restructure without much access to borrowing, even though they were much less indebted at the time of the GFC.
6. While the adjustment through emigration has been comparatively smaller in Greece, total emigration increased from roughly 38,000 in 2006 to 62,000 in 2010 reaching a peak of 125,000 in 2012 falling to 110,000 in 2015 according to information provided by Eurostat noting a large percentage of those emigrants are young and well educated (see http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=migr_emi1ctz&lang=en).
7. Sargent (2001) argues that people are inherently optimistic and grasp eagerly at any signs that there may be improvements in the economy's long-run ability to grow. This optimism is likely to be partly self-fulfilling as people increase consumption and investment spending on the back of these beliefs. Eventually, they will realise again that this better state of affairs is ephemeral and so the economy will drop back sharply as people adjust from overconsumption and overinvestment and digest their losses. A more striking approach, which adds a speculative financial cycle to the picture, has been developed by Minsky (1986) among others.
8. See for example http://www.wsj.com/articles/SB10001424127887324299104578527202781667088 and http://www.ekathimerini.com/207795/article/ekathimerini/business/lagarde-admits-to-imf-mistakes-urges-greek-govt-to-do-more.
9. The IMF gets paid back first. Indeed, unless the recovery programme is very successful, the ESM will in effect simply be repaying the IMF and will itself only be able to exit once international financial markets have sufficient confidence in the prospects for Greece that they are prepared to lend to Greece again on terms the government finds acceptable.

10. See http://www.imf.org/external/pubs/ft/scr/2013/cr13156.pdf.
11. See for example http://www.imf.org/external/pubs/ft/scr/2012/cr1257.pdf.
12. The initial projected estimate of Greek debt by 2022 was 142% of GDP but by 2015 it had been revised to 170% of GDP (see IMF's update on public debt sustainability analysis at http://www.imf.org/external/pubs/ft/scr/2015/cr15186.pdf).
13. http://www.imf.org/external/pubs/ft/scr/2012/cr1257.pdf.
14. http://www.nytimes.com/2016/05/25/business/international/greece-debt-relief-imf-eurozone-bailout.html?_r=0.
15. http://www.bbc.com/news/world-europe-33325886.
16. Although, as of July 2016, Portugal and Spain were still not compliant with the terms of the SGP.
17. http://www.irishtimes.com/news/banking-crisis-how-the-costs-have-evolved-1.657756.
18. See http://ec.europa.eu/economy_finance/articles/governance/2012-03-14_six_pack_en.htm.
19. Masini (2014) provides interesting review of the history of the theories on OCAs. He divides them to ones based on exogenous and endogenous criteria. Starting with the pioneering paper of Mundell (1961), initially, the focus of creating an OCA was on exogenous criteria that need to be satisfied before joining or creating a currency union. In this case, the arguments were based purely on economics. As time passed by, there was a change to endogenous criteria, mainly through policy debates rather than academic work, which implied that what is important, is not achieving the exogenous criteria per se but a political will to initiate a currency union and create the conditions to smooth the process towards convergence. In this case, politics outweighed economics. The argument is that the potential problems will force countries to change once they are members.
20. Table 10 in the Appendix 1 shows the years when the current euro area Member States joined the EU and the euro area, respectively.
21. All three Baltic States have joined the euro area since the GFC, facilitated in part by their having had to reduce their price levels, which enabled them to meet the Maastricht criteria.
22. The data are obtained from Thomson Reuters Tick History (TRTH) database of Securities Industry Research Centre of Asia-Pacific (SIRCA).

Acknowledgements We thank Dimitri Christelis for useful comments.

References

Anand, P. 2016. *Happiness Explained: What Human Flourishing Is and What We Can Do to Promote It*. New York: Oxford University Press.

Arghyrou, M.G. 2015. The Greek Crisis and Financial Assistance Programmes: An Evaluation. CESifo Working Paper No. 5591, 1–28.

Balourdos, D. 2014. Effects of the Economic Crisis on Poverty in Greece (Ch. 7). In *The Debt Crisis in the Eurozone: Social Impacts*, eds. N.P. Petropoulos, O. Tsobanoglou, and D. Balourdos (Contributor), 109–154. Newcastle Upon Tyne, England: Cambridge Scholars Publishing.

Bank of Finland. 2015. *Bulletin 5*, 1–111.

Bergiannaki, J.D., and S. Dimitrakopoulos. 2014. Contemporary Economic-Financial Crisis: Post-traumatic Stress Symptoms and Related Individual and Social Reactions (Ch. 9). In *The Debt Crisis in the Eurozone: Social Impacts*, eds. N.P. Petropoulos, O. Tsobanoglou, and D. Balourdos (Contributor), 175–186. Newcastle Upon Tyne, England: Cambridge Scholars Publishing.

Blyth, M. 2013. *Austerity: The History of a Dangerous Idea*. New York: Oxford University Press.

