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Introduction

Martin Myant, Sotiria Theodoropoulou and Agnieszka Piasna

Following four years of decline, unemployment rates started to climb in Europe from 2009 onwards to reach record levels that had not been seen since the mid-1990s, with an EU average of 10.9 per cent of the labour force in 2013, while the euro-zone unemployment rate reached an all-time high of 12 per cent the same year. The experience of member states varied substantially, however. In 2013, Greece and Spain had unemployment rates of 27.5 and 26.1 per cent, respectively, whereas the jobless rates in Germany and Austria were 5.2 and 5.4 per cent (AMECO database). This book broadly sets out to investigate why unemployment has risen more in some countries than in others since 2008 and how far this relates to the policies pursued.

To answer this question, one inevitably needs to consider the experiences of countries in the context of the economic crisis that has marred the EU and especially the euro zone since 2008, initially as a result of the global financial crisis and subsequently as a result of the multiple crises of sovereign debt, balance of payments and banking and the policy responses to them. We therefore qualify our broader question to ask whether the developments and policies aimed at achieving the goal of internal devaluation can account for this variation and if so, how. More specifically, has internal devaluation helped to reduce unemployment, as advertised, or has it, on the contrary, contributed to its rise and if so, in what ways?

Europe in crisis

The first years of EMU, up until 2008, were characterised by the build-up of current account imbalances within the euro zone and the divergence of real exchange rates; that is, of inflation rates and unit labour cost growth among member states. Research has shown that the drivers of these imbalances were divergent domestic demand developments and

not unit labour costs (Gaulier and Vicard 2012). Member states in the southern periphery countries enjoyed a reduction in interest rates on joining the single currency, which boosted their economies. Their inflation rates rose as a result, which meant that their real exchange rates appreciated, but also – and more importantly as it turned out – that their real interest rates fell, further fuelling demand. At the same time, monetary integration brought about more financial integration. As a result, increased demand on the periphery could be financed by credit flows from the core euro zone, where subdued demand meant that there were higher savings seeking high returns (Burda 2013). Increased demand led to higher prices and wages, as labour markets became tighter. In several member states, these credit flows financed a construction boom and led to housing bubbles.

Thus, although the euro zone as a whole had a balanced current account, imbalances built up between the core and the periphery. On the periphery, current account deficits were linked to increased borrowing either by the private (Ireland, Spain) or the public sector (Greece), financed by credit flows from the north. The fact that there was no EU regulation of financial markets and macro-prudential policies meant that there had been only weak constraints on over-lending (Martin 2014). It was up to lenders to assess the repayment risk of their borrowers.

When the global credit crunch occurred in 2008, market sentiment changed dramatically and financial market agents started to reassess their exposure, becoming more cautious. Credit flows dried up, which caused the first recession of 2008–2009. The second recession then followed a switch towards policies of fiscal restraint across the EU. A special role in this was played by Greece after questions arose about that country's capacity to continue servicing its debt, given that, as a member of EMU, it had no central bank to back it as lender of last resort (De Grauwe 2011). From 2008 onwards the interest rate at which the Greek government could borrow to roll over its debt started rising and eventually reached a prohibitively high level. As the creditworthiness of the government was cast into doubt, so was the creditworthiness of Greek banks and companies who were borrowing from the financial markets, regardless of the soundness of their balance sheets (Pisani-Ferry *et al.* 2013). Thus, the first episodes of 'sudden stops' of private financial flows which hitherto had been financing demand occurred in late 2008 and continued till 2010, when the Greek government requested and received a bail-out package (Merler and Pisani-Ferry 2012). The crisis appeared

to be a sovereign debt crisis, but at the same time was a peculiar type of balance of payments and banking crisis (Pisani-Ferry *et al.* 2013). The lack of effective crisis mechanisms at the euro zone/EU level in the wake of the Greek debt crisis soon led to contagion to other member states. Portugal, Spain, Ireland and Italy all saw the interest rates at which their governments could borrow on the financial markets soar, with sudden halts occurring there, too.

All these crises have triggered recessions in the affected member states from which the EU and the euro zone have not recovered in 2015. The fact that the recessions were caused by the sudden reverse in private credit flows meant that the shock had particular repercussions for activities that had been hitherto financed by them, such as construction, thus concentrating job losses in them. Real output in the EU barely exceeded its 2008 value in 2014, whereas in the euro zone in 2014 it was still below that of 2008. This weak recovery has been attributed to the economic policy choices that were made first in some member states (the Baltics) in 2008–2009 and then on a wider scale from 2010 onwards, especially in the euro zone (Wren-Lewis 2015)).

Internal devaluation

The bailouts to countries affected by a sovereign debt crisis were granted conditional upon the implementation of economic adjustment programmes. Responsible for spelling out the programmes and monitoring their implementation was the so-called 'Troika' of institutions: the European Commission, the European Central Bank and the International Monetary Fund. Two of the main pillars of the policy responses to the economic crisis are fiscal austerity and internal devaluation. A standard tool for adjusting balance of payments crises is real exchange depreciation, that is, making the prices of domestically produced goods and services relatively cheaper than those produced in countries in relation to which it has a current account deficit. In flexible exchange rate regimes, real exchange rate depreciation is facilitated in the short run by a depreciation of the nominal exchange rate. However, when a country has adopted a fixed exchange rate regime (for example, a currency board or a hard peg, as in the Baltic states) or has joined a monetary union, then internal devaluation – that is, a relative downward adjustment in production costs, notably nominal wages, and prices – is the only way to adjust the real exchange rate in the short run. Productivity growth is another way forward.

However, the latter requires multiple policy levers to be pulled in combinations often not completely known to policymakers (Mayhew and Neely 2006), while the effects take time to emerge.

In Europe, internal devaluation was first adopted in the Baltic states which, even though they did not belong to the euro zone, chose to maintain currency pegs/boards, while pursuing adjustment policies against their balance of payments crises. When the euro-zone crisis began, reforms of both labour and product markets were recommended, although the effects on labour costs have been more pronounced. It is crucial to note that the implementation of internal devaluation in the euro zone has been asymmetric. In other words, the burden of adjusting real exchange rates – a relative variable – within the euro zone has fallen exclusively on the member states with current account deficits. A less painful approach would have been if member states with current account surpluses (for example, Germany) had also taken action to produce an internal *re*valuation of their real exchange rate by increasing demand in their economy. More expansionary fiscal or monetary policies could have helped in that direction. However, fiscal policies have been constrained by the EU fiscal rules, whereas until 2013 the ECB was fairly reticent in its responses to recession in the area.

Given that cuts in nominal wages are difficult to pursue and undesirable even for employers, as they harm employees' morale and motivation (see Bewley 1999), internal devaluation is a painful process insofar as it typically requires that unemployment rises in order to put pressure on wage demands in the private sector. Policies used to precipitate internal devaluation include fiscal austerity and structural reforms that increase the responsiveness of wages and prices to economic pressures, such as recession and unemployment. This is also why the prospect of having to use internal devaluation as a means of adjustment to asymmetric shocks – that is, shocks that affect only a part of the monetary union area but not others – has been mentioned as one of the costs that countries considering whether to join a monetary union would probably have to incur (De Grauwe 2014).

Internal devaluation is meant to make the relative prices of goods and services in an economy relatively cheaper than those of its trading partners. In principle, that should make its exports relatively cheaper and its imports relatively more expensive. To the extent that the demand for its exports depends on their price, and other things (such as foreign

demand) being equal, this should lead to higher export demand. Moreover, if imports become relatively more expensive, it is possible that they will be substituted for by domestically produced products. If both these effects happen, then net exports are assumed to increase and so will aggregate demand. Internal devaluation also involves changes in the relative prices of a country's own tradable and non-tradable sectors in favour of the former with the aim of transferring resources from the non-tradable to the tradable sectors.

Whether such a strategy can expand exports depends on many assumptions that are not always realistic or sound. First, the demand for exports must be sensitive to price changes. This is more likely to be the case for low-technology products. Second, in the case of reducing unit labour costs, labour costs have to constitute a substantial part of total costs, so that a given reduction goes a long way in reducing production costs. Third, there must be sufficient export capacity to accommodate any increase in demand. Even, however, if these conditions applied, it is still questionable how far an increase in demand for exports could stimulate employment creation insofar as tradable sectors are often not the most labour intensive, while they typically account for a relatively smaller share of employment in an economy.

While these potentially positive effects are predicated on several assumptions, the effects of lower wages in an economy that has already suffered a recession are much more direct, as they are associated with lower incomes and consumption. Labour market reforms aimed at reducing the bargaining power of wage-setters have been shown to have adverse short-term effects on demand, as they lower income security and increase employment volatility.

Analysts often refer to the real exchange rate of a country as 'competitiveness' and, consequently, to its depreciation as an 'increase in competitiveness'. The relative prices of an economy's goods and services may have some role to play in its export performance in the short run, when technology, capital and human capital stock and, therefore, productivity are given. Depending on how price elastic their demand is, the notion of competitiveness of an economy in the longer run – unlike companies – is less meaningful and its use as an important objective for guiding economic policies has been criticised (Krugman 1994). Instead, the quest for sustainably good macroeconomic performance in the long term depends on domestic productivity growth (ibid.) and increasing

specialisation in the production of goods and services of high quality and added value. The latter allow a country to finance its imports and to not compete with regard to prices and costs, so that economic activity and a sustainable current account balance can also be compatible with rising living standards (Mayhew and Neely 2006).

When discussing the effects of internal devaluation in the euro zone it is, therefore, important to distinguish between internal exchange rate adjustment (devaluation or revaluation) as a means of adapting to asymmetric shocks and internal devaluation as a strategy for improving economic performance. The current account imbalances that emerged in the euro zone reflect divergent domestic demand developments rather than export performance (European Commission 2009, 27) and thus some realignment of relative prices is required across the euro-zone member states. Ideally, that should take place in both deficit and surplus countries, with devaluations and revaluations. However, in several instances the policy recommendations imposed on member states that received financial support made unilateral relative price adjustment the main driver for improving macroeconomic performance. It is in this context that labour market reforms have been advocated in order to push wages down further, but also – more broadly – to promote labour market flexibility.

As has often been the case since the 1990s, however, increasing labour market 'flexibility' has been taken to be synonymous with deregulating labour markets, although this is by no means automatic (cf. Stanford 2005). The notion of 'flexibility' itself has been limited to numerical adaptation (facilitating the hiring and firing of employees in response to demand fluctuations), wages (making it easier for employers to adjust wages in accordance with labour market conditions or productivity) and, to some extent, working time (enabling employers to vary the number of hours worked in a given period in response to demand) (cf. Regini 2000). Despite the empirical research that positively challenges this view (see e.g. Howell 2005; Bassanini and Duval 2006; Theodoropoulou 2008), the notion that labour market deregulation leads to better labour market and macroeconomic outcomes obtained a new lease of life in the EMU context. However, rather ironically, in most of the member states whose unemployment rates have remained the lowest in the EU and the euro zone, labour markets are anything but deregulated, in that employment and compensation outcomes are deliberately regulated through policy interventions by governments or/and the social partners. Working-time

and functional flexibility (the ease with which the work performed by employees can be adapted to demand fluctuations; Regini 2000) are prevalent in these labour markets (for example, Germany, Austria and the Netherlands).

Looking beyond unemployment

Assessing the effect these policies have had on unemployment requires careful analysis. Although the unemployment rate is the usual measure that policymakers employ in policy debates, we take a more thorough approach and look in more detail at the labour market dynamics underlying the changes in headline indicators, such as employment and unemployment. This is important not only in order to fully grasp the multitude of processes that underlie the movement in headline employment indicators – the latter are all too often taken at their face value as a measure of the success (or lack of success) of policies – but also in order to assess the effects of the crisis on the quality of employment.

Changes in the unemployment rate can be driven by changes in the population. Indeed, in most troubled countries during the crisis emigration increased or remained at a high level and labour supply was reduced as a result, although this might not involve 'exporting' the unemployed. Nevertheless, even with an unchanged number of jobs, existing positions would need to be allocated among fewer people and, as a result, have a positive effect on the unemployment statistics. Another avenue of labour force reduction was an increased rate of transitions to inactivity, as workers discouraged by unsuccessful job search exited the labour market altogether. Policies aimed at reducing unemployment benefits by tightening conditionality or limiting their duration were arguably a factor in further reductions in unemployment because there was little incentive to report oneself unemployed.

On the other hand, employment or unemployment rates do not take into account other labour market dynamics. Thus, a change in the number of people in employment does not necessarily correspond to a proportional change in the number of available jobs. Job creation in terms of temporary, short-term or part-time employment – all increasingly involuntary – has contributed substantially to the redistribution of available work across an increasingly precarious workforce. Accordingly, either the actual number of employed has remained stable despite the

apparent improvement in employment indicators (for example, Germany and Poland), or the severity of labour market decline was masked (for example, Greece, Spain and Ireland). This is illustrated in Table 1, which compares changes in employment rates and total hours worked between 2007 and 2014. Thus, for most of the countries analysed in this book, changes in employment or unemployment rates not only inflate any signs of improvement, but also fail to show increasing precariousness of jobs.

Table 1 **Evolution of employment rates and total hours worked in selected EU countries, 2007–2014 (indexed 2007=100)**

Employment rates	2008	2009	2010	2011	2012	2013	2014
EU 28	100.8	98.8	98.3	98.5	98.3	98.3	99.4
EA 17	100.5	98.5	97.9	98.0	97.3	96.8	97.4
Germany	101.6	101.9	103.0	105.4	105.8	106.5	107.0
Ireland	97.4	89.5	86.1	85.1	85.0	87.4	89.2
Greece	100.8	99.8	97.0	90.5	83.4	80.1	81.1
Spain	98.0	91.2	89.4	88.1	84.8	83.3	85.1
Italy	100.0	98.0	96.9	96.9	96.6	94.7	95.1
Poland	103.9	104.0	103.3	104.0	104.7	105.3	108.2
Portugal	100.6	97.8	96.6	94.4	90.8	89.6	92.6
UK	100.0	97.8	97.1	96.9	97.8	98.6	100.6
Total hours worked	2008	2009	2010	2011	2012	2013	2014
EU28	100.8	97.9	96.9	96.6	95.8	95.0	96.2
EA17	100.7	97.4	97.4	96.6	95.1	94.0	94.6
Germany	101.1	99.1	100.7	100.6	101.0	101.0	102.0
Ireland	97.5	87.1	83.3	81.5	80.9	83.3	84.8
Greece	100.8	98.9	95.5	88.5	80.6	76.9	76.8
Spain	99.2	91.3	89.2	87.5	82.8	80.6	81.4
Italy	100.0	97.3	96.8	96.3	94.5	92.5	92.5
Poland	103.2	102.7	99.8	100.1	100.0	99.6	101.9
Portugal	100.4	97.7	96.5	93.9	89.2	87.7	90.2
UK	99.9	97.8	97.5	97.6	99.0	100.2	102.6

Source: Eurostat, authors' calculations. Total hours worked = number of employed * average actual hours worked, employees 15–64 years of age.

Selection of country case-studies and outline of the book

Given the complexity of the factors shaping unemployment and labour market performance more generally an appraisal of the policies of internal devaluation and the extent to which they contributed to changes in unemployment and employment requires detailed case studies. For this purpose, we chose countries that pursued internal devaluation after 2008 due to the country-specific adverse demand shocks they experienced. These case studies include (in chronological order of receiving financial support from the EU and, in most cases, the IMF) Greece, Ireland, Portugal and Spain. We also look at Germany, where internal devaluation was pursued in the early 2000s – when the macroeconomic climate in Europe was more positive – in order to investigate how its effects were different under such conditions. Last but not least, we include two case studies of countries that are not part of the single currency and do not have an exchange rate peg, namely Poland and the United Kingdom. Given that, as already mentioned, at the heart of internal devaluation strategies lies the notion that labour market deregulation leads to better macroeconomic outcomes – however defined – these two countries, which have pursued labour market deregulation for some time, allow us to see whether, and if so how, this notion holds water.

Greece

Greece, discussed in Chapter 1 by Sotiria Theodoropoulou, was the country in which the euro zone's sovereign debt crisis started out and was the first euro-zone member to receive a bailout in May 2010. Six years after the onset of recession and two harsh economic adjustment programmes later, Greece has lost more than 25 per cent of its real GDP, while in early 2015 it had the highest unemployment rate in the EU (27 per cent). Although there is no doubt it was the recession that led to higher unemployment, the increase in Greece, as in Spain, was even higher than would have been expected from the decline in output.

The chapter reviews the potential reasons for this discrepancy and focuses in particular on whether internal devaluation can also be held responsible for it. The author argues that the large concentration of job losses in the construction sector, in which informal employment is prevalent, and the loosening of employment protection legislation while the real economy was in free fall intensified the effects of the recession

on unemployment. Moreover, fiscal austerity and reforms of the collective bargaining system, which led to further deregulation, undermined any possibility of concerted tripartite action to help soften the impact of the adjustment. Internal devaluation was bound to be a risky approach in a country as closed to trade as Greece and with a narrow export base, where labour costs represent only a small proportion of value added. Nominal unit labour costs declined after 2010, but the effect was not fully passed on to prices. Real wages fell, dragging down domestic demand – including the demand for imports – but without having any discernible effect on export volumes. As the recession thus became a depression, financial distress in the Greek economy increased, hindering the much needed investment that could help to restart and restructure it. Thus, internal devaluation, although successful in helping to rebalance the current account deficit, has in fact contributed to intensify the effects of recession on unemployment.

Ireland

Tom McDonnell and Rory O'Farrell (Chapter 2) show how in Ireland the government chose to deal with the banking crisis with a rescue package, agreed with the Troika in 2011, which imposed austerity policies. As a consequence, the country experienced its longest recession in over a century, with declining GDP and an unemployment rate that peaked at 15.1 per cent. The biggest declines in employment were in construction and retail, while there was growth in health and information and communication technology. Even though unemployment started falling after early 2012, the labour force was more than 10 per cent smaller in 2014 than in 2007, with emigration explaining much of the difference between changes in employment and those in unemployment.

Although the term 'internal devaluation' was rarely used in Ireland, policymaking was clearly influenced by the argument that weak competitiveness was fundamental to the country's problems and that it could be solved by reducing relative wage costs. This was targeted by reducing public sector pay – although that need have no direct impact on export costs – and by changing wage-setting mechanisms. However, analysis of the effects of internal devaluation shows that relative wage costs explain neither the origins of the crisis nor the behaviour of the economy after the introduction of austerity. A more plausible narrative shows Ireland suffering from an asset-price bubble. When this burst in

2008 the effect was a dramatic drop in construction activity and employment. There was an apparent improvement in relative unit labour costs, but that was largely the result of structural changes in the economy away from sectors with lower unit labour costs, notably construction. An improved balance of payments position was largely due to reduced imports following lower domestic demand.

Portugal

Portugal, as discussed in Chapter 3 by António Bob Santos and Sofia Fernandes, was the third euro-zone member state to receive a bailout and a conditionality programme in May 2011, following agreement with the Troika. The programme included the classic recipe of fiscal austerity and policies aimed at facilitating internal devaluation. The terms were based in part on the assumption that Portugal's problems followed from a loss of competitiveness due to increasing relative unit labour costs. The solution was to adopt policies that reduced pay levels by freezing the minimum wage, reducing employment protection across the economy and cutting public sector pay. The result was a further rise in unemployment, to 17.5 per cent. Claims that there has been some sort of recovery are highly questionable.

Among other things, the chapter pinpoints three important areas in which policies adopted in 2011 were failing. The first is employment, with an apparent fall in unemployment from its peak explicable largely in terms of emigration and of people dropping out of the labour force altogether. The second is the external balance, which improved primarily thanks to reduced imports because of lower internal demand. There was an increase in exports, but rather than following from pay reductions within the framework of internal devaluation, this is most accurately seen as a continuation of pre-crisis trends. The third area is the long-term prospects of the Portuguese economy. Here the authors demonstrate that difficulties followed not from high wages – unit labour costs increased in previous years in line with the euro-zone average – but from structural problems. Portugal had wage levels that were too high to compete in less sophisticated products but human capital levels that were too low for competition in more sophisticated products. The solution includes an emphasis on research, innovation and enhanced skill levels. The policies pursued since 2011 led to cuts in precisely these areas.

Spain

Spain, discussed in Chapter 4 by Jorge Uxó, Eladio Febrero and Fernando Bermejo, received financial support for recapitalising its banks in July 2012. Thus although its government did not receive a bailout for its public debt, the country had to implement financial support–related conditionalities, pursuing fiscal austerity and internal devaluation. Reduced public spending, following increases in 2009 to provide an anti-crisis stimulus, and reduced employee protection were followed by a continued rise in unemployment, which peaked at almost 27 per cent, falling slightly through 2014. By following linkages between sectors, the authors show the extent of the dependence of declining economic output on the construction sector, with this and real estate accounting for 82 per cent of the employment fall between 2007 and 2009.

Thus Spain's crisis followed very clearly from the credit-fuelled construction boom. The main effect of policies pursued from 2010 was further to reduce domestic demand levels, causing the continuing rise in unemployment and depression in investment. There was an improvement in the external balance, but this was a result overwhelmingly of lower demand. Wage cuts leading to lower unit labour costs were of little importance for exports. Indeed, lower wages were not passed on to lower prices, partly because of the effects of higher indirect taxes, but also to a large extent because profit levels increased.

Germany

The case of Germany is examined by Steffen Lehndorff in chapter 5. Germany was the pioneer of internal devaluation in the euro zone, as, following its EMU entry at – arguably – an overvalued real exchange rate, it sought to realign it through real wage growth consistently below productivity growth. This involved policy measures that contributed to bring down collective bargaining coverage, pay stagnation, growth of a low-wage sector and increased inequality. The case study allows us to see the effects of internal devaluation under more favourable macroeconomic conditions than the currently critical ones in the euro zone.

When the crisis struck, the German reaction included negotiated measures for preserving employment through internal flexibility and changes in working time. In the following years there was arguably some

reversal of internal devaluation, with negotiated pay increases, albeit not on a large scale.

German policy before the financial and economic crisis has been used to justify internal devaluation elsewhere in subsequent years, but this is not valid, for two main reasons. First, much of Germany's export success was based on non-price factors: pay restraint was more important in holding down consumption and hence imports, thereby limiting demand and growth potential for *other* euro-zone members. Indeed, the high profit levels of German businesses at a time of pay restraint were a source of precisely those funds that fuelled credit growth elsewhere, thus contributing to crises of indebtedness. The second reason for not advocating the same policy everywhere else follows from this: if all countries were to pursue internal devaluation the effect would be to depress demand for all. Germany had been able to export, to a great extent, precisely because other countries had been pursuing more expansionist policies.

United Kingdom

The UK experience, discussed by Steve Coulter in Chapter 6, differs from those previously considered as the country was never a euro-zone member and experienced a significant currency devaluation in 2007. Policies also arguably created a more favourable macroeconomic environment for employment creation. However, using this as a control case throws up some significant oddities that cannot easily be explained. Despite devaluation, the United Kingdom did not experience an export boom. In fact its external balance, taking the current account alone, was consistently less favourable than that of any other EU member state and productivity performance was exceptionally weak. Also, unlike previous UK crises and those in other EU member states, a fall in real wages was accompanied by relatively stable levels of total employment, with the 2008 level surpassed in 2012, albeit with an increasing emphasis on less secure forms of employment. There were further unusual features, with employment conditions becoming more favourable for older cohorts, a strong increase in self-employment and a shift from public to private sector employment.

Three explanations, not mutually exclusive, are considered for these labour market developments. The first is that real wage reductions were

the key to preserving employment. This is consistent with the available data, albeit with the obvious caveat that jobs were preserved in aggregate by worsening pay and conditions, with an accompanying fall in productivity. The second is the possibility that employers were hanging on to employees, who, in turn, were accepting pay reductions. The third is that active labour market policies, although a small part of public spending, were unusually effective.

Poland

Like the United Kingdom, Poland experienced a currency devaluation as the crisis broke out. It also continued GDP growth, albeit at a slower pace than in preceding years. As this followed measures to create a more flexible labour market in earlier periods, the obvious question is whether that was important in the country's apparent resilience in the face of external shocks. Małgorzata Maciejewska, Adam Mrozowicki and Agnieszka Piasna investigate this in Chapter 7, following the policies pursued in previous decades which had strong similarities to measures adopted elsewhere in later years under 'internal devaluation'. They therefore refer to Poland suffering from a longer-term 'crawling' crisis during which measures to create flexible labour markets were adopted. The result from the early 2000s was a framework for a very high level of flexibility thanks to forms of very precarious employment. That coincided with an inflow of foreign investment, which contributed to export and GDP growth. It also coincided with lower unemployment before the crisis and possibly to greater adaptability of employment during the crisis, when further steps were taken in the direction of flexibility.

However, it is not valid to draw links between employment policies and areas of apparent economic success. Reduced unemployment coincided with emigration to seek work elsewhere. FDI came to other central European countries with different employment conditions, in all cases attracted by the pre-existing low relative pay levels. Adaptation during the crisis was not eased by a cushion of temporary jobs as it was rather permanent employment that adjusted. From 2012 unemployment began to increase again. This period saw an increasing shift towards less secure forms of employment as firms reacted by minimising employment costs. Thus the creation of a labour market offering insecure employment conditions to much of the labour force carried a high social cost with little by way of demonstrable economic benefits in return.

Conclusion

These individual country studies lead to four conclusions:

(i) Unemployment was not caused by wages that were too high. There were issues of competitiveness in some countries, but they were related to the absence of high-quality export sectors, economic structures that had not adapted from exporting low-tech products and weak support – from education and research infrastructure – for the development of such activities. In a number of very clear cases, unemployment followed from the collapse of construction after the ending of easy credit. Wage cuts have done nothing to solve this structural problem.

(ii) Internal devaluation was effective in reducing current account deficits, but overwhelmingly by reducing imports. It did not trigger higher exports. Indeed, a consistent finding is that lower wages did not lead to lower export prices. The latter, indeed, often increased, reflecting increases in taxes, input prices and, not infrequently, also profits. There were, coincidentally, cases of countries increasing export levels, but predominantly in more sophisticated and less price-sensitive products, often reflecting no more than the continuation of past trends.

(iii) internal devaluation has led to more rather than less unemployment, albeit with the trend partially masked in several countries by emigration and growing numbers of discouraged workers who are no longer seeking employment. There is also more long-term unemployment and an increase in precarious employment, with all the social costs attached to those phenomena.

(iv) Evidence also points the way to alternative – and more effective – solutions based on improved competitiveness and more employment opportunities on the basis of quality improvement. That requires spending and investment in education, research and the like, areas that have been subjected to cuts in the interests of internal devaluation policies.

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Chapter 1
Severe pain, very little gain: internal devaluation and rising unemployment in Greece

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1. Introduction

The economic crisis that began with the global credit crunch in 2008 has, through its evolution, put Greece at or near the top of several dismal categories. With an unemployment rate of 25.6 per cent, Greece was the country with the highest jobless rate in the EU in the first quarter of 2015. It has also been one of the countries most adversely hit by the economic crisis that started in 2008, losing 25 per cent of its GDP between then and 2014. Greece was also the country in which the euro-zone sovereign debt crisis began in 2010 and, consequently, the first to receive a bailout, the only one to receive three bailouts and the only one in which the economic adjustment programmes attached to the financial support have failed outright to restore the country's access to financial market financing or to render public debt sustainable as a proportion of GDP.

The fact that unemployment has risen since the beginning of the economic crisis is not surprising, given the depth and length of the recession. However, there are indications that it rose by more than what would have been predicted by Okun's Law, the long-term empirical relationship between changes in output and unemployment, as estimated for Greece. This chapter first explores the dynamics of the labour market response to the recession and reviews different explanations for the apparent over-responsiveness of the Greek unemployment rate to it.

It also focuses on one of the pillars of the adjustment programme that was imposed in Greece and other euro-zone members that received financial support, namely so-called 'internal devaluation', that is, policies aimed at restoring price competitiveness (real exchange rate vis-à-vis one or more trading partners) by means of productivity improvements and/or wage cuts when depreciation of the nominal exchange rate is not available (Darvas 2012). Internal devaluation has been pursued in order to reduce Greece's current account deficit, which peaked at 16.5 per cent of GDP in

2008, and bring it more in line with 'fundamentals' (European Commission 2010) but also in the hope that, especially after 2012, demand for net exports could be stimulated to provide a source of aggregate demand for the Greek economy (European Commission 2012), which at the time was shrinking at an annual rate of 8 per cent. The strategy of internal devaluation had previously encountered scepticism, for several reasons, some general and some more case-specific.

Nominal wages are known to be rigid downwards (cf. Bewley 1999), which essentially means that unemployment would have to increase in order to put the downward pressure on wages that is supposed to achieve the targeted adjustment. Given that the burden of adjustment would have to be borne by member states with current account deficits alone and not by those with current account surpluses, such as Germany, whose wage and price developments have been steadily moving below the euro-area target inflation rate of 2 per cent, the costs of internal adjustment were bound to be even higher. Moreover, the type of labour market reforms that increase wage flexibility also come with side-effects in terms of employment and income security and greater inequality, all of which become further magnified at times of recession.

More specifically, however, in the case of Greece, goods exports had been concentrating on capital-intensive sectors, in which labour costs represent a relatively marginal proportion of costs, and in services, demand for which is not very price-elastic (European Commission 2010, 21). Furthermore, the Greek economy has been relatively closed, with exports a small proportion of its GDP. In other words, policies that would put pressure on wages were likely to have only a small effect on price competitiveness and such effects would at best have only a very limited positive impact on aggregate demand. Indeed, the latter could reasonably be expected to be dampened further as the downward pressure on wages would reduce disposable income and consumption (Theodoropoulou and Watt 2012, 2015).

This chapter therefore further investigates the form that internal devaluation took in Greece and asks whether it achieved its intended effects, one of which was to provide a source of demand stimulus that would help to reduce unemployment, and if not, why not. The rest of the chapter is structured as follows. Section 2 introduces the main characteristics of the Greek economy and its growth model, which are critical for understanding how it reached the crisis, why it responded the

way it did and why internal devaluation was always likely to fail. Section 3 examines developments in the labour market during the recession. Section 4 investigates why the unemployment rate over-responded to the recession. Section 5 analyses internal devaluation in Greece and its effects. Section 6 concludes.

2. Greece in the crisis

The Greek economy fell into recession as early as 2008, following the onset of the global financial crisis in 2007. In 2008, the economy had a current account deficit of 16.5 per cent and a government budget deficit of 9.9 per cent of GDP, which grew further to 15.3 per cent in 2009. The rise in risk-aversion in the aftermath of the global credit crunch and the revelations in 2009 that the Greek public budget deficit as a share of GDP had not only breached the EU's fiscal rules but had expanded to double digits, resulted between 2008 and 2010 in episodes of 'sudden stops' of private sector capital inflows (cf. Merler and Pisani-Ferry 2012) which had hitherto been financing both the current account and the government budget deficits. By early 2010, the Greek government was effectively shut out of the financial markets. That led to the request for and provision of a bailout package by the EU and the IMF, which included an economic adjustment programme to be implemented as a condition of financial support.

While the Greek banking system had directly suffered relatively little from the global credit crunch of 2008–2009, the dramatic adverse shift in market perception regarding the creditworthiness of the Greek government eventually affected the banking system and the private sector more generally, thus causing a rather atypical balance of payments crisis (Pisani-Ferry, Sapir *et al.* 2013). Although the ECB stepped in and provided the banking system with the necessary liquidity to mitigate the sudden cessation of private capital flows and prevent the banking system from collapsing, this liquidity did not find its way to the real economy.

The current account deficit was to some extent common to the other troubled countries in the euro area, most notably Ireland, Portugal and Spain. An important driver of these trends was the fact that, due to membership of the common currency, the periphery countries – and Greece in particular – benefited, up to the crisis, from relatively low real interest rates. On joining EMU, they saw their interest rates decline as

the risk of future inflation and currency devaluation were all but eliminated. That gave periphery old member states a boost in growth, which led to higher than targeted inflation rates. As they were subject to the nominal interest rate set by the ECB for the average of the euro area their real interest rates remained low. Lower real interest rates further fuelled demand, which would have cooled off to some extent if there had been real exchange rate appreciation.

Low real interest rates also generated demand for credit which, thanks to accelerated financial integration, was met by increased credit flows from other euro-zone members (notably Germany), where savings rates have been higher due to, among other things, subdued wage and domestic demand growth and illustrated in mirroring current account surpluses. Thus, financial integration within the EMU neutralised the real exchange rate channel through which the periphery economies could have been stabilised in the run-up to the crisis. Instead, what happened was that demand remained strong, raising their imports and domestic demand and pushing up their nominal wages and prices which, within the euro area, led to higher real exchange rates and worsened their trade balances further.

However, beneath these common trends, the Greek current account deficit was underpinned by the fundamental characteristics of the Greek growth model, which created vulnerability in the Greek economy when the global financial crisis broke. Since 1974, the Greek economy had been characterised by a high growth-low development pattern (Vaitsos 2011). Capital accumulation had been low and not focused on potentially dynamic sectors that could promote productivity growth and a shift in economic activity towards higher quality and value added sectors. Although Greece, like other advanced economies, has experienced de-industrialisation, on the eve of the crisis its industry accounted for a fairly low share of value added, concentrated mainly in low and medium-low technology sectors, while even the tertiarisation of the economy had focused – with the exception of tourism – on services that are neither very tradable nor dynamic and with high value added (Giannitsis 2013). The export orientation of the Greek economy has thus been weak and, as a consequence, Greek firms have faced relatively weak competition – both international and domestic – and have had little incentive for making efforts to increase their competitiveness. The state had been systematically spending to create public employment directly as a means of keeping unemployment under control and boosting business demand

through its consumption and investment. This can explain the chronic proneness to high public deficits and debt (Argeitis 2011, 182-3), as well as the current account deficits that gradually grew as a share of GDP from 1974 (Giannitsis 2013).

Table 1 **Correlation coefficients between current account balance (CAB) and real effective exchange rate (REER) calculated with different indicators, Greece, 1994–2013**

	1994–2013 CAB (billion euros)	2001–2013 CAB (billion euros)
Harmonised index of consumer prices (HICP)	–0.59	–0.20
Nominal unit labour costs in the whole economy	–0.82	–0.65
Nominal unit wage costs manufacturing	–0.37	–0.16
Price deflator GDP	–0.72	–0.50
Price deflator exports of goods and services	–0.55	0.04

Source: author's calculations using AMECO data (UBCA series) and DG ECFIN Price and wage competitiveness data (Annual REER series Eurozone).

Table 1 shows the bivariate linear correlation between the current account balance in Greece with various real effective exchange rate (REER) indicators, which vary depending on the relative price or cost index used for their calculation (European Commission-DG Ecfin). It suggests that the strongest association between the Greek current account balance and measures of relative prices (real effective exchange rate) based on different relative price and labour cost indicators is that between nominal unit labour costs *for the whole economy* and the GDP price deflator. What is striking is that the correlation between the current account balance and the nominal unit labour costs in the manufacturing sector – the tradable sector par excellence – is weak in absolute terms and far less than half of the REER based on nominal unit labour costs for the total economy. This suggests that the strong negative association between unit labour costs and the current account balance is likely to originate in the developments in unit labour costs in services and/or non-tradable sectors.

The strong negative correlation with the GDP deflator, which reflects the evolution of the prices of domestically produced goods and services as a result of demand, suggests further that domestic demand developments are likely to have been more relevant for the Greek current account imbalance than exports. Indeed, recent research suggests that rather than unfavourable developments in export performance, it has been demand

developments that have been driving current account deficits, which then resulted in upward trends in measures of relative costs/prices and instead the observed real exchange rate appreciations have been due to relative cost developments in the non-tradable sectors (cf. Gaulier and Vicard 2012, Gabrisch and Staehr 2015).

Figure 1 presents the distribution of employment across sectors in 2008. Wholesale and retail trade activities employed most people, with 18.2 per cent of total employment, followed by manufacturing with 12.1 per cent, agriculture with 10.6 per cent, construction with 8.8 per cent, public administration with 8.1 per cent and education with 7.2 per cent. Non-tradable sectors accounted for a higher share of employment than tradable ones. The relative importance of the various sectors did not change dramatically between 2001 and 2008, although the decline in manufacturing and agriculture continued, whereas the shares of construction, public administration and education expanded.

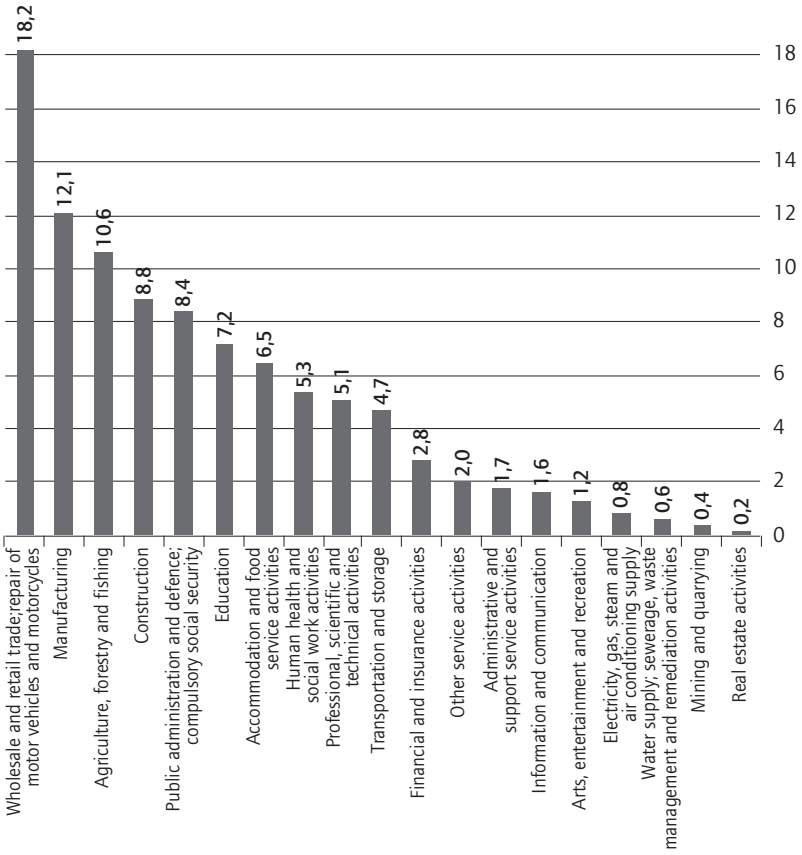
The sector that experienced the most pronounced employment growth was real estate, renting and business activities, where employment expanded between the first quarter of 2001 and the first quarter of 2008 by 51.5 per cent. Other than that, the sectors that registered relatively the largest employment expansions were construction and the broadly defined public sector (public administration, health and social work, other community, social and personal services, public utilities and education), all increasing by between 20 and 28 per cent. In other words, in 2001–2008 employment growth took place predominantly in the non-tradable sectors.

3. Labour market developments in Greece

Evolution of unemployment in Greece during the crisis: underlying labour market dynamics

Unemployment in Greece rose more than threefold between 2008 and 2013, from 7.8 per cent to 27.5 per cent. During the same period, Greek GDP shrank in volume by 25 per cent (see Figure 2). While the onset of the recession preceded the adoption of the EU/IMF economic adjustment programmes in Greece, with their emphasis on fiscal austerity, the adverse effects of the latter in the real economy were much higher than originally forecasted in the programme (IMF 2012). It is worth noting

Figure 1 **Distribution of employment across NACE2 sectors, first quarter of 2008**



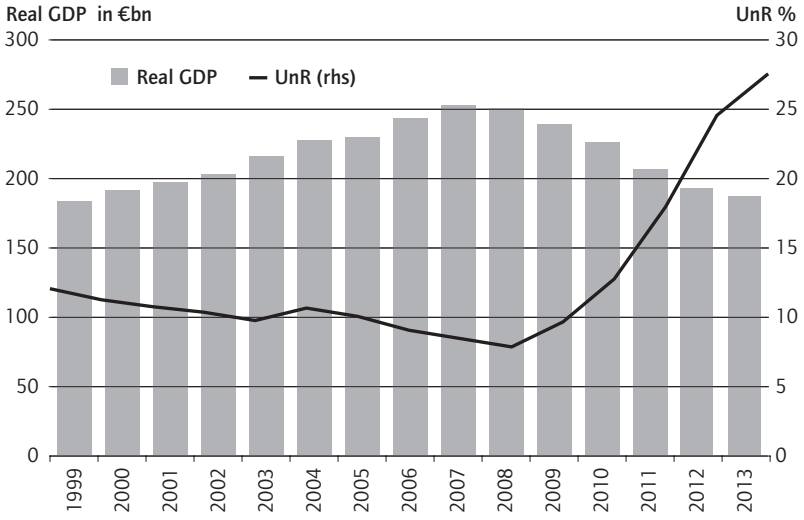
Source: Author's calculations using Eurostat Labour Force Survey database.

that the Greek general government balance shifted from a deficit 15.3 per cent of GDP in 2009 to a deficit of 3.5 per cent in 2014. That took a significant fiscal effort, as the structural government balance increased from a deficit of 15.2 per cent of potential GDP in 2009 to a deficit of 6.2 per cent of potential GDP in 2013.[1]

1. The increase in the government's structural fiscal balance indicates the discretionary fiscal tightening effort.

The increase in unemployment affected some groups of the labour force and some economic sectors more than others. That and the large increase in the share of long-term unemployed in the total suggest that the increases in the unemployment rate originally due to the negative output shock have probably become structural. In practice, this means that a recovery alone is unlikely to prove sufficient to restore unemployment rates to their pre-crisis levels and that, unless effective activation policies are put into place, the potential of the Greek economy to attain output growth will remain curtailed for a long time.

Figure 2 **Real GDP and unemployment rate (UnR), Greece, 1999–2013**



Source: Eurostat (une_rt_an, nama_10_gdp series).

For men of all ages, the unemployment rate rose almost fivefold, from 5.1 per cent in 2008 to 24.5 in 2013 (Eurostat Labour Force Survey). The rise was even more pronounced for older men (aged 40–64), whose unemployment rate rose from a negligible 2.9 per cent in 2008 to 17.8 per cent in 2013, while for those aged 50–64, it reached 18.2 per cent in 2013. Women in Greece have been facing higher unemployment levels, which, however, increased by less than those of men during the same period (from 11.5 to 31.4 per cent). Similar to women, young people (below age 25) have faced unemployment rates well above the EU or euro area average. In 2008, the youth unemployment rate stood at 21.9 per cent (15.9 per cent in the EU and 16.1 per cent in the euro area). By 2013,

it had risen to 58.3 per cent (23.7 in the EU and 24.4 in the euro area). Thus, although the rise in youth unemployment has received most public attention, older men have been hit far harder by the crisis.

The share of the long-term unemployed in total unemployment has traditionally been high in Greece, but after the crisis began in 2008 it rose from 47.1 per cent to 67.1 per cent in 2013 and further to 73.5 per cent in 2014. In other words, from one in two unemployed in 2008, long-term unemployed people represented two in three unemployed in 2013 and almost three in four in 2014. Again, the rise was particularly dramatic for men of all ages, but in particular those aged from 40 to 64 years. Within the latter age group, almost eight out of 10 unemployed men had been without a job for longer than 12 months. Women of similar age faced equally, if not slightly higher long-term unemployment shares. However, long-term unemployment had been more usual among elder women prior to the crisis than it was for men, with their share in total unemployment being around 60 per cent in 2008. Long-term unemployment is a particular challenge for any economy, as has also been associated with 'hysteresis' phenomena, whereby the potential output of an economy decreases following prolonged recession and long-term joblessness for large parts of its labour force.

In the case of Greece, this development has been particularly worrying for other reasons. On the one hand – and as we will see further below – Greece has not been famous for either its level of spending on active labour market policies (which can be an effective tool together with economic recovery for re-integrating the long-term unemployed into employment) or the effectiveness of its policies. This means that the prospects of regaining the economy's production potential are already looking bleak. The age group of 40–64 year olds, especially men, might generally be considered to be in the prime of their careers and thus their effective side-lining implies that precious work experience and 'human capital' accumulated in the course of their careers are no longer being put to use to help the Greek economy to recover.

On the other hand, the recent reforms in the Greek pension system and the continuous pressure on it are particularly worrying for this age group because many of its members are far from retirement age. Given the very low unemployment benefit coverage and the absence of minimum income support, their long-term unemployment is likely to add particular pressures to the social security system.

As the unemployment rate may sometimes conceal aspects of the labour market situation, we also examine the labour market dynamics linked to the decline in real output in Greece between 2008 and 2013. Employment among the working age population (15–64 years old) declined from 65 per cent in 2008 to 54 per cent in 2013 or by 17 per cent. For those under 25, the change in the employment ratio declined from 23.5 to 11.8 per cent, whereas for those above 25 years old it declined from 69.1 to 55.6 per cent. Women of working age saw their employment rate decrease by 18 per cent, whereas for men the respective reduction was 22.2 per cent.

According to Eurostat data (lfsa_argan), the total activity rate in Greece increased slightly between 2008 and 2013 – by 1.2 per cent – thanks to the increase in the activity rates of women, both Greek and foreign. During that period, the activity rate of Greek females rose by 6 per cent, whereas that of foreign females rose by 12.5 per cent. These figures contrast with the evolution of men's activity rates, which fell almost equally by 1.9 per cent for Greeks and 2.1 per cent for foreigners. For the 40–64 age group, male activity rates (of all origins) declined more steeply, by 7.7 per cent between 2008 and 2014, a staggering figure given that the Greek labour market has traditionally promoted the male breadwinner model. Looking at breakdowns of activity rates by age and sex during the same period, there was a slight decrease for those under 25 years of age and an increase in the otherwise low activity rate of women above 25. Given that unemployment increases and activity rate decreases hit men of prime age in particular, this suggests that more women actively joined the labour market in search of complementing household incomes.

The average number of actual weekly hours of work in the main job for employed people fluctuated slightly between 2008 to 2014 to reach 41 hours from 40.6. During that period, this decrease reflects mainly the change in working hours of employees (from 38.9 to 38.1), whereas the hours worked by the self-employed remained roughly stable (from 45.8 to 46). Slight fluctuations were observed for males and females during the same period, without leading to changes. Looking at the average number of actual weekly hours of work in the *second* job, however, we see that between 2008 and 2013, there was a slight decrease for men (from 19 to 18.2) and an increase for women (from 15.7 to 17.2). These data further reinforce the picture that, given the stronger adverse effect of unemployment increases for men, women have sought to supplement lost family incomes, in this case by working longer hours in second jobs.

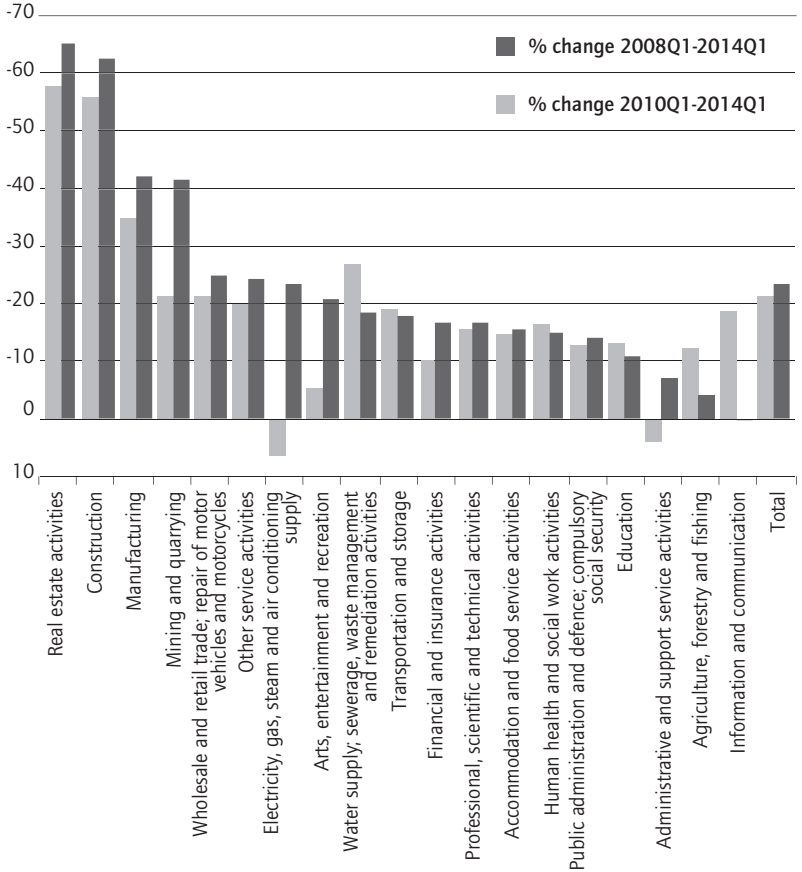
Real labour productivity growth per person employed was negative between 2008 and 2011, turned positive in 2012 and remained stable in 2013 (Eurostat data, nama_aux_lp). This measure does not account for changes in the pool of employed people and thereby for the heterogeneity in labour productivity across sectors in the Greek economy. This is an important qualification, given that – as we will see below – employment losses were fairly concentrated in particular branches, while the intensity of job losses also varied across sub-periods during the crisis (2008–2014). With this caveat in mind, it could be argued that there are indications that – at least in some sectors – firms held back from shedding labour in response to the recession between 2008 and 2011, although it appears that this was no longer the case between 2011 and 2013. Indeed, the annual rate of employment (headcount) losses more than doubled between 2010 and 2011, accelerating from 3.6 to 7.6 per cent.

The relatively low – by EU standards – share of part-time contracts in total employment increased between 2008 and 2013 from 5.4 to 8.4 per cent (Eurostat data, lfsa_eppga). The share in total part-time employment contracts of those that were involuntary rose from 44.1 per cent in 2008 to 68.2 per cent in 2013 (Eurostat data, lfsa_eppgai). On the other hand, the share of temporary contracts in total employment increased between 2008 and 2011 from 11.6 to 12.6 per cent and fell to 10.2 per cent in 2012, when it remained stable (Eurostat data, lfsa_etpga). There were indications (low reliability of Eurostat data) that in 2008, 82.2 per cent of those with temporary contracts had accepted them because they could not find a permanent job. By 2013, that share had risen to 87.8 per cent of total temporary contracts (Eurostat data, series lfsa_etgar).

According to Eurostat labour force statistics (see Figure 3), between the first quarter of 2008 and the first quarter of 2014 the sectors with the largest relative employment losses were real estate activities, with 65.1 per cent (57.7 per cent from the first quarter of 2010) lost jobs, and construction, with 62.4 per cent (55.7 per cent from the first quarter of 2010). Together, the job losses in these two sectors (mostly construction) accounted for about 20–24 per cent of total job losses in the economy in these periods. Just over half of men aged 40–64 lost their jobs in construction and 60 per cent in real estate activities between 2008 and 2014. The construction and real estate services sectors had among the highest losses not only in terms of number of persons employed but also the average number of actual weekly hours worked, falling from 41.6 to 35.3 and from 45.4 to 37.4. In other words, the reduction in the overall

labour input in the construction and real estate services sectors was even greater than the cuts in jobs suggest.

Figure 3 **Relative change in employment by NACE2 sectors, 2010Q1–2014Q1 and 2008Q1–2014Q1**



Source: Author's calculations using Eurostat LFS data.

Manufacturing, the second largest sector in terms of share in total employed persons (12.1 per cent in the first quarter of 2008), and mining and quarrying experienced losses of 42 and 41 per cent, respectively (35 and 21 per cent, respectively, from the first quarter of 2010). Again, job losses for males aged 40–64 years of age were close to double the average in the sectors. The job losses in manufacturing accounted for about one

in five job losses in the total economy, with another one in five being accounted for by job losses in the trade sectors. The average actual weekly hours worked in manufacturing remained roughly stable. Wholesale and retail trade, which, with 18.7 per cent, accounted for the highest share in total employment in 2008, experienced employment losses of 25 per cent between the first quarter of 2008 and the first quarter of 2014, with average actual weekly hours worked stable, while employment losses in the third largest sector – agriculture, forestry, and fishing – were limited to 4 per cent between the first quarter of 2008 and the first quarter of 2014.

In spite of the massive fiscal austerity pressure, public services (public administration, education and health care) lost between 13 and 16 per cent of their jobs between the first quarter of 2010 and the first quarter of 2014, accounting for about 4–5 per cent of the job losses in the total economy. On the other hand, average actual weekly working hours increased in the public administration and education sectors by 1.6 and 1.8 per cent, respectively, a development which illustrates how labour input in those sectors was reduced through the dismissal of employees on temporary/fixed-term contracts and the reallocation of workload to permanently employed people (Matsaganis forthcoming).

Labour market adjustment to the output shock that the Greek economy has been suffering has taken place not only via the adjustment of labour input (employment headcount and hours); labour costs have also adjusted. According to calculations based on Eurostat data (lc_lci_lev), between 2008 and 2013 labour costs (including wages, salaries and social security contributions) fell in the industry, construction and services sectors (excluding public administration) by 12.6 per cent, whereas the wages and salaries component of labour costs fell during the same period by 15.6 per cent, suggesting that it bore a larger part of the adjustment than social security contributions. Most of this adjustment took place after 2012. The cuts were particularly pronounced in the construction sector, where labour costs fell by 22 per cent during the 2008–2013 period, whereas in the business economy, private (business) services and industry, the losses were slightly below the national (minus public administration) average. Thus, the construction sector seems to have responded to the shock by adjusting quantities and prices. The adjustment of labour costs will be discussed in more detail in the following sections on internal devaluation.

4. Why has the unemployment rate over-responded to the Greek recession?

There is no doubt that the massive recession that the Greek economy has experienced since 2008 goes a long way towards explaining the increase in the country's unemployment rate. However, recession alone cannot account for all of it. The empirical relationship between changes in output growth and unemployment increases – that is, by how many percentage points the unemployment rate changes (increases) when output growth changes (falls) by 1 per cent – is called Okun's law. Estimations of the Okun's law for Greece for the period 1970–2007 suggest that a 1 per cent decrease in output was associated with a 0.12 to 0.23 percentage point increase in the unemployment rate (Gogos and Kosma 2014). Thus, the increase in the unemployment rate between 2008 and 2013 was well above what Okun's law would have predicted given the economy's behaviour prior to the crisis. A different report has suggested that the responsiveness of the unemployment rate to recession started picking up relative to the prediction of Okun's law from 2010 onwards (Nikolitsa 2014). In that respect, we could say that the Greek labour market did not demonstrate sufficient 'macro-flexibility' (cf. Blanchard *et al.* 2013) to the output shock it has been experiencing since 2008, as the unemployment rate changed in response to it to a far greater extent than what would have been expected in accordance with Okun's law.

The literature suggests various reasons that may explain the higher responsiveness of unemployment to recessions. Low costs of firing and hiring and the greater use of temporary contracts are associated with a higher responsiveness of the unemployment rate to recessions, in contrast to stronger traditions of lifelong employment (as in Japan) (IMF 2010, Carlin and Soskice 2015). Greece has been classified until relatively recently in the top half of the OECD rankings in terms of the strictness of its employment protection legislation both for regular and for temporary contracts (http://www.oecd.org/employment/emp/oecdindicatorsofemploymentprotection.htm).

However, this indicator of 'official' stringency of employment legislation does not provide a full picture of the extent to which EPL protects working people in Greece. The Greek labour market has been characterised by a division between highly protected insiders, under-protected 'mid-siders' and unprotected outsiders (Jessoula *et al.* 2010; Matsaganis forthcoming). The 'mid-siders', representing the vast

majority of Greek workers, have been employed in small firms (which are typical of the Greek economy), paid on average less and enjoying less generous unemployment and employment protection. A special case of mid-siders are the self-employed, who in Greece represent almost 30 per cent of employed persons, double the EU28 average.

In addition, Greece is also characterised by substantial informal employment, which tends to be concentrated in particular sectors, such as construction, tourism and other services, where the enforcement of employment regulation, minimum wage and social provisions has been weak. These are sectors in which employment has been precarious but where flexibility is de facto very high (Matsaganis forthcoming). The large concentration of job losses in the construction sector and other services and the characteristics of the labour market (with its high polarisation) may have been one of the explanations of the over-responsiveness of unemployment to recession.

Moreover, the economic adjustment programmes that Greece had to adopt in exchange for EU/IMF financial support, led to reforms in EPL. Firing costs were lowered for employees on regular contracts; the greater use of temporary and fixed-term contracts was facilitated; and more flexibility in working time arrangements was promoted (Theodoropoulou 2015). These changes took place from 2010 onwards, when – as we saw – the rate of employment losses started picking up as it became clearer that the recession was here to stay. It is fair to speculate that the EPL reforms that took place once the economic adjustment programmes were adopted are likely to have exacerbated the responsiveness of unemployment to recession.

The extent to which active labour market policies are used effectively to help unemployed workers reposition themselves into employment has also been mentioned as a factor that can reduce the response of unemployment to recession. At 0.2 per cent of GDP in 2010, public spending on active labour market policies in Greece was less than half the EU average (Theodoropoulou 2015). Even the little money spent had very questionable effects on unemployed workers before the crisis (Matsaganis forthcoming). Moreover, during the crisis, the extra policy measures that were pushed in this area – namely, the temporary extension of short-term public works programmes – had a particular focus on young people not in employment, education or training (NEET), even though, as we saw, the group that was worst affected by unemployment increases were men 40 years of age or above.

The degree of trust or the quality of labour relations has also been suggested as a mitigating factor with regard to the extent to which unemployment rises follow an adverse output shock (Blanchard, Jaumotte *et al.* 2014). Unlike other euro-zone member states, Greece did not manage to establish a solid tradition of social concertation between employers, trade unions and the state in the run-up to joining EMU, for various reasons, which included the reluctance or inability (due to the Maastricht criteria) of the government to put macroeconomic policy considerations on the bargaining table (Ioannou 2000). Once Greece joined EMU, the hurdles to building such concertation became even higher (Ioannou 2004) and when the economic adjustment programmes attached to the Greek bailouts were adopted, the scope for negotiations decreased even further. On the one hand, in a context of severe public spending cuts – including in investment – and substantial tax increases, there was little Greek governments could offer in exchange for concerted action over wages and price adjustment. On the other hand, under pressure from the Troika, collective wage bargaining was decentralised and in fact was the only area in which reforms wrought a paradigmatic change (Theodoropoulou 2015).

This lack of trust in employment relations has meant that concertation has not been possible with regard to the adjustment of nominal wages and prices in order to minimise the effects on real incomes and speed up adjustment. Moreover, there have been no high-level agreements between employers and unions that would privilege adjustment to the recession through the intensive margin (hours) and/or wages rather than the extensive margin (employment).

Other factors influencing the elasticity of unemployment to recession, although in different directions, are the responsiveness of wages, the amount of financial stress facing the economy and the demand component – that is, domestic vs external – that dominates the downturn, with a drop in domestic demand having stronger effects on unemployment for a given fall in output growth than export demand (ECB 2012). We will return to evidence on the effects of these factors in the following section, where we examine the impact of internal devaluation. It will be argued that the strategy of internal devaluation as it was actually implemented in Greece may have exacerbated rather than mitigated rising unemployment in Greece.

5. Role of internal devaluation in explaining unemployment in Greece

5.1 Internal devaluation in the Greek adjustment programmes

Internal devaluation (or adjustment) has been defined as the outcome of policies aimed at productivity improvements and/or wage cuts to restore price competitiveness when depreciation of the nominal exchange rate is not available (Darvas 2012). The real exchange rate can be defined either as the relative prices of tradable to non-tradable products in an economy or as the relative prices, costs and productivity of a particular country vis-à-vis the rest of the world or the group of its main trading partners (for example, the EU) (IMF 1984).

In the context of the first Greek conditionality programme, internal devaluation was to be promoted through a bundle of structural reforms that would aim at both strengthening external competitiveness and accelerating the reallocation of resources from the non-tradable to the tradable sector (European Commission 2010: 10). Labour market reforms, by changing collective wage bargaining institutions, the setting of minimum wages, employment protection legislation and unemployment benefits (Theodoropoulou 2015) were aimed at increasing the responsiveness of wages to the recession and, together with product market and business environment reforms, at facilitating the transfer of productive resources from the non-tradable to the tradable sector, through adjustment of *internal* relative costs and prices (that is, across the tradable and non-tradable sectors). Fiscal austerity, with the cuts it imposed on public sector wages, was also supposed to contribute to internal devaluation by reducing the wage costs of the non-tradable public sector, where a significant wage premium applied over the private sector (including the tradable part of it), even after controlling for compositional effects of the sector's workforce (Christopoulou and Monastiriotis 2013).

The original programme explicitly left out conditionality on private sector wages. At that point the risks attached to putting additional pressure on private sector wages were deemed too great, despite the potential benefits (European Commission 2010. Indeed, in 2009, labour costs represented only 17 per cent of the output value of the manufacturing sector in Greece and about 49 per cent of its value added. Thus, it would take a very large drop in labour costs and the assumption of no increases in any other

production costs for any discernible change in the prices of manufacturing exports to occur (Giannitsis 2013). However, the approach changed by 2012, when, under the pressure of faltering fiscal adjustment and the deepening of the recession that it caused (IMF 2012), explicit targets for private sector wage adjustment were brought to the fore in the second adjustment programme for Greece, in an attempt to stimulate external demand for Greek output (European Commission 2012).

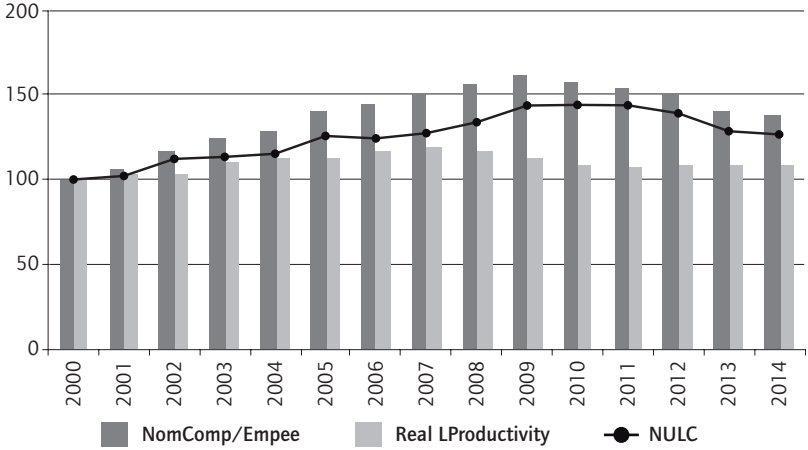
In sum, therefore, from the beginning the strategy of internal devaluation as a means of adjusting the current account balance and as a potential source of demand stimulation was, due to the closedness of the Greek economy, very risky. The risks were heightened by the fact that internal devaluation in Greece would be the only weapon wielded to achieve the adjustment of its current account deficit, rather than coordinated action aimed at narrowing the current account surpluses at the core of the euro area. Further constraints were the Greek system of industrial relations, which had not been effective in the past in delivering concertation among price and wage-setters and had been weakened further in the context of the adjustment programmes. We next turn to the actual effects of internal devaluation.

5.2 Internal devaluation, wages and prices

Nominal unit labour costs for the total economy continued rising in 2008 and 2009 as nominal compensation per employee rose and labour productivity started declining. Nominal unit labour costs only started falling from 2011 (see Figure 4). In 2012–2013, when the second economic adjustment programme introduced conditionality on private sector wages as well, the downward adjustment of nominal unit labour costs became more pronounced, driven predominantly by nominal compensation per employee.

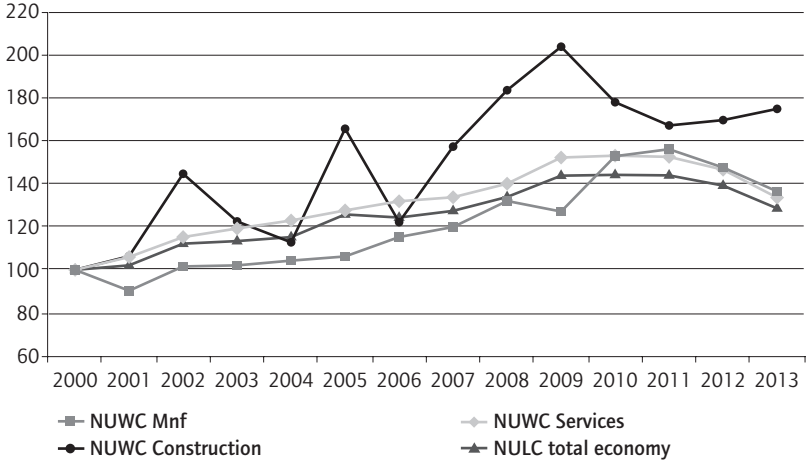
Figure 5 shows the evolution of nominal unit labour costs for the whole economy, as well as that of nominal unit wage costs – excluding employers' social security contributions – in three major economic sectors: manufacturing, services and construction. Nominal unit wage costs in the construction sector were actually the ones that grew the most, doubling between 2000 and 2009 reflecting the booming demand in that sector.

Figure 4 **Nominal unit labour costs and their components, Greece, 2001–2014**



Source: Author's calculations using AMECO data (HWCDW, PLCD, RVGD series).
Note: NULC – Nominal unit labour costs; NomComp/Empee – Nominal compensation per employee; Real LProductivity -Real labour productivity.

Figure 5 **Nominal unit labour costs and nominal unit wage costs, Greece, 2000–2013 (2000=100)**

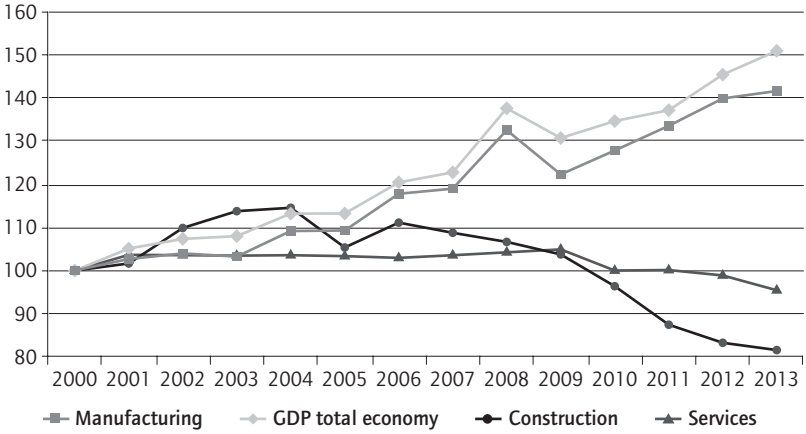


Source: Author's calculations using AMECO data (PLCD, PWCM, PWC4, PWC5 series).
Note: Mnf: Manufacturing.

We see that the evolution of nominal unit labour costs mirrors that of nominal unit wage costs in services, while unit wage costs in manufacturing continued to increase until 2011 before they started declining. Unit wage costs in the construction sector have been much more volatile and although their growth rate declined sharply between 2009 and 2011, they began rising again after that.

The next question is whether these falls in nominal wages/labour costs translated into lower prices for the whole economy, exports and various sectors and, perhaps more importantly, for the purposes of internal devaluation – which is a relative concept – whether these declines in nominal wages/unit labour costs were further translated into real exchange rate devaluation.

Figure 6 **Price deflators, total economy (GDP) and main sectors, Greece, 2000–2013 (2000=100)**

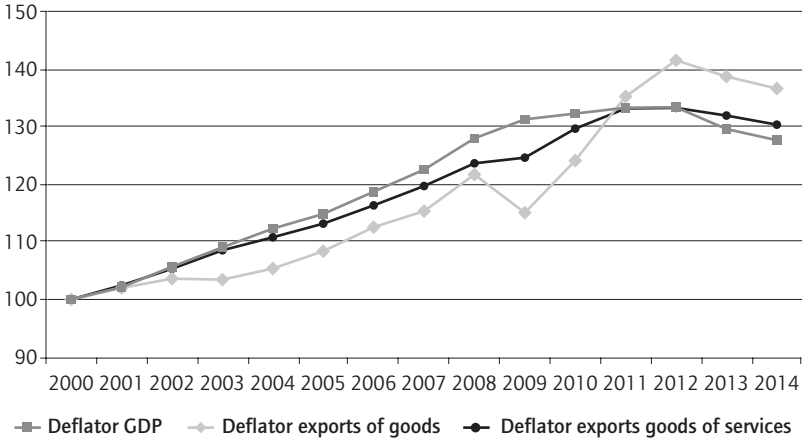


Source: own calculations using AMECO data (PVGM, PVG2,PVG4, PVG5 series).

Figure 6 shows the evolution of price deflators for broad sectors of the economy and for GDP, reflecting total demand for domestic output. With the exception of construction, it appears that the decline in price deflators in services and for GDP has been less pronounced than the decline in unit labour costs and unit wage costs that we saw in Figure 5. The price deflator in the manufacturing sector has actually been increasing since 2009 despite the fact that nominal unit wage costs have been declining in manufacturing in line with the rest of the economy. Given that manufacturing is one of the main sectors that are tradable, this means

that any potential gains in terms of price competitiveness from the pressure on nominal wages have not been passed on – whether wholly or partly – to the sector's prices. The evolution of the export price deflators of goods and services (see Figure 7), however, suggests that nominal wage cost decreases from 2011 onwards were passed on to a larger extent to exported goods, probably due to stronger competition in international markets.

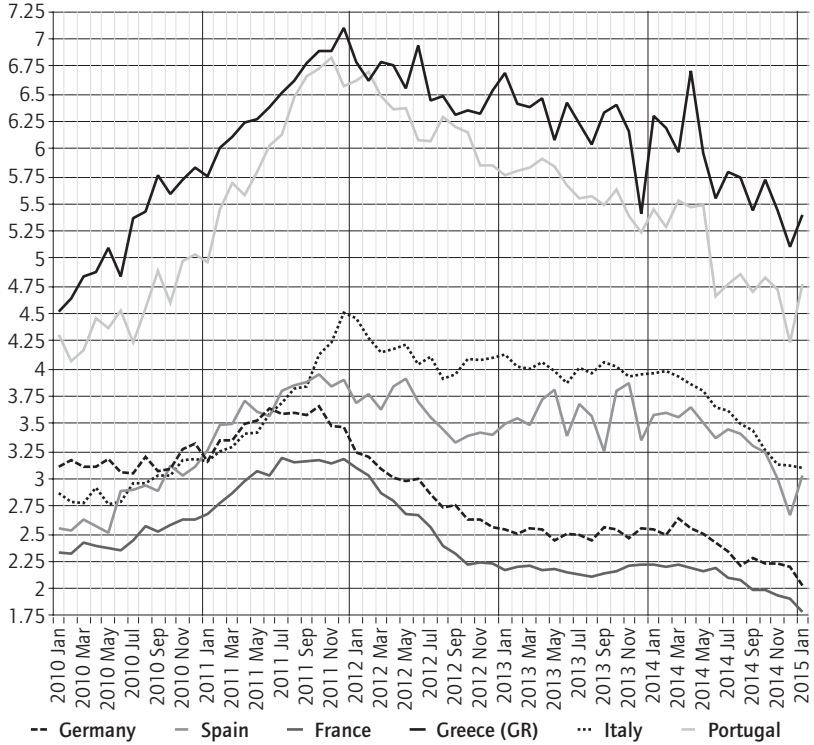
Figure 7 **Price deflators of exports and GDP, Greece (2000=100)**



Source: Author's calculations using AMECO data (PXGS, PVGD, PXGN series).

There may be several reasons for this. For example, product market competition may not be strong enough and allow for profit margins and prices to resist adjustment to lower unit labour costs. Looking into the relevant OECD product market regulation indicators, one can see that Greece is in most cases in the middle of the range of OECD members in terms of the restrictiveness of product market regulation, although the Greek authorities implemented deregulation reforms in most of the areas to which these indicators refer between 2008 and 2013 (latest available data). However, there are some exceptions to this. Price controls in competitive sectors – for example, road freight, professional services, and mobile communications – in fact slightly increased during that period. Similarly, the rules for getting information on and obtaining licenses and permits to start new businesses remained among the least simple within the OECD group, with no change. This is an indication of barriers to entry in a product market, which is normally something that hinders

Figure 8 **Cost of borrowing for non-financial institutions, Germany, Spain, France, Greece, Italy, Portugal, January 2010–January 2015 (% per annum)**



Source: ECB (MFI interest rate statistics).

competition and makes it possible to maintain the profit margins of incumbents at a high level. Barriers to entry in service sectors – including professional services – also remained relatively high by OECD standards and changed marginally between 2008 and 2013. Barriers to trade and investment were generally low and were reduced further across the board with regard to the dimensions measured.

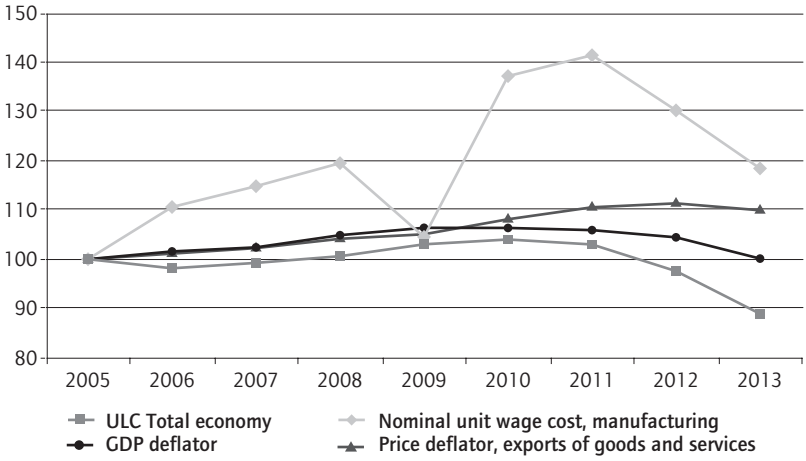
The increase in other production costs – for example, capital borrowing costs or energy consumption costs – could also be a reason. Pelagidis (2014) documents that energy – both electricity and natural gas – prices for industrial use have risen by over 60 per cent since 2009 due to a combination of large increases in electricity costs and the imposition of high excise tax rates in the context of fiscal adjustment. He estimates that

Greek industries have to pay up to 80 per cent more for energy than others in the EU.

Moreover, the combination of uncertainty until 2012 on whether Greece would remain in the euro zone and the fragility of the Greek banking system, exacerbated both by the deep and ongoing recession and doubts concerning the solvency of the Greek state, meant that the costs of borrowing for Greek business rose and remained high from the outbreak of the crisis (see Figure 8). Given that the main exporting sectors are not labour-intensive, it is no surprise that the squeeze on nominal wage/labour costs has not managed to make up for these developments.

The relative price of Greek exports and tradable goods did not improve, not only because of domestic economic developments but also because the evolution of the respective relative prices in the other euro-zone member states has not been favourable. Figure 9 shows that although the Greek real effective exchange rate (REER) calculated by using the (relative) nominal unit wage costs in manufacturing declined markedly after 2011, the REER calculated by the export prices deflator shows that there have barely been any gains in relative prices vis-à-vis the rest of the euro zone, despite considerable adjustment in the respective price

Figure 9 **Real effective exchange rates using different relative price/cost indexes, Greece vs EA18, 2005–2013 (2005=100)**



Note: ULC - Unit labour costs.
Source: DG ECFIN price and cost competitiveness database (REER annual data series Eurozone).

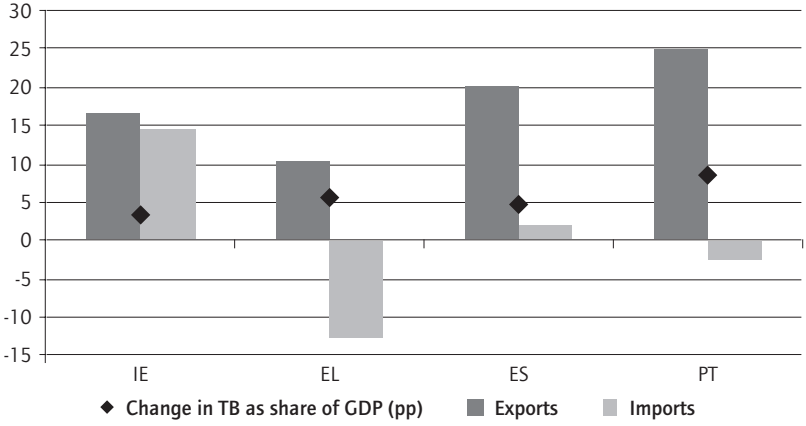
deflator since 2011. The difference between the two can be accounted for by price developments in other countries. This comes as no surprise as the pursuit of internal devaluation that has been imposed in member states with current account deficits has been asymmetric: in other words, member states with a current account surplus were under no obligation to pursue internal revaluation in order to share the burden of adjustment of intra-euro-zone imbalances.

In short, therefore, we see that, although the strategies of internal devaluation have had a visible effect on labour costs, this effect has not been passed on sufficiently to the prices of manufactured goods and Greece's real effective exchange rate with the rest of the euro zone.

5.3 Internal devaluation and the Greek trade balance

Figure 10 shows the contribution of exports and imports to the improvement of the trade balance as a share of GDP in Greece, Spain, Portugal and Ireland between 2010 and 2013. Greece registered the second highest improvement. On top of that, however, it was also the country that reduced imports the most, which was a relatively more important driver than the increase in exports in improving the trade balance. This suggests that the improvement in the trade balance in Greece was achieved by lowering domestic demand, far more than has

Figure 10 **Development of exports and imports, Greece, 2010–2013**

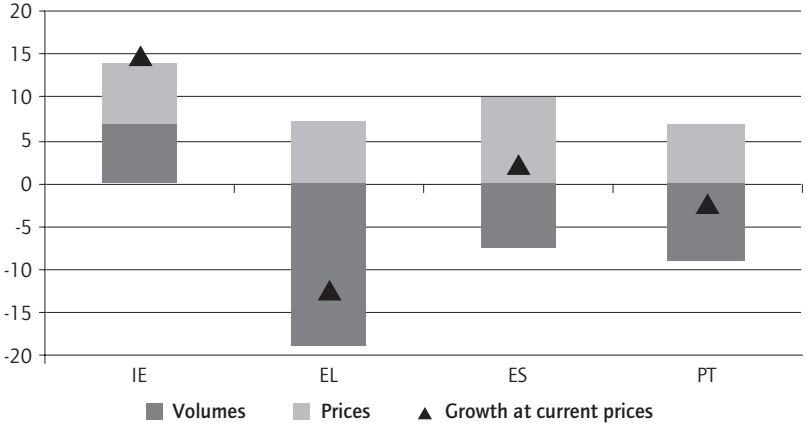


Source: Author's calculations based on AMECO data (UXGS, UMGS, UBGS, UVGD series).

been the case in the other euro periphery countries. This is consistent with what we would expect given that internal devaluation was pursued at the same time as an unprecedented fiscal adjustment, which, as it turned out, has had a devastating – and larger than originally anticipated – effect on domestic demand.

A closer look at the development of imports and exports (Figures 11 and 12) reinforces the bleak picture. Between 2010 and 2013, the fall in imports (at current prices) in Greece was close to 15 per cent; the fall in the volume of imports was even larger, at close to 20 per cent.

Figure 11 **Change in import prices and volumes, selected countries, 2010–2013**

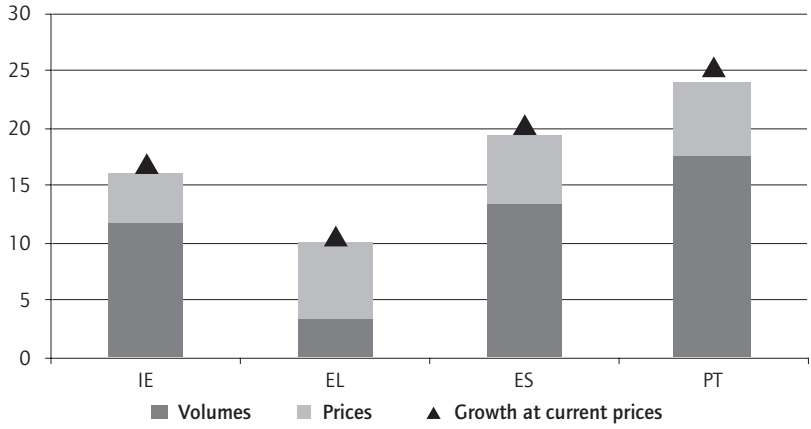


Source: Author's calculations based on AMECO data (UXGS, UMGS, UBGS, UVGD series).

On the other hand, the increase in exports (at current prices) between 2010 and 2013 was mainly nominal, due to an increase in prices, rather than real and due to volume. In both respects – exports and imports – Greece exhibited a worse performance than Ireland, Portugal and Spain.

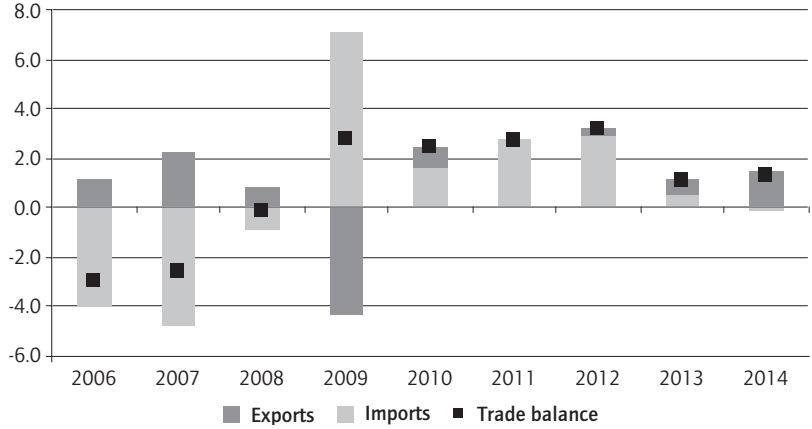
In other words, the improvement of Greece's trade balance was due primarily to lower real domestic demand, with barely any increase in external demand through real exports. This is clearly illustrated in Figure 13, which shows that the positive effect of the trade balance – that is, of positive net exports – on GDP growth has been driven by the positive contribution of imports, which occurs when imports actually fall.

Figure 12 **Growth in export volumes and prices, selected countries, 2010–2013**



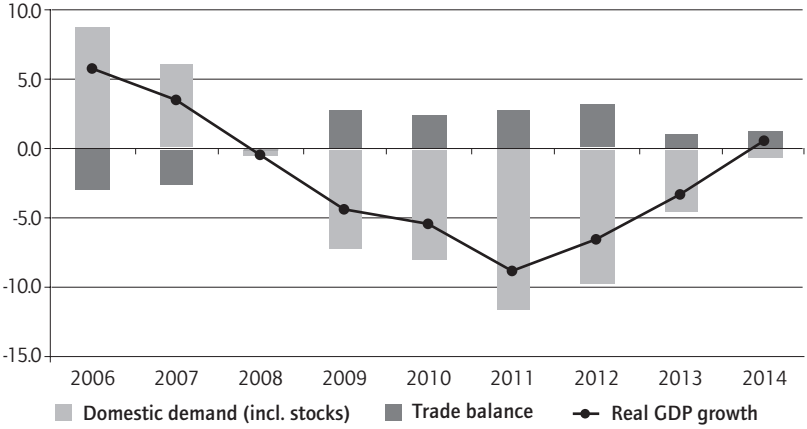
Source: Author's calculations based on AMECO data (UXGS, UMGS, UBGS, UVGD series).

Figure 13 **Contributions to GDP growth of imports, exports and the trade balance, Greece, 2006–2014 (forecast)**



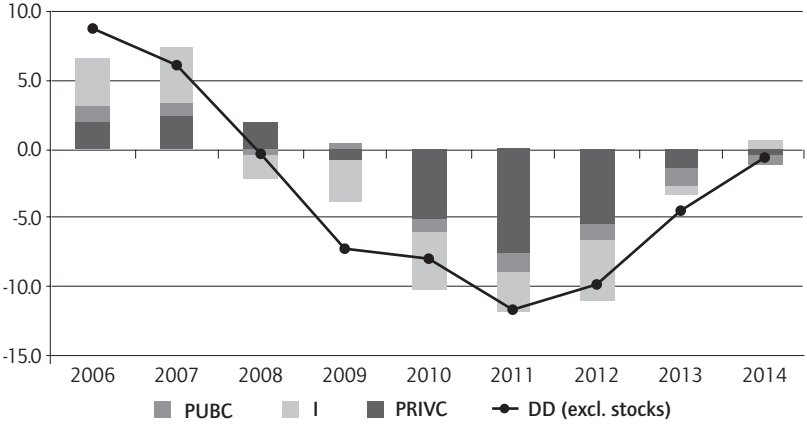
Source: AMECO (UMGS, UXGS, UBGS series).

Figure 14 **Contribution of the trade balance and domestic demand to real GDP growth**



Source: own calculations using AMECO data (CVGD3,CVGD9, OVGD series).
Note: TB — Trade balance; DD — Domestic demand.

Figure 15 **Contribution of domestic demand and its components to GDP growth, 2006–2014**



Source: AMECO (CVGD5, CVGD0,CVGD2, CVGD3 series).
Note: PrivC — Private consumption; PubC — Public consumption; I — Investment (Gross fixed capital investment); DD — Domestic demand.

5.4 Internal devaluation and domestic demand

Figure 14 shows that from 2009 onwards, when the recession began in Greece, it was (negative) domestic demand that drove (negative) real GDP growth; the trade balance contributed relatively little.

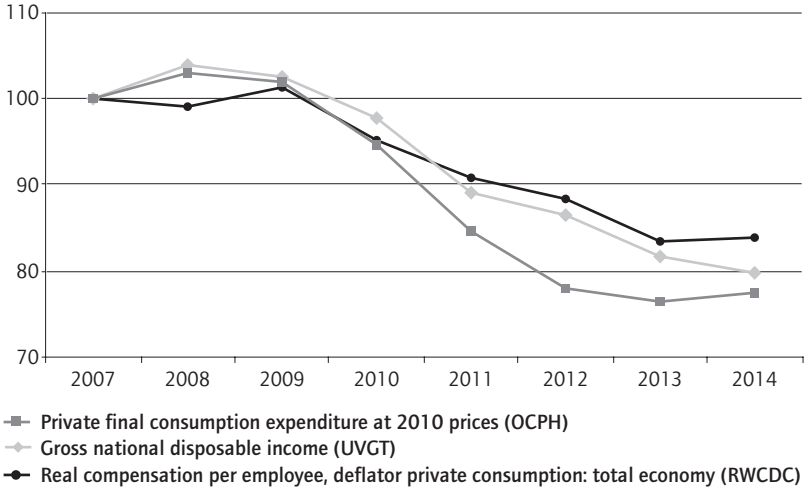
The components of domestic demand made negative contributions to GDP growth from 2009 onwards (see Figure 15). Private consumption was the leading negative component, followed by investment. The negative effect of private consumption accelerated from 2010 onwards, when the economic adjustment programme was first adopted and wages started falling.

As Figure 16 shows, private consumption expenditure followed the evolution of disposable income and real compensation per employee relatively closely. As the effects of internal devaluation pressures on labour costs developed, disposable income fell. In the early years of the crisis, it seems that households and firms tried to smooth out their consumption. However, starting in 2010, private consumption fell faster than disposable income, suggesting that households increased their savings, either servicing debt or as a precaution in the face of uncertainty about their employment and income prospects in the near future. Of course, both deleveraging (paying back debt) and precautionary savings tend to reduce demand even further. It has been reported that between 2010 and 2014, deleveraging took place to the tune of 35 billion euros, funds which, however, were not rechannelled into the economy through new bank loans (Zografakis and Kastelli 2015, 11).

The Greek banking sector has gone through major turbulence during the crisis due to its exposure to sovereign risk, the 'haircut' on Greek government bonds in 2012 and the dramatic increase in non-performing loans. According to World Bank data, the share of non-performing bank loans to total loans in Greece went up from 4.6 per cent in 2007 to 9.1 per cent in 2010 and to 33.4 per cent in 2014. Moreover, since 2010, Greek banks have had to face episodes of large deposit withdrawals, when uncertainty about Greece's continued membership of the euro heightened.

This development points to one of the reasons why internal devaluation has not achieved the hoped-for results in Greece. In principle, lower unit labour/wage costs should have led to increased profitability and

Figure 16 **Private consumption, gross disposable income and real compensation per employee, Greece, 2007–2014 (2007=100)**



Source: Author's calculations based on AMECO data (UVGT, OCPH, RWCDC).

investment, which should then have stimulated demand and growth. However, the protracted recession in the Greek economy, itself the result of fiscal adjustment and lower wages, had repercussions on expectations. The dismal macroeconomic conditions have also impacted on the stability of the banking system and the availability of credit, including to finance investment. According to Eurostat data, private sector credit flows between 1999 and 2008 averaged 12 per cent of GDP. The same figure for the period 2009–2013 was –1.06 per cent of GDP, meaning that the level of loan repayments was higher than that of new loans. The fiscal adjustment programme did not spare public investment expenditure, which, between 2008 and 2013 was reduced by almost 60 per cent (in current prices). A similar reduction also occurred in the private sector (corporations).

These developments resonate with some of the factors mentioned in Section 4 as increasing the responsiveness of unemployment rates to recessions, namely, the relatively greater fall in domestic rather than external demand and financial stress. In that respect, although internal devaluation policies may have led to an improvement in the current account, they have created perverse effects for domestic demand. The lack of investment has probably slowed down the transformation of the Greek economy from a domestic-demand to an export-led one.

6. Conclusions

This chapter has sought to explore unemployment development in Greece since the beginning of the crisis and the adoption of the economic adjustment programmes that were attached to the country's bailouts. Unemployment in Greece has risen as a result of the unprecedented recession in output growth but not only due to the sheer scale of the recession. The collapse in domestic demand that was first caused by the balance of payments crisis that followed the global credit crunch and then further fuelled by the massive fiscal adjustment that the country had to undergo in a given period of time and an internal devaluation strategy that de facto disproportionately affected labour costs more than prices or productivity aggravated the responsiveness of the unemployment rate to the recession.

The characteristics of the Greek labour market and economy, with its chronic heavy reliance on the state for driving demand and employment creation, exacerbated this over-responsiveness. The de facto high external flexibility in the labour market, a result of low enforcement of employment law, particularly in sectors hardest hit by the recession (construction, services), meant that firms adjusted to the fall in product demand primarily by shedding jobs. The policy responses did not do much to counteract this and mitigate its effects. Fiscal austerity put a sudden brake on a major source of demand in Greece and labour market deregulation made it easier to fire people during a downturn, while the reforms of collective bargaining eliminated any chances of building a consensus around the distribution of real exchange rate adjustment costs, which in the case of Greece have been borne disproportionately by wages and labour.

Internal devaluation had a discernible effect on labour costs, but in many cases this was not passed on to prices. Although Greece undertook some reforms in product markets, it seems that they were not always enough to squeeze profit margins to follow the adjustment of labour costs. Moreover, in the context of fiscal austerity, indirect and excise taxes rose, increasing energy consumption costs for Greek firms. Last but not least, the lack of any effort by member states with current account surpluses to pursue internal *re*valuation meant that the effects of lower labour costs on the real exchange rate were in some cases completely nullified.

Not surprisingly, internal devaluation did not do much to improve the trade balance at a higher level of output. Instead, adjustment took place through much lower imports. For the trade balance to be achieved at a higher level of output (and lower unemployment), the Greek export base would have had to expand and upgrade. However, this has not happened and the unfavourable conditions for investment – high uncertainty and credit constraints – and the lack of progress in reforms that would support the transformation and specialisation of the Greek economy in dynamic, high value added sectors, account for this. Under these circumstances, internal devaluation failed to spur higher growth and lower unemployment.

What policy implications can we draw from the case of Greece? The experience of Greece seems to suggest that certain conditions should be avoided. First, in the short-run, when increasing productivity growth is not feasible, measures that promote the even adjustment of costs and prices should be pursued. If nominal wages and prices had adjusted similarly, the real spending power of households would not have suffered and the slump in domestic demand would have been contained. Concerted action by the social partners, possibly with the participation of the government, can be a way forward to ensure that price and nominal wage developments allow for any necessary real exchange rate adjustments without imposing counter-productively uneven costs on wage- and price-setters. This is also the only way to link such developments to policies aimed at productivity growth and a continuous transformation of economies towards high value added production. Second, real exchange rate adjustments should be as symmetrical as possible, especially as the inflation target in the euro zone is fairly low (BlanchardBlanchard *et al*. 2010). Last but not least, the importance of correctly sequencing policies aiming at repairing multiple problems, from fiscal and current account deficits to the balance sheet health of the national banks, the importance of considering the possible side-effects of policies aiming at one of these objectives for the others, and the appropriate sequencing of measures cannot be overstated for their effectiveness and efficiency.

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Chapter 2
Fall of the Irish house of cards

Tom A. McDonnell and Rory O'Farrell

1. Introduction

This chapter examines labour market trends in Ireland since the beginning of the crisis and explores some of its causes. In particular, the chapter considers whether changes in labour-cost competitiveness can adequately explain employment trends since 2008. Alternative explanations for the fall in employment are also explored, with particular attention given to the unsustainable nature of economic and labour market developments in the period leading up to the 2008 crash and how Ireland's idiosyncratic development path from 2001 onwards, combined with a swing to fiscal austerity, caused the subsequent recession and collapse in demand and employment.

An economy's competitiveness can deteriorate for a number of reasons, for example, in the wake of a domestic asset-price or consumption boom, in which upward pressure is exerted on prices across the economy to an extent that is not replicated in trading partners. Competitiveness will also deteriorate if domestic inflation persistently runs ahead of productivity gains and this is not matched by similar levels of inflation in trading partners, or where a country's exchange rate appreciates against that of major competitors and trading partners. A loss of competitiveness will negatively affect net exports as well as employment in the traded sectors, and if sufficiently large enough will induce a balance of payments imbalance.

Countries within a fixed exchange rate regime such as the euro area are unable directly to reverse a loss of competitiveness and balance of payments imbalance through a nominal devaluation of the currency. For a country in this predicament the loss of competitiveness can be reversed only internally, through relative gains in the efficiency of production, often only achievable gradually and over the medium term, or through direct action to reduce individual domestic prices, such as the cost of capital or

the cost of labour. In practice, direct action on domestic prices to induce so-called 'internal devaluation' usually refers to policies aimed at reducing wages and other labour costs.

In the Irish context, internal devaluation policies were usually framed as competitiveness reforms and the term 'internal devaluation' itself was rarely used by policymakers. Internal devaluation policies are those aimed at reducing unit production costs in the economy. In its broadest sense internal devaluation is not only associated with policies to cut wages and other labour costs, but also policies to increase productivity, reduce social benefits and public spending, as well as 'structural reforms' to increase flexibility and reduce job security in the labour market. However, the emphasis tends to be on lowering wage rates. The idea is that falling labour costs will reduce export prices at constant exchange rates, while falling wages will reduce domestic demand for imports so that the overall effect will be to boost net exports. Internal devaluation is much more difficult to achieve than nominal devaluation because it involves changing thousands of prices and wages across the economy. The process is likely to be expensive, slow, uncertain and politically damaging and to have significant implications for the affected workers and businesses.

However, governments that have ceded control over monetary policy often have very limited control over price levels in the economy. While governments do have the power – subject to political constraints – to cut public sector pay and pensions, they do not directly control private sector labour costs. Thus governments operating within a monetary union have very limited direct influence on unit labour costs in the traded export sectors. Even so, governments can indirectly influence private sector labour costs in a variety of different ways, for example, through the tax system, changes to sectoral wage floors and coordinating centralised bargaining. In these ways, governments can indirectly pursue internal devaluation.

This chapter proceeds as follows. Section 2 outlines the major macroeconomic and labour market trends since the beginning of the crisis. Section 3 examines the policies of internal devaluation as applied in Ireland, while Section 4 assesses prices, earnings and labour-cost trends. An alternative explanation for post-2008 labour market trends is presented in Section 5. Section 6 concludes.

2. Macroeconomic and labour market trends in Ireland

In 2008, Ireland entered what would become its longest and deepest recession in over a century. This followed two decades of almost continuously strong annual growth in output and employment. Ireland's seasonally adjusted rate of unemployment, which consistently remained at or below 5 per cent between 1999 and early 2008, increased sharply beginning in 2008, and eventually reached a peak rate of 15.1 per cent in early 2012. The unemployment rate has since slowly but steadily declined and was 10.4 per cent at the end of 2014. Ireland's headline economic developments from 2007 to 2013 are summarised in Table 1 and compared with the performance of the United Kingdom and the euro area.