Christodoulakis, N.M. 2015. *Greek Endgame: From Austerity to Growth or Grexit*. London: Rowman & Littlefield International.

Chtouris, S., and D.S. Miller. 2014. Social Accumulation of Value for Economic Recovery-Research Model (SAVER) (Ch. 4). In *The Debt Crisis in the Eurozone: Social Impacts*, eds. N.P. Petropoulos, O. Tsobanoglou, and D. Balourdos (Contributor), 32–55. Newcastle Upon Tyne: Cambridge Scholars Publishing.

Chung, H., C. Muntaner, J. Benach, and EMCONET Network. 2014. Employment Relations and Global Health: A Typological Study of World Labour Markets (Ch. 7). In *The Financial and Economic Crises and Their Impact on Health and Social Well-Being*, eds. V. Navarro and C. Muntaner, 97–121. Amityville, NY: Baywood Publishing Company.

Cohen, S., M. Guillamón, I. Lapsley, and G. Robbins. 2015. Accounting for Austerity: The Troika in the Eurozone. *Accounting, Auditing & Accountability Journal* 28 (6): 966–992.

D'Errico, M., C. Macchiarelli, and R. Serafini. 2015. Differently Unequal: Zooming-In on the Distributional Dimensions of the Crisis in Euro Area Countries. *Economic Modelling* 48: 93–115.

de Sousa, L., P.C. Magalhães, and L. Amaral. 2014. Sovereign Debt and Governance Failures: Portuguese Democracy and the Financial Crisis. *American Behavioral Scientist* 58 (12): 1517–1541.

Dyson, K.H.F. 2014. *States, Debt, and Power: 'Saints' and 'Sinners' in European History and Integration*. Oxford: Oxford University Press.

Felke, R., and S. Eide. 2014. Export-Driven Adjustment in Portugal. *Intereconomics* 49 (3): 170–178.

Gelormino, E., C. Bambra, T. Spadea, S. Bellini, and G. Costa. 2014. The Effects of Health Care Reforms on Health Inequalities: A Review and Analysis of the European Evidence Base (Ch. 3). In *The Financial and Economic Crises and Their Impact on Health and Social Well-Being*, eds. V. Navarro and C. Muntaner, 32–53. Amityville, NY: Baywood Publishing Company Inc.

Glynn, I., Kelly, T., and P. Mac Éinrí. (2015). The Re-emergence of Emigration From Ireland: New Trends in an Old Story. *Migration Policy Institute Reports* (November), 1–26.

Goodhart, C.A.E. 2007. Currency Unions: Some Lessons from the Euro-zone. *Atlantic Economic Journal* 35: 1–21.

Goodhart, C.A.E. 2016. In Praise of Stress Tests. In *Stress Testing and Macroprudential Regulation: A Transatlantic Assessment*, ed. R.W. Anderson, 141–153. London: Centre for Economic Policy Research.

Guardiola, J., and M. Guillen-Royo. 2015. Income, Unemployment, Higher Education and Wellbeing in Times of Economic Crisis: Evidence from Granada (Spain). *Social Indicators Research* 120 (2): 395–409.

Jager, J., and K.A. Hafner. 2013. The Optimum Currency Area Theory and the EMU: An Assessment in the Context of the Eurozone Crisis. *Intereconomics* 5: 315–322.

Kallianiotis, I.N. 2013. Privatization in Greece and its Negative Effects on the Nation's Social Welfare (Expropriation of the National Wealth). *Journal of Business & Economic Studies* 19 (1): 1–23.

Kickert, W., and T. Ysa. 2014. New Development: How the Spanish Government Responded to the Global Economic, Banking and Fiscal Crisis. *Public Money & Management* 34 (6): 453–457.

Kregel, J. 2011. Debtors' Crisis or Creditors' Crisis? Who Pays for the European Sovereign and Subprime Mortgage Losses? Public Policy Brief No. 121, *Levy Economics Institute of Bard College*, 1–11.

Krugman, P. 2015. *Northern Discomfort*. Available at http://krugman.blogs.nytimes.com/2015/05/29/northern-discomfort/?_r=1.

Lindner, A. 2011. Macroeconomic Adjustment: The Baltic States Versus Euro Area Crisis Countries. *Intereconomics* 46 (6): 340–345.

Lynn, M. 2010. *Bust: Greece, the Euro and the Sovereign Debt Crisis*. Hoboken, NJ: Bloomberg Press.

Manolopoulos, J. 2011. *Greece's' Odious' Debt: The Looting of the Hellenic Republic by the Euro, the Political Elite and the Investment Community*. London: Anthem Press.

Masini, F. 2014. A History of the Theories on Optimum Currency Areas. *European Journal of the History of Economic Thought* 21 (6): 1015–1038.