Table 1 **Key economic trends, Ireland, 2007–2013**

Employment rates	2007	2008	2009	2010	2011	2012	2013
Total employment (% of working-age population)							
Ireland	69.2	67.6	61.9	59.6	58.9	58.8	60.5
UK	71.5	71.5	69.9	69.4	69.3	69.9	70.5
Euro area	65.5	65.9	64.5	64.1	64.2	63.8	63.5
Unemployment (% of labour force)							
Ireland	4.7	6.4	12.0	13.9	14.7	14.7	13.1
UK	5.3	5.6	7.5	7.8	8.1	7.9	7.6
Euro area	7.5	7.6	9.5	10.1	10.1	11.3	12.0
Gross domestic product (% volume change over previous year)							
Ireland	4.9	-2.6	-6.4	-0.3	2.8	-0.3	0.2
UK	2.6	-0.3	-4.3	1.9	1.6	0.7	1.7
Euro Area	3.0	0.5	-4.5	2.0	1.6	-0.7	-0.5

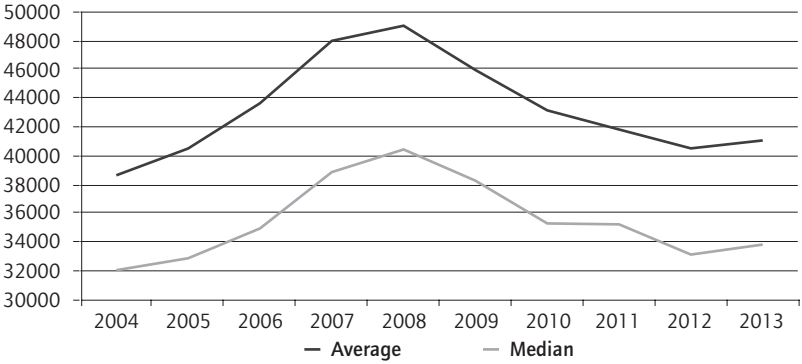
Notes: Labour market data refer to averages for the whole year; Total employment refers to all persons in employment (ILO definition) aged 15–64 as a proportion of all persons aged 15–64; Unemployment is measured in accordance with the ILO definition and refers to persons aged 15–74.
Sources: Eurostat, (2015a, lfsi_emp_a, une_rt-a) and Eurostat, (2015b, nama_10_ma).

2.1 Economic growth

Investment grew strongly every year for more than a decade prior to 2007 – with the exception of 2001 – before stagnating in 2007 as construction activity slowed, and then collapsing in 2008–2010 as the banking system fell into crisis, credit dried up and asset values plummeted. Investment became heavily skewed towards construction activity in the years leading

up to the crash, with construction's contribution to gross value added well above the EU15 average for more than a decade prior to the crash. Personal consumption and government consumption also grew strongly from 1998 to 2008 before falling sharply in 2009 as net wealth declined, confidence evaporated, investment went into reverse and the government began its programme of austerity with the October 2008 budget. Economy-wide disposable household income came under immense pressure from 2008 onwards (Figure 1) due to falling levels of employment (particularly in construction and retail), increases in taxation and reductions in the rates of social transfers. Net exports made a positive contribution to growth each year from 2007 through to 2012. This was partially because imports were falling as a result of declining domestic demand, but it also reflects the strong performance of services exports during a difficult period for the international economy.

Figure 1 **Nominal household disposable income, Ireland, 2004–2013**



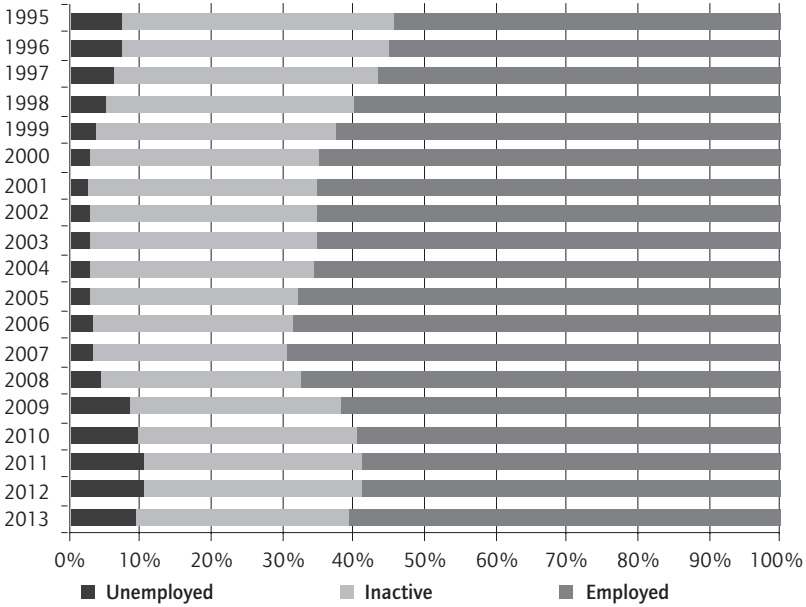
Sources: CSO (2015a, SIA12) and (NERI, 2015).

2.2 Employment

The proportion of working age people categorised as economically inactive gradually declined each year from 1995 through to 2007 (Figure 2). The medium-term trend was partially reversed by the recession, with 30.2 per cent economically inactive in 2013. Employment as a percentage of working age people fell sharply from a peak of 69.2 per cent in 2007 to just 58.8 per cent in 2012. The wholesale and retail sector was the largest employment sector throughout the boom and subsequent recession, notwithstanding the loss of 40,000 jobs in the sector between 2007 and

2012. However, by far the largest decline in employment occurred in the construction sector. Three out of every five construction jobs were lost between 2007 and 2014 and the fall in construction employment accounts for two-thirds of the total net decline in employment over the period (Figure 3).

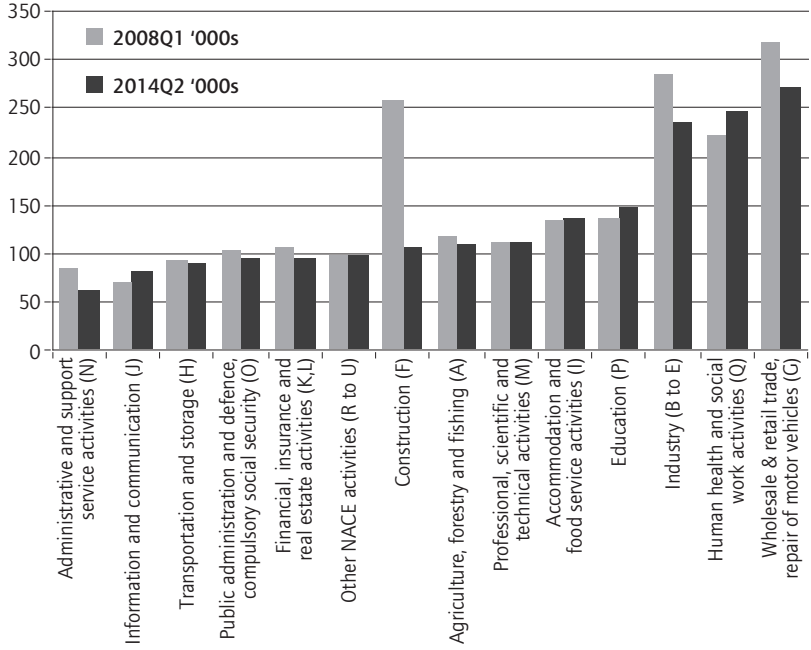
Figure 2 **Employment and unemployment trends, Ireland, 1995–2013**



Note: Share of employed, unemployed and economically inactive in the population of working age (15–64 years of age).
Source: Eurostat (2015a, lfsi_emp_a, une_nb_a, lfsi_act_a).

Total employment fell by over 240,000 between 2007Q3 and 2014Q3. However, the rate of decline across economic sectors has been very uneven (Table 2). Indeed, there were net increases in employment in six of the 14 economic sectors and, if we exclude the performance of the construction, industry and retail sectors, we find there was a net increase in employment of 20,000 over the seven-year period. Employment in information and communications rose by almost 18 per cent (+11,900) during the period, while employment in health and social work activities rose by over 11 per cent (+30,600).

Figure 3 **Seasonally adjusted sectoral employment changes, Ireland, 2008Q1– 2014Q2**



Source: CSO (2015b, QNQ03).

The net job losses in the (non-tradable) construction sector (–158,400) are equivalent to two-thirds of economy-wide net job losses between 2007 and 2014. This lends support to the narrative of a construction boom and bust driving the overall fall in employment. However the next largest job losses by sector (–68,600) came in the largely tradable industry sector and this ostensibly gives support to a narrative based on declining competitiveness. On the other hand, most of the job losses in the industrial sector came at the height of the economic crash, with net employment in industry declining by 39,800 in just one year (2008Q3 to 2009Q3). The suddenness and timing of this decline is more suggestive of shock-induced decline associated with the global downturn than a decline associated with a gradual loss in competitiveness. Indeed, total employment in industry broadly stabilised after 2010.

Total employment bottomed out in 2012 and since that time the sectors with the largest percentage increases in employment have been two low-

Table 2 **Employment shifts by economic sector, Ireland, 2007Q3–2014Q3**

Economic sector	2007Q3	2012Q3	2014Q3	Change 2007 to 2014	Employment 2014Q3 relative to 2007Q3
Declining sectors					
Construction	270,800	100,000	112,400	-158,400	41.5%
Industry	307,400	230,800	238,800	-68,600	77.7%
Admin. and support service	83,600	64,700	65,200	-18,400	78.0%
Wholesale and retail trade	310,900	270,900	275,200	-35,700	88.5%
Public admin. and defence	107,900	99,300	98,100	-9,800	90.9%
Transportation and storage	92,800	90,000	87,500	-5,300	94.3%
Financial, insurance, real estate	106,600	100,900	103,100	-3,500	95.2%
Agriculture, forestry and fishing	112,200	84,800	109,700	-2,500	97.8%
Expanding sectors					
Accommodation and food	139,000	119,300	139,800	+800	100.6%
Professional, scientific and tech.	115,400	101,700	116,900	+1,500	101.3%
Other NACE activities	97,700	100,800	101,600	+3,900	104.0%
Education	133,700	145,900	144,100	+10,400	107.8%
Human health and social work	218,900	243,700	249,500	+30,600	111.3%
Information/communication	67,400	78,300	79,300	+11,900	117.7%
Total in employment	**2,169,600**	**1,832,700**	**1,926,900**	**-242,700**	**88.8%**

Note: Q3 2007 to Q3 2012 broadly equates to the peak to trough period. Total employment fell by 336,900 during this period with over half of the job losses in construction (170,800). More than one out of every seven jobs (15.5 per cent) were lost in the economy as a whole on a net basis, with most of the losses arising close to the start of the crisis. The economy has recovered 94,200 jobs since Q3 2012 equivalent to just 28 per cent of the jobs lost in the preceding five years.
Source: CSO (2015b, QNQ03).

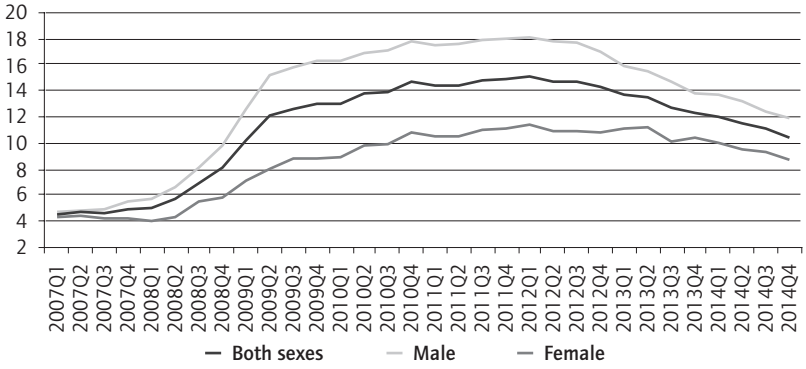
paid ones, namely the highly volatile agriculture, forestry and fishing sector (up 29.4 per cent) and the tradable accommodation and food services sector (up 17.2 per cent), as well as one highly paid sector, namely professional, scientific and technical activities (up 14.9 per cent). The numbers employed in education and public administration continued to decline after 2012 in line with the ongoing programme of fiscal austerity.

2.3 Unemployment

The seasonally adjusted unemployment rate reached its post-crisis peak of 15.1 per cent in February 2012, having been as low as 4.0 per cent as recently as the first quarter of 2008. The large spike in unemployment occurred despite the fact that the labour force declined by 5.1 per cent from 2,277,600 in Q1 2008 to 2,161,500 in Q1 2012 (some of which was due to net outward migration). Net migration turned negative in 2010 following fourteen consecutive years of net inward migration. Net outward migration totalled 143,800 persons over the period 2010 to 2014. By 2014 the annual average unemployment rate had fallen back to 11.3 per cent, although the labour force continued to decline, albeit at a slower pace. This means unemployment is now very close to its long-term (thirty-year) average of 11.0 per cent.

As unemployment rates have increased across Europe the proportion of total unemployed who are long-term unemployed has also increased. The proportion in Ireland is higher than the average for the EU15 and, as of Q2 2014, the long-term unemployed accounted for 58.6 per cent of all unemployed in Ireland (6.8 per cent of the labour force). The high level of long-term unemployed is suggestive of hysteresis effects in the labour force. Such effects are related to an erosion in the stock of human capital. Skills, confidence, tacit knowledge and work habits are eroded as unemployment is prolonged. If this is indeed the case, higher levels of unemployment could become structural within the economy with a permanent effect on potential output.

Figure 4 **Unemployment rates (seasonally adjusted), Ireland, 2007Q1–2014Q3**



Source: CSO (2015b, QNQ37).

3. Internal devaluation strategies

There have been very few instances of significant internal devaluation in advanced economies over the past thirty years (Shambaugh 2012: 181–82). The generally low levels of inflation across the OECD economies have made internal devaluations difficult to achieve in practice. Ireland and Latvia have been cited as examples of successful internal devaluations in the context of the period since the 2007–2008 economic crash. Both countries have been praised by the European Commission for pursuing internal devaluation strategies to reverse perceived macroeconomic imbalances. On the other hand, internal devaluation strategies have been widely criticised by social and economic commentators for the immense social and economic damage attributed to them.

Internal devaluation strategies were proposed by domestic and external commentators from early on in Ireland's economic crisis. The proposals were based on their assertions that a loss of competitiveness explained, or at least contributed to, Ireland's economic crash and dramatic fall in employment. In addition, the parlous state of the public finances arising from the collapse in employment reduced scope for a conventional Keynesian response. From late 2008 onwards the Irish government explicitly adopted the policies of fiscal austerity, defined here as discretionary cuts to public spending and/or discretionary increases in government revenue. The reason used to justify the move to pro-cyclical fiscal austerity was the need to bring the public finances and the cost of borrowing under control.

In this context, and given the negative consequences of fiscal austerity for domestic demand, the Irish government, at least in rhetorical terms, embraced an export-led growth strategy which, they argued, would have to be driven by economy-wide competitiveness improvements. As Ireland does not control its own monetary policy and therefore cannot devalue its currency, it was argued that such competitiveness improvements would have to be driven by internal devaluation.

While it is reasonable to anticipate gains from internal devaluation in the form of higher net exports, it is also reasonable to anticipate that deflating labour costs will reduce aggregate demand through lower household consumption and investment. It is therefore an empirical question, when anticipating short-to-medium-term outcomes for output and employment, whether, in terms of size, the positive *net export effect* from

internal devaluation outweighs the negative *domestic demand effect* from internal devaluation.

There are risks to internal devaluation strategies. For heavily indebted countries there is the danger that a fall in domestic demand will induce or exacerbate a recession, and in so doing generate a debt deflation spiral in which the burden of international debt actually becomes more onerous as a proportion of national income. In addition, deflating labour costs amounts to reducing labour's share of national income and by extension increasing capital's share of national income. As accumulated net wealth stocks (capital) are much more concentrated over the population than income flows from labour we can reasonably anticipate that strategies based on deflating labour costs risk increasing economic inequality and poverty.

3.1 Policy measures

Official policy decisions have contributed to declining unit labour costs in Ireland in two main ways. Most significantly, the public spending cuts introduced to help close the budget deficit included measures to reduce public sector pay rates. The direct impact on Ireland's competitiveness from the public sector pay cuts is likely to be marginal as the pay cuts took place in non-traded sectors of the economy and there is no direct transmission from public sector pay to private sector pay in the traded sectors.

The second main way that policy has sought to reduce unit labour costs has been through changes to Ireland's wage setting mechanisms. The wage setting mechanisms cover some 23 per cent of total private sector employment. Ireland has, since 1946, used a system of independent Joint Labour Committees (JLCs) to establish sectoral wages in certain industries such as catering, contract cleaning, hairdressing, hotel, retail and security, among others. The various JLCs are responsible for regulating terms and conditions of employment and setting minimum rates of pay. The pay, terms and condition are set out in an Employment Regulation Order (ERO) and generally include matters such as breaks, holidays, overtime, sick pay and Sunday premiums. The JLCs have employer and worker representatives and an independent chair appointed by the Enterprise Minister.

A 2011 ruling by the High Court declared the process of making EROs to be unconstitutional. As a result of the ruling, all seventeen EROs in place at the time ceased to have statutory effect and could not be enforced. In effect, the sectoral minimum wages under the EROs were replaced by the lower national minimum wage. Ireland was a programme country in 2011 and the 'troika' of lenders – European Central Bank, European Commission and International Monetary Fund – took an active interest in the legislation that would replace the old 1946 legislation. The troika and the government were both keen to create a wage-setting regime that was conducive to internal devaluation through lower wage rates and more flexible conditions (European Commission 2010). One goal was to prevent distortions of wage conditions across sectors arising from the presence of sectoral minimum wages in addition to the national minimum wage. In addition, the European Commission's programme report of December 2011 claimed that reducing unemployment in Ireland required increasing labour market flexibility.

Additional troika requirements related to wage-setting mechanisms were inserted in the Memoranda of Understanding (MOUs) agreed between Ireland and the troika after the Fine Gael–led government came to power in 2011. These insertions were at least partially driven by domestic policy preferences and included: (i) clauses to allow enterprises to derogate in a downward direction from the terms (to the level of the minimum wage) where the employer can show there is a risk to the sustainability of the enterprise; (ii) requiring that the JLCs be reviewed every five years; (iii) requiring that wage setting take account of wages in other member states; and (iv) severe restrictions on the content of EROs, which are now limited to providing for a minimum hourly rate of remuneration and no more than two higher hourly rates of remuneration based on criteria such as length of service. Other matters that had been included, such as providing a rate for Sunday working, pay in lieu of notice, redundancy, breaks and holidays, are now specifically excluded by law. In addition, fewer sectors are to be covered by the EROs. The overall impact of the troika's influence was to push the wage-setting legislation (Industrial Relations Amendment Act 2012) in a pro-employer and anti-worker direction, although this was, in any event, the government's preferred outcome.

The troika justified the policy stance in the November 2011 MOU on the grounds of 'reducing the possible negative impact on job creation and competitiveness' and facilitating flexibility. In September 2012 the Commission described the new legislation as a reform to increase labour market flexibility. In addition to the changes to wage-setting mechanisms

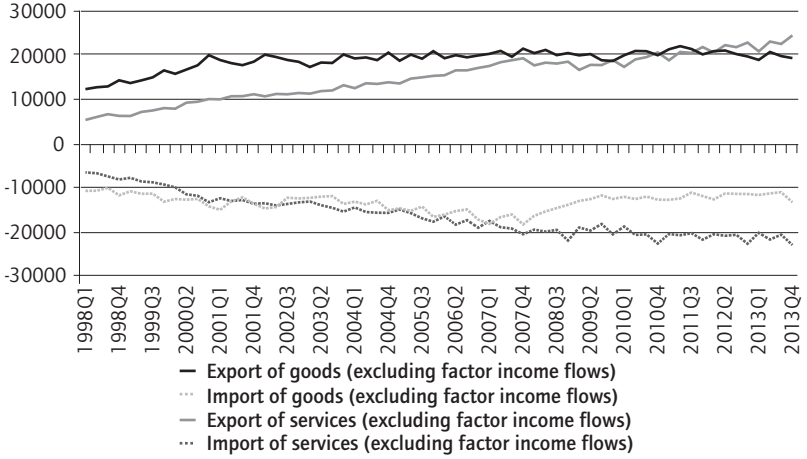
the troika pushed for legislation to enhance competition in professional services, although reforms to legal services were resisted by the Fine Gael–led government. The troika also requested a cut in the national minimum wage in late 2010 and the then government complied by reducing the rate from 8.65 euros to 7.65 euros. The reduction in the rate had, at any rate, already been flagged in the government's 2010 National Recovery Plan (DOF 2010). This measure was subsequently reversed by the new government in early 2011. Finally, various welfare rates were cut (for example, unemployment benefits for the under-25s) with the explicit goals of forcing people into the workforce and reducing entry-level wage rates by increasing the overall supply of labour.

3.2 Trade patterns

Since 2008, Ireland's current account has moved from deficit to surplus, reflecting improved cost competitiveness, allied to reduced consumer demand for imported goods. The current account balance is the trade balance (merchandise and services exports minus merchandise and services imports) less 'current' payments abroad, such as interest payments and the repatriated profits of firms. The current account moved from a deficit of 10 billion euros in 2007 and 2008 to a small surplus in 2010 and a surplus in excess of 10 billion euros by 2013. The only substantial change in trends since the onset of the recession has been the fall in goods imports (Figure 5). Goods exports have remained stable. The fall in goods imports is very much in line with expectations, given the general fall in household disposable income, investment levels and aggregate demand. Service imports and exports have continued to grow along pre-crisis trends and there is no obvious evidence on the services side of a trade impact directly attributable to internal devaluation.

Ireland's share of world trade fell continuously year on year between 2002 and 2006 and again between 2009 and 2012. Specifically, Ireland's share of world trade, which peaked at 1.4 per cent in 2002, had fallen to 1.0 per cent by 2012. Share of merchandise trade fell even further, from 1.4 per cent in 2002 to 0.6 per cent in 2012. The decline suggests a loss of competitiveness in merchandise production. On the other hand, Ireland actually increased its share of the global services market from 1.0 per cent in 2000 to 2.7 per cent in 2012. Ireland's share is broadly unchanged since 2007, which suggests no fundamental improvement or decline in competitiveness in services provision since 2007.

Figure 5 **Quarterly Irish imports and exports in real terms (euro millions)**



Note: Import figures are represented here in negative terms.
Source: CSO (2015c, NQQ24).

4. Prices, earnings and labour costs

One influential narrative suggests that Ireland lost international competitiveness due to a domestic building boom and increasing production costs and, as devaluing the currency was not an available option, it was therefore necessary to cut prices and wages in order to restore lost competitiveness. Since then, wages in the private sector have been largely stable, albeit marginally declining. Even so, Ireland has shown a relatively strong improvement in exports and its current account quickly moved into surplus, despite a difficult international trading situation. This contradicts the devaluation narrative as Ireland improved its net export position rapidly, without a general fall in wages. Falling disposable incomes and reduced demand for imports help explain some of the improvement in net exports. In addition, inflation has also been lower than in the euro area for a number of non-labour categories (for example, utilities, transport, communications and housing) and this has helped to push down costs.

4.1 Prices and earnings

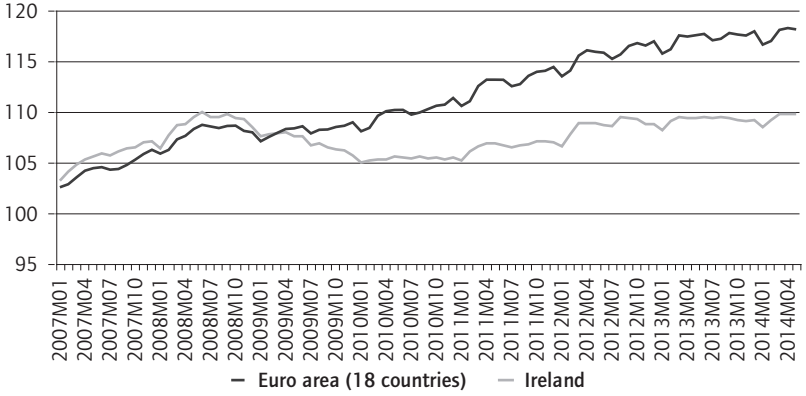
The Central Bank of Ireland (CBI 2015) has developed a Harmonised Competitiveness Indicator (HCI), which it uses to assess Ireland's competitiveness vis-à-vis its trading partners. Ireland's main trading partners are the euro area, the United Kingdom and the United States. So, did Ireland lose competitiveness prior to the crash and then succeed in regaining competitiveness after 2008? The HCI suggests that Ireland's competitiveness improved between 1997 and 2000 before deteriorating between 2002 and 2005, and then again between 2006 and mid-2008. The data shows that Ireland's real HCI improved significantly compared with Ireland's trading partners since the onset of the crisis, with these competitiveness gains coming during the height of the crisis between 2008 and 2012. Cost competitiveness in real terms (producer prices) deteriorated slowly from mid-2012 until mid-2014, with improvements in the period since.

Was there, then, an internal devaluation in Ireland, understood as a policy-driven general fall in wages and prices relative to the economy's main trading partners? While there was a fall in consumer prices, there was only a general fall in wages in the public sector. Figure 6 shows that Ireland had a period (September 2008 to September 2009) of deflation, followed by a period of price stagnation (up to January 2011), followed by moderate price increases. In contrast, euro area inflation was relatively stronger. Prices in Ireland also grew more slowly than in the United Kingdom and the United States. However, price changes in Ireland were driven mainly by market forces rather than by coordinated policy. While there were some policies to reduce VAT in labour intensive sectors linked to tourism, these policies were introduced only from 2011 onwards and were more than offset by an increase in the basic rate of VAT.

Earnings per week fell in absolute terms in both 2010 and 2011, and again in 2013. In 2010 the 1.9 per cent fall in average weekly earnings was somewhat mitigated by a reduction of 1.6 per cent in the rate of inflation (Figure 7). However, in both 2011 and 2013 inflation was positive and so the reduction in nominal earnings was compounded by the changes in prices to generate an even larger fall in real wages (Figure 8). In terms of wages, average hourly earnings actually increased marginally over the entire period, while average weekly wages declined. Nominal average hourly wages increased from 21.53 euros in Q1 2008 to 22.14 euros in Q1 2014, while real average hourly wages increased from 21.53 euros to 22.04 euros over the same period.

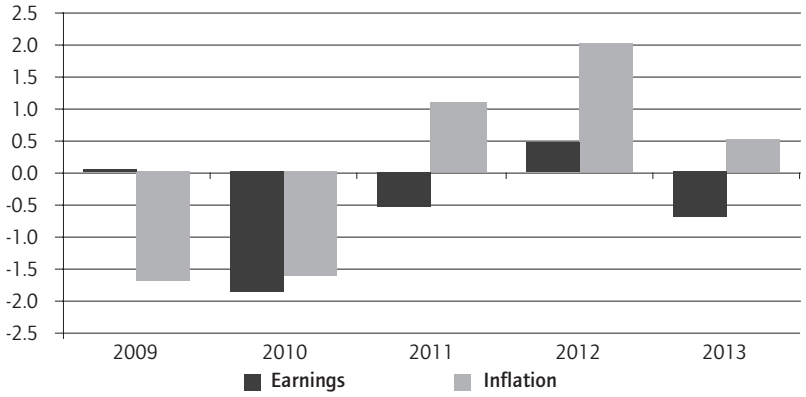
The decline in weekly wages is explained by the reduction in weekly paid hours, from 32.8 hours per week in Q2 2008 to 31.3 hours per week in Q1 2014 (Figure 9). Average weekly hours fell sharply in 2008, with no obvious trend in the meantime. It is the sharp fall in employment between 2008 and 2013 that is the main explanation of the change in total earnings across the economy and the primary reason for the collapse in domestic demand since 2008 (Figure 10).

Figure 6 **Harmonised index of consumer prices in Ireland and the euro area, 2007–2014**



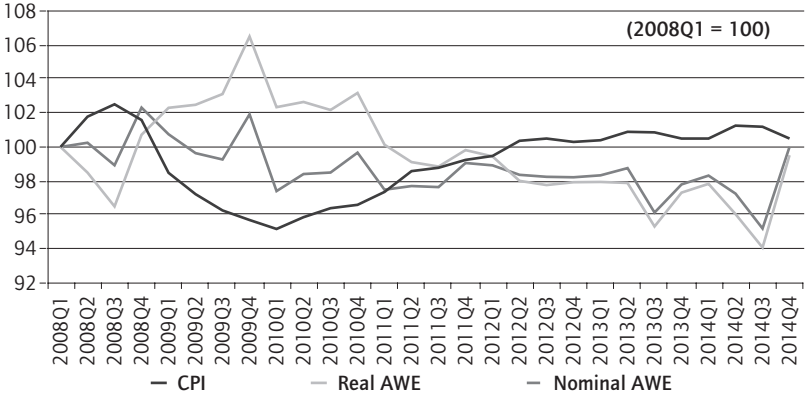
Note: Base year 2005=100.
Source: Eurostat (2015c, prc_hicp).

Figure 7 **Annual trends in earnings and prices (HICP) in Ireland, 2009 to 2013**



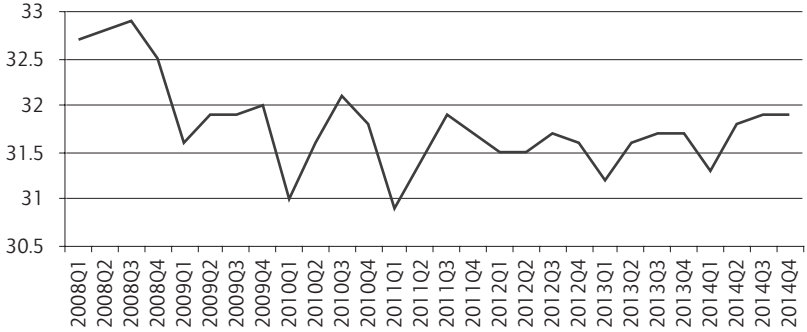
Source: CSO (2015d, CPM05) and CSO (2015e, ELCA2013BL1).

Figure 8 **Average weekly earnings (AWE) and prices (CPI), Ireland, 2008–2014**



Source: CSO (2015d, CPM02) and CSO (2015e, ELCQQ42014TBL1).

Figure 9 **Average weekly paid hours, quarterly data, Ireland, 2008–2014**

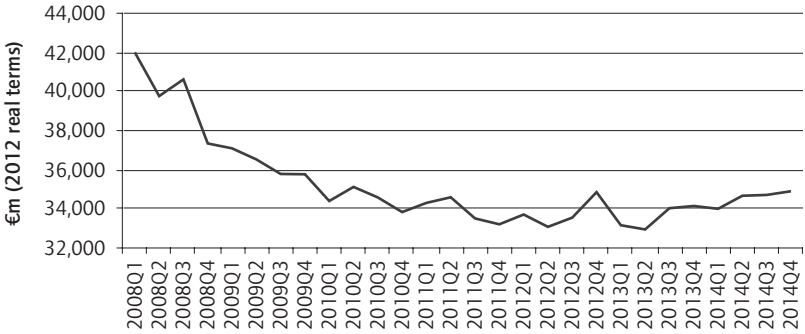


Source: CSO (2015e, ELCQQ42014TBL3).

4.2 Unit labour costs

Growth in labour costs was consistently above that of the euro area for a full decade leading up to 2008 (Eurostat 2015d). Growth in labour costs subsequently fell below the euro area average in 2009 before declining in nominal terms in both 2010 and 2011 (while still growing in the euro area). Irish labour costs increased in 2012, and at a rate marginally faster than that of the euro area. However, growth in labour costs was once again lower than in the euro area in 2013 and in 2014.

Figure 10 **Final domestic demand in constant 2012 prices, Ireland, 2008–2014 (quarterly data; euro millions)**



Source: CSO (2015c, NQQ24),

While the nominal data do appear to suggest that Ireland may have lost wage competitiveness in the decade leading up to 2008 it is actually more instructive to compare annual changes in real unit labour cost. It turns out Ireland did have faster increases in real unit labour costs between 2003 and 2005 and again between 2007 and 2008. Annual changes in real unit labour costs have been lower than in the euro area since 2009, with real unit labour costs declining sharply in 2010 and 2011 and then again, albeit more modestly, in 2012. The much faster growth in real unit labour costs in the euro area since 2009 suggests that Ireland did indeed undergo an internal devaluation vis-à-vis the rest of the euro area in the post-crash period.

However, a 'successful' internal devaluation in Ireland may have been due more to chance than to design. Nominal unit labour costs declined somewhere in the range of 11 per cent to 15 per cent, depending on the method of measurement (O'Farrell 2013). Nominal unit labour costs represents the amount an employer must pay to hire someone to produce one unit of a good, and so account for changes in productivity. It is very likely that changes in the composition of the economy following the end of the construction bubble – that is, the loss of less productive construction and retail jobs – give an exaggerated sense of the improvement in nominal unit labour costs.

Some sectors of the economy are more labour intensive than others, and so have higher nominal unit labour costs. For example, the construction sector is more labour intensive than manufacturing. Even if nominal unit

labour costs in each sector are constant, the *average* for the whole economy can change if jobs are lost in the more labour intensive sectors of the economy. We can treat the total of nominal unit labour costs over the economy as the weighted average of the cost for the individual economic sectors. The weights account for the importance of a particular sector in contributing to nominal unit labour costs for a given year. Using the weights of a given year it is possible to control for changes in the composition of the workforce between 2008 and 2012. The results are shown in Table 3 and are described in greater detail in O'Farrell (2013: 14–15).

Table 3 **Decomposition of nominal unit labour costs, difference relative to peak of 2008, Ireland (%)**

	2000	2004	2008	2012
Total change	–33.9	–18.3	0.0	–16.4
Change in nominal unit labour costs holding sectoral composition constant	–32.5	–19.4	0.0	–0.7
Changing composition, fixed nominal unit labour costs	–4.3	0.9	0.0	–9.7

Notes: The total change in unit labour costs is based on factor cost. The fixed composition uses 2008 sectoral weights.
Source: O'Farrell (2013).

Using the weightings for 2008, nominal unit labour costs only declined by 0.7 per cent between 2008 and 2012. Alternatively, keeping wages constant, but just altering the weights leads to a fall in nominal unit labour costs of 9.7 per cent. Clearly, the change in the sectoral *composition* of employment is the main cause of the improvement in nominal unit labour costs. Qualitatively similar results are gained by using 2012 as the reference year. Interestingly, the same is not true for the period leading up to the 2008 crash. The conclusion is that the decline in nominal unit labour costs in Ireland since 2008 is attributable mainly to compositional shifts in employment (notably the dramatic decline in construction) rather than to declining wages.

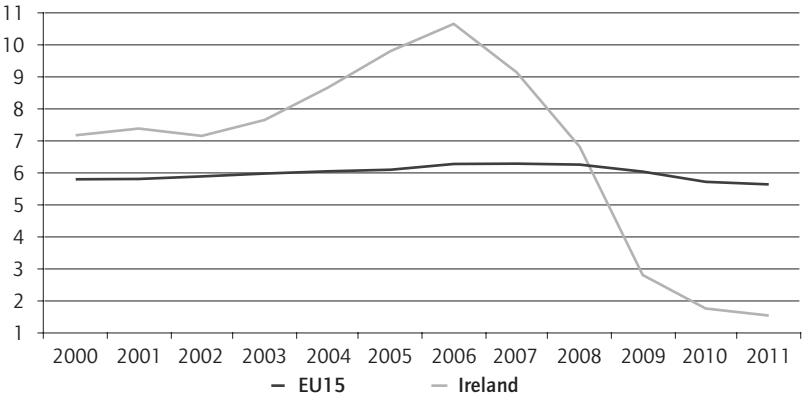
5. Understanding employment trends: an alternative narrative

Overall, there is no compelling evidence that a loss of competitiveness is responsible for Ireland's collapse in employment. A more persuasive argument is that the driving force behind the rise in unemployment was the bursting of a domestic asset-price and construction boom over the period 2008 to 2010. The resulting collapse in private sector investment levels and construction-related employment were inevitable outcomes of the bursting of that bubble. The bubble was itself caused by internal factors, notably weak financial regulation and fiscal policy that encouraged property speculation, as well as external factors, most significantly access to cheap credit from Europe and negative real interest rates within Ireland.

The crash had its origins in an asset-price bubble fuelled by cheap credit. House prices in Ireland quadrupled between 1996 and 2007. Ireland began this period with a relatively small housing stock and initially there were strong fundamentals underlying housing demand as the population was growing and incomes were expanding rapidly in line with productivity and employment gains. At the same time, Economic and Monetary Union and Ireland's membership of the euro area were enabling Irish financial institutions to provide mortgage finance at historically low rates. The response to the increase in housing demand was a construction boom. The stock of dwellings increased from 1.4 million houses in 2000 to 1.9 million in 2008 with annual completions quintupling between 1990 and 2006. The domestic banks became increasingly reliant on international bond borrowings, rising from less than 15 billion euros in 2003 to almost 100 billion euros in 2007 (over half of GDP), with the share of credit becoming increasingly linked to property.

The Irish economy was already at or close to full employment by 2004–2005 and by 2007 the construction sector accounted for an unsustainable 13.3 per cent of all employment. Construction accounted for almost half of total employment growth in the economy between 2000 and 2007. Investment had also become heavily skewed towards construction. The construction sector accounted for almost 11 per cent of gross value added by 2006 and was well above the EU15 average for over a decade prior to the crash (Figure 11).

Figure 11 **Value of construction sector as percentage of gross value added, Ireland, 2000–2011**



Notes: ESA 2010 basis. In nominal terms gross value added in Ireland attributable to construction fell from a peak of 17.2 billion euros in 2006 to 4.2 billion euros in 2009 and to 2.4 billion euros in 2011.
Source: Eurostat (2015b, nama_10_a10) and authors' calculations.

The housing market shuddered to a halt in 2008 as the global economic and banking crisis induced a freeze in interbank lending, which in turn created immense difficulties for the overleveraged Irish banks. In September 2008 the Irish Government legislated for a blanket guarantee of the liabilities of the main Irish retail banks. This was to have profound implications for the public finances and eventually cost the state the equivalent of 40 per cent of GDP in bank bailouts. The domestic context was now a credit freeze, falling employment, deepening recession and collapsing house prices. Average house prices fell by 50 per cent from peak to trough, while real GNP fell by 13.9 per cent between late 2007 and late 2009. Unemployment trebled and the ability of debtors to service loans became increasingly compromised as collateral value fell below loan amounts.

Falling employment and asset prices, rising private sector indebtedness, loss of consumer confidence and weak credit conditions induced a severe balance sheet recession in the Irish economy, with an increase in the savings rate (mainly to support deleveraging) and a sharp decline in personal consumption and private investment. The sudden and sharp fall in domestic demand then generated a second wave of job losses, this time centred primarily on the retail sector.

The years prior to the crisis were characterised by the increasing erosion of the tax base by ever deeper tax cuts and new and more generous tax expenditures, while at the same time the government became increasingly reliant on transaction taxes associated with the construction boom. A yawning fiscal deficit quickly opened in the public finances in 2008 as the effect of the automatic stabilisers took hold (Table 4). Government revenue plummeted along with the private incomes and expenditure it depended upon, while social protection spending increased rapidly in line with much higher unemployment numbers. In addition, tens of billions of euros of public money were being poured into the banking sector. The general government deficit was much larger than in other euro area countries with commensurately less fiscal space for a Keynesian response to the fall in private sector demand.

Table 4 **Ireland's general government balance (percentage of GDP)**

	2006	2007	2008	2009	2010	2011	2012	2013
Overall balance								
Ireland	2.9	0.1	−7.3	−13.8	−30.5	−13.1	−8.2	−7.4
Euro area	−1.3	−0.7	−2.1	−6.4	−6.2	−4.2	−3.7	−3.0
Overall balance (exc. financial sector supports)								
Ireland				−11.3	−10.5	−8.9	−8.2	−7.4

Notes: IMF estimates for the overall balance are for general government and include financial sector supports.
Source: IMF (2014).

Table 5 **Cumulative discretionary fiscal adjustments, Ireland, 2008–2014 (euro billions)**

	Total	2008-2010	2011-2013	2014
Revenue	**10.8**	5.6	0.04.3	0.9
Expenditure of which	**19.2**	9.2	8.4	1.6
Capital expenditure	*5.0*	*1.6*	*3.3*	*0.1*
Current expenditure	*14.2*	*7.6*	*5.1*	*1.5*
Total fiscal contraction	**30.0**	14.7	12.6	2.5

Notes: Figures may not sum due to rounding. For context, Ireland's GDP averaged 174 billion euros over the period 2008 to 2014; adjustments on the expenditure side represent discretionary reductions in spending.
Source: Department of Finance budgetary documentation; Budget 2009 to Budget 2014 inclusive.

At a macro level, economic policy was not fundamentally motivated by competitiveness concerns but by the need to achieve a sustainable fiscal position. Competitiveness concerns were very much secondary. The ensuing period of pro-cyclical fiscal austerity (Table 5) squeezed public spending (current and capital) along with household disposable income and exerted further downward pressure on personal consumption. Public sector employment was reduced creating a third motor of falling employment. One consequence of the government's deflationary fiscal stance was that Ireland's investment/GDP ratio became the lowest in the entire European Union in 2011 and 2012, with both the public and private (household and corporate) sectors deleveraging in tandem.

An economy subjected to this type of shock does not simply bounce back to equilibrium. A negative investment shock on the scale experienced in Ireland will inevitably reduce the economy's capital stock relative to what it might otherwise have been. This will have at least some impact on future potential output. Similarly, permanent damage to the stock of human capital known as 'hysteresis shadows' or 'hysteresis effects' can develop in the labour market during a sustained downturn. Skill and work habits are eroded, while the 'learning-by-doing' so crucial to the development of human capital and economic growth becomes stalled. This has implications for the economy's productive capacity – and for the economy's long-run equilibrium.

In other words, demand-side effects can have permanent impacts on the economy and on living standards. Actual unemployment may become structural if it is allowed to persist for long periods of time. The result is a fall in potential output and higher equilibrium levels of unemployment. That may prove to be the long-term price of Ireland's credit bubble, fiscal austerity and internal devaluation.

6. Conclusions

Overall, there is no clear causal link between an internal devaluation in Ireland and the substantial movements in employment after 2008. Irish wages are now relatively lower than in other EU countries (compared with 2008). However, this is not due to a coordinated policy, but to a weak Irish economy and a collapsed construction sector, and in large part to the policies of austerity which served to increase unemployment. The decline in nominal unit labour costs is almost entirely due to a shift away

from the labour intensive construction sector. Experiences with internal devaluation in the euro area have not been happy ones. Countries deemed to have undergone 'successful' internal devaluations have also undergone severe recessions.

External (nominal) devaluations based on a depreciation of the currency are likely to be much more effective than internal devaluations because they lower export costs without inducing a decline in domestic demand. Unfortunately, this policy choice is not available to governments in the euro area as they do not control their own currency, although the option of deliberate currency devaluation was always possible and should have been strongly considered by European policymakers and by the monetary authority.

The alternative way to restore lost competitiveness in the euro area periphery, while simultaneously supporting demand, would have been for the more competitive 'core' to engage in a process of internal revaluation (increasing domestic wages and prices). Competitiveness issues are ultimately all about relative differences – and competitiveness imbalances are as much about excessive current account surpluses as they are about current account deficits. These differences can be closed through internal devaluation in the less competitive economies or, alternatively, through internal revaluation in the more competitive core economies. Provided inflation is higher in the more competitive economies the competitiveness gap will eventually close. Internal revaluation could be induced within the surplus countries through policies to increase wages, prices and domestic demand.

This is not to say that countries should not act prudently to ensure they remain competitive, or that there should be no European and domestic rules and coordination to ensure this is the case. However, once imbalances have already developed, it is unwise, at least during times of economic weakness, to place the entirety of the adjustment burden on the debtor country. Although internal revaluation is undoubtedly a politically difficult option to sell to the creditor countries it nevertheless represents a much better alternative within a currency union to a strategy focused purely on internal devaluation in the debtor countries. Indeed, the official preference for internal devaluation over internal revaluation has created a deflationary bias for the euro area and for the world economy.

The Irish experience offers little succour for proponents of internal devaluation. A policy rethink is required at the European level.

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Chapter 3
Internal devaluation and unemployment: the case of Portugal

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Introduction

In 2000, Portugal had among the lowest unemployment rates in the European Union, at 3.9 per cent (as against 7.8 per cent on average in the EU15). Eight years later, unemployment had almost doubled, rising to almost 11 per cent in 2010 due to the impact of the global financial crisis.

Several factors have contributed to this strong increase in unemployment in Portugal over the past decade. In the macroeconomic adjustment programme that Portugal signed with the EU and the International Monetary Fund (IMF) in 2011,[1] two main reasons were put forward to explain it. First, unit labour costs increased more in Portugal than in its main trading partners since the introduction of the euro, which caused a major loss of competitiveness and thus hampered job creation. Second, the rigidity and inefficiency of the labour market; according to the Organisation for Economic Cooperation and Development (OECD), Portugal has the highest level of employment protection among its members. Although the assessment contained in the Memorandum of Understanding (MoU) also mentioned other factors, such as the low education level of the population and other macroeconomic features – such as a loss in market share for labour-intensive goods due to the strengthening of Asian and eastern European competition – the priority of the macroeconomic adjustment programme was to address the two first factors mentioned above.

To this end, a strategy of internal devaluation was implemented to reduce unit labour costs and restore competitiveness, together with a reform of

1. See: Directorate-General for Economic and Financial Affairs (2011) The Economic Adjustment Programme for Portugal, Occasional papers 79, June 2011, European Commission.

the labour market to increase its flexibility. These measures, together with other structural reforms – of product markets, competition rules and the judicial system, among others – were expected to boost growth, create jobs and improve competitiveness. However, at the end of the implementation of the MoU, the assessment of the macroeconomic adjustment programme in terms of unemployment was disappointing. The unemployment rate reached 17.5 per cent in the first quarter of 2013, although while the macroeconomic adjustment programme signed in 2011 forecasted a peak of unemployment at 12.4 per cent in 2012. Portugal today has the fourth highest unemployment rate in the EU, after Greece, Spain, Cyprus and Croatia.

Despite this negative trend, some will argue that the adjustment of the Portuguese economy is on track and starting to bear fruit: rising unemployment was reversed in mid-2013 and in 2013 Portugal recorded its first current account surplus for twenty years. Others will claim that these positive trends do not stand up to scrutiny and persist in their negative assessment of the impact of the MoU on the Portuguese economy.

The aim of this chapter is to shed light on (i) the determinants of the unemployment trend in Portugal, (ii) the impact of the internal devaluation strategy pursued since the adoption of the MoU in 2011 and (iii) the priorities that should be on the top of the national reform agenda to foster job creation in Portugal. The chapter is structured in three sections. Section 1 presents a critical overview of the situation in the Portuguese labour market included in the Macroeconomic Adjustment Programme for Portugal, as well as a summary of the main reforms. Section 2 assesses the internal devaluation strategy implemented between 2011 and 2014, which aimed at restoring competitiveness and fostering job creation. Finally, Section 3 calls into question the need for an internal devaluation strategy in Portugal and presents some priorities for a new strategy to ensure more and better jobs in Portugal.

1. The Portuguese labour market: main problems and recent reforms

In the context of the negative developments in the euro area bond markets which started at the end of 2009 and taking into account the political crisis in Portugal in spring 2011, in 2011 the country was unable to refinance in the financial markets and had to request a financial

assistance programme from the EU and the IMF. In exchange for a loan of 78 billion euros, the country committed itself to a macroeconomic adjustment programme, which foresaw comprehensive action on three fronts: fiscal consolidation, safeguarding the financial sector and structural reforms to boost potential growth, create jobs and improve competitiveness. The adjustment programme was expected to act as a catalyst for structural reforms and one of the main reform objectives was to improve labour market performance. Indeed, the labour market was considered highly inefficient due to the strictness of employment protection, the generosity of unemployment benefits, the rigidity of working-time arrangements and the centralised wage bargaining system that was unable to keep wage growth in line with productivity developments. This inefficient labour market was identified by the IMF and the European Commission (EC) reports as one of the main causes of the country's major loss of competitiveness during the past decade, which has undermined Portugal's economic performance since the introduction of the single currency.

We start this chapter with a short presentation of the Portuguese economic outlook before the global financial crisis of 2008, as well as of the main problems of the Portuguese labour market identified in the macroeconomic adjustment programme (Section 1.1). We then provide a short overview of both the reform of the labour market that has been implemented since 2011 (Section 1.2) and the measures adopted to achieve an immediate reduction in unit labour costs, while at the same time cutting public spending (Section 1.3).

1.1 The Portuguese economy and its labour market before the euro area debt crisis

The deterioration in unit labour costs after 2000 is identified in the Macroeconomic Adjustment Programme as one of the causes of the major loss of competitiveness of the Portuguese economy and of the increase in the unemployment rate during the past decade. However, to understand the problems of the Portuguese labour market before the euro area debt crisis, it is necessary to analyze the evolution of the Portuguese economy in the 1990s and 2000s.

Economic outlook

After Portugal's integration in the European Union/European Economic Community (EU/EEC), we can identify two economic cycles of the Portuguese economy (Banco de Portugal 2009): a more intensive growth and catching-up period (1986–1997) and a less intensive growth and divergence period (1998–2008). During the first period, Portuguese GDP grew 4.1 per cent annually in real terms (almost twice as high as the euro area average), mainly pushed by private consumption (5.3 per cent), investment (6.5 per cent) and exports (7.6 per cent), with all GDP components on higher growth rates than those registered in the euro area (Table 1). By contrast, in the period 1998–2008 the annual growth rates of all GDP components and GDP itself were lower (less than half) than in the previous period. Real GDP grew below the euro area average, meaning that a trend change in the Portuguese convergence process occurred in 1986–1997.[2]

Table 1 **GDP indicators 1986–2008 (average annual rate of change, %)**

	Portugal		Euro area	
	1986-1997	1998-2008	1986-1997	1998-2008
GDP growth rate	4.1	1.8	2.4	2.1
Private consumption	5.3	2.4	2.4	1.9
Public consumption	4.5	2.3	1.9	1.9
GFCF - Gross Fixed Capital Formation (investment)	6.5	1.0	2.9	3.1
Exports	7.6	4.4	5.9	5.7
Imports	12.2	4.6	6.1	5.8
Potential product growth rate	3.7	1.1	2.4	1.9
Employment	0.7	0.4	0.4	0.9
Capital stock	1.2	0.9	0.8	0.8
Total Factor Productivity	1.8	0.3	1.2	0.3

Source: Adapted from Almeida *et al*. (2009). Data from Bank of Portugal and AMECO. Variables in real terms.

The reasons for the decline in growth are both internal – structural problems of the Portuguese economy – and external, such as financial and monetary integration (late 1990s) and changes in world trade (in the 2000s), leading to a loss of external competitiveness.

2. This convergence can also be seen in terms of GDP per capita: between 1985 and 2000 Portugal's GDP per capita relative to the EU15 increased from 59.6 per cent to 74.5 per cent (EU15=100, 1995 PPS). Source: AMECO.

The impact of the financial and monetary integration in the 1990s eliminated the exchange rate risk premium, due to the escudo's integration in the exchange rate mechanism of the European monetary system from 1992 and the subsequent maintenance of a relatively stable exchange rate until the accession of Portugal to the euro in 1999. This process facilitated the access of financial institutions to international funding markets (due to the lower costs of capital), resulting in a sharp drop in interest rates (real interest rates declined from 6 per cent in 1992 to roughly 0 per cent in 2001; see Blanchard 2006: 4), which fed a strong increase in domestic demand – increased demand for intermediate goods and final consumption – which raise the level of Portugal's external indebtedness (Antão *et al.* 2009). In Table 1 we can see that consumption growth (both private and public) was higher in Portugal than in the euro area as a whole (in both periods) and that imports grew 12.2 per cent annually in the period 1986–1997 (6.1 per cent in the euro area). In both periods, import growth rates were higher than export rates, which put pressure on the current account balance, namely in goods (Tables 1 and 2).

Another external shock that the Portuguese economy suffered involved changes in global competition, related to China's accession to the World Trade Organization (WTO) in 2001 and EU enlargement to central and eastern European countries in 2004. These two factors exposed the Portuguese economy to more competitive countries, with lower production costs and wages – both China and central and eastern Europe – and with higher skills (mainly central and eastern Europe; Reis *et al.* 2013), which affected some Portuguese labour-intensive sectors, such as textiles and footwear.

The exposure to more competitive – based in low-cost production – economies highlighted the structural weaknesses of the Portuguese economy, namely the low level of formal education compared with other advanced economies, profile specialisation and exports based on low and medium-low technology intensity sectors, with most jobs concentrated in these areas (see Section 3.1 for further details). These factors led to low levels of R&D and a low innovative capacity in enterprises, reflected in low productivity (Almeida *et al.* 2009). In fact, in the period 1998–2008 the potential product growth rate was three times lower than in the period 1986–1997, mainly due to a six times lower growth rate of total factor productivity (Table 1), but also to a lower contribution from employment and capital stock. Thus, Portugal found it difficult to compete with economies with lower wages and higher levels of qualifications, at the

same time as it became more difficult to compete with more advanced economies, given the low skill level of the Portuguese population and business innovation.

Table 2 **Main economic indicators, Portugal, 1995–2010**

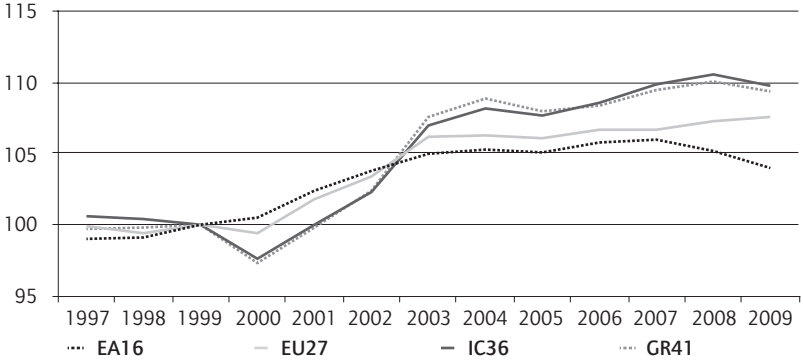
	1996	1997	1998	1999	2000
Real GDP growth rate	3.7	4.4	5.1	4.1	3.9
Inflation rate	–	1.9	2.2	2.2	2.8
Unemployment rate	7.2	6.7	4.9	4.4	3.9
Labour productivity growth (annual % change)	1.9	1.7	1.6	2.9	1.3
Gross household savings (% of GDP)	8.4	7.8	8.6	8.1	7.4
Public debt (% of GDP)	59.5	55.2	51.8	51.0	50.3
Public deficit (% of GDP)	-4.7	-3.7	-4.4	-3.0	-3.2
Current account balance total (% of GDP)	-4.5	-6.2	-7.5	-8.9	-10.8
Goods (% of GDP)	-8.7	-9.8	-11.3	-12.3	-13.3
Services (% of GDP)	1.7	1.8	2.2	2.1	2.5
Capital balance (% of GDP)	2.0	2.5	2.1	2.1	1.4
	2002	2004	2006	2008	2010
Real GDP growth rate	0.8	1.6	1.4	0	1.9
Inflation rate	3.7	2.5	3	2.7	1.4
Unemployment rate	5.0	6.6	7.6	7.6	10.8
Labour productivity growth (annual % change)	0.7	1.3	1.4	0.2	3.7
Gross household savings (% of GDP)	7.7	7.1	5.6	4.8	6.6
Public debt (% of GDP)	56.2	62.0	69.2	71.7	96.2
Public deficit (% of GDP)	-3.3	-6.2	-4.3	-3.8	-11.2
Current account balance total (% of GDP)	-8.5	-8.3	-10.7	-12.1	-10.1
Goods (% of GDP)	-11.0	-11.2	-11.6	-13.4	-10.7
Services (% of GDP)	2.8	3.1	3.4	4.0	3.6
Capital balance (% of GDP)	1.9	1.7	1.2	1.2	1.4

Source: Eurostat and PORDATA/INE.

We must also mention the importance of the increase in inflation from the end of the 1990s (Table 2), rising to around 3 per cent (2.8, 3.7 and 3 per cent in 2000, 2002 and 2006, respectively) in the 2000s and thus causing

a deterioration in the real effective exchange rate (REER) compared with other economic areas. In Figure 1 we can see the deterioration of Portuguese competitiveness in the 2000s (an increase in the REER index) relative to the euro area countries, the EU27, a group of 36 industrialised countries and a broad group of 41 other countries. This trend, coupled with low levels of productivity in the 2000s (Table 1), contributed to the decline of Portuguese exports and an increase in the annual deficit of the current account balance, from –4.5 per cent in 1996 to –12.1 per cent in 2008 (Table 2). The Portuguese case is the opposite of that recorded in other countries – such as Ireland – where real exchange rate appreciation (caused by an increase in inflation) coexisted with high levels of productivity, resulting in high exports (OECD 2007. See Figure 1).

Figure 1 **Real effective exchange rate, based on harmonised index of consumer prices (HICP) / consumer price index (CPI), Portugal vs economic areas (annual data, index 1999=100)**



Sources: European Commission (2010b).
Notes: IC36 = 36 industrialised countries; GR41 = broad group of 41 other countries

In short, internal and external factors led to an increase in domestic demand (private and public consumption) that was higher than real GDP growth, a higher growth rate of imports relative to exports (Table 1) and a decline of export growth rates, related to the appreciation of the REER (Figure 1) and to low levels of productivity (which influenced the evolution of nominal unit labour costs). All this contributed to unbalanced growth associated with a falling savings rate and to deficits in the current balance and the capital balance (Table 2). The changes in global trade led to a reorientation of foreign direct investment from Portugal to central and eastern Europe and to China (due to their lower

production costs and higher skills), making Portugal less and less attractive for productive investment (in the period 1998–2008, the Gross Fixed Capital Formation growth rate was six times less than in the period 1986–1997, see Table 1), attracting primarily financial capital, in the form of credit, due to the growth in domestic demand (Reis *et al.* 2013). This led to a deterioration of the capital balance in the 2000s (Table 2). Another factor was pressure on the labour market due to the growing competition from China and central and eastern Europe in the sectors more exposed to international competition – low-skilled jobs sectors – which helped to push up the unemployment rate in the 2000s (Table 2).

Evolution of the Portuguese labour market

The two economic cycles of the Portuguese economy had an impact on the labour market and on the unemployment trend. The high GDP growth in the 1990s led to a steady decrease in unemployment, from 7.2 per cent in 1996 to 3.9 per cent in 2000 (Table 2). In 2000, Portugal recorded one of the lowest unemployment rates in the EU, at 3.9 per cent against 7.9 per cent in Germany and an average 7.8 per cent in the EU15. With low unemployment rates until the early 2000s (despite the rigidity of the Portuguese labour market, according to international reports), nominal wage growth was substantially higher than labour productivity growth, leading to a growth in nominal unit labour costs. Due to the downward rigidity of nominal wages and a high inflation rate, in the period 2000–2009 wage growth continued to outstrip productivity growth even though the country recorded low GDP growth and unemployment started to rise, from 3.9 per cent in 2000 to 7.6 per cent in 2008 (Table 2). As a consequence, in the period 2000–2009 there was a significant increase in nominal unit labour costs in Portugal, as in the EU18. Figure 2 illustrates that, even though nominal unit labour costs increased in Portugal in the 2000s, they remained below or at the same level as average nominal unit labour costs in the euro area (EA18). Nominal unit labour costs increased at a higher rate than in the EU18 until 2005 and at a similar rate between 2005 and 2009.

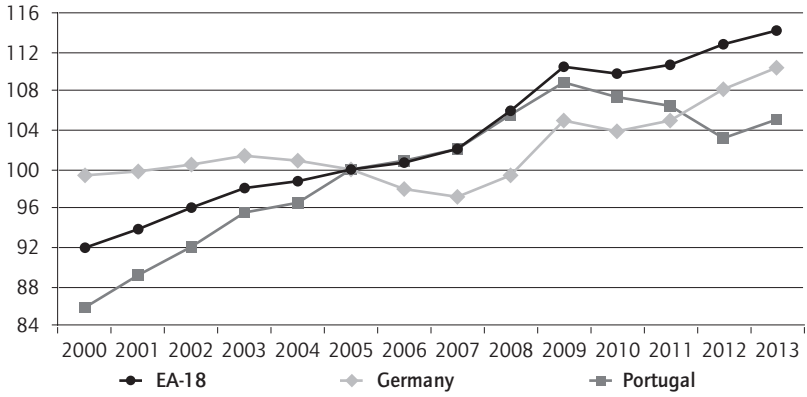
In a context of exposure to more competitive economies, based in lower production costs and higher labour skills – for example, China and central and eastern Europe – the increase in unit labour costs helped to render the Portuguese economy less competitive in goods manufacturing and in services, as well as to reduce enterprise competitiveness and increase unemployment. This loss of competitiveness – increase in unit labour costs – was common to countries such as Spain, Greece, Italy, France and

Ireland in the period 2000–2009, and in Germany from 2007 (Figure 2). Nevertheless, as outlined by Caldas and de Almeida (2014), if we consider a longer period in the analysis of unit labour costs growth in Portugal (not only the past decade), we can conclude that between 1996 and 2007 wages (in real terms) grew by 11 per cent and productivity by 15 per cent; in other words, wages in Portugal developed below productivity during the period in question. Also Ordóñez *et al*. (2014: 1) conclude that the development of real unit labour costs in Portugal is not the main cause of its loss of competitiveness, from a long-term perspective:

> Portugal, Ireland, Italy, Greece and Spain succeeded in reducing their real unit labour costs by more than their northern partners. With the exception of Ireland, however, technological progress was weak; it was through capital intensification that periphery economies gained efficiency and competitiveness ... We conclude by outlining technology as the key convergence factor.

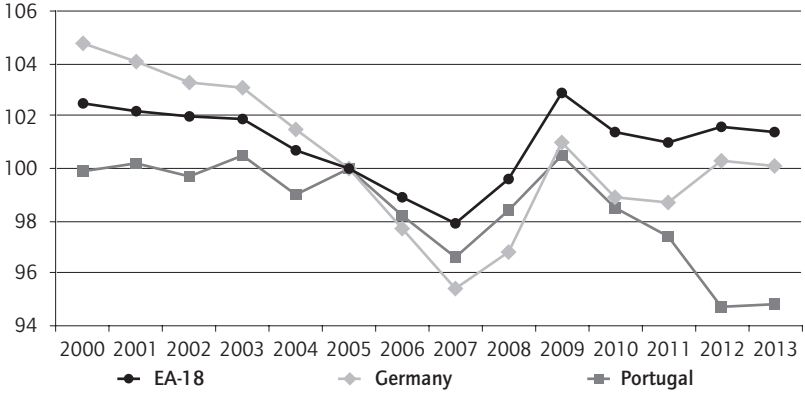
Finally, Figure 2 also illustrates that the adjustment of nominal unit labour costs in Portugal started in 2010, before the macroeconomic adjustment programme was entered into with the Troika. Indeed, after 2009, nominal unit labour costs has decreased in Portugal, contrary to what happened in the EU18. This is also reflected in the real unit labour costs trend – that is, discounting the prices effect – which underwent no significant change until 2005 (although it decreased in the EU18), but decreased after 2009 at a higher rate that in the EA18.

Figure 2a **Nominal unit labour costs (2005=100)**



Source: Eurostat.

Figure 2b **Real unit labour costs (2005=100)**



Source: Eurostat.

A number of other causes further explain the increase in unemployment in Portugal in the past decade, such as labour market segmentation and the high level of employment protection for permanent contracts. Indeed, despite the 2004 employment protection reform, which introduced more flexibility in hiring and firing procedures in Portugal, Centeno and Novo (2010) remark that this reform increased flexibility in fixed-term contracts, leaving the regulation of permanent jobs unchanged – in other words, it created a two-tier labour market. However, the high level of employment protection, which was held responsible for fostering labour market segmentation and reducing labour turnover, was not the only argument used by international institutions – such as the OECD and the European Commission – to characterise the Portuguese labour market as inefficient and its regulation as unfavourable to job creation. The unemployment benefit scheme that was more generous than the EU average[3] was perceived as contributing to the long duration of unemployment and it was claimed that rigid working-time arrangements constituted a burden on firms.

Nevertheless, rising unemployment in Portugal over the past decade – particularly in the late 2000s – is also related to global economic trends that have affected the Portuguese economy and labour market, as well as to the impact of new external shocks in the late 2000s. These global trends

3. According to a recent DG ECFIN study, the Portuguese unemployment benefit scheme is relatively generous in terms of unemployment insurance replacement rates and duration compared with the EU average. See Stovicek and Turrini (2012).

include changes in labour market regulation purportedly in response to increased competition in global markets and the supposed transition from a 'Fordist' model to a so-called 'knowledge-based society' (Oliveira and Carvalho 2010). These changes require a highly educated workforce and have gone hand in hand with a deterioration in conditions of employment, with job insecurity and 'atypical' employment coming to the fore.

Concerning the external shocks, the Portuguese economy was hit hard by the global financial crisis, which caused a recession in Portugal and the EU in 2009, as well as economic stagnation in the following years, raising unemployment in both Portugal and the EU. From 2008 to 2010, the Portuguese labour market was unable to respond to the adverse cyclical conditions caused by the global financial crisis. If we analyze the characteristics of unemployment in Portugal in the period 2008–2010, we observe that its rise particularly affected older workers (over 45 years of age), low or low-skilled workers and young workers with intermediate qualifications. According to the INE (National Statistic Office), between the third quarter of 2008 and the third quarter of 2010 the number of unemployed increased by 40 per cent among workers who had up to nine years of schooling and by more than 85 per cent among those with 12 years of schooling. By contrast, the proportion of unemployed people with higher education remained stable during this period (see Table 3). Unemployment during recessions tends to affect unskilled workers more, given their low preparedness to meet emerging labour market challenges and increasing job complexity, as production shifts to goods and services with higher technological intensity and added value (Oliveira and Carvalho 2010). Thus, Portuguese competitiveness, which in recent decades has subject to a development model based on low-skilled and low-wage jobs (Mateus 2013), has had difficulty adapting the increased competitiveness of global economies and this was translated into an increase in unemployment from 2000 (and in particular from 2008).

Table 3 **Unemployed by age and level of qualification, Portugal, 2008-2010 ('000)**

	Total population	Population > 45 years of age	9 years of education	12 years of education	Higher degree
2008Q3	423	116.7	293.8	63	66.2
2010Q3	597.4	185.5	411.9	119.2	66.2
% change	+41.23%	+58.96%	+40.20%	+89%	0%

Source: Authors' elaboration, based on INE data.

1.2 Labour market reform, 2011–2014

In the memorandum of understanding signed with the European Commission and the IMF, the Portuguese government committed itself to reforming the labour market with a view to tackling rising unemployment by increasing labour flexibility and cutting wages in an attempt to restore competitiveness and promote job creation. In line with the adjustment programme, significant changes were thus introduced in five key areas: unemployment benefits, employment protection legislation, working time arrangements, collective bargaining and active labour market policies. These changes were negotiated at the national level with the social partners, and led to the conclusion – in January 2012 – of a tripartite agreement aimed at growth, competitiveness and employment.[4] The main characteristics of this reform are presented below.

Employment protection

One of the main priorities of labour market reform in Portugal was to reduce the high level of employment protection (see Figure 3) and to close the gap in protection legislation between open-ended and temporary contracts with a view to tackling labour market segmentation, fostering job creation and easing the transition of workers between jobs. This was achieved by means of two main initiatives.

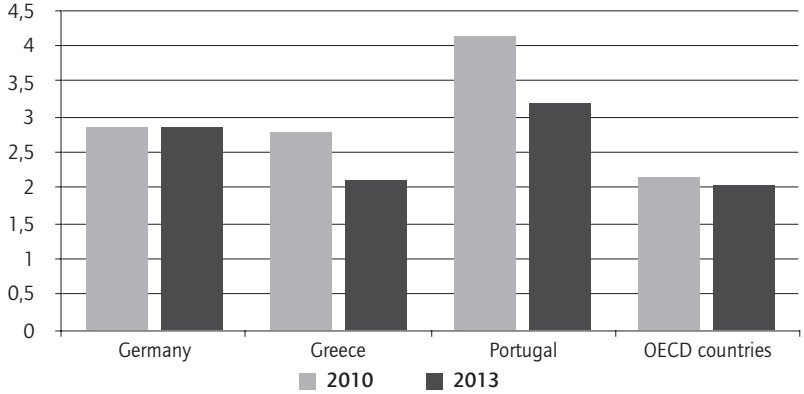
First, substantial cuts in severance payments (from more than 30 days of work per year before the reform to 12 days currently) and alignment of the level of severance payments for all types of contract, whether open-ended or temporary. The maximum amount of compensation is limited to 12 months and the three month minimum payment in place before the reform was eliminated.

Second, the introduction of new and less 'restrictive' definitions for legal dismissal of employees on open-ended contracts. Before the reform, individual dismissals were possible only if a given work position became obsolete due to the introduction of new technology and jobs eliminated in this way followed a pre-defined order of seniority. In order to increase flexibility within companies and to increase the use of open-ended contracts, the new Labour Code foresees the possibility of individual dismissal based on 'unsuitability' even without the introduction of new

4. A revised Labour Code was adopted in June 2012: Law No. 23/25 June 2012.

technology and eliminates the tenure rule based on seniority in case of job elimination. In addition, the government is currently considering a reduction in compensation for unfair dismissals, purportedly to strike a balance between limiting incentives to challenge fair dismissals in court and adequately penalising unfair dismissals.

Figure 3 **Strictness of employment protection, individual and collective dismissals (regular contracts)**



Source: Authors' elaboration, based on OECD.Stat, table 'Strictness of employment protection – individual dismissals (regular contracts)', http://stats.oecd.org/Index.aspx?DataSetCode=EPL_R

Unemployment benefits

Purportedly to discourage people from remaining unemployed, the unemployment benefit system was reformed to cut both the maximum duration of unemployment benefits (from 38 to 26 months) and the maximum monthly amount of benefit (with a graduated fall after six months of unemployment). On the other hand, two measures were adopted to increase the coverage of unemployment benefit: the contribution period for eligibility was reduced (from 15 to 12 months) and the system was extended to include a clearly-defined category of self-employed (in particular, workers that obtain more than 80 per cent of their annual income from a single entity). Finally, a temporary increase (10 per cent) in unemployment benefit was put in place in the case of jobless households in which both members of a couple are not working and have children.

Working time arrangements

Several initiatives were adopted with a view to reducing wage costs, boosting productivity and increasing flexibility for companies. The minimum additional pay for overtime work has been cut in half and the 25 per cent compensatory time off per hour of overtime has been eliminated. Working time was also made more flexible by means of so-called 'time banks' for individual workers or groups of workers: the company can directly negotiate with the worker on up to 150 hours a year that are not paid as overtime.[5] The government also implemented an increase in working time of up to seven days per year, cutting paid annual leave entitlement from 25 to 22 days and scrapping four national public holidays.

Collective bargaining

In addition to these measures targeting working time flexibility, several initiatives were adopted to promote wage flexibility. The government launched a reform of the wage setting mechanism with a view to facilitating the decentralisation of wage bargaining. The main measures adopted were (i) the end of almost automatic extension of collective agreements to non-signatory firms in the sector; (ii) the reduction of the firm-level threshold for unions to delegate to firms' works councils the conclusion of collective agreements; and (iii) the introduction of the possibility for sectoral collective agreements to include conditions under which firm-level agreements can deviate from sector-level agreements. These initiatives are expected to promote wage adjustments in line with productivity at the firm level, reducing the scope for large firms to unduly burden the competitive position of other firms in the sector.

Active labour market policies

During the first year of the programme's implementation, the emphasis was put on reducing employment protection and increasing flexibility. However, since 2012, the government has launched several initiatives to promote better transition from school to work (such as reform of the education system with the development of vocational education) and to ease the transition of workers between jobs through active labour market policies aimed at improving workers' employability (in particular, young people and the disadvantaged). In this context, several new programmes and initiatives, supported by EU funds, were introduced, such as a new

5. There were already 'time banks' prior to the reform but they could be activated only through collective bargaining.

hiring incentives programme (*Estímulo 2012*), a targeted training initiative (*Vida Ativa*), an initiative allowing for the partial accumulation of unemployment benefits and wages and programmes for tackling youth unemployment (*Impulso Jovem* and a youth guarantee scheme) (see Table 4). In addition, a plan was launched to revamp the role and functioning of Public Employment Services (PES), which includes measures aimed at improving job counselling/job search assistance and activation/sanction systems.

1.3 Reducing unit labour costs ... while cutting public spending

Although reforming the wage setting mechanism was considered important to control the development of unit labour costs, the government also adopted measures aimed at immediately reducing unit labour costs. First of all, there was no increase in the Portuguese minimum wage between 2011 and September 2014 (it is the lowest among the EU15 countries and, according to Eurostat data, stood at 80 per cent of the EU28 average in 2014, as against 83 per cent in 2009). In addition, a set of initiatives was adopted aimed at reducing both unit labour costs in the public sector (and by spillover in the private sector) and public spending. All wages in the government sector were frozen in nominal terms from 2012 to 2014 and promotions were restricted. In 2011, there was a 5 per cent average cut in public sector wages (except for lower wages). In 2012, the so-called thirteenth and fourteenth month wage payments for workers with monthly wages of 1,100 euros or more were suspended. However, as the Constitutional Court ruled against this suspension, in 2013 the two bonus had to be reinstated; to compensate this reinstatement, a new progressive increase in public sector wage cuts was instituted (which replaces the wage cut already in place since 2011). Additionally, in order to increase public revenue, a general surcharge of 4 per cent of taxable income and a 2.5 per cent solidarity tax for the highest tax bracket were adopted.

Unit labour costs in the public sector were reduced, not only through wage cuts but also through an increase in working time. In addition to the increase in working time of up to seven days per year already mentioned, working hours in the public sector were raised from 35 to 40 hours per week (alignment with the private sector).

Finally, with regard to public employment, the size of the public administration was reduced by more than 8 per cent between the end of 2011 and

Table 4 **New programmes to ease the transition from joblessness to work, Portugal**

Estimulo 2012 A hiring incentives programme	***Vida Ativa*** A targeted training initiative	Partial accumulation of unemployment benefits and wages	***Impulso Jovem***	A youth guarantee scheme
This programme provides a wage subsidy for firms that hire and train unemployed people registered at PES centres for 6 months or more up to a maximum amount of 420 euros per month. The measure subsidises 50 per cent of the wage of the employee up to a ceiling equal to the social support index during the 6 months. Firms benefiting from the scheme must provide training and offer a contract of at least six months.	This initiative delivers high-employability training modules on a part-time basis, to allow the unemployed to keep actively searching for a job. The streamlined placement procedure ensures that all newly-registered unemployed attend a training module no more than 45 days after registration at a job centre.	This initiative aims at bringing into employment those that have been registered at PES centres for at least 6 months. It allows the accumulation of up to 50% of unemployment benefit, for up to 12 months, when accepting a job offer that pays gross wages below unemployment benefit.	This programme was established specifically to help unemployed young people – one of the groups most affected by the crisis – and includes: (i) internships, which provide on-the-job training to increase employability; (ii) other programmes, which include an incentive for employers through reimbursement of employers' social security contributions for younger (18–30 years old) unemployed workers and programmes aimed at promoting entrepreneurship; and (iii) SME financing activities.	The youth guarantee aims at ensuring that young people under 30 get a good-quality, concrete offer (job, apprenticeship, traineeship or continued education) within 4 months of leaving formal education or becoming unemployed.

Source: Authors' elaboration.

the end of 2013 and the targeted reductions of management positions and administrative units in the central administration were 27 per cent and 40 per cent, respectively.

2. Assessing internal devaluation in Portugal

The rationale underlying the macroeconomic adjustment programme is that Portugal has suffered a major loss of competitiveness over the past decade, purportedly due to the higher increase in unit labour costs there than in its euro area partners. This trend is also taken to explain the steady deterioration of its current account balance since the mid-1990s (from a balanced situation in 1995 to a deficit above 12 per cent in 2008).

In order to restore national competitiveness, and taking into account that adjustment of the nominal exchange rate is not an option for the euro area member states, the macroeconomic adjustment programme rested on an internal devaluation strategy focusing on the downward adjustment of unit labour costs and/or prices. This internal devaluation was expected not only to improve national competitiveness but also, together with structural reforms, to boost potential growth and to foster job creation.

Almost four years after the adoption of the macroeconomic adjustment programme, we can make a preliminary assessment of the strategy, in terms of both its successes and failures in boosting potential growth, restoring national competitiveness (Section 2.1) and fostering job creation (Section 2.2.).

2.1 Was the strategy successful in improving competitiveness and boosting potential growth?

One way of analysing competitiveness is to explore the evolution of the trade balance; in other words, the performance of exports and imports (and the current account balance), as well as GDP and productivity growth. Based on analysis of the development of the Portuguese current account balance since 2011, we might, at first glance, assume that the internal devaluation process was successful in improving national competitiveness. Indeed, in 2013, Portugal recorded its first current account surplus in twenty years and its exports reached 40 per cent of GDP, against around 32 per cent prior to the crisis (see Figure 4).

However, a deeper analysis is necessary to understand the dynamics behind this improvement of the current account balance.

Figure 4 illustrates the positive trend of the Portuguese current account balance since 2011. It is due mainly to the trend in the trade balance, with a reduction of the deficit of the balance of goods (from –19.2 billion euros in 2010 to –8.7 billion euros in 2014) and an increase in the surplus of the balance of services, mainly tourism (from 6.4 billion euros in 2010 to 10.6 billion euros in 2014), and to the positive trend in the current transfers balance (EU funds and emigrants' transfers). Nevertheless, in order to get a clear picture of the impact of internal devaluation policies on the external competitiveness of the Portuguese economy, we need to analyse the growth rate of exports and imports during this period.

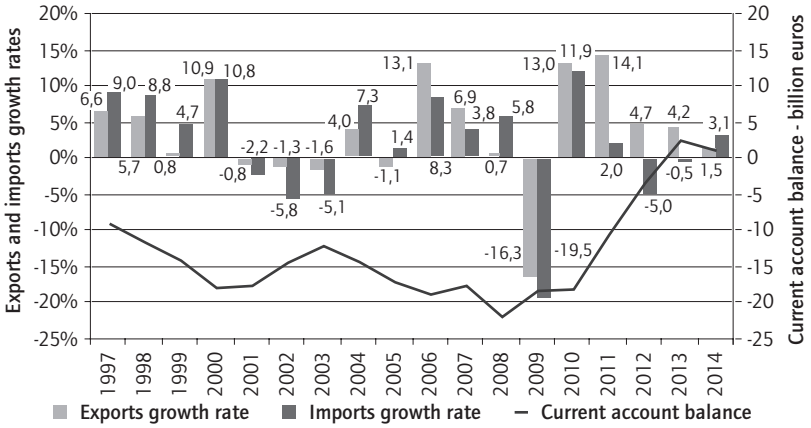
In 2012 and 2013, Portugal registered a small increase in its exports (4.7 and 4.2 per cent, respectively). However, Figure 4 confirms that this positive export trend is not new. Furthermore, the export growth rates recorded in 2012/2013 are below the levels observed before the macro-economic adjustment programme period and in 2014 the export growth rate decreased by almost three times relative to 2013, to 1.5 per cent. Indeed, with the exception of 2008 and 2009 (during which the Portuguese economy was strongly impacted by the global financial crisis), Portuguese exports recorded a higher annual average change than in the years 2012–2013: 13.1 per cent in 2006, 6.9 per cent in 2007, 13 per cent in 2010 and 14.1 per cent in 2011[6] (in all these years, the export growth rate was higher than the import growth rate). We can thus conclude that the positive trend of Portuguese exports after 2011 is not due to internal devaluation as it had been going on since 2006, at least.

Analysing Figure 4 we notice a new trend in imports from 2011: in 2012 and 2013 there was negative import growth (–5 per cent and –0.5 per cent, respectively). This import contraction in recent years is due mainly to the strong decrease in internal demand: the gross available income of households fell by 3.7 per cent in 2011, 1.9 per cent in 2012 and 0.3 per cent in 2013, while wages decreased by 4 per cent in 2011 and 6.9 per cent in 2012, remaining stable in 2013.[7]

6. We consider that the good performance of Portuguese exports in 2011 is not linked to the MoU. The programme started in mid-2011 and we can reasonably assume that it did not have an immediate impact, as the measures took some time to be implemented.

7. Data from INE (National Statistic Office) and PORDATA (www.pordata.pt).

Figure 4 **Exports and imports of goods and services (% change) and current account balance (billion euros), 1997–2014 (all variables in constant prices, base = 2011)**



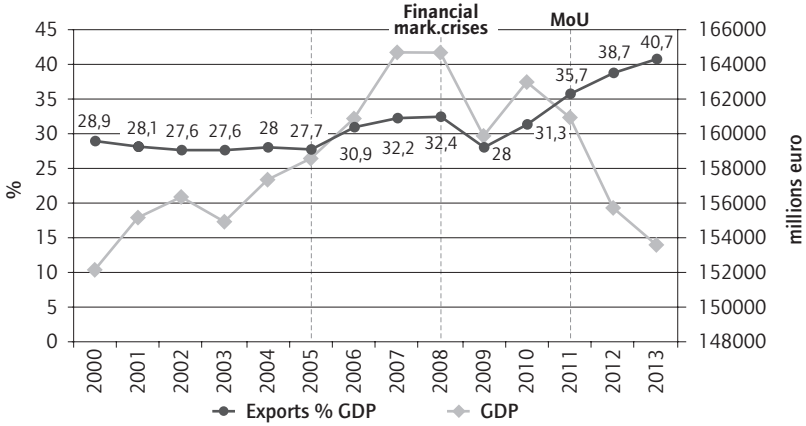
Source: Authors' elaboration, based on data from PORDATA and INE (National Statistic Office).

From this analysis we can conclude that the internal devaluation process had a huge impact on the decrease in household income, with a negative impact on domestic demand and imports, but little impact on the external competitiveness of Portuguese economy, since exports growth rates are below the levels observed before the macroeconomic adjustment programme.

In addition, if we analyse the share of exports in Portuguese GDP prior to the global financial crisis of 2008, we notice a substantial increase in the exports-to-GDP ratio (from 27.6 per cent of GDP in 2002 to 32.4 per cent in 2008). In 2009, the financial crisis had a negative impact on Portuguese exports, as pointed out above, but the positive trend of the increasing weight of exports in Portuguese GDP was pursued with even greater intensity after 2009, reaching 38.7 per cent of GDP in 2012 and 40.7 per cent in 2013. There is, however, one main difference between the dynamic of the exports-to-GDP ratio recorded before and after the global financial crisis. If until 2008 the increase of the weight of exports in national GDP was due to both an increase in the export growth rate (Figure 4) and GDP growth (Figure 5), in the MoU period the increase in the export/GDP ratio was little influenced by the growth rate of exports (lower after 2011 than in the pre-crisis period, as seen above), but influenced mainly by the huge decrease in GDP during the MoU period,

due to austerity policy. After an increase of almost 2 per cent in 2010, Portuguese GDP fell by –1.3 per cent in 2011, –3.2 per cent in 2012 and –1.4 per cent in 2013, contributing to a rapid increase in the share of exports in GDP.[8]

Figure 5 **Exports as a percentage of GDP and GDP in millions of euro (constant prices, base=2006)**



Source: Authors' elaboration, based on data from EUROSTAT/PORDATA/INE (National Institute of Statistics).

These conclusions are underlined by some experts on competitiveness, such as Professor Francisco Madelino,[9] who says that 'Wage devaluation had an impact close to zero on competitiveness ... if the external balance recorded some positive developments, it is the result of the reduction of consumption – and its consequences on imports – more than the boosting of exports' (interview with the authors).

Additionally, even though a short-term negative impact of austerity policies and internal devaluation on national growth was expected when the MoU was adopted, the GDP contraction ended up being more substantial than forecast. Indeed, the MoU signed in 2011 anticipated a cumulative contraction of GDP of 2.8 per cent during the period in question; in the end, the contraction was more than twice as high (more

8. See European Commission (2014b).
9. Professor at ISCTE-IUL (University Institute of Lisbon). Former President of the Employment and Training Institute (IEFP). Expert in Economics and Competitiveness.

than 6 per cent, in total). GDP per capita fell by 3.7 per cent (from 16,686 to 16,067 euros), despite the decrease of 1.1 per cent in Portugal's total population (10,542 million in 2011 to 10,427 million in 2013). We have to go back to 1999 to find a lower level of GDP per capita (15,718.8 euros).[10] One could argue that the short-term negative impact will be compensated by a medium-term improvement of national potential growth. However, growth prospects are not encouraging, as Portugal is expected to register growth rates in 2015 and 2016 very close to the euro area average, while Greece and Ireland are expected to grow twice such as fast as the euro area average in the next two years (see Table 5).

Table 5 **GDP growth rate 2005-2013, projections for 2014–2016**

	2005	2006	2007	2008	2009	2010
Euro Area	1.7	3.3	3.0	0.4	-4.5	1.9
Portugal	0.8	1.4	2.4	0	-2.9	1.9
Greece	2.3	5.5	3.5	-0.2	-3.1	-4.9
Ireland	6.1	5.5	5.0	-2.2	-6.4	-1.1
	2011	2012	2013	2014	2015	2016
Euro Area	1.6	-0.7	-0.4	0.8	1.1	1.7
Portugal	-1.3	-3.2	-1.4	0.8	1.3	1.5
Greece	-7.1	-7.0	-3.9	0.8	2.3	3.3
Ireland	2.2	0.2	-0.3	4.3	3.3	3.2

Source: Eurostat for 2005–2013; OECD Economic Outlook (November 2014) for the years 2014, 2015 and 2016.

Finally, it was also expected in the context of the implementation of the macroeconomic adjustment programme that unit labour costs would be further reduced (in addition to the impact on unit labour costs of lowering nominal wages) through an increase in labour productivity. As we saw in Section 1, devaluation policies involved not only cuts in wages, but also cuts in work benefits, such as the elimination of vacation days and national holidays or an increase in weekly working hours. However, the available data do not illustrate a positive effect of these measures on labour productivity; the opposite effect seems to have taken place in Portugal, translated into a decrease in hourly labour productivity in the period 2011–2013 (Table 6).

10. Source: PORDATA and INE/Banco de Portugal.

Table 6 **Labour productivity per hour of work (PPS, EU28=100)**

	EU28	Germany	Greece	Ireland	Italy	Portugal
2000	100	124.5	75.9	114.1*	117	62.9
2005	100	127.2	76.8	120.7	103.3	63.1
2010	100	125.4	76.1*	126.2*	103.8	65.8
2013	100	126.6	74.8	122.6*	101.9	65.3

Source: PORDATA (based on Eurostat / INE – National Statistic Office) - * Provisional value.

If we consider labour productivity per hour of work, we can see a divergence between Portugal and the EU28 if we compare the situation in 2010 – before the macroeconomic adjustment programme – and in 2013 (Table 6). In 2010, labour productivity per hour of work represented 65.8 per cent of the level of the EU28, while in 2013 it represented 65.3 per cent. This divergence in productivity is similar in other countries with macroeconomic adjustment programmes, such as Ireland and Greece, and in countries implementing austerity programmes, such as Italy. This means that there was no positive impact of austerity measures on labour productivity growth in Portugal.

2.2 Was the strategy successful in fostering job creation?

Even though the primary aims of the MoU were to achieve fiscal adjustment and strengthen national competitiveness, its objectives also included fostering job creation in order to reverse the increasing unemployment recorded during the past decade.

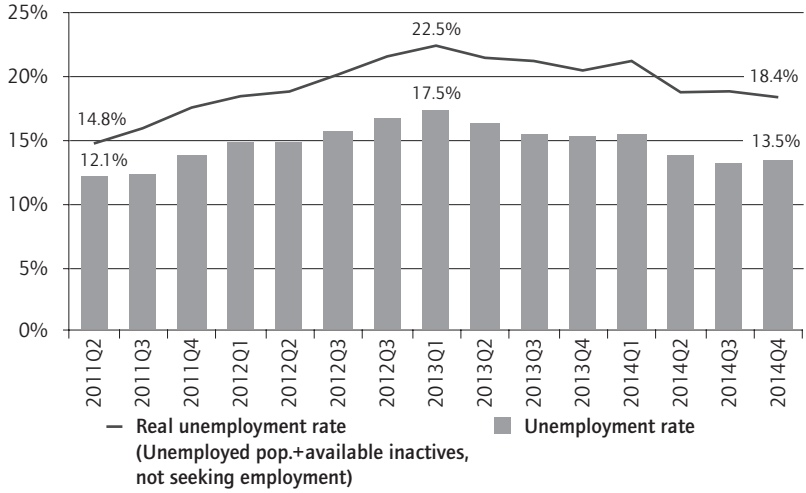
The impact of the adjustment programme on unemployment was underestimated at the time the programme was adopted. Indeed, in the Macroeconomic Adjustment Programme of May 2011, it was foreseen that unemployment would peak at 12.9 per cent in 2012 and would then start decreasing. However, the picture ended up worse than expected, with the unemployment rate reaching 17.5 per cent in the first quarter of 2013.

This negative employment trend is one of the consequences of the higher than expected contraction of GDP between 2011 and 2013 (6.1 per cent against 2.8 per cent forecasted in the adjustment programme). The sharp drop in GDP is, in turn, due to a far stronger contraction in domestic demand than was predicted (–13.1 per cent against –10.5 per cent) and

difficult access to credit on the part of SMEs, despite the ECB's massive injection of liquidity in the euro area. In addition to these domestic factors, the poor national economic performance of the MoU period is also explained by the fear of euro area fragmentation, which prompted a capital drain and held investors back. All these factors contributed to the deterioration of the Portuguese labour market during the implementation of the Macroeconomic Adjustment Programme.

Figure 6 shows, however, that since the second quarter of 2013, the unemployment trend has reversed and there has been a steady decrease in the official unemployment rate (from 17.5 per cent in the first quarter of 2013 to 13.1 per cent in the third quarter of 2014), with an exception for the last quarter 2014 (with an increase to 13.5 per cent). Nevertheless, before focusing on the improvement in the unemployment rate in the past 18 months, we need to review the changes in the Portuguese labour market since 2011.

Figure 6 **Unemployment rate (official and real; %)**



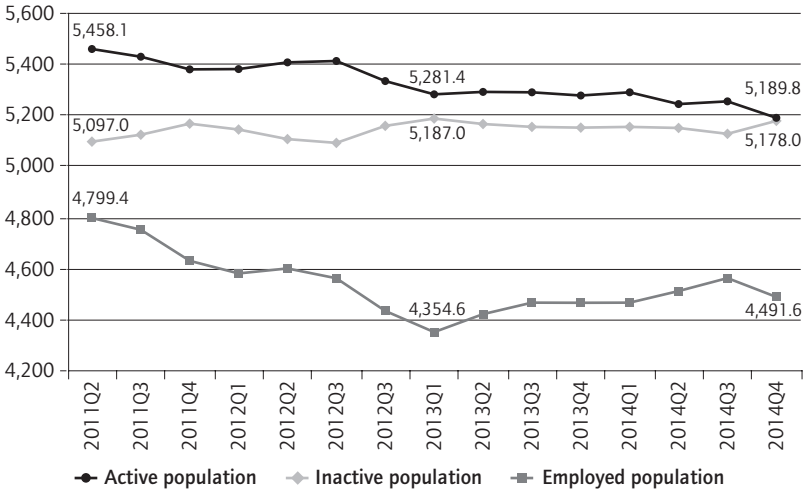
Source: Authors' elaboration, based on data from INE, Inquérito ao Emprego (National Statistic Office).

From the signing of the MoU in May 2011 until the last quarter of 2014, there was a profound change in the Portuguese labour market, with a reduction of the Portuguese workforce and of the number of employed people, an increase in the number of unemployed people, an increase in the number of people who left the labour market (especially people who

had stopped looking for jobs and emigrants), as well as a reduction in the wage level (in both the public and the private sector).

Figure 7 illustrates the reduction in the total Portuguese workforce since the second quarter of 2011, with a decrease in the active population of 268,300 people (–4.92 per cent). This is partly due to the decrease in the Portuguese population during that period (a net reduction of about 187,000 people, corresponding to 1.77 per cent of the population), as well as to an increase in the inactive population of over 80,000 people (1.59 per cent).

Figure 7 **Active, inactive and employed population ('000)**



Source: Authors' elaboration, based on data from INE, Inquérito ao Emprego (National Statistic Office, Labour Survey).

The reduction of the Portuguese active population was accompanied by a decrease in the number of employed people. Between the the second quarter of 2011 and the fourth quarter of 2014 there was a net destruction of 307,800 jobs (a change of –6.41 per cent). In other words, in just over three years the labour market lost nearly a third of a million jobs, despite the improvement in job creation since the first quarter of 2013 (Figure 7). This rapid and massive net reduction in the number of those in employment increased the pressure on national public finances through its negative impact on government revenues (fewer jobs means lower tax revenues) and the increased pressure on social security sustainability

(reduced contributions to the social security system and additional spending on unemployment benefits).

Between the the second quarter of 2011 and the fourth quarter of 2014 there was a reduction in the number of those employed in all forms of work: the number of self-employed workers was reduced by 19 per cent (–191,400 jobs), while the number of employees (dependent workers) decreased by 2.9 per cent (–109,900 jobs). Concerning type of contract, the decrease in full-time contracts was 6.1 per cent (–253,500), while the decrease in part-time contracts was about 8.6 per cent (–54,400 jobs) (Figure 8).

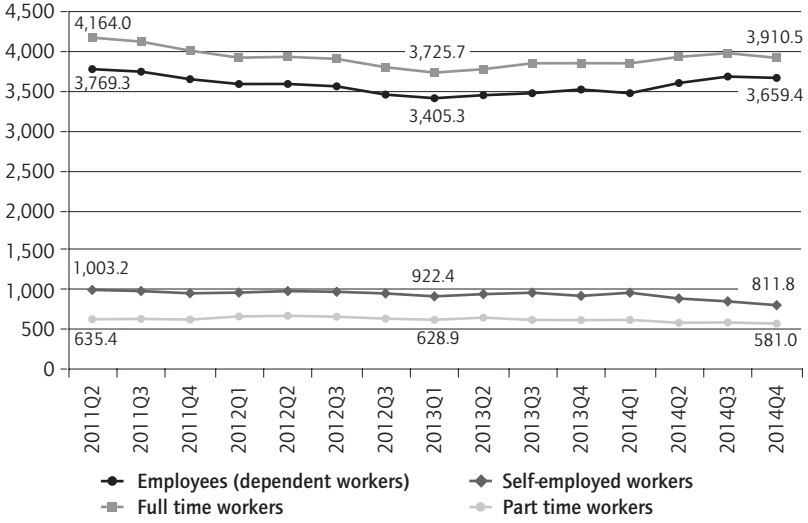
The number of unemployed increased significantly between the second quarter of 2011 and the first quarter of 2013, reaching a record 926,800 people (against 658,700 in the second quarter of 2011), but declining since then (with 228,500 fewer unemployed between the first quarter of 2013 and the fourth quarter of 2014). However, despite this declining trend, the global analysis between the second quarter of 2011 and the fourth quarter of 2014 indicates that there was an increase in the number of unemployed of 39,600 people in the period. If we take into account the time that people spend in unemployment, we observed an increase in the number of long-term unemployed, which represented 55 per cent of total unemployment in the second quarter of 2011 against 65 per cent in the fourth quarter of 2014, an increase of 87,100 people in that period (Figure 9). According to Gloria Rebelo,[11]

> many companies, seeking to reduce labour costs, chose to finish job contracts with older workers (linked to higher salary base) and replace them by hiring younger workers with lower wages. However, this type of decision generates a strong wage compression, triggering a disturbing rise in unemployment – particularly long-term unemployment. (Interview with the authors)

Additionally, we have witnessed a large increase in the past three years in the number of 'available inactive people', that is, people who are available to work but who have given up looking for a job; in other words, 'demotivated' people who are not registered in the official unemployment statistics. If in the second quarter of 2011 such people

11. Professor at Universidade Lusófona de Humanidades e Tecnologias and expert in labour market and training policies.

Figure 8 **Employed population, by type of contract ('000)**

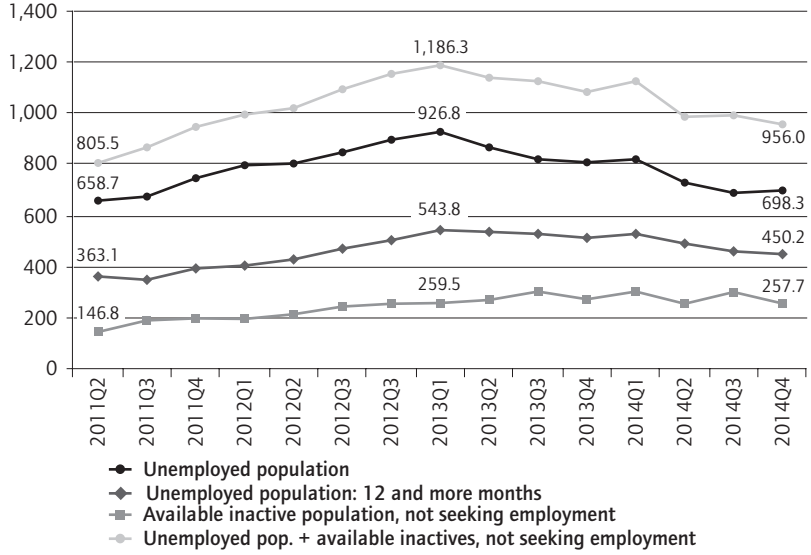


Source: Authors' elaboration, based on data from INE, Inquérito ao Emprego (National Statistic Office, Labour Survey).

represented about 22.3 per cent of total unemployment (146,800 people), in the fourth quarter of 2014 they represented 36.9 per cent (257,700 people). This means that the total number of people in Portugal without a job – but available to work – is almost 1 million (Figure 9). This has an impact on the unemployment rate, which was officially 13.5 per cent in the fourth quarter of 2014 (11.6 per cent higher than in the second quarter of 2011), but stands at 18.4 per cent if we count 'demotivated' people, representing a 24.3 per cent higher rate than in the second quarter of 2011 (Figure 6).