Matysek-Jędrych, A. 2012. Competitiveness and Crisis: The Case of the Baltic States Economies. *Poznan University of Economics Review* 12 (2): 49–73.

Mayes, D.G., and M. Virén. 2011. *Asymmetry and Aggregation in the EU*. Basingstoke: Palgrave Macmillan.

Minsky, H. 1986. *Stabilizing an Unstable Economy*. New Haven, CN: Yale University Press.

Mitsopoulos, M., and T. Pelagidis. 2012. *Understanding the Crisis in Greece*, 2nd ed. Basingstoke: Palgrave Macmillan.

Mundell, R.A. 1961. A Theory of Optimum Currency Areas. *American Economic Review* 51 (4): 657–665.

Murphy, M.P. 2014. Ireland: Celtic Tiger in Austerity—Explaining Irish Path Dependency. *Journal of Contemporary European Studies* 22 (2): 132–142.

Navarro, V. 2014a. Neoliberalism and Class Ideology; or, the Political Causes of the Growth of Inequalities (Ch. 1). In *The Financial and Economic Crises and their Impact on Health and Social Well-Being*, eds. V. Navarro and C. Muntaner, 8–22. Amityville, NY: Baywood Publishing Company.

Navarro, V. 2014b. The Crisis and Fiscal Policies in the Peripheral Countries of the Eurozone (Ch. 2). In *The Financial and Economic Crises and Their Impact on Health and Social Well-Being*, eds. V. Navarro and C. Muntaner, 23–29. Amityville, NY: Baywood Publishing Company Inc.

Nowatzki, N. 2014. Wealth Inequality and Health: A Political Economy Perspective. In *The Financial and Economic Crises and Their Impact on Health and Social Well-Being*, eds. V. Navarro and C. Muntaner, 432–453. Amityville, NY: Baywood Publishing Company Inc.

Panagiotarea, E. 2013. *Greece in the Euro: Economic Delinquency or System Failure?* Colchester, UK: ECPR Press.

Pappas, T.S. 2014. *Populism and Crisis Politics in Greece: Embattled Democracy*. Basingstoke, Hampshire: Houndmills; New York: Palgrave Macmillan.

Pekkarinen, J., et al. 1997. *Finland and EMU, Publication 1997/26*. Helsinki: Prime Minister's Office.

Phylaktis, K. 2015. The Cyprus Debacle: Implications for European Banking Union, Ch. 4. In *European Banking Union: Prospects and Challenges*, eds. J. Castaneda, D.G. Mayes, and G. Wood. Abingdon: Routledge.

Sargent, T.J. 2001. *The Conquest of American Inflation*. Princeton, NJ: Princeton University Press.

Schnabl, G. 2016. Central Banking and Crisis Management, Mimeo, University of Leipzig. In *The Economics of Central Banking*, eds. D. Mayes, P. Siklos, and J.-E. Sturm. Oxford: Oxford University Press, forthcoming.

Singh, D. 2016. Safeguarding 'Critical Social Functions' Post the Global Financial Crisis. In *The Human Face of the European Union: Are EU Law and Policy Humane Enough?* eds. N. Ferreira and D. Kostakopoulou, 48–73. Cambridge: Cambridge University Press.

Smith, D. 2014. Coping with the Threat of Humiliation: Contrasting Responses to the Eurozone Crisis in Greece and Ireland. In *The Debt Crisis in the Eurozone: Social Impacts*, eds. N.P. Petropoulos, O. Tsobanoglou, and D. Balourdos (Contributor), 84–108. Newcastle Upon Tyne: Cambridge Scholars Publishing.

Stiglitz, J.E. 2015. Europe's Economic Madness Cannot Continue. *The Guardian*, 9 January. Available at https://www.theguardian.com/business/2015/jan/09/europe-economic-madness-cannot-continue-greece-elections.

Tombazos, S. 2011. Centrifugal Tendencies in the Euro Area. *Journal of Contemporary European Studies* 19 (1): 33–46.

Tsafos, N. 2013. *Beyond Debt: The Greek Crisis in Context*. North Charleston, SC: CreateSpace.

Varoufakis, Y., and S. Holland. 2012. A Modest Proposal for Resolving the Eurozone Crisis. *Intereconomics* 4: 240–247.

Young, B. 2014. The Role of German Ordoliberalism in the Euro Crisis. In *The Debt Crisis in the Eurozone: Social Impacts*, eds. N.P. Petropoulos, O. Tsobanoglou, and D. Balourdos (Contributor), 2–13. Newcastle Upon Tyne: Cambridge Scholars Publishing.

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http://www.springer.com/978-3-319-59101-8

The Greek Debt Crisis
In Quest of Growth in Times of Austerity
Floros, C.; Chatziantoniou, I. (Eds.)
2017, XVI, 313 p. 40 illus., Hardcover
ISBN: 978-3-319-59101-8