If there has been an improvement in the Portuguese labour market since the second quarter of 2013 (which is illustrated by the decrease in the official unemployment rate from 17.5 per cent to 13.1 per cent as well as the increase of about 4.8 per cent of the employed population), this trend is hard to explain taking into account the performance of the Portuguese economy in the past two years. Indeed, an economic recession of 1.4 per cent in 2013 and expected GDP growth of 0.8 per cent in 2014 are hardly compatible with a decrease of about 25 per cent in unemployment. In this context, Subir Lall, of the IMF, stated in an interview for a Portuguese newspaper in November 2014: 'I think nobody understood how the

Figure 9 **Unemployed and available inactive population ('000)**



Source: Authors' elaboration, based on data from INE, Inquérito ao Emprego (National Statistic Office).

unemployment rate is dropping'.[12] The growth in the available inactive population – 'demotivated workers' – in the past three years and a half is certainly part of the explanation.

There are, however, two other important trends that contribute substantially to the reduction in the number of unemployed people in Portugal. On one hand, we cannot neglect the impact of emigration on the improvement of the Portuguese labour market. As already pointed out, the Portuguese population has decreased by 1.64 per cent and the active population by 3.74 per cent since the second quarter of 2011, reflecting the high increase in emigration between 2011 and 2013, when about 150,000 long-term emigrants left the country (Table 7). The number of annual long-term emigrants from Portugal increased by more than 200 per cent between 2009 and 2013. This trend naturally alleviates part of the pressure on the Portuguese labour force. The challenge for the years to come, however, is to establish the conditions that would persuade these emigrants to come back to work in their home country and reverse the youth/brain drain that, according to some economists, has taken

12. See the interview with Subir Lall in the *Jornal de Negócios* on 10 November 2014.

place in Portugal in recent years. We need to point out, however, that emigration has not hit Portugal as heavily as it has hit Ireland and Greece. Indeed, Greece recorded three times more long-term emigrants in 2012 than Portugal (even though the total population of the two countries is about 10 million people).

Table 7 **Long-term emigration from Portugal, Greece and Ireland, 2009–2013**

	2009	2010	2011	2012	2013
Portugal	16,899	23,760	43,998	51,958	53,786
Greece	–	119,985	125,984	154,435	–
Ireland	69,672	78,099	87,053	89,436	–

Source: Authors' elaboration, based on data from Eurostat and PORDATA for Portugal in 2013.

On the other hand, we need to pay some attention to the trend in public employment and the impact of active labour market policies. When we analyse the trend in public employment in Portugal in the past five years, we notice that public employment has suffered substantially, although the trend was reversed in the first quarter 2013, since when the public administration has been creating new jobs. In the second quarter of 2013 there were 286,900 public employees (as against 348,700 in the second quarter of 2008) and in one year there was an increase in public employment of about 9 per cent (313,000 in the second quarter of 2014). This trend is similar to the one in general employment, as outlined above. Between the second quarter of 2013 and the second quarter of 2014, about 90,000 jobs were created in Portugal, including about 26,100 new jobs created by the public administration (Table 8). We thus need to acknowledge the importance of public employment in job creation in Portugal in the past 18 months. Additionally, a study by the Portuguese Central Bank puts in evidence the importance of active labour market policies in job recovery in Portugal. The study concludes that job creation in the private sector increased by about 2.5 per cent between the third quarter of 2013 and the third quarter of 2014; more than one-third of this increase (0.9 percentage points) concerns professional training promoted by the public employment agency.[13]

Finally, we need to pay some attention to the relative change in employment by sector between 2011 and 2014. At the end of 2014, manufacturing and wholesale/retail trade employed most people, at 16.4

13. Banco de Portugal (2014), pp. 26–28.

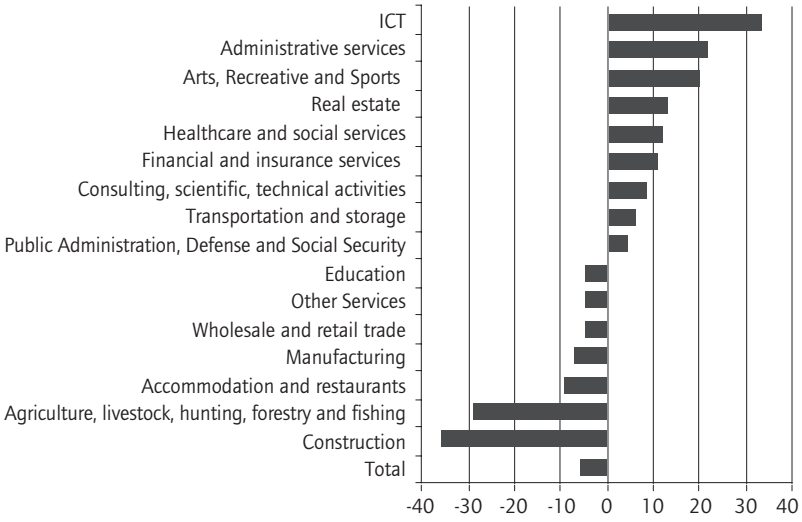
Table 8 **Employees in the public administration, defence and social security, 2008Q2–2014Q2 ('000)**

	2008Q2	2011Q2	2012Q2	2013Q2	2014Q2
Employed population	5149	4799.4	4602.7	4424.6	4514.6
Employed population in the Public administration, Defence and Social Security	348.7	303.2	293.8	286.9	313

Source: Authors' elaboration, based on Eurostat data.

per cent and 15 per cent, respectively. Despite a decrease in employment in these two sectors between 2011 and 2014 (of 7 per cent and 5 per cent, respectively), their share of employment remained stable. The two sectors that recorded the largest relative losses were construction (–36 per cent) and agriculture (–29 per cent). While in the first quarter of 2011 agriculture ranked third in the Portuguese economy in terms of people employed and construction fourth, by the end of 2014 they had fallen to fifth and sixth places, respectively (Figure 10).

Figure 10 **Distribution of employment across NACE2 sectors in the fourth quarter of 2014 and relative change in employment by NACE2 sectors (between the first quarter of 2011 and the fourth quarter of 2014)**



Source: Authors' elaboration, based on data from INE, Inquérito ao Emprego (National Statistic Office).

Figure 10 shows that only half of the sectors of the Portuguese economy recorded a decrease in employment between the first quarter of 2011 and the fourth quarter of 2014, but it must be pointed out that the four sectors that recorded the highest losses represented more than 40 per cent of total employment in 2011, while the four sectors that recorded the highest increases (information/communications (+33 per cent), administrative and support service activities (+22 per cent), arts/entertainment/recreation (+20 per cent) and real estate activities (+13 per cent)) represented only 5.5 per cent of total employment in that year. Despite the cuts in public administration jobs during the adjustment programme, public employment increased in that period, contributing to job creation in 2014.

3. Strengthening competitiveness and reducing unemployment in Portugal – defining a new strategy

In the previous section we presented a short assessment of the internal devaluation strategy pursued in Portugal since 2011. Given the only sporadic success of the strategy, we can question whether or not it was the approach to boosting national competitiveness and fostering job creation. With an unemployment rate reaching 13.5 per cent at the end of 2014, creating new and better jobs is undoubtedly one of Portugal's main challenges for the years to come. This high level of unemployment not only has a negative impact on national economic performance but is also an obstacle to social inclusion and the consolidation of public finances. Even if we acknowledge that increasing labour market flexibility can help to reduce labour market segmentation and stimulate job creation, it is doubtful that labour reform will be successful if it is not part of a comprehensive strategy to renew the national economy and labour market. This means pursuing a strategy of improving the qualifications of the labour workforce and fostering innovation to increase productivity and develop new sectors of activity to replace those in which the economy is no longer able to be competitive at the global level due to the strengthening of Asian and central and eastern European competition (such as labour-intensive goods).

3.1 Calling into question the principle of internal devaluation

The assumption that wage reductions will increase the competitiveness of the Portuguese economy is at least questionable. It should be noted

that company wage costs in Portugal (including salaries and social security charges) represent only 21 per cent of their production costs (Table 9). This means that a wage reduction of 10 per cent – with all the rest remaining constant – would have a potential impact on final output value of only 2.1 per cent. It is also noteworthy that in 2011, about 66 per cent of Portuguese companies' production costs were intermediate costs, such as the costs of raw materials, energy, transport and communications (Caldas and de Almeida 2014). Thus, we can call into question the rationale of the strategy pursued between 2011 and 2014 which led to the adoption of measures oriented to cut wages and labour costs, while at the same time no effective measures aimed at cutting context and intermediary costs (for example, utilities) were adopted.

Table 9 **Activities of enterprises (Portugal, 2011) (billion euros)**

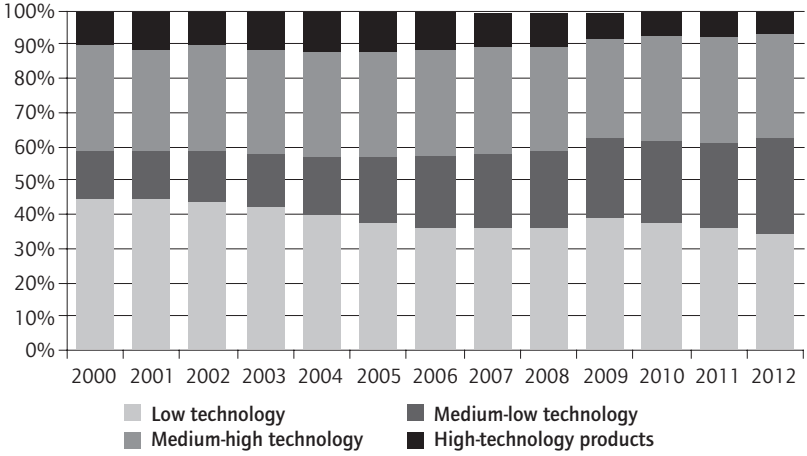
	2010	2011
Turnover	401.3	389.8
Production	243.6	239
Gross added value	88	82.2
Wage costs (wages + social contributions)	52.2	50.9
Gross operating surplus	36.3	31.6
Operating results	20.1	5.4

Source: INE (National Office of Statistics), Empresas de Portugal 2011.

If we analyse only export companies, the conclusion is similar: wage costs represent about 33 per cent of their production costs, which means that a 10 per cent reduction in wages would have an impact of only 3.3 per cent in reducing export prices. Thus, by hypothesis, to achieve an improvement of 20 per cent in external competitiveness, wage costs would have to be reduced by about 60 per cent (Amaral 2010). These data show that wage devaluation (via wage reduction) would not have a significant effect on enterprise competitiveness (neither internally nor externally). Rather, wage reduction is likely to have a negative impact on firms because a fall in available household income has a direct impact on domestic demand; in other words, it directly affects companies' sales – not to mention potential issues related to delays in the payment of household debt and other social costs (Amaral 2010; Caldas and de Almeida 2014). This question becomes even more important if we consider that about 95 per cent of Portuguese companies do not export and so are entirely dependent on the domestic market (INE 2014).

Thus, it seems that increasing the competitiveness of domestic enterprises is more dependent on other variables than wage reduction. In this context, we need to take into account the characteristics of the Portuguese productive structure, which specialises mainly in low and low-medium technology. In 2011, 77.6 per cent of the gross added value of manufacturing sectors was based on the low and medium-low technological sectors, with medium-high technology sectors representing only 18.4 per cent (in 2010) and 14.3 per cent of employment in 2011 (FCT 2013). In a long-term perspective, if we analyse the evolution of the export profile, we see a clear improvement of the technological specialisation between 1990 and 2000 (Amaral 2011; Salavisa Lança 2000) and a stagnation in the period 2000–2012. On one hand, the weight of exports of low and medium-low technology products decreased from 72.6 per cent (in 1990) to 58.5 per cent (in 2000); on the other hand, between 2000 to 2012 this figure stagnated at around 60 per cent, reaching 62.2 per cent in 2012 (Figure 11), meaning that there was no change in the structure of the productive specialisation in the 2000s. Moreover, since the international crisis of 2008 the share of exports of high and medium-high technological products has decreased.

Figure 11 **Exports of industrial products, by level of technology intensity**



Source: GEE (2013)/MEE - Ministry of Economy and Employment and INE – Estatísticas do Comércio Internacional.

The exception with regard to Portuguese exports are knowledge-intensive services, where there has been a change in the pattern of specialisation

over time. Portugal had a surplus in the balance of technological payments for the first time in 2007 and has maintained a positive balance since then (except for 2010). This means that, since 2007, Portugal exports more technology and knowledge-intensive services than it imports (Bob Santos 2014).[14]

Besides the specialisation profile of the Portuguese economy, it is also important to consider other structural problems that have conditioned its competitiveness (Mateus 2013). These include the following: the low level of formal education of the population in general (despite the efforts undertaken in the 2000s in education, 64 per cent of the population had at most nine years of schooling in 2011 as against 30 per cent in the EU27 – see Table 10); business characteristics (50 per cent of company owners have no more than six years of schooling; 95 per cent of Portuguese companies do not export[15]); and there are systemic problems in the national innovation system (FCT 2013). If it is true that higher levels of formal education do not bring about an immediate increase in productivity and competitiveness (there may be adjustment problems in the labour market and mismatches between education and the needs of the economy, in the short term), it is also true that higher levels of formal education lead to higher levels of qualifications in the labour market in the long term (Almeida *et al.* 2009). In addition, in open economies, exposed to international competition, education and qualifications are essential to increase R&D levels, generate innovative products and services and strengthen national competitiveness in the long term (Ladd 2012; Krueger and Lindahl 2001; West 2012). That is why the reinforcement of education and training policies in Portugal, not only at a general level but also oriented to innovation and knowledge-intensive activities, is important. This is a key condition to guarantee higher levels of competitiveness in the long run (OECD 2014a). Taking these constraints into consideration, Portugal needs an ambitious and comprehensive strategy aimed at addressing these structural problems in the medium-term.

Despite these structural problems, in the 2000s Portugal made significant progress in terms of innovation capacity, although it remained below the EU27 average, according to the IUS 2014 Innovation Union

14. See http://tek.sapo.pt/opiniao/opiniao_exportacoes_de_servicos_de_conhecimen_1381316.html

15. INE (2014).

Scoreboard (European Commission 2014a). In the period 2006–2010, Portugal was third in the EU27 with regard to progress made in terms of innovation, at an average annual rate of 7.2 per cent (European Commission 2013: 16), clearly converging with the EU27 average. However, since 2011 Portugal has been lagging behind the EU27 again, with the index value of innovation in Portugal decreasing from 79 per cent in 2010 to 74 per cent of the EU27 average in 2013 (European Commission 2014a), which coincides with the MoU period. In Table 11 we can see that Portugal's position in the IUS has dropped since 2010, the year in which Portugal achieved its best position.

Table 10 **Attainment level of people 15–64 years of age (%)**

Education level		2007	2008	2009	2010	2011
Basic education (ISCED 0-2)	EU (27)	32.90	32.20	31.60	30.80	30.00
	PT	**71.30**	**70.60**	**69.10**	**67.10**	**63.80**
Secondary and post-secondary education (ISCED 3-4)	EU (27)	46.50	46.60	46.40	46.50	46.40
	PT	**16.7**	**16.7**	**17.8**	**19.1**	**20.6**
Tertiary education (ISCED 5-6)	EU (27)	20.60	21.20	22.00	22.70	23.60
	PT	**12.00**	**12.70**	**13.10**	**13.80**	**15.60**

Source: Authors' elaboration, based on Eurostat data.

Table 11 **Innovation Union Scoreboard – Portugal's performance, 2006–2014**

	EIS 2006	EIS 2007	EIS 2008	EIS 2009	IUS 2010	IUS 2011	IUS 2013	IUS 2014
Portugal's position in the EU27 innovation ranking	22º	22º	17º	16º	15º	16º	17º	18º

Source: Authors' elaboration, based on data from European Commission, European Innovation Scoreboard (EIS)/Innovation Union Scoreboard (IUS) (Reports 2006-2014).

be understood by analysis. The data available from DGEEC (2014) show that total R&D expenditure (public and private) decreased from 1.6 per cent of GDP in 2010 to 1.41 per cent in 2012, a decline of almost 440 million euros (–16 per cent), despite the sharp fall in GDP in that period. The reduction of R&D expenditure was transversal to all entities: companies invested less than 10 per cent in R&D in the period 2010–2012, public entities saw a cut of 37 per cent, higher education institutions

a cut of 17 per cent and non-profit private institutions invested less 30 per cent. These figures led to the loss of over 2,000 jobs in R&D (full-time equivalent) between 2011 and 2012, half of whom worked in public R&D institutions. Thus, the cuts made in R&D in the period 2010–2012 compromised some of the advances that Portugal achieved in the 2000s. It is well known that the best performing countries in this area are those that invest continuously in R&D and qualifications, as well as in attracting qualified immigrants (DGEEC 2014). Furthermore, when we consider that a country's long-term economic growth depends on its innovative capacity (Foray 2009), we can see Portugal innovation's performance since 2011 as a problem.

3.2 Looking forward: which way for more and better jobs in Portugal?

As outlined in Section 1, according to the assessment of the European Commission and the IMF, the main causes of the rising unemployment trend in Portugal were the deterioration of unit labour costs during the past decade and the rigidity and inefficiency of the labour market. Even though the macroeconomic adjustment programme signed in 2011 identifies other causes of rising unemployment in Portugal since the introduction of the euro – in particular, the low education level and other macroeconomic features – it does not give them the importance they deserve in the design of the reform programme for the national economy. Indeed, despite recent increases in PISA educational achievement scores in 2009 and 2012 (highlighted by the OECD as a result of public policy reforms in education in the 2000s), the Portuguese economy suffers from a low skilled work force (about 60 per cent of the population had at most nine years of schooling). This is particularly worrying as in the past decade the Portuguese economy has recorded a loss in market share for labour-intensive goods, as Asian and central and eastern European competition have strengthened, and it thus needs to develop new economic activities, which will certainly require an upgrade in labour force qualifications. In addition, the country suffers from problems concerning the transition from education to the labour market (role of education) and between jobs (role of active labour market policies). These problems were duly recognised in the macroeconomic adjustment programme signed in 2011; however, the reform of the education system was driven mainly by the need to reduce public spending. In fact, total education expenditures represented 5.6 per cent of GDP in 2009,

decreasing to 4.9 per cent in 2013, despite the decrease of GDP in that period. Public expenditure on basic and secondary schools decreased from 5 billion euros (2010) to 3.9 billion euros in 2012 (CNE 2014: 7). Instead of pursuing an improvement in unit labour costs through a reduction in nominal wages, the strategy should have been focused on measures aimed at increasing labour productivity growth (which would not be reflected in wage growth until unemployment falls).

One of the consequences of the strategy pursued in recent years is that it has fed a growing consensus that the aim of improving the competitiveness of the Portuguese economy is not compatible with an austerity policy based on wage depreciation and maintenance of low wages. The President of the Portuguese Economic and Social Council (which brings together representatives of companies and workers), Silva Peneda, says that 'Competitiveness today is not a function of wages ... but it is more a function of how companies are managed and of the reduction of auxiliary costs' (23 December 2014 in TSF Forum).[16] This position contrasts with the one taken by the Troika since 2011, but it is in line with the strategy defended over time by various experts on competitiveness.

For example, Fernandes (2014) states that Portugal should develop a new cycle of policies based on innovation and knowledge, taking advantage of the investments made in the past 30 years in the modernisation of basic infrastructure, workforce qualifications and development of scientific and technological capacity. Also for Godinho (2013) and Mateus (2013), competitiveness must be based on innovation and productive differentiation, efficiency and modernisation of public services, internationalisation of companies and orientation of production for global markets, strategic cooperation between various economic actors and workforce qualifications. Competitive dynamics and improving the specialisation profile of the Portuguese economy are essential to boost growth and reinforce social and territorial cohesion (cohesion and competitiveness are two sides of the same coin (Mateus 2013). These two conditions are, in turn, key conditions for creating more and better jobs, as well as for consolidating public finances. Francisco Madelino, former President of the Portuguese Employment and Training Institute (IEFP), shares this position, stating that:

16. Available at http://www.tsf.pt/PaginaInicial/Economia/Interior.aspx?content_id=4311003

> The main problems that arise in improving competitiveness are due mainly to weaknesses in human capital, cuts in training and education, difficult access to credit, energy costs, weak links between companies and universities, the functioning of the courts, extremely time-consuming licensing procedures – all of which have been aggravated in recent years – problems of judicial reform and in the restrictions imposed on filling vacancies in the public administration. (Interview with authors, November 2014)

Criticism of the wage depreciation policy as a way of creating jobs is also underlined by Gloria Rebelo,[17] who states that 'job creation is dependent on the economic growth of the country. We must strengthen the capacity to invest – not only private but also public investment – and attract foreign direct investment' (interview with the authors, November 2014). In this context, also Mario Draghi (President of the European Central Bank) recognises that economic growth and sustainability of public debt cannot be achieved without adequate public policies that encourage investment, welcoming the investment package proposed by new European Commission to stimulate growth in the EU: 'Moreover, using EU funds more effectively to boost both current demand and future potential – which means raising investment – would have a similar effect on growth and debt sustainability. I therefore welcome the Commission's new proposal to stimulate investment spending in Europe.'[18] Ordóñez, Sala and Silva (2014) also mention innovation and technology investment as the way to foster growth: 'technology is the right way to ensure stable long-run economic growth. This would explain why, despite the PIIGS' [Portugal, Italy, Ireland, Greece and Spain] efforts to reduce their real unit labour costs, they have been unable to converge with the core euro-zone economies' (Ordóñez *et al.* 2014: 26).

In brief, if it is to promote sustainable growth, consolidate public finances and create more and better jobs, Portugal needs a new medium-term strategy focused on public policies that support innovation, workforce qualifications, the promotion of knowledge and changes in the specialisation profile of the economy towards higher added value activities (such policies were on the national reform agenda prior to

17. Professor at Universidade Lusófona de Humanidades e Tecnologias. expert on labour market and training policies.

18. Speech by Mario Draghi in November 2014, available at http://www.ecb.europa.eu/press/key/date/2014/html/sp141127_1.en.html

2011). This does not mean that fiscal consolidation is not important, but it will be achieved only with a dynamic and innovative economy that values its endogenous resources, boosts economic growth and creates jobs (and not through blind austerity and internal devaluation policies).

4. Final remarks

Until the international crisis of 2008, Portugal had a relatively low unemployment rate and public debt was in line with the EU average. The financial crisis led the EU member states to adopt interventionist measures to rescue the financial system, through the injection of public funds and this had a negative impact on national public deficits. The impact was more substantial on smaller economies and those that were more vulnerable to external shocks, such as the Portuguese economy. The external shocks in the 2000s and the crisis of 2008 helped to bring Portugal's structural problems to the fore, including:

— a very low level of economic growth during the past decade;
— a low level of qualifications among the majority of the Portuguese population;
— a productive specialisation profile based in low and medium-low technology;
— a low incorporation of technology and knowledge in most exported goods, generating low levels of added value (despite the positive trend of exports in the past two decades); and
— concentration of exports in a small number of companies (95 per cent of Portuguese companies do not export).

These structural problems, highlighted by the effects of the global financial crisis, provided the ideal conditions for working out an adjustment programme for Portugal (MoU) based on restrictive budgetary and financial measures, as well as an internal devaluation strategy, which were expected to lead to economic recovery and job creation.

We have analysed the impact of the internal devaluation measures introduced in Portugal during the MoU period (May 2011 to May 2014). We have outlined that the initial objectives set out in the MoU were not achieved: the public deficit is still above 3 per cent of GDP; public debt has increased by almost 30 percentage points (up to 130 per cent of GDP); export growth rates are lower than before the implementation of the MoU

measures; GDP growth is stagnant after three consecutive years of recession (2011–2013); and more than 18 per cent of the active population has no job. In addition, there has been no change in the economy's specialisation profile, the technology intensity of exports or labour productivity. Furthermore, Portugal's innovative capacity has decreased to the levels of 2007. By the end of 2014 the country's labour market had shrunk as a result of emigration, unemployment and the number of demotivated people who had simply given up looking for a job. Also important is the social impact of the implementation of MoU austerity measures, reflected in the increase in the poverty rate and social inequalities since 2011.

As a result, it has been recognised – at both national and international level – that a new generation of public policies is needed to stimulate economic growth, through innovation, technological modernisation, workforce qualifications and modernisation of public services. These are key conditions of tackling the high level of structural unemployment in the Portuguese economy. The working out of public policies in the period 2015–2020 must take full advantage of the available EU funds to support its new medium-term growth strategy:

— Portugal will benefit from a new package of structural funds until 2020 (about 20 billion euros), aimed at supporting projects related to economic competitiveness, workforce qualifications and social cohesion;
— A new package of European funds for innovation and R&D is available until 2020, with about 80 billion euros provided by Horizon 2020, the EU Framework Programme for Research and Innovation (Portuguese companies and entities can benefit from these funds);
— Portugal may also benefit from the investment plan (public and private) of the new European Commission, estimated at 315 billion euros.

Additionally, Portugal needs to take proper advantage of the quality of its basic infrastructure, particularly the communications network, the network of science and technology, people with advanced training and the entrepreneurship and business innovation network constructed in the past two decades.

To conclude, there are several factors favourable to the development of policies in the coming years to stimulate economic growth, improve the qualifications of the Portuguese population and boost job creation and social cohesion. Portugal now needs its political leaders[19] and economic actors to utilise them fully and to create a new dynamic for a competitive and innovative economy to foster a job-rich recovery.

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Chapter 4
Crisis, unemployment and internal devaluation in Spain

Jorge Uxó, Eladio Febrero and Fernando Bermejo

1. Introduction

The Spanish unemployment rate in 2007 was 8.2 per cent, after an outstanding period of strong economic growth. This figure was very similar to the EU28 average of 7.1 per cent. In 2014, however, the Spanish rate of unemployment was 24.4 per cent and significantly above the EU28 average, which had increased to 10.3 per cent. During those seven years, 3.3 million jobs were lost in Spain, 16 per cent of total employment in 2007. The aim of this chapter is to analyse the main reasons behind this huge rise in unemployment, with particular attention to the impact of the strategy of 'internal devaluation' implemented by the government.

Needless to say, this upward trend in unemployment is related to the decline of economic activity, but employment elasticity to GDP has been also higher in Spain, especially during the Great Recession of 2008–2009. Although the decrease in GDP was very similar in Spain and the EU28 during these two years, job destruction was notably higher in Spain (Figures 1 and 2). According to the ECB (2012), the different nature of the shocks hitting each economy can be a crucial factor in explaining why employment elasticity to GDP differs so remarkably across EU countries (for example, the bursting of a construction bubble usually has a more prolonged effect than any other kind of shock, also entailing more intense labour adjustments). Other relevant circumstances that tend to enlarge the fall in employment in a recession are high levels of debt or a substantial proportion of temporary contracts.

By the same token, Myant and Piasna (2014) argue that the increase in unemployment in recent years is associated with structural changes that affect particular sectors, such as construction. They play down the functioning of the labour market – and especially wage 'flexibility' – as a relevant mechanism for explaining the differences in employment development.

Figure 1 **Real GDP, Spain (2008Q2=100)**

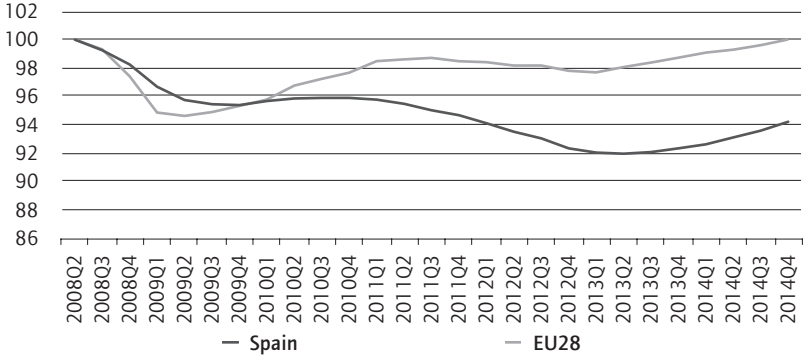
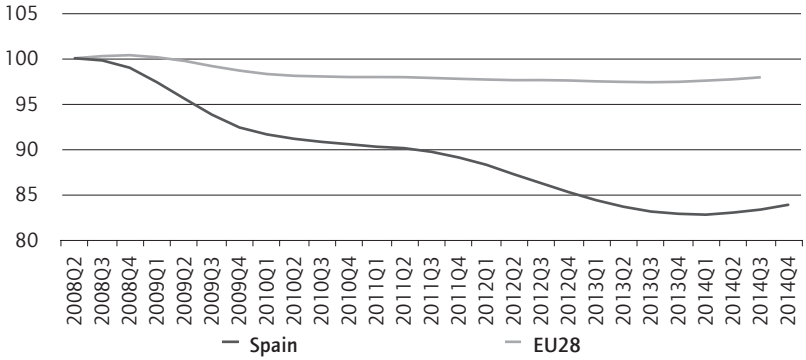


Figure 2 **Employment, Spain (2008Q2=100)**



Source: Eurostat.

Nevertheless, the European economic authorities and some mainstream economists point out that it is precisely the absence of wage flexibility and other supposed 'rigidities' in the labour market that have caused the greater increase in unemployment rates in some countries such as Spain. Labour market reforms and wage devaluation are recommended for economies more affected by the economic crisis.

We take a different view. In this chapter we shall attempt to show that a combination of structural factors and mistaken macroeconomic policies to fight the crisis provide a sound explanation of what is going on in the Spanish labour market.

Regarding the former argument, the strong impact of the crisis on construction and manufacturing explains more than 80 per cent of the fall in Spanish employment during these years. Furthermore, this has led to long-term and low-qualified unemployment.

In fact, the substantial fall in temporary employment during the two first years of the economic crisis is not a symptom of a 'too rigid' labour market but, on the contrary, evidence that employment in Spain is too volatile. In turn, this is due to the sectoral composition of production and the excessive proportion of temporary contracts: it has little to do with rigid wage bargaining.

With respect to our second argument, restrictive macroeconomic policies implemented in Spain and other peripheral countries between 2011 and 2013 triggered a second recession with severe effects on employment. The combination of fiscal austerity and labour market reforms in pursuit of internal devaluation has strangled domestic demand, while not increasing external demand, which would have offset the negative consequences of the former.

The high indebtedness of Spanish households and corporations is also relevant in this state of affairs because these agents have to reduce their spending in order to service their debt and to diminish their debt ratios ('balance sheet recession', see Koo 2008). Once more, internal devaluation aggravates this restrictive effect because of 'debt deflation'.

The chapter is organised as follows. Section 2 provides a brief account of the main trends in employment and unemployment in Spain since 2008. In Section 3, we analyse the sectoral distribution of job losses and the characteristics of the unemployed. Section 4 examines the effects of the macroeconomic policies applied by the Spanish government on GDP and employment, with particular attention to internal devaluation. Finally, we offer some conclusions.

2. Aggregate trends in employment and unemployment

In this section, we provide some stylised facts about the Spanish labour market since the beginning of the financial and economic crisis. Our period runs from 2008 to 2014. With due caution, we associate the first two years (2008 and 2009) with the shock to the construction industry,

whose full effects were partially compensated by some fiscal expansion measures (adopted under the auspices of the G20). The following four years (from 2010 to 2013) are those in which labour market reforms (in 2010, 2011 and 2012) take place, combined with severe fiscal austerity and the reverberations of the bursting of the real estate bubble (including forced saving to deal with debt servicing, tightening credit conditions because of the rise in non-performing loans). Finally, Spain recovered positive GDP and employment growth in 2014, mainly due to falling interest and exchange rates, the downward trend in oil prices and some easing of budgetary policy.

Table 1 **Main labour market indicators, Spain**

Spain	2008Q2	2014Q4	Difference	% of change
Employment	20684.6	17344.2	-3340.4	-16.1%
Employment rate (% pop>15)	53.6%	44.5%	-9.1	
Permanent employees	11858.9	10857.1	-1001.8	-8.4%
Temporary employees	5200.4	3428.7	-1771.7	-34.1%
Temporary rate (% employees)	30.5%	24.0%	-6.5	
Part-time employment	2375.1	2758.8	383.8	16.2%
Part-time employment rate	11.5%	15.9%	4.4	
Unemployed	2081.1	5610.4	3529.3	169.6%
Unemployment rate	9.1%	24.4%	15.3	
Population over 15 years	38601.7	38953.3	351.6	0.9%
Active population	22765.7	22954.6	188.9	0.8%
Inactive population	15836.1	15998.7	162.7	1.0%
EU28	**2008Q2**	**2014Q3**	**Difference**	**% of change**
Employment	221924.3	217271.5	-4652.8	-2.1%
Employment rate (% pop>15)	53.4%	51.7%	-1.7	
Permanent employees	158021.0	156061.7	-1959.3	-1.2%
Temporary employees	26639.6	25263.7	-1375.9	-5.2%
Temporary rate (% employees)	14.4%	13.9%	-0.5	
Part-time employment	40124.1	44412.0	4287.9	10.7%
Part-time employment rate	18.1%	20.4%	2.3	
Unemployed	16510.6	24954.7	8444.1	51.1%
Unemployment rate	6.9%	10.3%	3.4	
Population over 15 years	415757.2	420598.8	4841.6	1.2%
Active population	238434.9	242226.1	3791.2	1.6%
Inactive population	177322.3	178372.7	1050.4	0.6%

Note: Unless otherwise indicated, all the data included in the tables are annual averages (thousands).
Source: Eurostat.

With regard to employment, we can see in Table 1 that 3.3 million jobs have been wiped out by the crisis in Spain, proportionally more than in the EU28 (4.6 million). Most employment destruction took place during the two recessions suffered by the Spanish economy: between the third quarter of 2008 and the fourth quarter of 2009 (1.6 million jobs disappeared) and between the second quarter of 2011 and the second quarter of 2013 (1.4 million). Nevertheless, annual average employment decreased steadily from the onset of the crisis to the second quarter of 2014.

The labour market reforms have contributed to the rise of job precarity, especially among young people. Job losses are particularly prevalent among those with temporary contracts – because of lower firing costs – and the ratio of temporary employees has decreased from 30.5 per cent to 24 per cent. However, this ratio is still higher than the EU average (14 per cent) and this reduction has taken place simultaneously with the loss of more than 1 million permanent contracts (over 2.8 million employees less).

The number of part-time jobs has also increased substantially despite the generalised job destruction, accounting for 16 per cent of total employees at the end of 2014, 4.4 percentage points more than in 2008. Therefore, total hours have decreased even more than total employment during the whole period (–18 per cent versus –16 per cent). In addition, 7 per cent of employees had a temporary and a part-time contract simultaneously.

Indeed, the bulk of the recent increase in employment is again concentrated in temporary contracts. Between the fourth quarter of 2013 and the fourth quarter of 2014 the number of employees with temporary contracts increased by 173,000 and the number of permanent employees by only 43,000.

According to the Labour Force Survey, 14 per cent of the new jobs created during the first three quarters of 2014 had a working week of less than 10 hours, and only 53 per cent reached the usual full-time working week of 40 hours. The average number of hours was 31 for the new jobs created during 2014, while this average was 37 hours per week in the case of employees working for the same firm for more than four years. These differences have increased during the crisis, and especially after the labour market reform of 2012.

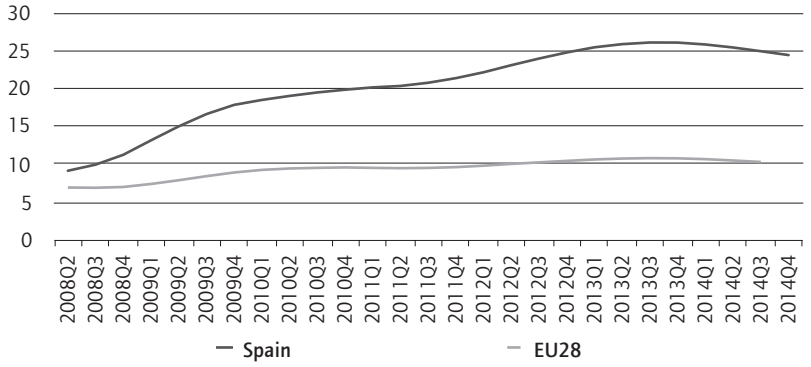
Table 2 **Employees by age and type of labour contract, Spain**

Spain	2008	2010	2012	2014
Total employees	16861.3	15592.3	14573.4	14285.7
% Part-time	11.8%	13.0%	14.5%	15.9%
% Temporary	29.1%	24.7%	23.4%	24.0%
Total 15-29	4162.1	3106.8	2395.2	2139.7
% Part-time	15.8%	19.8%	24.0%	27.8%
% Temporary	48.5%	45.1%	47.3%	51.9%
Total 30-60	12126.6	11911.3	11596.2	11530.6
% Part-time	10.3%	11.3%	12.6%	13.9%
% Temporary	23.3%	20.1%	19.1%	19.7%
Total 60 or more	572.6	574.2	582.0	615.4
% Part-time	15.2%	15.9%	16.5%	16.3%
% Temporary	11.2%	10.6%	10.2%	8.2%

Source: Eurostat.

This destruction of employment led to a rise in unemployment – in absolute values and also as a percentage of the active population – to reach almost 27 per cent in the third quarter of 2013 (Figure 3). Although the effects of the bursting of the real estate bubble were partially offset by an expansionary fiscal policy (until May 2010), unemployment increased in 2008 and 2009 by more than 8 percentage points. Since then, fiscal austerity and labour market reforms have led to an additional increase of roughly another 6 percentage points.

Figure 3 **Unemployment rate, Spain, 2008Q2–2014Q4**



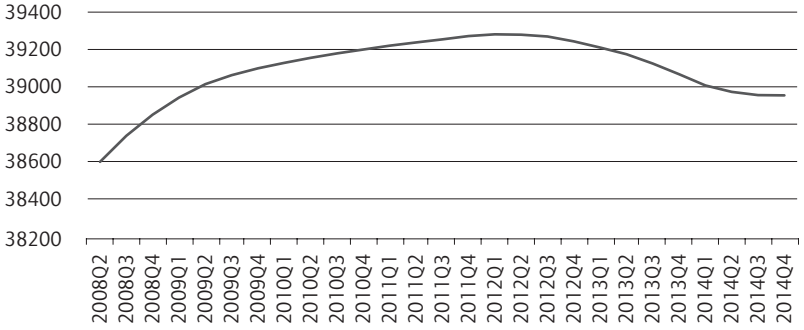
Source: Eurostat.

The active population had been growing rapidly during the previous upswing, mainly due to the arrival of immigrants. Between the onset of the crisis (2009) and 2012, it remained fairly stable at the aggregate level, but it has been decreasing steadily since then. There were 489,000 fewer active people in 2014 than in 2012. Although this is partially explained by the reduction in total population over 15 years of age (Figure 4), it is also due to discouragement: the inactive population increased by 189,000 people (Figure 5).

It is remarkable that the number of actives aged between 16 and 29 declined by 475,000 people during these two years, and migration and discouragement are two relevant explanatory factors, besides demography. On the one hand, 197,000 people of these ages left Spain in 2013 and 2014: 177,000 foreigners (700,000 since 2008) and 20,000 Spaniards. The net migratory flow (immigrants less emigrants) is negative (–46,000). On the other hand, the activity ratio also decreased significantly, from 66 per cent in 2009 to 58 per cent in 2014.

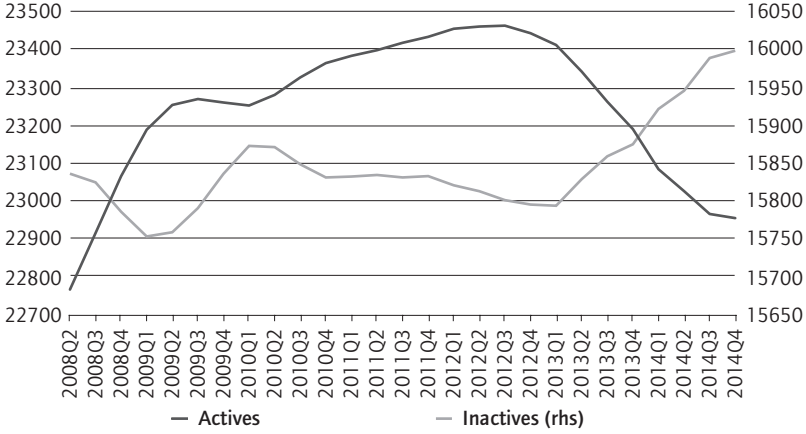
Considering this increase in discouraged workers and those working part-time involuntarily, Felgueroso (2014) points out that the official rate of unemployment underestimates the real importance of labour underutilisation in Spain. Using the same measures as the Bureau of Labor Statistics in the United States he finds that the U6 rate reaches 37.7 per cent in Spain (and 21.3 per cent in the EU28). The numerator of this ratio is the sum of unemployment, discouraged workers and those working part-time for economic reasons and the denominator is active population plus discouraged workers.

Figure 4 **Total population over 15 years of age, Spain, 2008Q2–2014Q4**



Source: Eurostat.

Figure 5 **Active and inactive population, Spain, 2008Q2–2014Q4**



Source: Eurostat.

3. Sectoral composition of employment and some characteristics of the unemployed

The employment collapse in some particularly important economic sectors confirms the adequacy of the structural change hypothesis to explain the evolution of labour market figures in Spain because two sectors – manufacturing and construction – account directly for 80 per cent of all job losses (Table 3).

Specifically, the fall in employment in construction accounts for 64 per cent of those in work in it in 2007, but it is also substantial in manufacturing (roughly 30 per cent jobs lost). Regarding employment directly related to public services, this continued to increase until the end of 2011, but has declined significantly since then, as a consequence of budgetary cuts (Table 4). Annual average employment in public administration, defence, education and health care suffered a reduction of 256,000 jobs between 2011 and 2014.

The impact of the collapse of construction on Spanish unemployment is even higher if we take into account the 'employment multiplier', the effect of an increase in production in one economic sector on employment in other sectors.

Using input-output techniques and data collected from the WIOD Database (Timmer *et al.* 2012), the total labour requirements necessary to satisfy the final demand for each domestic product ($\mathbf{l}_t$ or "vertically integrated labour" according to Pasinetti, 1973) is obtained by the following equation:

$$[1] \qquad \mathbf{l}_t = \mathbf{a_{nt}}\,[\mathbf{I}-\mathbf{A}]^{-1} \cdot <\mathbf{y}>$$

where $\mathbf{a_n}$ is a vector of the labour requirements directly required to produce one million euros of sectoral gross output, $[\mathbf{I}-\mathbf{A}]^{-1}$ is the usual Leontief inverse and $<\mathbf{y}>$ is a diagonal matrix calculated from vector $\mathbf{y}$ which represents the annually produced physical final demand by sector, including private and public consumption, exports, gross fixed capital formation and changes in inventories and valuables.

This is shown in Table 5, disaggregated for 16 industries, for 2007, 2009 and 2011. Input/output data are not available after 2011, so we have estimated vertically integrated labour for 2014 by multiplying the direct employment of each sector in that year by the employment multiplier[1] in 2011.

Four vertically integrated sectors accounted for 56 per cent of total employment in 2007: manufacturing (19 per cent), construction and real estate (18 per cent), accommodation and catering (10 per cent), and wholesale and retail trade (9 per cent). Another 20 per cent was employment related to public services (education and health)[2] or public administration and defence.

Table 5 also shows the backward and forward linkages among sectors. In 2007, 6,442,000 workers were occupied in producing intermediate goods and services, used as inputs for other sectors. Construction is one sector in which the labour devoted to satisfying the intermediate consumption of other sectors – the column labelled 'out', which indicates forward linkages – is lower than the labour induced in other sectors to satisfy its own (the column labelled 'ind', which stands for a measure of backward linkages). These figures make clear its capacity to put other sectors' workers in motion. This is also the case with regard to other activities strongly affected

1. Ratio between vertically integrated labour associated with the final demand in a sector and direct labour in the same sector.
2. We should concede that not all employees in education and health services are civil servants. Nevertheless, a very large proportion of these services is provided by the public sector.

by the crisis, such as manufacturing, the public sector (after 2011) and accommodation and catering. The opposite applies to professional, administrative and support services, transport and mining and quarrying, which are strongly dependent on other sectors' input requirements.

All of this highlights once more the over-specialisation of the Spanish economy in construction and real estate activities in the recent past, as well as the major impact that the bursting of the real estate bubble has had on total employment. As Table 6 shows, the reduction in the number of jobs directly or indirectly associated with these sectors reached 2.3 million in absolute terms between 2007 and 2014, or 69 per cent of the total reduction in employment in the Spanish economy. This is even clearer between 2007 and 2009, when job losses related to construction and real estate amounted to 82 per cent of the reduction in employment across the whole economy.

This fall in employment directly and indirectly related to construction is not a consequence of 'too high' wages; more 'flexible' wages would not have prevented it. Spain had been accumulating imbalances during the previous boom period: specifically, skyrocketing private household debt and an outsized construction industry.

In 1997, household debt began to grow, particularly to fund the purchase of houses. As Dejuán and Febrero (2011) explain, this is partly due to demographic factors (baby boomers reaching their thirties and a high property ownership rate in Spain) and other causes related to the creation of the euro zone (falling interest rates and enhanced capital movement). On the supply side, the number of dwellings increased hugely, but house prices rose dramatically as well, exacerbated by speculation.

The construction sector grew at twice the rate of GDP over ten years, a pace that was difficult to maintain. Between 1997 and 2007, there were 6.25 million housing starts, and one in five new jobs was created in the construction sector. In 2007, the weight of the building industry was much larger than in the EU as a whole, while employment in the manufacturing sector fell. Nevertheless, this growth pattern had become exhausted in 2007, for several reasons (Uxó, Paúl and Febrero 2011).

First, household debt had reached very high levels and housing prices had tripled in ten years. Although initially debt has an expansionary effect, insofar as it finances higher spending, the burden of debt service

has severely detrimental effects in the long term. Thus, at the same time such as residential investment falls, the debt service resulting from previous years rises inexorably, provoking an increase in 'forced savings'. Besides this, the ECB had begun to raise interest rates in late 2005.

Second, the housing market was already saturated: nearly 7 million dwellings had been built in the previous decade and in 2007, 700,000 units more were started, although the number of unsold dwellings was estimated at 500,000. By 2009, the stock of unsold dwellings amounted to 688,000 units, 2.7 per cent of the total stock. And the previous social and demographic factors that had led to the initial increase in demand for new houses disappeared.

Therefore, economic recovery could not be grounded once again on the construction industry. The real problem is that once construction halted its momentum, no other productive sector took over as locomotive of the economy, because of the lack of aggregate demand. This resulted, in turn, in a rise in unemployment that aggravated the problem of household debt. As we will see, wage depression and fiscal austerity made matters even worse. The only sector in which employment registered a significant increase between 2007 and 2011 was the aggregation of public administration, education and health care, whose share in total employment grew from 20 per cent to 25 per cent. However, this single positive trend was interrupted in 2011 due to the adoption of fiscal austerity.

Table 6 also highlights a generalised decline in the level of employment related to manufacturing, where only electricity, gas and water supply showed a slight positive trend during 2007–2009. A similar trend applies with regard to accommodation and catering, which includes tourism, the other sector in which the Spanish economy is highly specialised. Nevertheless, the reduction in employment has clearly been less significant in this case (5.3 per cent in 2007–2011 and 0.1 per cent in 2011–2014).

Table 4 **Private and public employment, Spain, 2008–2014 ('000)**

	2008	2010	2012	2014
Public employment	3006.7	3209.6	3112.4	2925.7
Private employment	17463.0	15514.9	14520.3	14241.6

Source: Eurostat.

Table 3 **Employment by economic activity, Spain**

Activities NACE 2		Thousands				Change between 2007 and 2014			Change between 2011 and 2014		
		2007	2009	2011	2014	Thousands	%	% of total	Thousands	%	% of total
Agriculture, forestry and fishing	A	866.2	788.1	755.3	738.2	-128.1	-14.8%	3.9%	-17.1	-2.3%	1.5%
Mining and quarrying	B	59.3	44.4	42.0	32.5	-26.9	-45.3%	0.8%	-9.6	-22.7%	0.8%
Manufacturing	C	2995.5	2549.4	2349.7	2123.8	-871.7	-29.1%	26.3%	-225.9	-9.6%	19.6%
Electricity, gas and water supply	D-E	201.7	213.8	213.0	204.0	2.3	1.2%	-0.1%	-9.0	-4.2%	0.8%
Construction	F	2759.2	1889.8	1403.9	981.2	-1778.0	-64.4%	53.7%	-422.7	-30.1%	36.7%
Wholesale and retail trade	G	3116.0	2990.5	2962.5	2858.2	-257.8	-8.3%	7.8%	-104.3	-3.5%	9.1%
Transport	H	964.6	923.8	899.3	852.7	-111.9	-11.6%	3.4%	-46.6	-5.2%	4.0%
Accomodation and food service activities	I	1456.6	1423.3	1401.1	1405.0	-51.6	-3.5%	1.6%	3.9	0.3%	-0.3%
Information and communication	J	567.2	533.3	533.3	508.5	-58.7	-10.3%	1.8%	-24.8	-4.6%	2.2%
Financial and insurance activities	K	508.0	487.5	464.6	453.7	-54.3	-10.7%	1.6%	-10.9	-2.3%	0.9%
Real estate activities	L	108.5	91.9	96.3	100.5	-8.0	-7.3%	0.2%	4.3	4.4%	-0.4%
Professional, scientific and technical activities; administrative and support services	M-N	1814.8	1793.4	1767.7	1733.0	-81.8	-4.5%	2.5%	-34.7	-2.0%	3.0%
Public administration, defence	O	1257.6	1387.8	1452.8	1302.0	44.5	3.5%	-1.3%	-150.7	-10.4%	13.1%
Education	P	1147.8	1180.1	1206.1	1142.8	-5.0	-0.4%	0.2%	-63.4	-5.3%	5.5%
Human health and social work activities	Q	1243.3	1352.6	1462.5	1420.6	177.3	14.3%	-5.4%	-41.9	-2.9%	3.6%
Arts, entertainment and recreation; other services	R-U	1513.4	1457.3	1411.6	1412.5	-100.9	-6.7%	3.0%	1.0	0.1%	-0.1%
Total	A-U	20579.6	19106.9	18421.4	17269.2	-3310.4	-16.1%	100.0%	-1152.2	-6.3%	100.0%
Construction + real estate	F+L	2867.7	1981.7	1500.2	1081.7	-1785.9	-62.3%	53.9%	-418.4	-27.9%	36.3%
Public administration, defence, education, health and social services	O-Q	3648.6	3920.5	4121.4	3865.4	216.8	5.9%	-6.5%	-256.0	-6.2%	22.2%

Source: Eurostat.

Table 5 **Direct and indirect labour, Spain, 2007, 2011, 2014 ('000)**

Activities NACE 2		2007					
		l_{direct} T		out	$l_{vert\ integ}$ T		ind
Agriculture, forestry and fishing	A	866.2	4.20%	397.0	584.6	2.80%	113.9
Mining and quarrying	B	59.3	0.30%	48.1	19.7	0.10%	8.4
Manufacturing	C	2995.5	14.60%	1229.2	3916.2	19.00%	2166.3
Electricity, gas and water supply	D-E	201.7	1.00%	96.5	177.2	0.90%	72.2
Construction	F	2759.2	13.40%	370.9	3528.3	17.10%	1141.7
Wholesale and retail trade	G	3116.0	15.10%	1589.5	1944.1	9.40%	413.0
Transport	H	964.6	4.70%	550.7	696.3	3.40%	283.2
Accomodation and food service activities	I	1456.6	7.10%	100.3	2041.7	9.90%	686.9
Information and communication	J	567.2	2.80%	283.6	409.8	2.00%	126.0
Financial and insurance activities	K	508.0	2.50%	234.7	366.3	1.80%	92.5
Real estate activities	L	108.5	0.50%	30.9	257.8	1.30%	182.0
Professional, scientific and technical activities; administrative and support service activities	M-N	1814.8	8.80%	1006.1	1092.6	5.30%	282.0
Public administration, defence	O	1257.6	6.10%	90.5	1464.5	7.10%	295.0
Education	P	1147.8	5.60%	57.9	1175.5	5.70%	81.0
Human health and social work activities	Q	1243.3	6.00%	52.8	1462.8	7.10%	269.5
Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies	R-U	1513.4	7.40%	303.4	1442.2	7.00%	228.6
		20579.6	**100.00%**	**6442.2**	**20579.6**	**100.00%**	**6442.2**

Note: l_{direct} – Number of workers required to obtain the total output for each sector, of which out accounts for the workers producing the part of that output used as intermediate consumption by the other sectors. That is, the number of jobs associated with agriculture, forestry and fishing in 2007 was 929,300, of which 425,400 were producing the share of this sectoral output that the other sectors required as inputs for their production process.

$l_{vert\ integ}$ – Number of workers associated with the production of the final demand for each sector, of which 'ind' accounts for the total number of jobs induced in the other sectors. For example, the total number of workers required to satisfy the final demand of agriculture, forestry and fishing in 2007 was 624,000, of whom 120,000 were employed in the other economic sectors to produce the inputs used by agriculture, forestry and fishing.

Source: WIOD Database and authors' elaboration.

Table 5 **Direct and indirect labour, Spain, 2007, 2011, 2014 ('000) (Cont.)**

Activities NACE 2		2011		
		l_{direct}	T	out
Agriculture, forestry and fishing	A	755.3	4.10%	343.6
Mining and quarrying	B	42.0	0.20%	30.1
Manufacturing	C	2349.7	12.80%	818.2
Electricity, gas and water supply	D-E	213.0	1.20%	107.3
Construction	F	1403.9	7.60%	230.7
Wholesale and retail trade	G	2962.5	16.10%	1498.5
Transport	H	899.3	4.90%	492.9
Accomodation and food service activities	I	1401.1	7.60%	99.6
Information and communication	J	533.3	2.90%	272.9
Financial and insurance activities	K	464.6	2.50%	200.0
Real estate activities	L	96.3	0.50%	28.6
Professional, scientific and technical activities; administrative and support service activities	M-N	1767.7	9.60%	1039.7
Public administration, defence	O	1452.8	7.90%	105.0
Education	P	1206.1	6.50%	59.0
Human health and social work activities	Q	1462.5	7.90%	59.4
Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies	R-U	1411.6	7.70%	285.4
		18421.4	**100.00%**	**5671.0**

Note: l_{direct} – Number of workers required to obtain the total output for each sector, of which out accounts for the workers producing the part of that output used as intermediate consumption by the other sectors. That is, the number of jobs associated with agriculture, forestry and fishing in 2007 was 929,300, of which 425,400 were producing the share of this sectoral output that the other sectors required as inputs for their production process.
$l_{vert\ integ}$ – Number of workers associated with the production of the final demand for each sector, of which 'ind' accounts for the total number of jobs induced in the other sectors. For example, the total number of workers required to satisfy the final demand of agriculture, forestry and fishing in 2007 was 624,000, of whom 120,000 were employed in the other economic sectors to produce the inputs used by agriculture, forestry and fishing.
Source: WIOD Database and authors' elaboration.

We conclude this section with a brief review of the distribution of the unemployed according to various criteria. Table 7 shows that the unemployment rate is highest among those under 29 years of age (indeed, for those below 24 years of age unemployment is well over 50 per cent). Unemployment is also much higher among those with lower levels of education, although, surprisingly, it is greater for those with a tertiary education than for those with upper secondary education.

Table 5 **Direct and indirect labour, Spain, 2007, 2011, 2014 ('000) (Cont.)**

2011 (cont.)			2014					
$l_{vert\ integ}{}^{T}$		ind	$l_{direct}{}^{T}$		out	$l_{vert\ integ}{}^{T}$		ind
517.1	2.80%	105.4	738.2	4.30%	332.9	511.0	3.00%	105.7
21.0	0.10%	9.1	32.5	0.20%	22.9	16.4	0.10%	6.8
3579.1	19.40%	2048.1	2123.8	12.30%	719.0	3270.9	18.90%	1866.1
190.1	1.00%	84.5	204.0	1.20%	101.7	184.1	1.10%	81.9
1867.0	10.10%	693.9	981.2	5.70%	154.0	1319.3	7.60%	492.1
1846.5	10.00%	382.3	2858.2	16.60%	1430.5	1801.3	10.40%	373.6
696.1	3.80%	289.7	852.7	4.90%	459.6	667.3	3.90%	274.2
1925.0	10.40%	623.6	1405.0	8.10%	75.9	1951.8	11.30%	622.7
371.2	2.00%	110.8	508.5	2.90%	262.8	357.9	2.10%	112.2
369.2	2.00%	104.6	453.7	2.60%	193.2	364.6	2.10%	104.1
236.7	1.30%	169.0	100.5	0.60%	27.1	249.7	1.40%	176.3
943.6	5.10%	215.4	1733.0	10.00%	1012.4	935.3	5.40%	214.7
1638.4	8.90%	290.7	1302.0	7.50%	79.6	1484.6	8.60%	262.2
1225.6	6.70%	78.4	1142.8	6.60%	44.2	1174.2	6.80%	75.6
1668.0	9.10%	264.9	1420.6	8.20%	41.2	1638.2	9.50%	258.8
1326.9	7.20%	200.6	1412.5	8.20%	269.7	1342.5	7.80%	199.7
18421.4	**100.00%**	**5671.0**	**17269.2**	**100.00%**	**5226.6**	**17269.2**	**100.00%**	**5226.6**

The distribution of unemployment by industry is presented in Table 8, where we also include the duration of unemployment by industry. It should be noted that those unemployed for more than one year are shifted from their corresponding industry to the column 'Unemployed more than one year'. This explains why the unemployment figures for construction are lower than expected. But the most striking fact is the huge amount of people unemployed for more than two years, who account for almost 40 per cent of the total unemployed in 2014 (50 per cent if we include those who have never worked).

Finally, we take into consideration unemployment related to previous occupation (Table 9). We see that in 2014, apart from the long-term unemployed, the highest unemployment rate corresponds to occupations that require low qualifications, particularly, service and sales workers (restaurants, hotels, trade) and elementary occupations.

Table 6 **Changes in vertically integrated labour, Spain**

Activities NACE 2, vertically integrated employment	Change 2007 to 2011			Change 2011 to 2014		
	Thousands	%	% of total	Thousands	%	% of total
Agriculture, forestry and fishing	-67.5	-11.5%	3.1%	-6.1	-1.2%	0.5%
Mining and quarrying	1.3	6.8%	-0.1%	-4.6	-21.8%	0.4%
Manufacturing	-337.1	-8.6%	15.6%	-308.2	-8.6%	26.7%
Electricity, gas and water supply	13.0	7.3%	-0.6%	-6.0	-3.2%	0.5%
Construction	-1661.4	-47.1%	77.0%	-547.6	-29.3%	47.5%
Wholesale and retail trade	-97.6	-5.0%	4.5%	-45.2	-2.4%	3.9%
Transport	-0.3	0.0%	0.0%	-28.7	-4.1%	2.5%
Hotels and catering	-116.7	-5.7%	5.4%	26.8	1.4%	-2.3%
Information and communication	-38.6	-9.4%	1.8%	-13.3	-3.6%	1.2%
Financial and insurance activities	2.9	0.8%	-0.1%	-4.7	-1.3%	0.4%
Real estate activities	-21.1	-8.2%	1.0%	13.1	5.5%	-1.1%
Professional, scientific and technical activities; administrative and support services	-149.1	-13.6%	6.9%	-8.2	-0.9%	0.7%
Public administration, defence	173.9	11.9%	-8.1%	-153.8	-9.4%	13.3%
Education	50.1	4.3%	-2.3%	-51.4	-4.2%	4.5%
Human health and social work activities	205.2	14.0%	-9.5%	-29.8	-1.8%	2.6%
Arts, entertainment and recreation; other services	-115.3	-8.0%	5.3%	15.6	1.2%	-1.4%
Total	-2158.2	-10.5%	100.0%	-1152.2	-6.3%	100.0%
Construction + real estate	-1682.5	-44.4%	78.0%	-534.6	-25.4%	46.4%
Public administration, defence, education, health and social services	429.2	10.5%	-19.9%	-235.0	-5.2%	20.4%

Source: WIOD Database and authors' elaboration.

Table 7 **Unemployed by age and level of education, Spain**

Ages	2008	2010	2012	2014
15-29, thousands of unemployed	1012.1	1566.6	1770.3	1651.6
Up to lower secondary education				1088.2
Upper secondary				204.5
Tertiary				358.9
Unemplyment rate	18.20%	31.70%	40.30%	41.00%
30-54, thousands of unemployed	1402.9	2707	3531.1	3611.5
Up to lower secondary education				2395.6
Upper secondary				357
Tertiary				858.8
Unemplyment rate	9.40%	17.20%	21.90%	22.70%
55 or older, thousands of unemployed	177.1	362.7	503.2	586.5
Up to lower secondary education				532.1
Upper secondary				33.4
Tertiary				69.5
Unemployment rate	6.90%	13.40%	17.00%	19.20%

Source: Eurostat.

Table 8 **Unemployed by industry and duration of unemployment, Spain**

	2008	2010	2012	2014
Agriculture	132.3	215.5	277.7	258.80
Up to 3 months	56.7	83,075	108.05	101.1
3-12 months	75.6	132.4	169.6	157.7
Unemployment rate	13.77%	21.52%	27.20%	25.50%
Manufacturing	213.1	266.1	315	243.10
Up to 3 months	90.4	75,325	93.35	70.4
3-12 months	122.7	190.8	221.7	172.7
Unemployment rate	6.18%	9.12%	11.26%	9.43%
Construction	422.1	501.9	429.4	295.20
Up to 3 months	186.3	143	115.7	86.5
3-12 months	235.8	358.9	313.7	208.7
Unemployment rate	14.65%	23.31%	26.99%	23.06%
Services	958.7	1446.8	1720.5	1574.10
Up to 3 months	372.4	447.7	524.8	494.8
3-12 months	586.3	999.1	1195.7	1079.3
Unemployment rate	6.43%	9.59%	11.50%	10.73%

Table 8 **Unemployed by industry and duration of unemployment, Spain (Cont.)**

	2008	2010	2012	2014
More than 1 year, number of unemployed	635.4	1853.7	2572	2930.70
Unemployment rate	2.75%	7.93%	10.97%	12.73%
More than 2 years, number of unemployed	256.9	787.7	1487.2	2324.30
Never in job, number of unemployed	230.4	352.3	490	547.70
Unemployment rate	1.00%	1.51%	2.09%	2.38%

Note: The classification of unemployed by industries depends on the sector where they were working when they became unemployed.
Source: Labour Force Survey (INE).

Table 9 **Unemployed by previous occupation, Spain**

Total unemployed, 2014	5301.85
Managers	0.50%
Professionals and technicians	2.91%
Clerical support workers	2.94%
Services and support workers	2.99%
Services and sales workers	11.31%
Skilled agricultural, foresty and fishery workers	0.72%
Craft and related trade workers	6.97%
Plant and machine operators and assemblers	2.90%
Elementary occupations	13.47%
Armed forces occupations	0.02%
Unemployed more than 1 year	55.28%

Note: 'Total unemployed' here includes only those who had worked at some time during the last 12 months.
Source: Eurostat.

4. Internal devaluation, fiscal austerity and employment

At the beginning of the Great Recession (2008–2009), the Spanish government implemented an economic policy aimed at reviving domestic demand through an expansive fiscal programme, coinciding with the proposals issued by the G20, the European Plan for Economic Recovery and the IMF. In fact, the Spanish fiscal stimulus package was one of the most expansive in the world (2.3 per cent of GDP in 2009), partly because Spain had considerable fiscal room to manoeuvre. Of course, one of the

outcomes of this expansive policy – and of the crisis itself – was the increase in the fiscal deficit (–11.1 per cent in 2009) and public debt (53.1 per cent of GDP in 2009: a rise of 17 percentage points in two years).

In 2010, the Spanish government curbed public spending, due to the sovereign debt crisis and pressure from other governments and the European Commission. Since that year, Spanish budgetary policy has been strongly restrictive and pro-cyclical.

The economic authorities argued initially that fiscal consolidation could be associated with an expansion of private domestic demand through some 'non-Keynesian effects' such as expectations of future tax cuts, decreasing interest rates or more confidence on the part of investors (Alesina 2010 summarises these arguments, while Romer 2012 provides an opposing point of view). Quite to the contrary, fiscal austerity has been systematically associated with lower growth during the crisis, which the IMF (2012) interprets as strong evidence for the underestimation of fiscal multipliers.

The Spanish government has finally recognised that fiscal austerity is detrimental to domestic demand in the short run and now argues that its positive effect will come in the long run in the form of higher potential growth and job creation (for example, Spanish government, 2013). Theoretically, this would be the outcome of a combination of improving fiscal finances, leading to a reduction in interest rates and the rebalancing of the external sector due to the recovered competitiveness derived from internal devaluation, with structural reforms accelerating the convergence towards full employment. However, potential growth is not independent of real aggregate demand growth. Austerity measures depress output and employment in the short run, but they have longer-lasting consequences. Ball (2014) offers clear evidence of this long-term damage from the Great Recession in OECD countries, including Spain. This implies less productive capacity, which could provoke a higher contraction of the tax base and thus a new rise in the deficit and public debt over GDP ratios. Lower production and a persisting public deficit might lead to a vicious circle.

Febrero and Bermejo (2013) provide a non-orthodox interpretation of the causes that drove the Spanish economy into recession and the limitations of the economic policies applied by the government. In this section, we focus on the role played by competitiveness derived from the internal devaluation strategy in the expected economic recovery. As is well known

(Alexiou and Nellis 2013), this process allows a country to achieve a lower inflation rate than its competitors, and in the case of the euro area it is frequently emphasised that this should be mainly the result of lower wage growth in countries with external deficits. If inflation in neighbouring countries does not change, this would mean an improvement in competitiveness and contribute to a correction of the current account deficit. Moreover, it is also expected that this boost to external demand would trigger an export-led growth recovery, helping to reduce unemployment.

Unfortunately, as we will show, these theoretical benefits have not been achieved and falling wages and fiscal austerity have contributed decisively to the increase in unemployment in Spain.

4.1 Evolution of wages and unit labour costs

Figures 6 and 7 present the evolution of nominal wages in Spain using two different indicators: the officially registered collective agreements signed by employers and trade unions and the effective wage cost per employee as estimated by the Quarterly Survey of Labour Costs, conducted by the INE (Spanish Statistical Office). They show a remarkable decrease in the rate of growth of nominal wages since the onset of the crisis, and especially after 2010. The average annual growth rate of the wage cost per employee was 3.6 per cent between 2001 and 2007, but it has been near to zero since then, with a negative rate of –0.4 per cent between the third quarter of 2012 and the end of 2014. If we consider real wages (deflated with the consumer price index) the loss of purchasing power since the end of 2009 is 8 per cent. In fact, wage moderation in Spain is even sharper when composition effects are taken into account, because job destruction has been concentrated on lower skilled workers who, on average, receive lower wages (Puente and Galán 2014).

Although the growth rate of nominal wages increased during the first recession of 2008–2009 in relation to the expansive period of 2000–2007, different causes can explain this. First, many collective agreements had been signed in previous years in a context of strong economic growth and with an average period of application of more than three years. Furthermore, although employment had been decreasing in the construction sector since the end of 2007, industrial employment began to shrink later, and the expectations of the social partners and the economic authorities did not fully anticipate the acute downturn that took

Figure 6 **Average annual growth of nominal and real wages, Spain (%)**

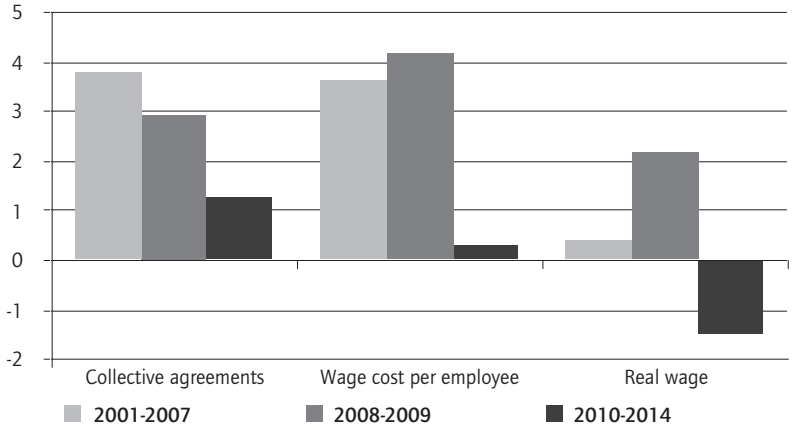
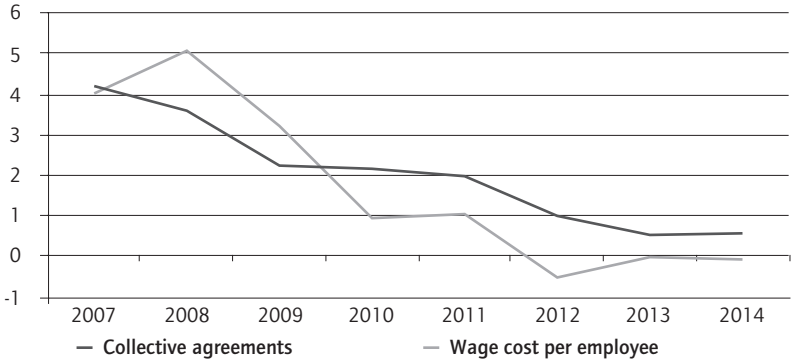


Figure 7 **Annual growth of nominal wages, Spain (%)**



Source: Ministerio de Empleo y Seguridad Social; Instituto Nacional de Estadística; authors' elaboration.

place from the third quarter of 2008. Second, the wage growth signalled in the collective agreements was indeed decreasing during 2008 and 2009, but most employment losses affected temporary workers, whose wages were on average one-third of the those of employees with a permanent contract. This composition effect explains that average wages were growing faster than the collectively agreed rate. Finally, the inflation rate in 2007 had been 2 percentage points higher than what was anticipated when nominal wages had been bargained, and the corresponding compensation was paid in 2008.

This evolution of wages is, on the one hand, the result of the economic crisis itself, which has weakened the position of workers in collective bargaining. Spanish trade unions and employers' organisations signed two Agreements for Employment and Collective Bargaining (ANEC) in 2010 and 2012 that included guidelines for limited wage growth between 2010 and 2014. For example, the second set a maximum growth rate of 0.5 per cent for 2012 and 0.6 per cent for 2013. The target for 2014 was conditioned by the evolution of real GDP in 2013 and the growth rate for wages was finally set at less than 0.6 per cent.

On the other hand, wage moderation is also the result of the deliberate adoption of various policy measures, especially those affecting the wages of public employees and the labour market reforms.

Civil servants' wages were cut in 2010 and 2012, and frozen in 2011, 2013 and 2014. These measures are usually presented as part of the fiscal consolidation policy, but it should be remembered that the Euro Plus Pact highlights the signalling effect of public sector wages for the private sector (see Marzinotto and Turrini 2014 for an analysis of the relationship between wages in the public sector and manufacturing).

Nevertheless, the economic policy decisions that had a more direct impact on wage bargaining were the labour market reforms passed in 2010, 2011 and, above all, 2012. Specifically, the last one involved very radical changes in three decisive areas related to wage determination:

(i) *Collective bargaining*: firm-level agreements were given priority in a broad set of areas, including wage determination; employers were given increased possibilities to opt out of the conditions laid down in sectoral or national agreements, as well as unilaterally to change working conditions previously agreed with employees above the minimum levels established in the collective agreement; and past agreements were to expire one year after their termination.
(ii) *Dismissal costs and procedures*: the economic conditions for dismissal and reduction of redundancy payments were redefined; administrative authorisation for collective dismissals was eliminated.
(iii) *Hiring possibilities*: a new type of permanent contract was introduced for firms with fewer than 50 employees (the vast majority of Spanish companies) with a period of one year with no dismissal compensation; more flexible conditions for training and apprenticeship contracts, as well as part-time hiring.

Izquierdo, Lacuesta and Puente (2013) aim to divide the development of nominal wages into a factor related to the economic crisis, and another one related to these legal changes in the labour market. They estimate a wage equation, including the situation of the labour market in their independent variables, and particularly the rate of unemployment, the evolution of labour productivity and the inflation rate. Then, analysing the residuals of this equation, they conclude that since 2010, and especially after 2012, the downward trend of nominal wages cannot be explained exclusively by the evolution of these variables, and that the labour market reform has deepened wage 'moderation'.

From the point of view of employers, unit labour costs are more relevant than wages per employee. Using national accounts data, they can be measured at the aggregate level by the ratio between nominal compensation per employee[3] and real average productivity.

Figure 8 takes the last quarter of 2000 as the base and reveals that Spanish unit labour costs recorded an upward trend until the last quarter of 2009, when they were 16 per cent higher than the euro-area average. Since then, there has been a continued reduction of unit labour costs and the difference with the euro area was only 3 per cent at the end of 2014. This pattern of unit labour costs is the result of both the behaviour of compensation per employee and the evolution of productivity, which has made a positive contribution to reducing unit labour costs. In any case, this increase in labour productivity is not explained by production increases but by an even greater decrease in the number of workers employed and by the sectoral composition of job losses.

In Figure 9 we present the evolution of real unit labour costs, which compare real wages per employee and average productivity, or real output per employee. In this case we use the GDP deflator instead of the CPI, because we are interested in real wages from the employer's viewpoint. This ratio has followed a clear downward trend since 2009, because the real compensation per employee has grown steadily less than average productivity. Consequently, real unit labour costs were 8.5 per cent lower in 2014 than in 2009.

According to the neoclassical account of labour demand, this difference should have translated into higher levels of employment, but Figures 10

3. It includes not only wages, but also social contributions and dismissal compensation.

Figure 8 **Nominal unit labour costs, Spain (2000Q4=100)**

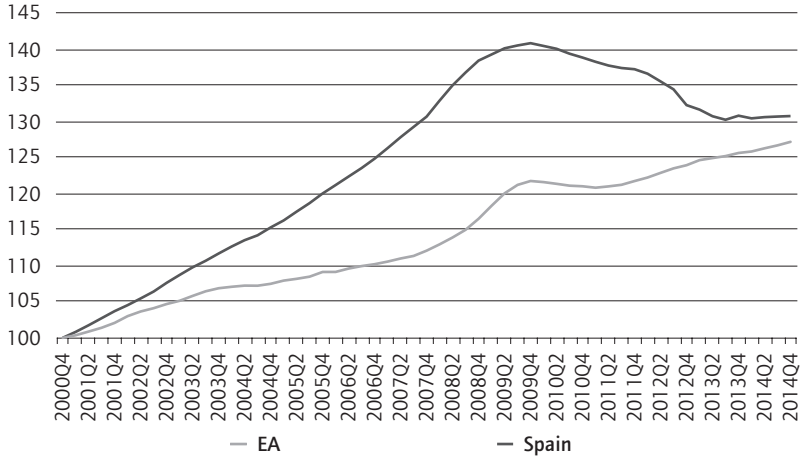
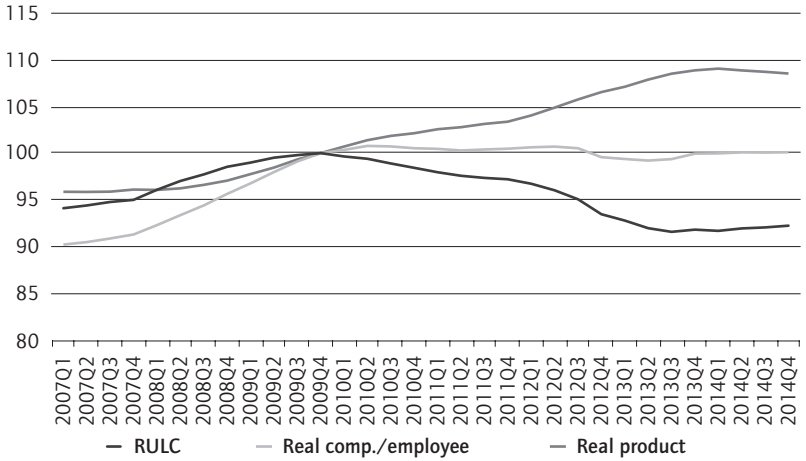


Figure 9 **Real unit labour costs, Spain (2009Q4=100)**



Source: Eurostat and authors' elaboration.

and 11 show very clearly that wage moderation has not caused this hoped-for effect at the aggregate level in Spain. On the contrary, we observe a negative relation between real unit labour costs and employment, showing that lower wages have not kept people in a job. Indeed, this is not surprising. First, a large part of the increase in Spanish unemployment is related to the collapse of specific branches of activity and there is a large

Figure 10 **Real labour costs and unemployment, Spain**

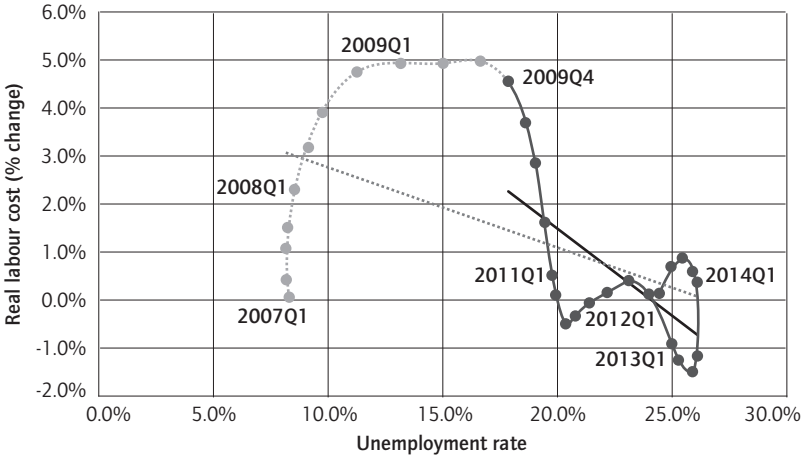
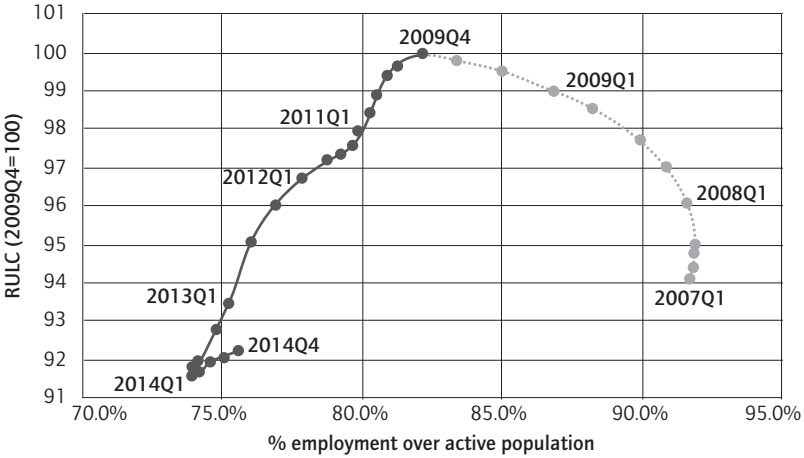


Figure 11 **Real unit labour costs and employment, Spain**



Note: Each point corresponds to a successive quarter. Dotted line: 2007Q1 to 2009Q3.
Bold line: 2009Q4 to 2014Q4. In Figure 10, the dotted trend line corresponds to the whole period, but the bold one only to the second part.
Source: Eurostat and authors' elaboration.

proportion of long-term unemployed with low qualifications. In these cases, cutting pay levels has little effect on employment. Second, labour demand depends more on the expected demand for goods and services produced by firms than on labour costs. But wage restraint has had a

strong negative effect on domestic demand without triggering enough external demand, as we will show in the next section.

Looking at the sectoral level, we have not found any systematic relationship between real wage growth and employment.

First, it is true that between 2007 and 2011, all sectors except for financial and insurance activities and public administration, defence, education, health care and social work activities experienced falls in employment and wage increases. However, the rises in employment in the aforementioned sectors were not accompanied by lower salaries.

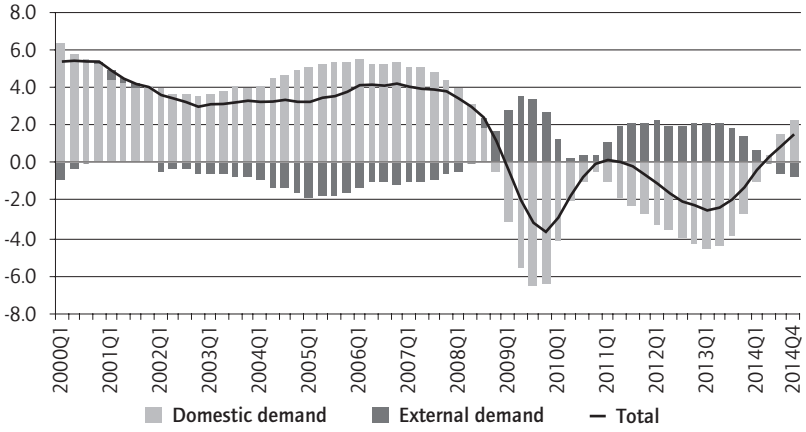
During 2011–2014, real wages fell by 10.5 per cent in real estate activities, and employment grew by 5 per cent in these years. However, the fall in wages in other sectors – such as wholesale and retail, transport, accommodation and catering – was compatible with new employment losses. Furthermore, public administration, defence, education, health care and social work activities changed from rising trends in employment (10 per cent) and wages (2 per cent) in 2007–2011 to a combined fall both in employment (5 per cent) and wages (1 per cent).

4.2 Downward trend in domestic demand

Figure 12 shows the contribution to GDP growth of domestic and external demand in Spain. The period prior to the crisis was characterised by a strong contribution of domestic demand and a negative contribution of external demand. By contrast, the external sector made a positive contribution from 2008 to 2013, but it was not sufficient to offset the negative contribution of domestic demand. Figure 13 represents, in turn, the contribution to growth of the different components of domestic demand since 2010.

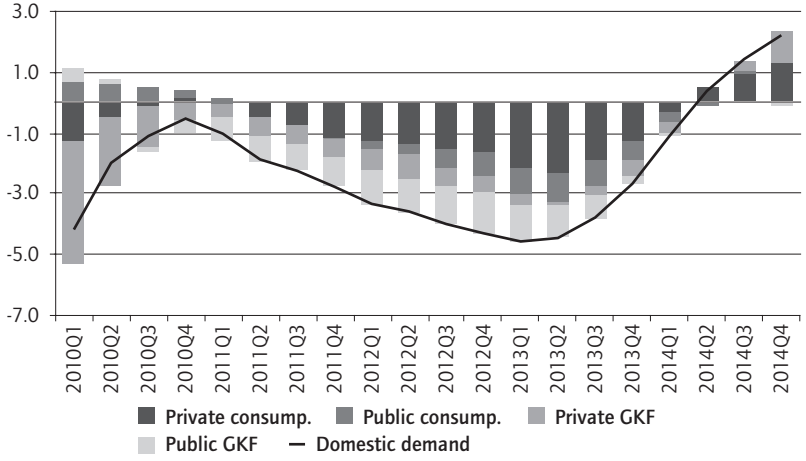
Regarding public demand, the restrictive effect of austerity policies on unemployment is not only derived from the cuts in public employment that we have seen in the previous section, but also from the negative contribution to growth of both public consumption and public investment and their multiplier effect. In real terms, the sum of these two components of aggregate demand was 16.5 per cent lower in 2014 than in 2009. In this same period, the negative contribution to growth of public demand explains 40 per cent of the total drop in domestic demand.

Figure 12 **Contribution of domestic and external demand to GDP growth, Spain, 2000Q1–2014Q2**



Source: Eurostat and authors' elaboration.

Figure 13 **Contribution of components of domestic demand to GDP growth, Spain, 2001Q1–2014Q4**



Note: GKF: gross capital formation
Source: INE and authors' elaboration.

In fact, most of the fiscal adjustment in Spain is due to cuts in public expenditure (24.4 billion euros between 2010 and 2013, or 2.3 per cent of 2010 GDP). The Spanish government has also raised some taxes (direct taxes on income, but above all indirect taxes, such as VAT), but the increase in public revenue (19.4 billion euros, 1.8 per cent of 2010 GDP) has been systematically lower than forecast. In our opinion, this is the consequence of the strong negative impact on effective demand of these decisions, which are instigating a vicious circle of cumulative losses of output and tax revenues, along with a further explosion of the stock of public debt over GDP. Because of this, deficit targets are not being reached and further austerity measures have been taken that have again increased unemployment. The authorities set a fiscal deficit target of 3 per cent GDP for 2013 when the fiscal consolidation strategy was adopted in 2010; however, the current deficit has been 7.1 per cent GDP (or 6.6 per cent without taking into account the bailouts of financial institutions). This failure to meet the target is due mainly to the slump in GDP and the consequent reduction in tax revenues, not to public expenditure.

Private consumption also registered negative growth rates in real terms during this period, especially in 2012 and 2013, when wage restraint was more intense. At the end of 2013, household final consumption was 7 per cent lower than in 2009 in real terms (Figure 14). In those two years, the average negative contribution to growth of private consumption was 1.7 percentage points. Undoubtedly, this drop is the result of decreasing household disposable income, which is derived mainly from wages (Figure 15). During 2008 and 2009, household nominal disposable income increased despite the fall in GDP, mainly due to expansive fiscal policies. However, the savings rate also rose for precautionary reasons and nominal consumer spending fell in 2009. From 2010, household income began to diminish because of job destruction, fiscal consolidation and decreasing wages, and we can see both a reduction in the savings rate and an increase in nominal spending. However, both real and nominal consumption fell from 2011 to 2013.

According to Arce, Prades and Urtasum (2013), the propensity to save decreases during phases of very sharp declines in income, for example because of the existence of minimum consumption thresholds for certain goods. When the level of available funds reaches unusually low levels, households cannot adjust their consumption by the same proportion.

Figure 14 **Private final consumption, Spain (2009Q4=100)**

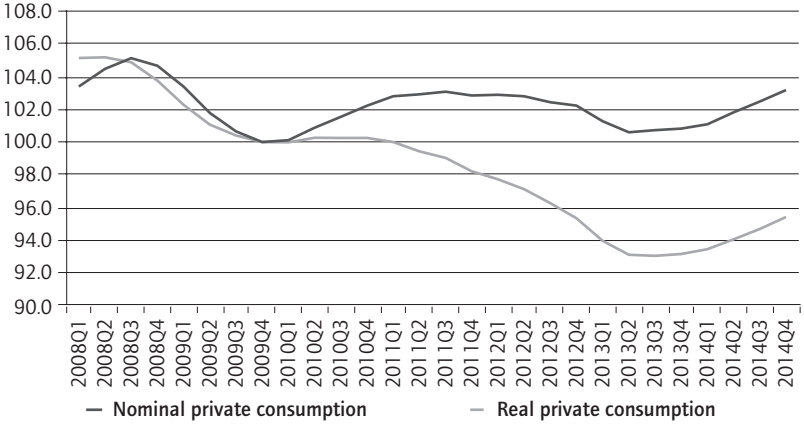
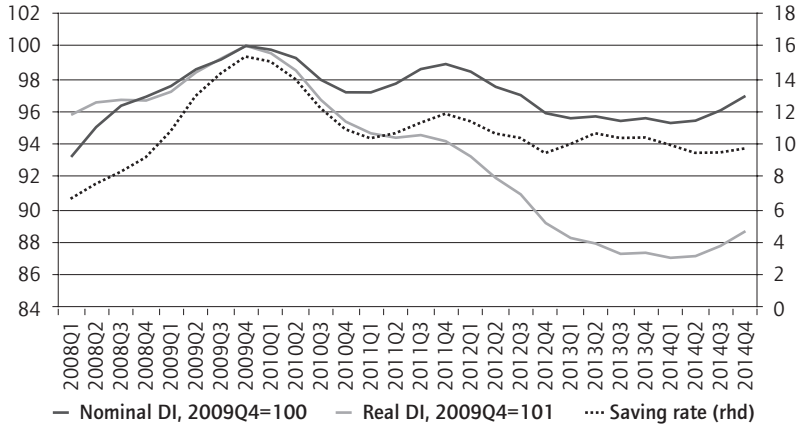


Figure 15 **Disposable income, Spain (2009Q4=100) and savings rate (%)**



Note: DI: Disposable income
Source: Eurostat, INE and authors' elaboration.

Cuts in savings are considerably more pronounced in households with lower incomes, although this is not possible in the case of households with a high level of debt, because they have to set aside a portion of their disposable income to repay it ('forced savings'). Data from the Banco de España confirm that households with outstanding mortgage debt increased their savings rate between 2006 and 2009 by a greater proportion and reduced it by a lower amount than other households in

the period 2009–2011. In other words, they adjusted their consumption more intensively.

This reveals that economies that have become heavily indebted in a short period of time and have experienced large current account imbalances, such as Spain, risk suffering from debt deflation when trying to rebalance their external sector through wage devaluation. When outstanding debt is high, falling wages increase the burden of debt servicing, reducing private consumption, which in Spain is roughly 60 per cent of GDP.

Figure 16 illustrates the evolution of new borrowing and debt servicing over household disposable income since mid-2000. New household borrowing peaks in late 2006, preceding the burst of the real estate bubble, and then it declines until the present, with the exception of a weak rebound in 2011, which is explained by some fiscal benefits linked to the purchase of a house. Since late 2007 debt service payments have been between 10 per cent and 13 per cent of household disposable income. This represents 'forced saving' to cancel past debt and which is going to remain high because most of this indebtedness (around 77 per cent in mid-2014) is long term (mortgage debt).

The consequences of this 'forced saving' on household consumption can be observed in Figure 17. Although total outstanding household debt reached a ceiling in late 2007 and then declined because of deleveraging, 'forced saving' (in Figure 17) remains relatively high, as already noted. With new borrowing at nearly zero, this means that current household net disposable income, after discounting borrowing and debt servicing, is roughly 10 per cent lower. According to our calculations, since mid-2012 Spanish households have been spending (consumption plus gross fixed capital formation) almost the same as their disposable income (after debt servicing), while simultaneously reducing their outstanding debt.

Theoretically, the reduction in consumption expenditure could be compensated by higher investment by firms whose profitability was increasing. In fact, falling labour costs and rising profit margins have led to an increase in the disposable income of Spanish corporations. However, we have seen in Figure 13 that investment made a negative contribution to growth during the whole of this period. This can be explained by the very low levels of capacity utilisation due to stagnating demand and the fact that firms devoted their increasing incomes to reducing debt more than to productive investment. Internal devaluation

has thus had a negative effect on domestic demand, contributing to increasing unemployment.

Figure 16 **Borrowing and debt service payments over households' gross disposable income, Spain, 2000Q2–2014Q4**

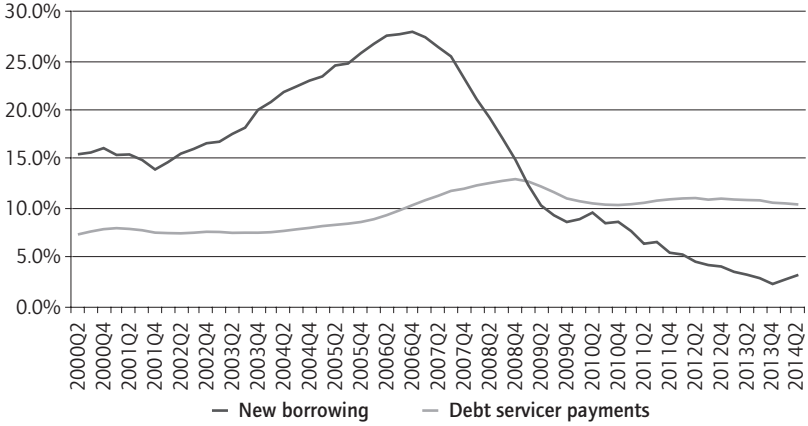
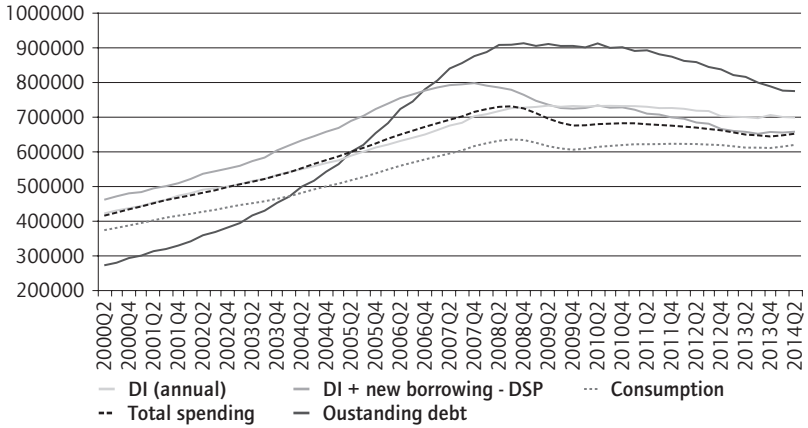


Figure 17 **Household disposable income, outstanding debt and total spending, Spain, 2000Q2–2014Q4 (million euros)**



Note: Disposable income (DI) includes interest paid on bank debt. New borrowing is calculated as the difference between outstanding bank debt in period t+1 minus outstanding debt in t plus paid principal on debt, divided by household disposable income. Debt service payments (DSP) accounts for paid principal on debt plus interest, divided by disposable income as well. Total spending includes household consumption expenditure and gross fixed capital formation.
Source: Banco de España, INE and authors' elaboration.

4.3 Internal devaluation and net exports' contribution to growth

We shall first provide some information about the aggregate evolution and changes in the composition of Spanish exports and imports.

The share of Spanish exports in world exports declined slowly and monotonically from 2.18 per cent in 2007 to 1.90 per cent in 2012, and then rebounded to 1.97 per cent in 2013. Two branches are of particular importance: manufacturing and tourism. With regard to manufacturing, chemical products, vehicles and food and drinks play a central role, and to a lesser extent, refined oil and metal products. The vehicles sector exports 19 per cent of its production, followed by chemical products with 15 per cent. These percentages are larger than in 2005, on average, which indicates that when domestic demand is strong, producers prefer to sell their output within national borders.

Imports show a larger decline during this period. Manufacturing and mining and quarrying (crude oil, particularly) explain almost 80 per cent of the total. Vehicles, chemicals and food and beverages account for around one-third of manufacturing imports in 2013. Imported manufactured goods account for a higher percentage of GDP when GDP grows faster (in 2007) and a smaller percentage when it grows slower.

European and Spanish authorities agreed that falling labour costs would not only help to rebalance the external sector by improving competitiveness, but also lead to a boost from net exports that would be enough to restore economic growth and reduce unemployment. However, these expected results have not materialised. First, although wages and unit labour costs have decreased, real effective exchange rates have improved much less, calculated by production prices or export prices. These are more appropriate measures of competitiveness than relative unit labour costs (Wood 2014). Second, the improvement in external balances observed in Spain since 2010 is explained mainly by the collapse of imports, which is the result of low relative demand, not of the (weak) improvement in competitiveness.

4.3.1 Changes in price competitiveness

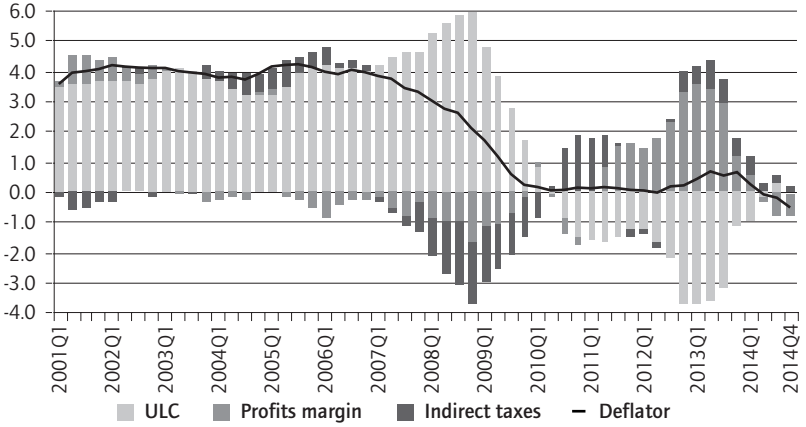
To assess price competitiveness we use the real effective exchange rate vis-à-vis 37 major trading partners, obtained using unit labour costs (REER-ULC), the GDP deflator (REER-DEF) or the price deflator of exports (REER-EXP). Taking 2000 as the base year, Spain registered a real appreciation until the middle of 2008, but its competitiveness has improved since then. Nevertheless, although real appreciation has largely been corrected in terms of unit labour costs, real depreciation has been much lower measured in terms of the GDP deflator, and even smaller in terms of export prices. REER-ULC has decreased by 13 per cent, REER-DEF by 9 per cent and REER-EXP by only 5 per cent. That means that real appreciation from 2000 still stands at 14 per cent if the REER-DEF or the REER-EXP are used, despite the strong wage devaluation. This clearly shows the limitations of the internal devaluation strategy, for at least three reasons.

First, divergences between the real exchange rates based on unit labour costs and those obtained using the GDP or exports deflators correspond to the different degree to which changes in labour costs are passed on to prices in a country and its competitors. Indeed, although inflation rates have slowed down, wage devaluation has only very partially been passed on to prices in Spain: unit labour costs have declined, but prices accumulated a 0.7 per cent rise between 2009 and 2014.

The growth rate of the GDP price deflator depends not only on unit labour costs, but also on profit margins and indirect taxes. Using data from national accounts (Uxó, Paúl and Febrero 2014), we can calculate the contributions of these three components on the rate of inflation, which are shown in Figure 18. Although the average annual growth rate of the GDP deflator was very moderate between 2010 and 2014 (0.2 per cent), it does not reflect the substantial contraction of unit labour costs (–1.4 per cent), due to the significant increase in profit margins registered since the implementation of internal devaluation policies started (1.1 per cent). Furthermore, the increase in indirect taxes has also made a positive contribution to rising prices (0.5 per cent).

Second, the rest of the euro zone has also registered inflation rates clearly below 2 per cent, as measured by the GDP deflator. A symmetric adjustment of competitiveness would require that the countries that previously had weak wage growth and external surpluses have inflation

Figure 18 **Contributions to the growth rate of the GDP deflator, Spain, 2001Q1–2014Q3**



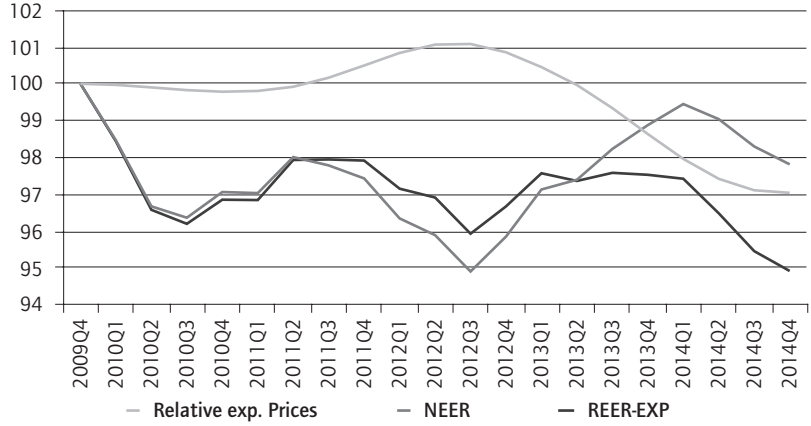
Source: Eurostat and authors' elaboration.

rates above 2 per cent for some time. However, the maintenance in the core of the monetary union of a slow wage growth policy requires peripheral countries to implement bigger wage cuts, causing a deflationary bias in the euro area as a whole.

Third, the appreciation of the euro from mid-2012 to the beginning of 2014. To a large extent, this is also a consequence of the asymmetric nature of the rebalancing of current accounts in the euro area. The attempt to generalise a model of export-led growth across countries, and the continuity of surpluses in the core countries, have caused a nominal appreciation of the common currency, with an adverse effect on the net exports of other members of the monetary union. In Figure 19 the evolution of REER-EXP has been divided between the cumulative change in the relative prices of exports and the variation in the nominal exchange rate, always in relation to the last quarter of 2009. We can see that while the depreciation of the euro contributed, until mid-2012, to reducing the Spanish REER, its appreciation more than offset the improvement observed in relative prices between that quarter and the end of 2013. Mainly due to the change in the monetary policy applied by the ECB, this trend reversed in 2014.

Although the effect on price competitiveness has been limited, it is true that declining wages have led to higher profitability in the tradable goods sector since 2010, and this factor has shifted the decision to increase

Figure 19 **Components of REER-EXP, Spain, 2009Q4–2014Q4**



Note: REER-EXP: Real effective exchange rate-Relative Export Prices Indicator, NEER: Nominal Effective Exchange Rate.
Source: European Commission and authors' elaboration.

production in plants located in Spain, whose output is exported (Salas Fumás 2014).

4.3.2 Changes in exports and imports

Spain went from net borrowing of over 10 per cent in 2008 to net lending in 2013, mainly because of the improvement in its balance of goods and services. This change made the foreign sector go from making a negative contribution to growth before the crisis, to a positive contribution from 2010 to 2013. Some interpret these two facts as confirmation that the strategy of internal devaluation is finally achieving the desired results and that it should be valued positively.

However, the change in the behaviour of the foreign sector is better explained by the collapse of domestic demand than by changes in relative prices (real depreciation), and the collapse of imports has contributed in a fundamental way to the present positive contribution of external demand to growth. So it can hardly be attributed to a 'successful' internal devaluation and it is unlikely that it will suffice to offset the stagnation (or contraction) of domestic demand and initiate a process of sustainable economic recovery.

Table 10 shows the evolution of exports and imports in real terms, and their contribution to economic growth, comparing the periods 2010–2013 and 2000–2007 (we do not consider 2008–2009 when world trade collapsed). Although the average annual growth rate of exports has improved slightly in Spain, there has been a much more substantial change in the behaviour of imports. Specifically, while they were growing in real terms at an annual rate of 8 per cent, negative growth rates were registered between 2010 and 2013.

Table 10 **Exports and imports real rates of growth and contributions to GDP growth, Spain**

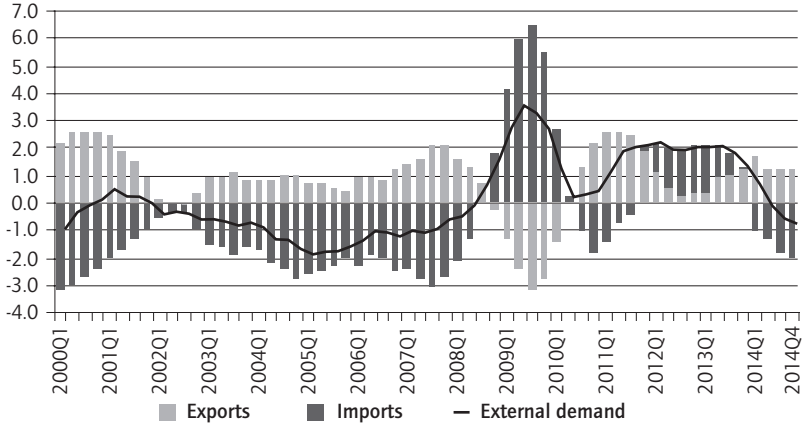
Spain		2000-2007	2010-2013	2014
Contribution to GDP growth	Domestic demand	4.6	-2.9	0.7
	External demand	-0.8	1.6	-0.2
	Exports	1.2	1.1	1.4
	Imports	-2.0	0.5	-1.5
Real rate of growth	Exports	4.9	4.3	4.6
	Imports	7.3	-1.6	5.9

Note: Average of the annual rate of growth corresponding to each quarter.
Source: Eurostat, European Commission and authors' elaboration.

The decline in imports also explains how the external sector has come to make a positive contribution to growth, not the increase in exports (Figure 20). Exports already made a positive, and very similar, contribution to GDP between 2000 and 2007. In contrast, the annual contribution of imports to GDP growth went from –2.0 to 0.5 percentage points.

Furthermore, this change in net exports corresponds almost entirely to the sharp contraction in domestic demand and not to the effects of improved competitiveness. To confirm this hypothesis, Uxó, Paúl and Febrero (2014) estimate an autoregressive distributed lag model in which the Spanish balance of goods and services depends on the ratio between domestic demand in the OECD as a whole divided by Spanish domestic demand, and on the real effective exchange rate. The signs of the long-run elasticities so obtained are the theoretically expected ones: an increase in OECD relative demand improves net exports and a rise in the REER (loss of competitiveness) worsens them.

Figure 20 **Contribution of exports and imports to GDP growth, Spain, 2000Q1–2014Q2**

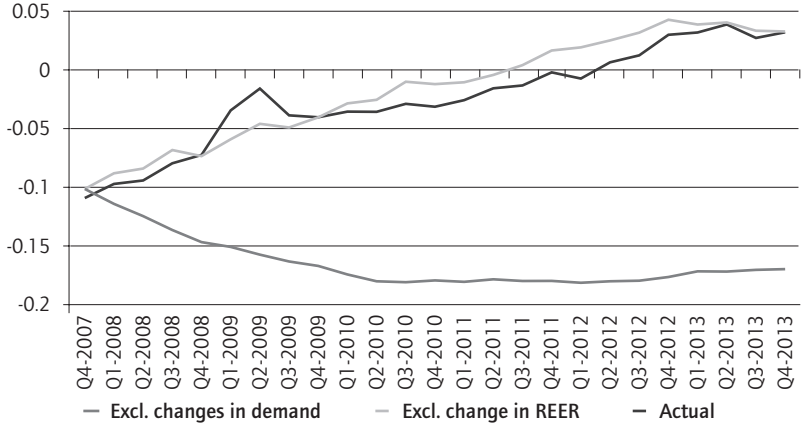


Source: Eurostat and authors' elaboration.

Using these results, in Figure 21 we compare the actual values of net exports with two hypothetical values. First, we calculate the hypothetical evolution of net exports assuming that relative demand has maintained its value at the level of the fourth quarter of 2007 (bold line). Second, we suppose that export prices have remained constant at the level of the fourth quarter of 2007 (dotted line). That is, in the first case we eliminate the effect on the external balance of the different evolutions of domestic demand, while in the second case we remove the effect of variations in competitiveness, and only the changes in relative demand are taken into account. The results are categorical. If there had been no fall in domestic demand in Spain, the rapid correction of the current account deficit would not have happened. In contrast, even holding the relative prices of exports constant, the improvement in the external balance would have been practically the same; that is, changes in aggregate demand alone explain almost all of the adjustment in the external balance.

The behaviour of net exports in 2014 confirms these findings. Once the Spanish economy recovered a positive growth rate, fuelled mainly by the consequences of the ECB's new monetary policy, falling oil prices and a less restrictive fiscal policy, imports began to increase and external demand started to make a negative contribution to growth.

Figure 21 **Net exports, Spain (actual and simulated values)**



Source: OECD Economic Outlook and authors' elaboration.

All of this calls into question the idea that internal devaluation is likely to trigger an export-led resumption of growth in the periphery EU member states. Although the contribution of net exports is indeed positive, it is not sufficient to offset the collapse in domestic demand and unemployment is increasing as a consequence of wage restraint.

5. Concluding remarks

In this chapter, we have focused on two main drivers of skyrocketing unemployment in Spain since 2008. First, structural changes caused by the bursting of the real estate bubble; second, macroeconomic policies induced by the Troika and adopted with the acquiescence of the Spanish government that consist chiefly of fiscal consolidation – supposedly to fight the sovereign debt crisis – and structural reforms, focused mainly on the labour market, to rebalance the external sector by means of internal devaluation and also to encourage firms to hire more labour.

Against the mainstream view that holds that employment increases with labour market 'liberalisation' – falling wages are supposed to increase the amount of labour demanded and wage devaluation is supposed to improve exports because of higher competitiveness – we have found a negative correlation between this decrease in wages, or more broadly, labour costs and employment. Moreover, we have discovered that (i) falling wages have

made no substantial contribution to rebalancing the external sector (net exports have increased because of a fall in imports caused by a shrinking aggregate demand); (ii) there has been no competitiveness gain, chiefly because higher profit margins and higher indirect taxes have offset lower labour costs; and (iii) household disposable income is lower and the burden of debt servicing is higher, weakening private consumption expenditure, which accounts for roughly 60 per cent of GDP. In sum, falling wages have been detrimental to employment because they have contributed to weakening domestic demand.

The crisis has hit the youngest cohorts in the labour market harder, with signs of dualisation. However, although the labour market reforms implemented between 2010 and 2012 did manage to bring down wages and dismantle benefits to employed and unemployed alike, they failed to reduce precarity, particularly among people under 29 years of age. Nearly 50 per cent of the 5.5 million unemployed in Spain have been either unemployed for two years or more or have never worked, and there are very high percentages of employed people with part-time or temporary labour contracts.

The increase in Spanish employment since the second quarter of 2014 should not be interpreted as a positive outcome of internal devaluation policies and falling wages, because the economic and social consequences of this kind of policy were nothing short of devastating between 2011 and 2013. The current recovery has little to do with austerity policy and is more probably due to the change in monetary policy, some easing of fiscal policies and the fall in oil prices. Finally, the new jobs are more precarious and worse paid.

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Chapter 5
Internal devaluation and employment trends in Germany

Steffen Lehndorff

1. Introduction

Recent trends in employment and unemployment in Germany have been widely hailed as a 'miracle' or even a 'role model'. In the course of the current euro-zone crisis they are being used politically to advertise the need for so-called 'structural reforms' of the labour market in order to foster more favourable labour market developments in other EU countries. But what is the substance of this story?

The bottom-line of the present chapter is that these 'reforms' have contributed substantially to internal devaluation in Germany which, in contrast to most other euro-zone countries, took place *before* the 'Great Recession' of 2008/2009. This development is analysed in Section 2. In Section 3 I describe labour market trends over the past 15 years and discuss the ways in which labour market reforms and internal devaluation have contributed to changes in employment levels and employment structures. In Section 4 I look at the potential links between internal devaluation and international competitiveness, which entails a look at the external effects of the internal devaluation approach within the monetary union until the Great Recession. Section 5 is dedicated to the more recent changes on the German labour market since 2008, which reflect the end – for the time being – of internal devaluation in Germany, while this approach is being imposed on other countries. I conclude that the present — as compared with many other EU countries — positive tendencies in Germany are not to be attributed to 'Agenda 2010', but rather to the first attempts at limiting the damage caused by these 'structural reforms' on the German labour market.[1]

The main message of what follows is that we are facing a paradoxical situation. Paul Krugman (2014) is certainly right when he states that 'if you try to identify countries whose policies were way out of line before

1. I developed this line of argument earlier in Lehndorff (2015a) and (2015b).

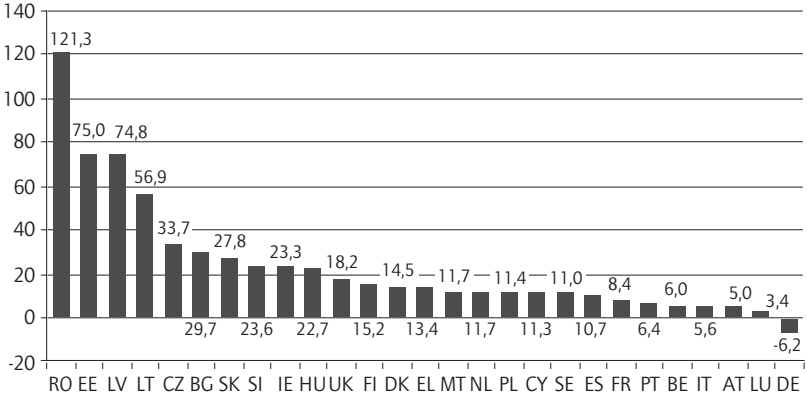
the crisis and have hurt Europe since the crisis, and that refuse to learn from experience, everything points to Germany as the worst actor'. The reason why this policy approach is credible for large parts of the European public, however, has very much to do with the relatively positive labour market trends in Germany since 2008. The bitter irony is – if for the wrong reasons – that this turn of events favours the presentation of Germany both at home and abroad as a model for Europe, which provides a platform for the German government's leading role in imposing the wrong lessons on other countries.

2. The making of internal devaluation

Given the different dynamics in unit labour costs and inflation rates, the European Commission (2010) estimated the level of internal devaluation of the German economy relative to the other euro-zone economies since 2000 at roughly 30 per cent. In fact, the development of wages in Germany in the 2000s was most unusual. Germany was the only country in the EU in which real wages per employee fell on average over the period 2001 to 2009 (Figure 1). Compared with other euro-zone countries – such as Ireland, Greece or the Netherlands, with pay increases above 10 per cent, but also with the second largest EU economy, France, with a pay increase of 8.4 per cent – the decline by 6.2 per cent in Germany reflects what we could call a classic example of internal devaluation within a monetary union. What was behind this outstanding feature of the biggest EU economy during the first decade of the euro?

The usual suspects in this instance would be the trade unions and their collective bargaining approach. In fact, it is a widely shared belief among critical observers in Germany and beyond that so-called 'competitive corporatism' has been at the root of what is called 'wage moderation'. Given the importance of export-oriented manufacturing industry in the German economy, it is far from absurd to assume that both employers and trade unions share the intention of protecting jobs in German manufacturing by keeping wage increases below those in competitor countries. What is more, as analyses of collective bargaining in German metalworking have shown, local derogations from sectoral agreements soared in the early 2000s, giving way to swaps of job protection for pay cuts in many metalworking companies (Haipeter 2013). The fact that these were firm-level derogations from sectoral agreements, however, reflects the fact that the so-called 'wage moderation' was part of a more complex problematic.

Figure 1 **Changes in real wages per employee,* EU, 2001–2009**



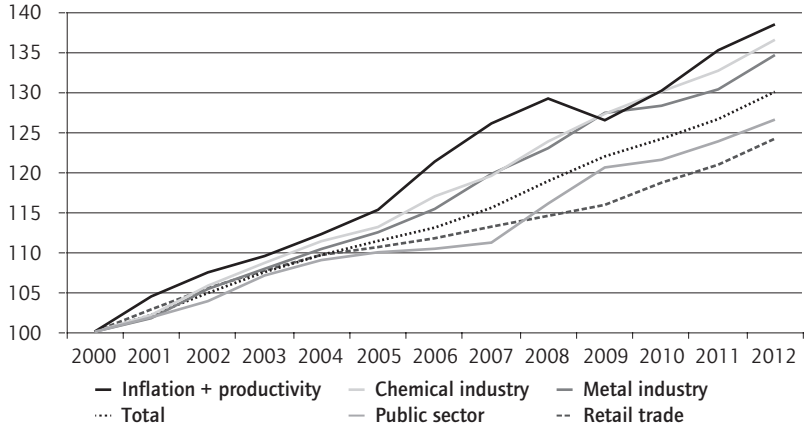
* Nominal compensation deflated by the national HCPI (harmonised index of consumer prices).
Source: Schulten and Müller (2015).

2.1 The weakening of collective bargaining

A glance at the development of collectively agreed wages from 2000 to 2012 (Figure 2) yields a perhaps surprising realisation. In the metal and chemical industries, of all places – in other words, in the two industries exposed most intensively to international competition – collectively agreed wages and salaries have risen most strongly. It is true that even the comparatively assertive trade unions in these sectors were unable, up to 2008, to take full advantage of the so-called distributionally neutral leeway defined as the sum of price rises and aggregate productivity growth (I shall come back to subsequent years in Section 5). The main reasons for the low average wage rises, however, lay in sectors – such as retail trade and public services – that are not exposed to international competition or only to a small extent.

This widening gap reflects important structural breaks in the German employment system that began to evolve in the 1990s and deepened in the early 2000s (Lehndorff *et al.* 2009). The *first* break was the erosion of the institutional architecture within which the so-called 'convoy principle' has traditionally functioned in German collective bargaining. The tacit conditions for the success of the 'wage formula' – that is, a guideline for the minimum collectively agreed pay increase across sectors defined as inflation rate plus average productivity growth in the whole of

Figure 2 **Development of collectively agreed wages in selected sectors, 2000–2012 (2000=100)**



Source: WSI-Tarifarchiv (2015).

the economy, rather than in the respective sector – to which the industrial trade unions continue to orient themselves in their bargaining policy, have been unhinged at the level of both primary distribution (collective bargaining) and secondary distribution (welfare state compensation mechanisms). As a result, trade unions have suffered from a loss (or relinquishment) of political influence over the implicit conditions of a more solidaristic wage policy, including – in particular – tax policy and the cornerstones of labour market regulation (described below). The drifting apart of collectively agreed wages thus conceals both a power-political and an institutional break, which probably can be made good by means of collective bargaining only to a limited extent.

To take the example of public services, what weighed down the United Services Union (ver.di) in its collective bargaining approach was the tax reforms of the SPD/Greens government, which resulted in considerable loss of revenues for public finances (in the middle of the previous decade they had amounted to more than 40 billion euros a year; Truger and Teichmann 2010). The massive pressure for spending cuts thus unleashed directly affected the wages – as well as working time – of public service employees. An important side-effect of this pressure was the break-up of the public employers' collective bargaining association as the federal states were hit hardest by declining tax revenues. It was thus no accident that, until 2007, collectively agreed wage rises in public

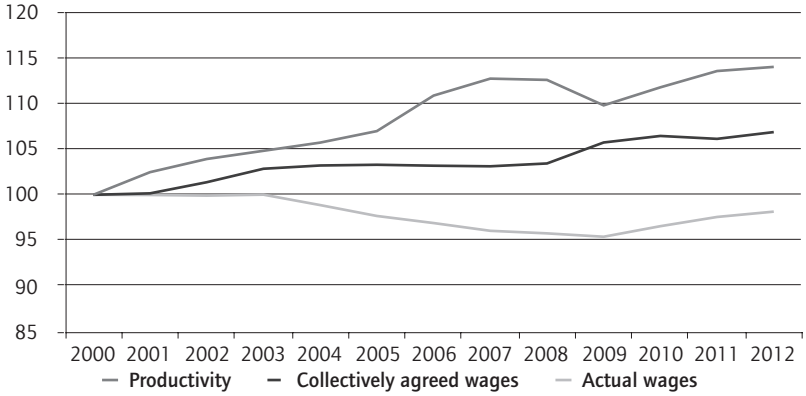
services were among the lowest in the major economic sectors. This was closely linked with a decline in trade unions' structural power as broad swathes of public employees now had to seek wage increases without being able to rely on, for example, the propensity to strike of the refuse collectors. The changes in the institutional framework and the political balance of power are inextricably linked.

Another example is the retail trade, the largest private service industry, which experienced the weakest pay rise in collective bargaining of all major sectors. One important reason here was the systematic dismantling of the Federal Government policy to declare sectoral collective agreements generally binding, following strong pressure from the employers' umbrella organisation since the mid-1990s (Schulten and Bispinck 2013). This turnaround substantially weakened both the employers' propensity to join bargaining associations and ver.di's leverage in these negotiations.

This leads us to the *second* structural break reflected in a 'negative wage drift' between collectively agreed and actual wages. In the first decade of the euro up to 2009, the rise in *actual* nominal wages per employee was little more than half the rise in nominal wages agreed in collective bargaining (Unger *et al.* 2013). In real terms, the latter rose only modestly, while the former fell (Figure 3). That is, most of what is unusual about the decline in real wages per employee, as shown earlier in Figure 1, was attributable to a weaker *impact* of collective bargaining on actual wages, rather than the outcomes of collective bargaining as such.

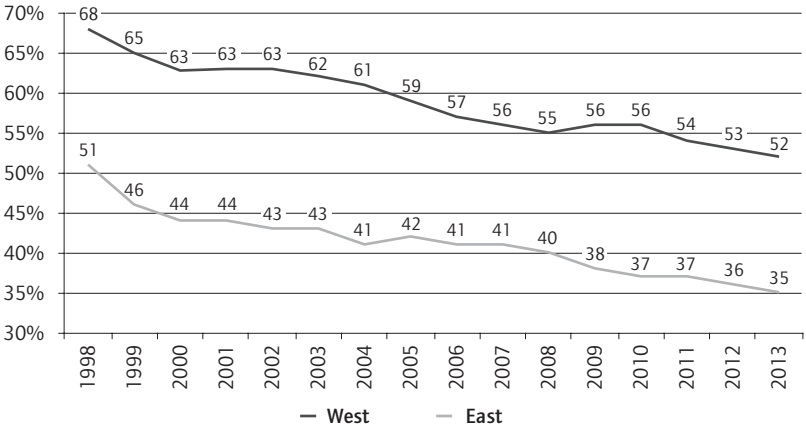
The single most important driver of this decline in collective bargaining *impact* was the drop in collective bargaining *coverage*. This trend has been particularly marked in sectoral agreements. From 1998 to 2013 the share of workers covered by sectoral agreements dropped by 16 percentage points in both parts of Germany (Figure 4). If we include firm-level agreements (whose importance has grown over time when counted by firms but not by workers covered), in 2013, 60 per cent of western German and 47 per cent of eastern German workers were covered by some form of collective agreement, which adds up to an average of 49 per cent coverage by sectoral agreements, plus 9 per cent by firm agreements, in Germany as a whole (WSI-Tarifarchiv 2015).

Figure 3 **Collectively agreed and actual real wages per employee, 2000–2012 (2000=100)**



Source: WSI-Tarifarchiv (2015).

Figure 4 **Share of workers covered by sectoral collective agreements (1998–2013)**



Source: WSI-Tarifarchiv (2015) based on IAB-Betriebspanel.

Compared with the late 1990s and the early 2000s this decline appears to have slowed down over the past few years, at least in the western part of the country, but it would be premature to claim that it is about to come to a halt. The single most important reason behind the mid-term trend is the weakening of trade unions: net trade union density fell from around 30 per cent in the mid-1990s to around 19 per cent in 2013 (Visser 2013).

It is obvious that weaker unions provide less incentive for employers to join an employers' collective bargaining association. While it is true that, as demonstrated by the examples of France and various other EU countries, weak trade union density can be outweighed by an established practice of statutory extensions of collective agreements, this practice (as mentioned earlier) has been blocked for strategic reasons by the employers' umbrella organisation since the 1990s. Hence the overall weakening of the collective bargaining architecture.

Against this background, the overall drive towards privatisation of public services and the increasing importance of outsourcing strategies in manufacturing has gained an additional negative impact on collective bargaining. Ever broader segments of industry and services have been made subject to poorer working conditions and wage standards. By way of example, massive low wage competition became a feature of postal services in line with the EU services directive. Obviously neither outsourcing nor privatisations are particular to Germany. However, in connection with the abovementioned institutional upheavals – especially the widening gap between wages in manufacturing and in services, as well as the widespread lack of generally binding collective agreements – they reinforced the dampening effect on labour incomes.

Last but not least, the abovementioned local derogations from collective agreements since the late 1990s developed a particularly problematic dynamic. In the metal industry in particular the drive towards locally agreed wage cuts and working time extensions began to threaten the whole system of collective agreements. Eventually, from 2003 on, IG Metall counteracted by establishing a system of a centralised internal coordination in combination with greater involvement of the local membership base, which step by step helped to regain control over this process and to prevent collective agreements from being hollowed out further (Haipeter 2013). Nevertheless, depending on the economic situation, in large parts of manufacturing the demand by employers at firm level to deviate from sectoral agreements remains a permanent challenge for works councils and local trade union organisations.

While the process of weakening of collective bargaining which started in the 1990s has proved to be a mid- to long-term trend, the so-called 'labour market reforms' of the mid-2000s worked as shock therapy. This move marked the *third* structural break in the employment system and gave a particularly powerful boost to internal devaluation.

2.2 'Agenda 2010'

The so-called labour market reforms from 2003 onwards were intended to bring about – and indeed caused – a structural break in the German employment system. They led to massive additional pressure on both collectively agreed and actual wages (on the following see, if not indicated otherwise, Bäcker *et al.* 2011; Bosch 2014; and Knuth 2014). These were the main elements relevant to the present issue whose effects I will spell out in what follows:

— The partial replacement of unemployment insurance by a means-tested benefit system that requires that offers even of low quality jobs must be accepted has had an intimidating ripple effect in broad segments of the labour market. This gave a strong impetus for the short-term unemployed to try and avoid being trapped in the means-tested 'Hartz IV' scheme by accepting job offers on low pay. What was labelled by the Federal Labour Agency as an 'increasing unemployment dynamic' (BA 2011) caused substantial knock-on effects in the whole pay structure (I will come back to this later).

— Many previous restrictions on temporary employment were abolished, while the European equal pay principle for agency labour was hollowed out by an opt-out in the case of collective agreements. This paved the way for a wave of dumping 'agreements' well below equal pay standards. The number of temporary agency employees rose from 300,000 in 2003 to around 900,000 in 2011, which amounted to almost 3 per cent of all employees liable to pay social security contributions. Temporary workers on average earned around half as much an hour as standard employees in 2006, which has been increasingly perceived as a threat to pay standards among core workers, too.

— Additional strong impetus for the extension of atypical employment was given, on the one hand, by public subsidies for low wages within the framework of Hartz IV and, on the other hand – and frequently in combination with it – by the promotion of 'mini-jobs' with pay of up to 450 euros without any reference to hours worked. The number of 'mini-jobbers' (as their first job) rose from around 4.2 million at the beginning of the 2000s to roughly 5 million persons. By 2012 around 14 per cent of all dependent

employees – most of them women – were exclusively in marginal employment (that is, without obligatory social security contributions for workers). Even if schoolchildren, students and pensioners are not included the figure is around 9 per cent; 84 per cent of 'mini-jobbers' were on low wages (Weinkopf 2012).

— Several pension reforms abolished previously existing pathways to early retirement; furthermore, stepwise from 2012 to 2029, the statutory retirement age is being gradually increased from 65 years of age to 67.

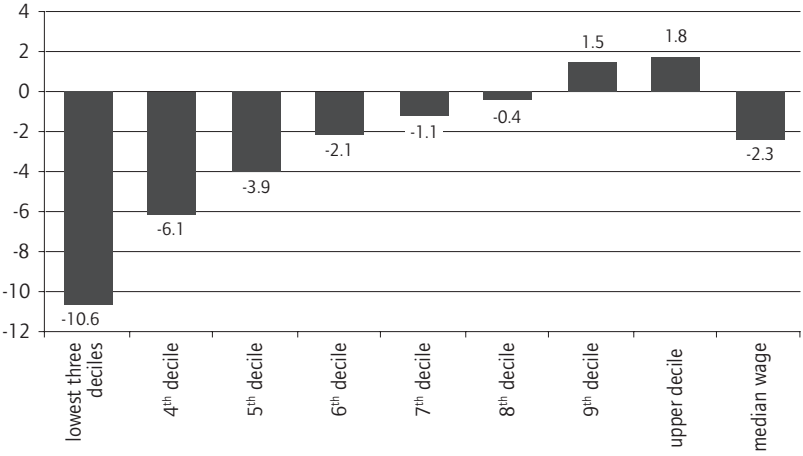
I will return to the employment effects of these reforms in Section 3. As to their effects on wages, which are the focus of the present section, Bäcker *et al.* (2011: 48) have given a blunt summary: 'Since the introduction of the "Hartz reforms" pressure has increased to accept employment even under the poorest conditions as regards low wages, temporary work, fixed term employment, part-time work or mini-jobs'. Lowering unemployed people's 'level of expectation' based on 'intimidation' (Knuth 2014: 6) was one of the express aims of Hartz IV right from the start – and it was achieved. As Herzog-Stein *et al.* (2013: 9) have shown, by comparing succeeding growth cycles, this dubious success is reflected in the unusual stagnation of average real wages after the reforms from 2005 to 2008 during a period of economic growth.

As a consequence of the structural breaks in the German employment system since the mid-1990s a large low wage sector emerged; in 2012 roughly 24 per cent of employees earned less than two-thirds of the median wage, compared with 19 per cent in 1995 and 21 per cent in 2000 (Kalina and Weinkopf 2014). Particularly noteworthy is the fact that only a minority of them – around a fifth – had no occupational or academic qualifications. The justification of low wages often presented – that they offer low qualified people a chance to enter the labour market – is even more dubious if one takes into account that 46 per cent of all registered unemployed persons in 2013 had no occupational qualifications (BA 2014).

The rise of the low wage sector is also reflected in the medium-term changes in overall pay structures: the lowest three deciles in the wage grid suffered from substantial losses over the 2000s, while hourly pay rose only in the two top deciles (Figure 5). These data support the view that the growing low wage sector has also produced a negative pull effect on

median, rather than just average, wages. Hence the fall even in median *hourly* pay, which was less marked than the fall in actual wages per person in employment depicted earlier.

Figure 5 **Real hourly wages, by decile, 2000–2010 (%)**



Source: Brenke and Gabra (2011).

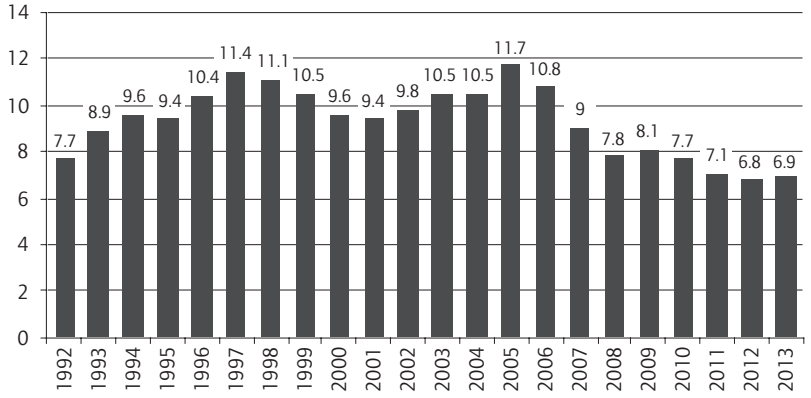
This change in wage *structures* behind the *average* pay decline over the 2000s gave way to a peculiar feature: up to the Great Recession, the share of households at risk of poverty (defined by an income of less than 60 per cent of median household income) increased because poverty rose both among jobless households and non-jobless households, while employment was on the rise at the same time (Gábos *et al.* 2015). That is, in Germany poverty increased along with job growth. It is to this 'paradox of employment and poverty' (Arbeitsgruppe Alternative Wirtschaftspolitik 2013: 20) to which I now turn.

3. Internal devaluation and the labour market

Looked at in a long-term perspective the German labour market has experienced a remarkable change over the past decade (on what follows cf., if not stated otherwise, Knuth 2014 and Bosch 2014). In the past, unemployment would usually fall in phases of economic growth and rise in recessions. From the 1970s, as in many other countries, the ups tended to be much more important than the downs. This, in turn, gave way to a

step-by-step increase in unemployment across business cycles. In contrast to this long-term trend, from the mid-2000s registered unemployment fell, briefly interrupted by a minimal rise in 2009, and continued to do so at a slower pace after the Great Recession (Figure 6). As already mentioned, most of this new feature was attributable to the important influx from short-term unemployment into employment after the 'labour market reforms'. While this influx was most marked up to 2008 it has remained relevant to a lesser extent since 2009 (Herzog-Stein *et al.* 2013).

Figure 6 **Registered unemployment, Germany, 1992–2013 (%)**



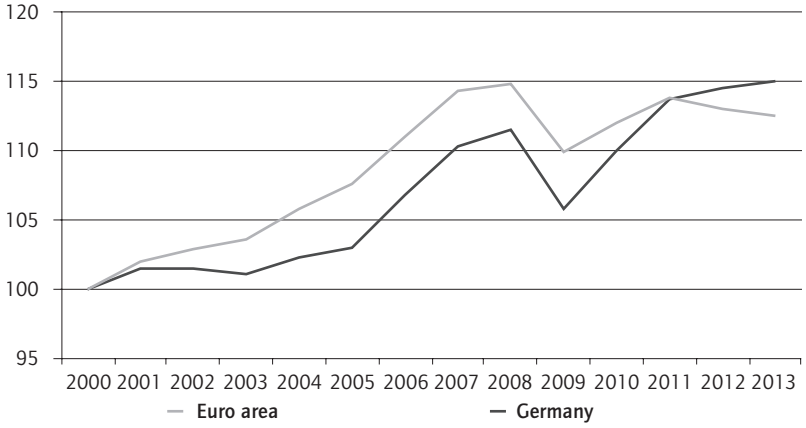
Source: BA (2014).

Interestingly, employment grew faster than unemployment declined: The employment rate rose from 65.6 per cent in 2000 to 73.5 per cent in 2013 (Eurostat database). Demographic change plays an important part in this. From around 2000, labour supply in Germany began to suffer from an ageing population. At the same time, the changes in the pension system built high barriers to early retirement. This led to a boost to the employment rate among workers aged 60 and over (Knuth 2014).

What is more, it should be noted that both the employment *rate* and the overall *number* of persons employed have been on the rise. In general one would expect a strong GDP growth to be the main driver of employment growth. Average GDP growth in Germany, however, has been far from outstanding by EU standards. As depicted in Figure 7, German GDP in the early 2000s suffered from a longer stagnation period and subsequently grew at a much slower pace than the euro-zone average, kept pace at a lower level until the Great Recession, dropped sharply in

2009 but recovered much more strongly than the euro-zone average and, different from most euro-zone countries, continued to rise after 2011. As Herzog-Stein *et al.* (2013) have shown by comparing the changes in GDP and employment during the business cycles 1999–2005, 2005–2009 and 2009–2013, the employment intensity of growth remained by and large the same over this period of time. This means that *most of what is being hailed as the German 'jobs miracle' is attributable to the stability of employment during the Great Recession and the stronger than average GDP growth from 2009*. I will come back to this in Section 5.

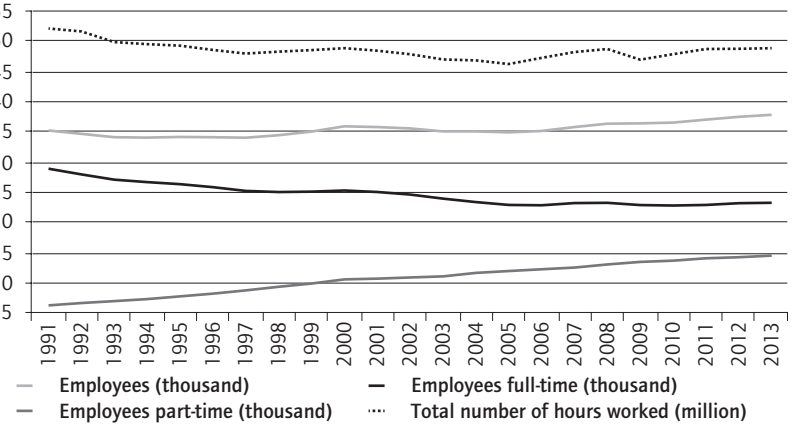
Figure 7 **Level of real GDP, euro area and Germany (2000=100)**



Source: Eurostat database (own portrayal).

Thus, if we want to understand the drivers behind the rise in employment *beyond* GDP growth we have to look at structural changes in the labour market. The arguably most pertinent source of the almost continuous rise in employment, in terms of both persons employed and percentage of the working age population, is the rise in female labour market participation. This long-term trend, in turn, is closely linked to soaring part-time employment, giving rise to a disconnection (at least until very recently) between the number of persons in employment and the total number of hours worked: the total number of hours worked dropped from the early 1990s until the mid-2000s and kept fluctuating over the following years (Wanger 2015). That is, roughly, more and more people shared a falling (up to 2005) and since then more or less stagnating labour volume, due to a continuous drop in the number of full-time workers (until 2006) and an ever growing number of mostly female part-time workers (Figure 8).

Figure 8 **Employment and total hours worked, 1991–2013**



Source: IAB (author's figure).

This change in average hours worked reflects an increasing dispersion of working hours between men and women, intertwined with an increase in precarious work, notably so-called mini-jobs (Kümmerling *et al.* 2015).[2] This went hand in hand with an increase in other forms of precarious employment fostered by the labour market reforms of the early 2000s, as summarised in the previous section.

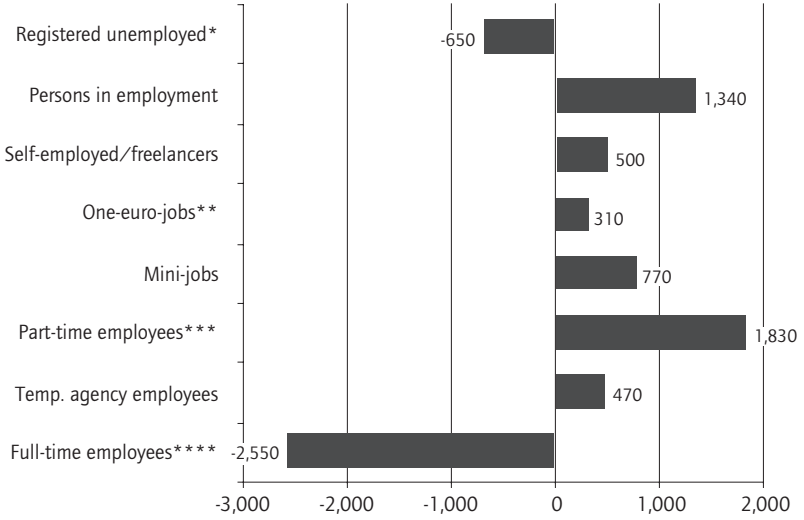
Thus, while recent employment growth in Germany is attributable mainly to the stronger than average GDP growth since 2009, it has been, in the longer run, closely connected to a substantial structural change in the German labour market. This structural change has been fostered, though

2. The significance of the mini-job regulation, which has contributed substantially to the growth of the low wage sector, is closely related to the maintenance of the so-called 'conservative welfare state' which partly compels and partly promotes limited participation by women in working life. The inadequate levels of child care facilities, which still have not been overcome, makes it difficult for many women with young children to resume work fairly quickly, while the tax and social contribution system makes unequal distribution of employment income between married couples financially attractive. Even though this system – which is still stuck in the 1950s – is increasingly coming under criticism and some modernisation has taken place (such as the introduction of a parental allowance on the Swedish model) its stability stands in marked contrast to the neoliberal-inspired reforming zeal in other areas. The extent of this stability is reflected in the retention of a benefit for parents not using child care, as well as in the stubborn defence of tax splitting for married couples. Hence the reinforcement of precarious work due to an interaction between neoliberal labour market reforms and a conservative gender model in Germany (Bosch/Jansen 2010).

not exclusively, by the labour market reforms of 'Agenda 2010' and must be regarded, next to the fall in collective bargaining coverage, as the main path to internal devaluation in the German economy up to the Great Recession.

Given the widely shared belief that 'Agenda 2010' is the reason behind German job growth it is important to keep in mind that, as already mentioned, these labour market reforms had a discernible effect neither on GDP growth nor on the employment intensity of growth. They influenced the sources of additional labour input, that is, short-term unemployed persons in close interaction with the rise in precarious and low paid work. This dynamic also reflected the greater emphasis on external flexibility in company human resources policy based on fixed-term contracts and temporary work (Bosch 2014). The importance of these structural changes for the overall 'employment miracle' is depicted in Figure 9.

Figure 9 **Changes in employment structure, Germany, 2000–2010 ('000 persons)**



Notes: * By German Labour Agency definition (–210,000 by ILO definition).
** Subsidised active labour market policy scheme. *** With social security contributions, i.e. without mini-jobs.
*** Excluding temporary agency jobs. All numbers rounded off.
Source: Bundesagentur für Arbeit (author's figure).

Both temporary agency workers and mini-jobs are overwhelmingly poorly paid. Among workers in mini-jobs, the share of low-wage workers was 86 per cent in 2010 and among temporary agency workers around two-thirds. The relevance of the labour market reforms for wage developments is not controversial: even most mainstream economists cheering on the Hartz reforms share the view that 'wage moderation' has been the single most important effect of 'Agenda 2010'. By way of example, ZEW (Centre for Economic Research, Mannheim) economist Bonin (2013: 150) has come to the conclusion that 'the structural improvements brought about by the reorientation of labour market policy alone' could not explain the rise in employment since 2005: 'Presumably the strongest support came from the restoration of international competitiveness due to many years of wage moderation … Furthermore, the emergence of a low-wage sector resulting from the greater employment pressure imposed on the low qualified unemployed subdued the growth of average unit wage costs.'

It is these competitiveness-related effects of internal devaluation to which I now turn.

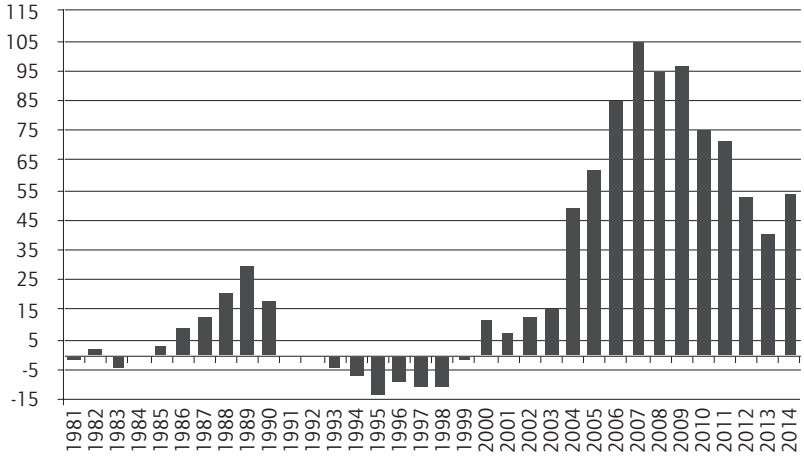
4. Internal devaluation and competitiveness

The German economy has been one of the most manufacturing-based and export-oriented economies in Europe for a long time. The export industry's performance and success is based primarily on high specialisation and product quality, especially of capital goods; the strong orientation towards customer service; the flexibility and qualifications of employees as a basis of incremental product and process innovation; all factors embedded – at least hitherto – in comparatively strong medium-sized (*Mittelstand*) ownership structures and a broad system of institutions ranging from occupational training to codetermination, as well as in a culture in which manual and technical work is appreciated (for references, see Lehndorff *et al.* 2009). Nevertheless, looking at the 2000s up to the financial crisis, compared with earlier decades, the soaring current account surplus with the euro-zone countries is striking (Figure 10).

It would be difficult to explain this turn of events primarily by a sudden regaining of product and process innovation capacities allegedly lost over the preceding decade. As a look at the 1980s reveals, there must have been much more than this. In fact, as noted by Bonin (2013) and many

others, there can be no doubt about the importance of declining average wages for this extraordinary surplus boom in foreign trade with the euro-zone countries. In previous decades the exchange rate adjustment mechanism would have made it possible for economies with rising labour unit costs and higher inflation rates to react to falling unit labour costs and a modest inflation rate in Europe's strongest economy. From the founding of the monetary union two-fifths of Germany's foreign trade no longer had to fear such action. This is what internal devaluation was all about, as reflected in the impressive rise in current account surpluses with the countries of the euro zone in particular during the short growth period 2004–2008.

Figure 10 **Germany's current account balances with the countries of the euro zone (billion euros)**



Source: Deutsche Bundesbank (author's figure).

Internal devaluation meant in practice that from the early 2000s the product- and process-based strengths of German manufacturing industry were *supplemented* by the decline of unit labour costs in comparison with other EU countries. Average real wages in Germany fell, while labour productivity rose in relation to the EU average, which gave way to a particularly low inflation rate far below the euro-zone average, as well as the ECB's target inflation rate. Even in industry unit labour costs in Germany fell up to 2008 much more than in any other country in the euro zone, with the exception of Finland (on what follows see Herzog-Stein *et al*. 2014). On top of this comes the fact that wages in the private services

sector in Germany are, on average, 20 per cent lower than in industry (unprecedented in the EU), which means that many pre-services for industry are extremely cheap. The Bundesbank (2011: 17) was thus certainly right to claim that German export success also gained 'impetus from improvements in price competitiveness'. The European Central Bank (ECB 2011) estimated the improvement in Germany's price competitiveness compared with the major global trading countries in the period 1999 to the beginning of 2011 at 16 per cent (basis: GDP deflator).

How does this relate to the widely shared observation that demand for many German export products does not depend primarily on price? While it is true that this does not apply by any means to all export industries,[3] there is no doubt that in particular in the motor and the machine-building industries – which account for around one-third of German goods exports – the price elasticity of demand is relatively low. Thus it must be assumed that the drop in nominal unit labour costs is reflected to varying degrees in export price levels across industries. On average, export prices rose from 2003 to 2008, while at the same time (until 2007) nominal unit labour costs fell (Schulten 2015). As shown by the example of the metal industry, where unit wage cost advantages were not reflected in falling prices subsequent to 2000, profits of German firms increased as competitors in other euro-zone countries raised their export prices at a faster pace (IG Metall 2010). The Bundesbank (2011: 33), too, pointed out that part of the relevant cost benefits 'were apparently used to increase profit margins'.

Before coming back to this important aspect, the other side of the same coin must be highlighted. Wage developments impact on the demand-side of the economy. From the end of the 1990s the key issue of all public 'debates' was the level of labour costs, which allegedly had to be brought down in order to boost the competitiveness of the German economy. The supposed imperative of lowering labour costs was never questioned, whether in relation to pension reform, decentralisation of collective bargaining or tax policy. As indicated earlier, in contrast to what had been prophesied by the neoliberally inclined main actors in the economy and politics no impetus was discernible from falling wages and labour costs

3. One particularly crass example is social and wage dumping in German slaughterhouses, taking advantage of loopholes in the statutory regulation of agency labour. The external effects include jobs put at serious risk, especially in the Danish, but also in the French meat industry (Czommer/Worthmann 2005; Refslund 2012).

for either investment or growth. What happened instead was almost a stagnation of the domestic market. The weak wage development hindered both a transfer of the growth impetus from the export boom to the domestic market and also a boost to imports, which would have enabled Germany's trading partners abroad to benefit from its export-induced growth impetus (Joebges *et al.* 2010: 10). Herzog-Stein *et al.* (2013: 17) show, on the basis of alternative model calculations, that higher wages would not have adversely affected either employment or economic growth despite a predicted lower growth in exports: 'The stronger domestic dynamic would have compensated for the weaker foreign demand and growth and employment would have been higher'.

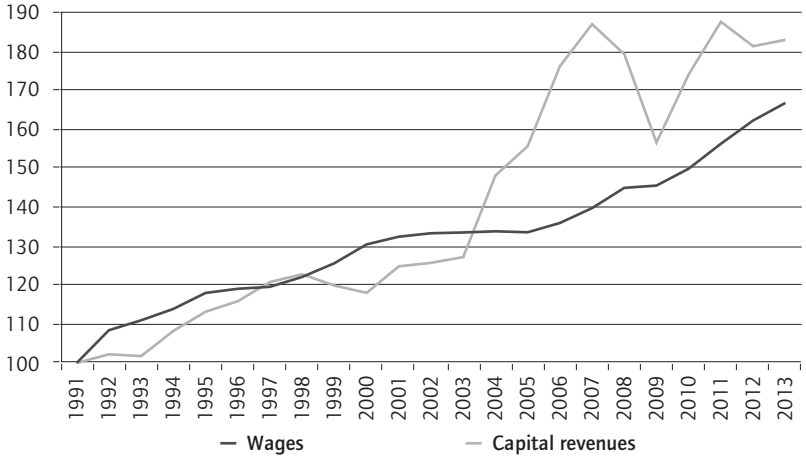
Therefore, the criticism formulated by many observers that Germany exports too much tends to divert attention from the core problem. It makes more sense to emphasise the other side of the coin: Germany imports too little. The key outcome of the prevailing economic and social policy approach of internal devaluation in the first decade of the euro zone was the '*import deficit*' of the largest EU economy. The relative and temporary success of this approach was possible only because the other EU economies did not choose the same route. The domestic imbalances in Europe's largest economy were the main source of the external imbalances that paved the way to the crisis in the euro zone. Thus, the common denominator that sums up the German business model in the monetary union can be described as '*making profits without investing*'.

And they did make profits. In contrast to falling average wages per employee and to the stagnation or minimal growth of overall labour income, profits rose significantly (Figure 11). The share of profits in GDP rose by 9 percentage points from the beginning of the 2000s to the eve of the crisis. The dynamic of rising inequality was among the strongest in the EU (Schäfer 2012; ILO 2010). The contrast to the pre-euro era was striking. On top of this, due to the tax reforms in the early 2000s secondary distribution did less than had previously been the case to attenuate the changes in primary distribution.

Due to weak economic growth, however, only a small part of rising profits was used for domestic investment. An analysis by the Bank for International Settlements (Ma and McCauley 2013: 8, 13) comes to the conclusion in relation to Germany that '[t]he fruits of wage moderation and labour market reforms were not invested domestically but instead funded the accumulation of net foreign assets', which on this account did

not involve an increase in direct investment, but a massive boom in lending abroad. Thus, German profits participated actively in the booming global financial market bubble and in particular the financing of strong growth driven by partly private, partly public debt in Europe's deficit countries. German investors were among the largest foreign creditors of the indebted US private sector, and German banks were the largest creditors of partly public, but primarily private debtors in Greece, Ireland, Portugal and Spain (Bofinger 2010; Lindner 2013). It was thus only a minor journalistic exaggeration when a commentator in the British *Guardian* newspaper declared: 'Germany blew the bubbles that popped up in the rest of Europe' (Chakrabortty 2011). It stands to reason that the bursting of this bubble resulted in considerable losses among German investors and banks, too (Herzog-Stein *et al*. 2013).

Figure 11 **Labour income and capital revenue, 1991–2013 (1991=100)**



Source: Destatis (VGR), calculation by Unger *et al*. (2013).

To sum up, the economic policy approach of internal devaluation in Germany before the crisis had three major effects: first, it held down imports due to the extraordinarily weak growth of the domestic market; second, it helped to increase exports further, by adding (on average!) price-based to product-based competitiveness; and third, it gave an extra boost to profits as export prices (again: on average!) did not reflect the drop in nominal unit labour costs. As a consequence, internal devaluation in Germany was crucial for the soaring economic imbalances within the euro zone both on the side of trade imbalances and on the side of capital

exports into deficit-driven economies. Thus, the German economy was heavily complicit in preparing the ground for both the global financial and the euro-zone crises. But when the bubble burst in 2008 and the euro house of cards almost collapsed in 2010 the German economy and its labour market turned out to be an island of (relative) stability. How could this be possible?

5. The gradual renunciation of internal devaluation

The fact that Germany is currently being held up as a model can be traced back to the much lauded 'German employment miracle' since 2008/2009 (on what follows, cf. Bosch 2011). The truly astonishing stability on the labour market during the financial crisis was the main condition of the rapid economic recovery from the third quarter of 2009 and the ensuing growth in employment in the following years. On the one hand, for the first time in many years stronger economic impetus came from the domestic market, primarily due to higher collectively agreed pay increases; on the other hand, on this basis industrial companies were able to react most quickly to the initial global economic recovery. Furthermore, in combination these developments were such a balm for crisis-hit state budgets that Germany was able to avoid what other – sometimes even less indebted – countries felt forced to do: introduce drastic austerity programmes.

Almost overnight, counter to the relentless mantras that had previously prevailed, extensive economic stimulus programmes were implemented. While in the years before the crisis economic growth was hindered by cuts in public spending, which matched lower tax revenues due to tax reforms, the temporary change of course in financial policy in 2008 and, especially, 2009 was a considerable impetus to growth (IMK Arbeitskreis Konjunktur 2011). The biggest direct effect of this recovery was the prevention of a massive fall in employment in crisis-ridden manufacturing. A similar turnaround happened with respect to external vs. internal flexibility. Only a few years beforehand, during the preceding phase of recession and stagnation, many companies had thinned out their workforces to such an extent that they struggled with staff shortages when the economy revived. This was still fresh in the memory and now even considerable productivity losses were accepted in the short term in order to retain skilled staff. Thus, the emphasis was now put on *internal* flexibility.[4] The contrast was as stunning as with regard to fiscal policy.

Since the mid-1990s increasing *external* flexibility had been one of the core neoliberal dogmas of employment policy; this was thus also one of the guiding principles of the labour market reforms. What rescued the German labour market in the crisis, however, was precisely the opposite: the reactivation of *internal* flexibility based on cooperation between employers and trade unions at eye-level.

Key to the revival of internal flexibility was short-time working, at levels not seen since the mid-1970s (Herzog-Stein *et al.* 2010). But other working-time measures contributed as much if not more to reducing the volume of work: the reduction of positive balances on working-time accounts, which in previous years had sometimes grown considerably; the reduction of overtime; and the use of collective agreements to ensure employment (Bogedan *et al.* 2011). Above all, the various forms of cuts in individual working time had even more of a massive effect on total volume of work than (collective) short-time working (Fuchs *et al.* 2010; Groß 2013; for an overview cf. Kümmerling and Lehndorff 2014).

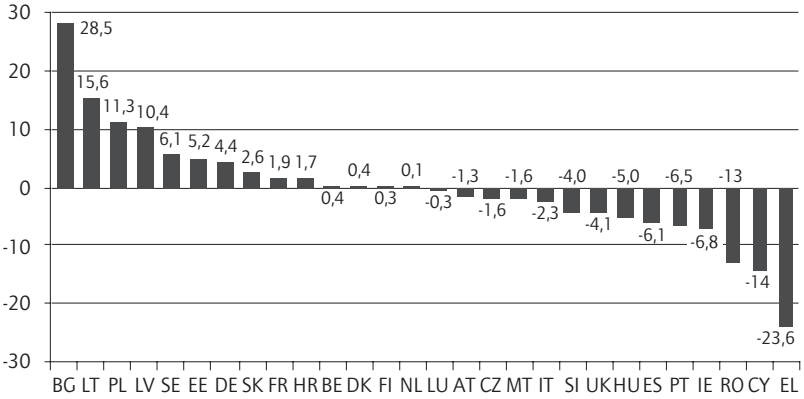
The overall positive experience of safeguarding employment by reactivating precisely those elements of the German social model that had survived the neoliberally inspired zeal for demolition triggered a fresh political dynamic – guided by Merkelian adaptability – that could not easily be dismantled again as economic recovery set in from the second half of 2009. The policies of internal devaluation could not be carried on as easily as in the years before the crisis. This gave rise to a paradoxical situation which continues to dominate the European scene: the relatively positive employment trend in Germany has served as a political platform for the German government to push for a policy approach of internal devaluation in other countries, while the drivers behind this relatively positive development at home have been exactly those which are being forbidden to other countries.

The turn of events is reflected in the new trends in wage developments in Europe since 2010 (Figure 12). If we compare this pattern with the one before the Great Recession (Figure 1), the contrast is striking not just due to the dramatic wage cuts in the most crisis-ridden countries, but also due to the overall more favourable development of wages in Germany.

4. It is true that considerable numbers of temporary workers in manufacturing were made redundant, but in the labour market overall this fall in employment was more than offset by employment gains in other sectors.

Apart from the Baltic states Germany had the highest wage increases of all euro-zone countries since 2010. This shift is largely attributable to the experience of 2008/2009 and the broad public criticism of the increasing social inequality which gave tailwind to a more active wage policy on the part of trade unions. Furthermore, the public debate inside Germany triggered new labour market regulations (most importantly the introduction of a statutory minimum wage and a facilitation of the extension procedure of collective agreements) which could support these more positive wage trends in the future, but may have contributed at least to contain the further downward wage drift. As was already discernible in Figure 3, this shift in emphasis is reflected in both collectively agreed and actual wage developments from 2008.

Figure 12 **Changes in real wages per employee,* EU, 2010–2013 (%)**



* Nominal compensation deflated by the national HCPI (harmonised index of consumer prices).
Figures for 2014: Forecast of teh European Commission (Spring 2014).
Source: Schulten and Müller (2015).

True, if balanced economic development is to be achieved in Germany and Europe this shift is still much too weak and the import deficit remains high. Nevertheless, the stabilising influence of consumer demand on the domestic market should not be underestimated. During the heyday of internal devaluation – between 2001 and 2008 – almost three-quarters of the relatively slow growth of around 1.2 per cent a year, on average, was triggered by export growth, while the average contribution of domestic demand to GDP growth amounted to 0.3 percentage points (Priewe and Rietzler 2010). In four out of the five years after 2009, by contrast, domestic demand contributed more to growth than the export surplus (Table 1).

Table 1 **Development of GDP and the growth contributions of its components, Germany, 2009–2014**

	2009	2010	2011	2012	2013	2014
Real GDP change (%)	–4.7	3.7	3.3	0.7	0.1	1.6
Growth contributions of structural components (in ppt)						
Exports	–2.9	1.5	0.7	0.9	–0.5	0.4
Domestic demand	–1.8	2.3	2.6	–0.3	0.6	1.2
Private households	–0.1	0.4	1.3	0.4	0.5	0.7
State	0.5	0.3	0.2	0.2	0.1	0.2
Capital investments	–1.9	1.0	1.2	–0.4	–0.1	0.7

Source: IMK, various reports.

As a consequence, for the first time since the turn of the century, the main driver of continuous employment growth – albeit under the condition of roughly unchanged total hours worked due to the ongoing rise in female part-time workers – was domestic demand based on (still modest) pay rises.

Nevertheless, 'the long shadow of the 2000s' (Bispinck 2012) still lay on the labour market. The proportion of employees and households on low incomes was still at the pre-crisis level in 2011. The significance of precarious employment had not diminished but the number and share of full-time workers with open-ended contracts increased for the first time in more than ten years. All in all, Germany's economic and social development since 2009 can best be described as zigzagging and the shifts in emphasis are still too tentative to enable the German economy to give a powerful impetus to help overcome the euro-zone crisis.

But even if the impetus were more powerful it could hardly overcome the negative effects of austerity and internal devaluation imposed on other countries. The export world champion cannot remain unscathed by this. As can be seen in Figure 10, the current account surplus in relation to the euro countries, first with the global financial crisis and then once more with the outbreak of the euro-zone crisis, fell significantly (on what follows see IMK-Arbeitskreis Wirtschaftspolitik 2013; IMK/OFCE/WIFO 2013; Deutsche Bundesbank 2013). While initially it was possible to make up for this loss by means of export growth to Asia and the Americas, it should not be forgotten that the euro zone, with its share of still roughly 37 per cent, continued to be by far the largest export market for the

German economy. It should therefore come as no surprise that, after the rapid upturn in 2010/2011, growth rates fell again in Germany, too. Thus, the boomerang of internal devaluation returned to the economy of its origin.

6. Conclusion

The paradox of recent developments in Germany and Europe can be summed up as follows: the comparatively positive economic and labour market development in Germany is not to be attributed to the internal devaluation entailed by 'Agenda 2010' before the financial crisis, but rather to the first attempts at limiting the damage caused by these reforms. Nevertheless, the 'jobs miracle' is used as a justification of the predominant EU policy approach geared to imposing internal devaluation on other countries. Some may be reminded of the old AC/DC lyrics: 'I'm on my way to the Promised Land, I'm on the highway to hell.'

It should be kept in mind that the logic of internal devaluation in Germany up until the financial crisis could work, in terms of improved price competitiveness, only because policy approaches in other countries did *not* follow the same logic. If all economies take the same route there will be a race to the bottom. If this had happened earlier, the euro zone would have experienced its first recession already some years before the financial crisis. What is more, and most importantly, the shortcomings in product-based competitiveness existing in many EU countries will not be overcome by internal devaluation. Rather, the opposite will be the case: falling wages, mass unemployment and poverty will reinforce the devaluation of what is ultimately the most crucial productive resource of any national economy, namely human labour.

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Chapter 6
The UK labour market and the 'great recession'

Steve Coulter

1. Introduction

The United Kingdom's labour market performance during the so-called 'great recession' and its aftermath – for the purposes of this chapter, 2008 to late 2014 – was fairly distinctive compared with that of continental Europe and other 'flexible' labour markets, such as the United States. It also behaved differently in comparison with the two previous recessions in the United Kingdom, in the early 1990s and early 1980s. Despite a recession that was deeper and more prolonged than the earlier episodes, unemployment rose by less and has fallen back more rapidly since. Economic recovery has been accompanied by notably rapid job creation. At the end of 2014 employment was at its highest ever level, at 31 million, a rate of 73.2 per cent and more than 1 million above the pre-crisis peak in 2008. Particularly impressive has been the labour market's ability to weather steep cuts in the public sector payroll, with losses more than made up for by the creation of nearly 2 million private sector jobs. The recovery has also been accompanied by significantly higher participation rates.

The flipside of this impressive headline performance has, however, been sharp falls in real wages and productivity alongside evidence of growing labour market polarisation. In keeping with this pattern, most employment creation since the end of the recession has been in part-time or insecure jobs and the economy has only very recently begun to generate well-paid, full-time jobs in significant numbers. How can these patterns be explained? From a policy perspective, there are two key contrasts with earlier recession/recovery cycles in the United Kingdom, which are emphasised to varying degrees by analysts. First, macroeconomic policy has been much more supportive of growth than in previous recessions (and far more so than in euro-zone countries). Second, it is arguable that the UK economy in the late 2000s was the beneficiary of several decades of innovation in labour market policy, the cumulative impact of which are

likely to have enhanced the impact on job creation of the rebound in growth from 2011.

However, disentangling the overall impact of these factors is complex and difficult, particularly given the uneven impact of the crisis and recovery on the labour market. While the continuing poor competitiveness of the UK economy suggests the good jobs performance has been at the cost of declining productivity, the causes and effects of these trends are still open to interpretation.

This chapter lays out some of the basic dimensions of the United Kingdom's labour market performance during the period and suggests some explanations for its distinctiveness. Section 2 addresses the macroeconomic policy response to recession. Section 3 then explains the impact of the recession on employment and unemployment, while Section 4 focuses on compositional effects. Section 5 considers a number of explanations of the outcomes observed and Section 6 concludes.

2. The macroeconomic policy environment

An important explanation of the United Kingdom's good employment performance during the recession and afterwards was, clearly, that macroeconomic policy was generally very supportive. In contrast to the two previous recessions, which took place against a backdrop of high inflation, policy this time was considerably more expansive, with a rapid loosening of both fiscal and monetary policy from late 2008 to stimulate demand. The recent recession, although particularly serious, reflected the downswing in a credit cycle rather than being the consequence of a contraction of monetary policy in response to high inflation, giving the authorities – particularly the Bank of England, which cut interest rates aggressively despite initially above-target inflation – much more room for manoeuvre. Unprecedentedly loose monetary policy probably removed many of the cash-flow restraints on firms and lower inflation made it easy for them to restrict wage growth without putting too much downward pressure on real wages.

Although discretionary fiscal policy has tightened considerably since the end of the immediate crisis period, making negative contributions to growth from 2010/11 to 2012/13, policy has slowly begun to reverse course and the UK Treasury estimates fiscal policy to have resumed

making modest contributions to growth from 2013/14 onwards. Tax cuts on low earners and falling inflation also led to a considerable boost to demand from domestic consumption from 2012. There are therefore grounds for supposing that the supportive macroeconomic environment played an important part in the United Kingdom's rebound from the recession and stands in considerable contrast to the response to the recessions of the early 1980s and 1990s when policy was a lot tighter.

This also provides an obvious point of comparison between the United Kingdom's experience and that of euro-zone countries which were forced to implement internal devaluation as their primary instrument of structural adjustment. The working definition of an internal devaluation used in this book – a policy strategy tasked with securing a fall in unit labour costs and/or prices to improve the external competitiveness of the economy within a monetary union or currency peg – is clearly not applicable to the United Kingdom. As a non-member of the European single currency with a freely floating exchange rate and independent national central bank the United Kingdom is in a somewhat different position.

The United Kingdom has been able to take advantage of its independent monetary policy to secure adjustments to competitiveness through the real effective exchange rate during the euro-zone crisis. It has also been able to partially counter the demand shock of domestic and international recession by pursuing 'quantitative easing' (QE). The Bank of England was an early convert to QE and pumped a total of GBP 375 billion – around a quarter of annual GDP – into the economy between 2009 and 2012 through purchases of assets, mostly government gilts. While the long-term effects of QE, including its distributional impact, are debateable, the policy is estimated to have increased real UK GDP by 1–2 per cent.[1] While the UK authorities have regularly been of 'talking down' the value of the pound, there was arguably no need for them to do this as the extent and duration of the UK's QE programme exerted considerable downward pressure on sterling on its own as currency markets became flooded with pounds.

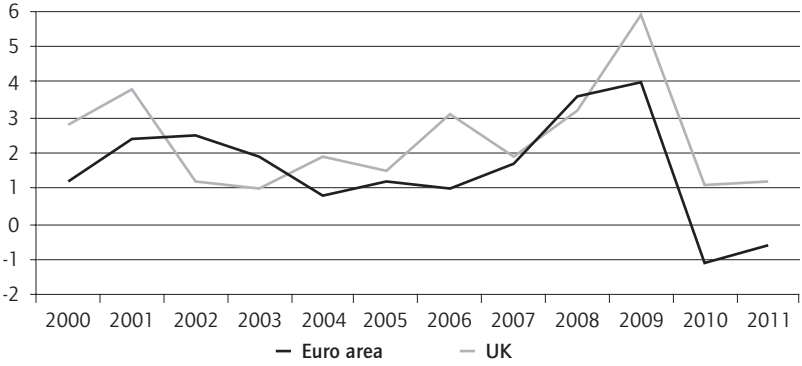
The range and potency of the monetary policy tools available to the UK authorities therefore place the country in a singular category with regard

1. 'The United Kingdom's Quantitative Easing Policy. Design, Operation and Impact.' Bank of England Quarterly Bulletin 2011 Q3.

to labour market outcomes and policy developments during the period we are considering. Nevertheless, discussion of the external environment facing the UK economy is still clearly important because of its dependence on trade, with the European Union accounting for roughly 50 per cent of the export total. Moreover, developments in the external position of the United Kingdom illustrate the systemic weaknesses in the international competitiveness of the UK economy manifested in, particularly, its poor productivity performance.

Sterling had, in fact begun to depreciate before the crisis erupted in 2008 relative to the euro and other currencies. However, despite a 20 per cent real depreciation of sterling compared with 2007, the UK's current account deficit deteriorated to a record 5.7 per cent of GDP by late 2013. Although much of this deficit was caused by a deterioration in the investment income balance rather than imports growing much faster than exports the United Kingdom's inability to exploit a weaker sterling reinforces the suggestion of a chronic competitiveness problem that shows up in its poor productivity.

Figure 1 **Unit labour costs in manufacturing in national currencies; year on year growth**



Source: OECD.

The OECD has been highly critical of the United Kingdom's inability to tackle this. The OECD attributes the limited impact on exports of sterling's recent rise to faster rising unit labour costs in manufacturing, possibly due to greater labour hoarding during the downturn. As Figure 1 shows, unit labour costs in the United Kingdom increased faster than the euro-zone average after 2003. However, while unit labour costs have

been cut following the recession, they continue to increase in the United Kingdom, a trend which has cut improvements in relative costs to less than 10 per cent, putting pressure on profit margins, leading to higher export prices and leaving relative export prices only around 5 per cent lower.

The United Kingdom's lack of international competitiveness suggests that it is domestically-generated consumption that is driving most employment growth rather than exports or domestic investment (which has been cut). This may help to explain the sectoral composition of changes in the labour market, particularly growth in many low-skill sectors, which are explored in Section 4. Before that, however, it is worth examining in more detail the shifts in growth, employment and unemployment.

3. How did the UK labour market perform during the recession?

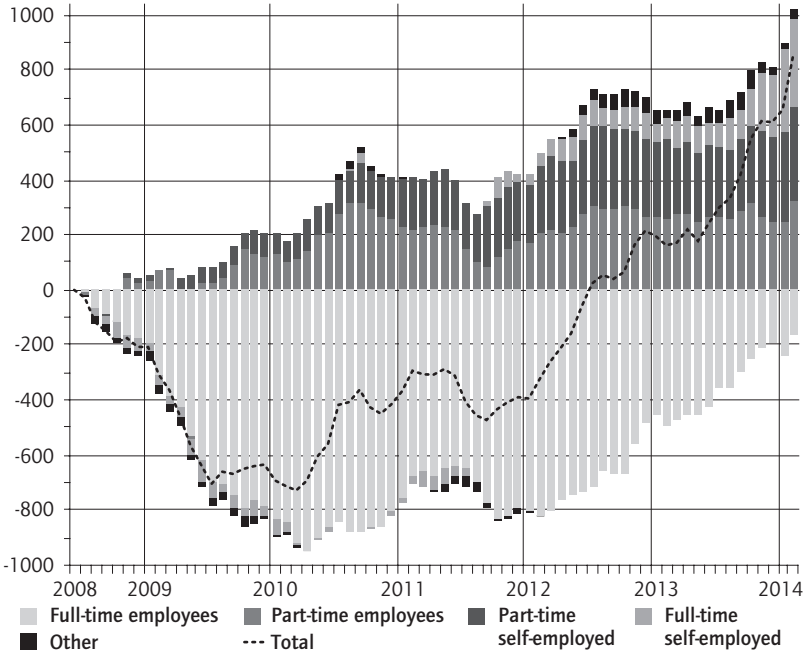
The headline figures on employment and unemployment in the United Kingdom have undoubtedly been strong, with lower than expected rises in the jobless totals and robust employment growth which has largely tracked the uptick in the economy. Both are in marked contrast with protracted recoveries from previous UK recessions, as well as being unlike the experience of other countries. Closer inspection of the data, however, indicates that much of the employment growth has occurred in part-time jobs and self-employment, suggesting that considerable labour market slack remains. The rest of the section outlines how the UK labour market coped with the recession and its aftermath and puts this in its historical and comparative context.

3.1 Employment and GDP

The United Kingdom's 'great recession' was characterised by a sharp and prolonged drop in GDP – by 6 percentage points in total over six successive quarters from Q2 2008 until Q3 2009 – alongside a much less significant fall in employment compared with previous, less severe recessions. In addition, while GDP struggled to recover its pre-2008 peak and trend rate, employment has recovered strongly, regaining its pre-2008 peak by 2013. This is in marked contrast with previous recessions. In the 1980s downturn the percentage fall in employment was broadly in

line with the percentage fall in GDP, while in the early 1990s recession the fall in the employment rate was larger than the decline in GDP. In addition, the recovery in employment in both previous recessions lagged the rebound in GDP by about 12–14 months and remained below the pre-recession level for a year and a half after the recovery began in earnest. By contrast, in the 2008–2009 recession, both employment and GDP growth began to pick up almost simultaneously around the end of 2009.

Figure 2 **Contributions to the change in whole-economy employment since 2008Q2**



Source: Bank of England Inflation Report (May 2014).

The growth in jobs has continued as the United Kingdom's recovery gathers pace, with the number of people in work rising to a record total of nearly 31 million. The average weekly number of hours worked has also increased sharply, rising from 949.3 million in the period January–March 2008 to 975.9 million in January–March 2014 (via a low of 909 million in July–September 2009). On the other hand, most of the growth in jobs that has occurred has been in part-time positions or self-employment. The percentage of people in full-time work fell from an

average of 74.5 per cent of the total in employment between January 2000 and December 2008, to 73 per cent between January 2009 and November 2013. The Bank of England estimates that half of the rise in private sector employment since mid-2010 has been accounted for by part-time working, either by employees or by the self-employed (see Figure 2). According to the employers' group, the Confederation of British Industry (CBI), it was only in April 2012 – several months after an improvement in other data – that the United Kingdom saw a rise in full-time job creation.[2] On the other hand, other data do not suggest that labour is being particularly underutilised; for example, flows into employment have remained strong. Bank of England data show that firms' capacity utilisation, which fell early in the recession, has improved since 2009.[3]

A very high share of the rise in the number of people in work is also due to growth in self-employment, with the total of workers in this category rising from 3.7 million in September 2008 to 4.4 million in early 2014. Self-employed workers now account for 15 per cent of the labour force, up from just under 12 per cent in 2000, although it has been on a rising trend for the past decade as a natural function of an ageing and expanding workforce; comparisons with other OECD countries indicate that the United Kingdom is not an outlier in this regard.

Nevertheless, the growth in self-employment has been a noteworthy feature of this recession and recovery cycle, with the Bank of England estimating that self-employment accounts for a third of the net rise in employment since 2010.[4] The Office for National Statistics (ONS) attributes the rise mainly to a fall in the number of people leaving self-employment rather than an increase in the numbers entering it.[5] It also notes a marked increase in the number of those at or near retirement age designating themselves 'self-employed', suggesting that falling asset prices during the recession and a corresponding decline in the value of pension annuities may be encouraging older workers to delay full retirement. Policies such as the New Enterprise Allowance, a benefit subsidy for those starting a business, and the Work Programme, the government's flagship welfare-to-work scheme, may have magnified this

2. CBI Industrial Trends Survey 2012.
3. Bank of England Inflation Report. November 2012, p. 29.
4. Bank of England. 'Self-Employment. What can we learn from Recent Developments?' Quarterly Bulletin, Q1 2015.
5. 'Self-Employed Workers in the UK', ONS, 2014.

tendency by offering alternative sources of income, although data on the age profile of those affected by these policies are unavailable and there is no reason to suppose that the effect is large.

Sectors seeing the largest increases in self-employment include: education, public health and social work, real estate, administration and many service activities. In most, although not all, of these sectors there has been accompanying growth in employee positions, implying no general strategy on the part of employers of substituting employee for self-employed positions. However, suspicions linger that some public sector employers in particular have responded to the tightening of funding since the recession by replacing outgoing employees with freelancers rather than permanent staff. Teaching unions have suggested in evidence to parliament that schools are no longer employing new teachers to fill vacancies and are making more use of temporary supply teachers instead. Between 2008 and 2013, employee jobs in the education sector rose by 5 per cent, but the number of self-employed jobs was up 58 per cent. The National Association of Schoolmasters Union of Women Teachers (NASUWT) claims that schools spent GBP 293 million on supply teachers in state secondary schools in England and Wales in 2009–2010, although it provides no details about the numbers of jobs involved.[6]

3.2 Labour supply

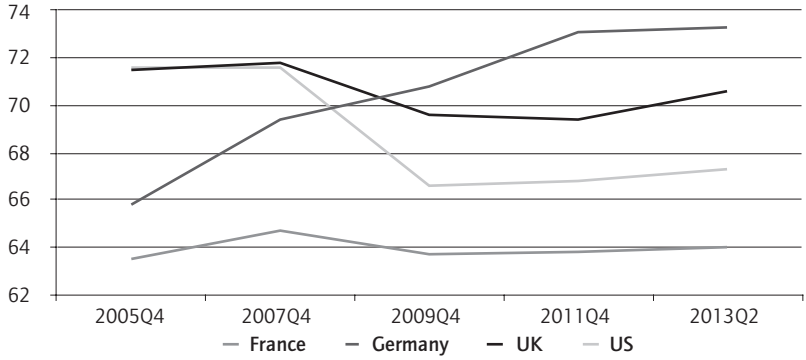
During the recession the United Kingdom also saw a fall in the labour participation rate from 76.8 per cent in 2008 to 76.3 per cent in 2010, although it has since recovered to 77.1 per cent in 2012, according to OECD data. Of particular note was the sharp fall in participation rates among younger workers, declining by 15–20 per cent in the 16–19 age-group. This probably reflects higher enrolment rates in further and higher education as a consequence of reforms enacted since 1997 to increase participation in higher education, including a large expansion in the number of university places. In 1993, for example, students accounted for one in five of all inactive individuals, but by the start of the recent recession this had increased to one in four (Jenkins 2010). On the other hand, at older ages participation rates have risen markedly. Labour force

6. Written Evidence given to the House of Lords Select Committee on Personal Service Companies, 2013.

participation for the 55–64 age-group increased at a slightly faster rate than for the prime age group (25–54).[7] One explanation for this may be that value of private pension annuities has declined significantly over the 2000s, making early retirement a less attractive option and encouraging older workers to find part-time employment.[8]

Another complicating factor is the impact of net immigration. The United Kingdom has absorbed large numbers of immigrants from the EU, particularly with the accession of the A8 countries in 2008. This is likely to have increased the total labour supply and may also have enhanced its flexibility, as immigrants from poorer countries are more willing to work in insecure sectors and for lower pay. However, detailed empirical studies are unable to find a significant impact on employment patterns as the increase in employment is much larger than the increase in the size of the labour supply brought about by immigration. A major recent study by the Business Department concluded: 'To date there has been little evidence in the literature of a statistically significant impact from EU migration on native employment outcomes.'[9]

Figure 3 **Employment rate, % of the labour force**



Source: OECD.

7. OECD Employment Outlook. 2013. Statistical Annex table C.
8. Bank of England Inflation Report, May 2013.
9. 'Impact of Migration on UK Native Employment: an Analytical Review of the Evidence, Devlin *et al.*, Department for Business, Innovation and Skills/Home Office, Occasional Paper 109, March 2014.

3.3 Unemployment

The recession brought to a halt almost fifteen years of steadily declining unemployment from its earlier peak of 3.02 million out of work in 1993. The trough of the unemployment cycle was reached in August 2004 when just 1.4 million people were surveyed as being out of work, although the jobless numbers had picked up slightly to 1.61 million by April 2008 as the tightening of credit conditions for firms and households began to bite in the aftermath of the collapse of the Northern Rock building society, which saw the first run on a bank in over a hundred years and was accompanied by significant turbulence on financial markets. This was the tipping point for unemployment, which thereafter began a sharp climb as the economy tipped into steep recession in Q2 2008 to reach 2.47 million by June 2009. Unemployment then plateaued for about two years, only reaching its peak of 2.68 million in October 2011. As of mid-2014 it stood at 2.33 million over the three months to March, with 1.14 million claiming Job Seeker's Allowance, the main social benefit for those out of work.

In comparison with other advanced economies, the United Kingdom entered the crisis with a comparatively low level of unemployment, averaging 5.1 per cent over the 33 quarters to Q1 2008. This level then increased substantially to a peak of 8.3 per cent in Q4 2011, a larger increase than most G7 countries other than the United States (see Figure 4 and Table 1). However, as noted above, the loss of jobs was smaller than the extent of the fall in GDP. The number of jobs 'saved' in the UK relative to the losses that might have been expected had the percentage fall in employment tracked that of GDP has been put in one analysis at around 1 million (Gregg and Wadsworth 2010). Along with Sweden, the United Kingdom is the only OECD country to have experienced a smaller rise in unemployment relative to its fall in GDP without a deliberate government-funded strategy of short-time working. Italy, Germany and the Netherlands saw lower rises in unemployment compared with the United Kingdom and their own GDP performances, but these countries followed a policy of employment subsidies.

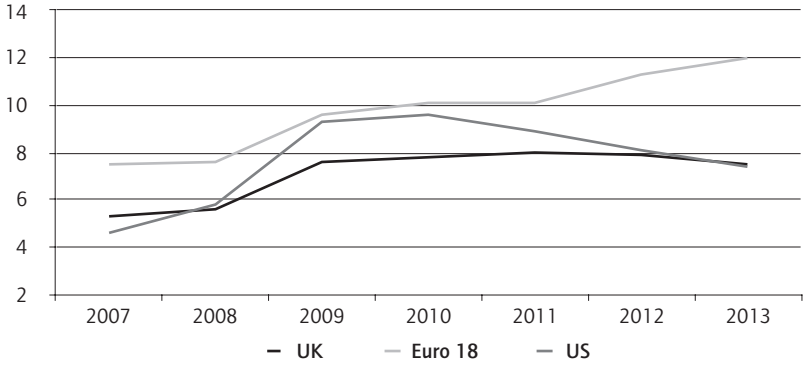
Much is often made of the United Kingdom's high degree of labour market 'flexibility' as a causal factor behind its distinctive experience of recession. In the United Kingdom, labour market flexibility mainly takes the form of numerical and wage flexibility (corresponding to the ability of firms to adjust headcounts and pay, respectively), which is reflected in its lower levels of employment protection legislation[10] and more decen-

tralised wage bargaining. The 'external' flexibility enjoyed by UK firms contrasts with 'internal' functional and temporal flexibility prevalent in the more 'coordinated' economies of continental Europe, which require high-trust relationships to be fostered between firms and their workforces that arguably make them less ready to shed labour during downturns.

Table 1 **Harmonised unemployment data (OECD) %**

	2008Q4	Peak of the cycle	2014Q3
UK	6.3	8.3 (2011Q4)	5.9
Eurozone	8	12 (2013Q1)	11.5
US	6.9	9.9 (2009Q4)	6

Figure 4 **Unemployment, % of labour force**



Source: Eurostat.

On the other hand, both the United States and Ireland, two countries with externally flexible labour markets, experienced much higher rises in unemployment than the United Kingdom, along with Spain, which has a large share of weakly-protected jobs in an otherwise tightly regulated labour market. Notwithstanding the different macroeconomic policies pursued by these countries, these diverse outcomes would suggest that labour market flexibility is not a necessary condition for good unemployment performance, a conclusion which is reinforced by examining the evolution of labour market policy in the 1990s and 2000s (see Section 5).

10. 'Protecting Jobs, Enhancing Flexibility. A New Look at Employment Protection Legislation'. OECD Employment Outlook 2013.

4. Sectoral changes

The most significant structural development in the United Kingdom labour market since the start of the recession has been the shift from public to private sector employment thanks to a deep and prolonged austerity drive with the professed aim of cutting the United Kingdom's budget deficit. Public sector employment fell from a peak of just over 6 million in mid-2008 to 5.41 million in late 2014, with cuts concentrated in administration and non-protected areas of departmental spending (that is, excluding the ring-fenced health care and education budgets).[11] As a proportion of aggregate employment, the public sector has been cut from 21.9 per cent in 2008 to 17.6 per cent. But numerically this has been more than offset by job creation in the private sector, which largely accounts for the steady rise in total employment experienced since the end of recession. Private sector employment during the recession fell by 0.8 million from peak to trough, but recovered quickly and has risen by around 2 million since early 2010. Despite the falling headcount, the overall public sector pay bill has actually increased since the start of the jobs cull, implying that it has been low-paying public sector jobs that have been cut. But have these workers moved into high- or low-skilled private sector jobs?

This section analyses changes in the labour market at sectoral level through an analysis of Labour Force Survey (LFS) statistics published by the ONS. The broad conclusion is that most of the jobs lost in the public sector were low-skilled; those created in the private sector were both high- and low-skilled, but with low-skilled jobs predominating.

Another important consideration is the shift between different sectors of the labour force, particularly highly-skilled and/or high-paying sectors and medium/low-skilled sectors. These trends can be difficult to analyse owing to differing definitions. Three approaches are considered here. The first uses occupational classifications published by the ONS to paint a picture of changes to the labour market and reveals strong growth in high-skills occupations and low growth in low-skills areas. However, this

11. These figures have been distorted somewhat by several developments: the nationalisation of several major banks in 2008; the reclassification of some English further education colleges out of the public sector in 2012; and the privatisation of Royal Mail in 2014. Nevertheless, it remains the case that cuts in the public sector payroll have been more than compensated for by private sector employment expansion.

approach relies on *descriptions* of occupations and so suffers from 'job-title inflation', or the tendency to attribute higher status to jobs without necessarily any change occurring in the nature of its responsibilities or the skills required to perform them.

The second method eschews the above approach to focus on changes in wage rates (wages here are assumed to be proxies for skill levels) with higher pay reflecting higher – and more scarce – skills, and vice versa. Finally, a third method analyses jobs in terms of whether the tasks they involve are routine or non-routine, a classification which has implications for the ability of employers to replace certain jobs through automation.

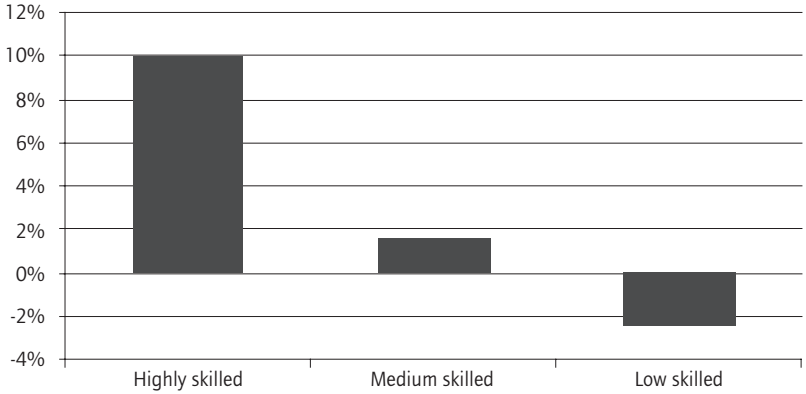
5.1 Trends in UK employment by occupational skill level

The LFS provides a quarterly analysis of all employment by occupation (EMP08) based on 2010 Standard Industry Classifications. The data are grouped by skill level, as follows:

- High-skilled:
  - Managers and senior officials
  - Professional occupations
  - Associate professional and technical
- Medium-skilled:
  - Administration and secretarial
  - Skilled trades
  - Care, leisure and other services
- Low-skilled:
  - Sales and customer services
  - Process, plant and machine operatives
  - Elementary occupations

The data (see Figure 5) indicate that employment growth since the start of the recession has been overwhelmingly concentrated in high-skilled occupations, which saw growth of 10 per cent. There was only very slight growth (1.6 per cent) in medium-skilled occupations and a decline of 2.4 per cent in jobs in low-skilled areas. This reflects trends in the UK labour market going back to at least the start of the 2000s: whenever employment rose the increase was overwhelmingly from high-skilled jobs, with medium- and low-skilled occupations bearing the brunt as employment fell.

Figure 5 **Proportion of employment growth by skill level of all employees, 2008Q1 to 2014Q2**



Source: LFS.

This is backed up by analysis by the Bank of England, using a broader definition that identifies older and more qualified people as being highly skilled. According to the Bank, most of the net increases in employment between 2010 and 2013 reflect rises in the employment of older and well-qualified people in high-skilled occupations. More recently, however, employment growth has been concentrated among the young and lower skilled. Medium-skilled workers have seen their share of jobs growth decline or remain static throughout most of the period, although this group is now seeing some growth.[12] Analysis of the past two decades also indicates that the United Kingdom has replaced a larger share of the medium-skilled jobs that have been lost with lower (as opposed to higher) skilled jobs than other European countries.[13]

5.2 Trends in skill levels as defined by wage rates

A major problem with occupational classifications as reflecting skill levels is their subjective nature, with the tendency towards 'job-title inflation' a particular drawback of the method. An alternative, and possibly more objective, way of getting to grips with the changing occupational structure of the UK labour market is to use wages as proxies for skill levels. Basing

12. 'Inflation Report', Bank of England, November 2014.
13. 'Why is the decline of routine jobs across Europe so uneven?,' Holmes C., SKOPE Issue Paper 33, 2014.

their analysis on occupations ranked by mean hourly pay, recent research by the Resolution Foundation think tank and the Centre for Economic Performance (RF/CEP) at the LSE provides clear indications that the UK labour market has become increasingly polarised by skill level, with increases in employment in high and low skills sectors and declines in medium skill sectors. This reflects long-term trends beginning in the 1980s and 1990s. It is well supported by the academic literature (Goos and Manning 2003; Lindley and Machin 2013) and contradicts mainstream economic theory, which predicts that mainly high-skilled occupations will see employment share growth in advanced economies.

Analysis of LFS data over the past three decades by the RF/CEP shows that high-skilled occupations – the top 30 per cent of jobs – have dramatically expanded their share of UK employment, while middle skill occupations have experienced a relative decline. Low-skilled jobs at roughly the bottom fifth of the wage distribution also increased their employment share. These trends altered somewhat in the pre-crisis period of 2002–2007, with high-skilled jobs accounting for almost all the expansion of employment and the middle group (70^{th} to 20^{th} percentiles) seeing a decline. Low-skilled occupations held their share constant.

The most recent analysis by RF/CEP covering the crisis and recession years shows a sharp increase in labour market polarisation between 2008 and 2012. In this period, it was low-skilled jobs that expanded their share, with high-skilled jobs increasing at a slower rate and medium-skilled jobs continuing their decline (Plunkett and Paulo Pessoa 2013). Eurostat data on unemployment rates of the 15–64 population by level of education show that in the United Kingdom the unemployed percentage of those with tertiary education was lower than the average of the EU18 and increased by less: 2.3 per cent to 3.2 per cent (a 40 per cent rise) compared with 4 per cent to 6.9 per cent (+75 per cent).

5.3 Routine and non-routine tasks

The Resolution Foundation has also examined whether the changes to the labour market described above have played out differently between routine and non-routine occupations, with the former defined as involving tasks that are easier to automate. Employment in routine jobs fell by 5.2 per cent between 2007 and 2012. It rose by 2.7 per cent in middle-routine intensity jobs and by 5.7 per cent in non-routine jobs.

As non-routine jobs are concentrated in both the low *and* high paid sections of the labour force this trend also provides support for the increasing polarisation thesis. Since employers find workers engaged in non-routine tasks harder to replace than those doing routine tasks, it might be expected that the recession would have led to a decline in the latter, something which, in turn, is largely a continuation or acceleration of existing trends (Autor, Levy and Murnane 2003). On the other hand, real wages in non-routine sectors show the opposite trend: a clear decline in remuneration for the higher skilled which may be the result of employers squeezing wages in order to hang on to their workers.

5.4 Sectoral changes and the impact on pay

The unexpectedly poor performance of real wages has puzzled many analysts, especially given the apparent expansion of employment in high-skilled sectors. The broad explanation for stagnant pay rises – that pay has remained static in exchange for preservation of jobs at the cost of declining productivity – is explored fully in Section 3.1. But other factors could also be at work to do with the changing composition of the labour market.

One possible explanation for the fall in real wages is that the changing structure of the labour market may have boosted lower paying sectors at the expense of higher paying sectors. The broad shift in jobs from the relatively high paying manufacturing sector to lower paying services is a long-term trend that is likely to have been exacerbated during the recession. Since the average weekly nominal wage for a services worker was GBP 437 in 2010 compared with GBP 524 for a manufacturing worker, this broad trend is likely to have strengthened the trend towards lower wages in the economy.

Table 1 and Figure 6 compare changes in occupational sectors (2007 Standard Industry Classification) from before the recession with the most recent figures (Q1 2008 to Q3 2014). It illustrates the percentage increase in employment since the recession in each of 14 occupational sectors. In order to account for big differences in the size of some sectors (wholesale, retail and repair of motor vehicles at 16 per cent of the labour force, compared with agriculture, forestry and fishing, at less than 1 per cent) it also presents the percentage share of total employment for each sector in Q1 2008 (figures are rounded). The third column of the table also shows the average weekly wage in Q1 2008. The results give an interesting picture of changes in the UK labour market before and after the recession.

Table 2 **Changes in employment share by sector**

Employment sector (2007 SIC)	Change in employment 2008Q1 to 2014Q3, %	Share of employment 2008Q1, %	Weekly earnings as percentage of average (£443), 2008Q1
Public administration and defence	–12	5	121
Manufacturing	–10	9	114
Construction	–8	7	117
Wholesale, retail; repair of cars and motor vehicles	–4	16	87
Financial, insurance and real estate	–5	4	157
Transport and storage	6	5	105
Administrative and support services	7	8	104
Information and communication	9	5	157
Other services	9	2	90
Accommodation and food service	10	6	68
Education	11	8	118
Human health and social work	15	11	106
Agriculture, forestry and fishing	20	1	79
Professional, scientific and technical	25	7	157

Source: LFS, author's calculations.

In lower paying sectors of the economy (below the median sectoral weekly wage of GBP 471 a week) some sectors are growing, while others are in decline. The medium to low-paying human health and social work sector saw the third largest sectoral increase of 15 per cent from its already significant jobs share of 11 per cent of the labour market over the last six years, equivalent to over half a million jobs. Other relatively low-paying sectors seeing a significant percentage and absolute increase in their share of the labour force include accommodation and food services (up 10 per cent on its 6 per cent share in 2008) and administrative and support services (up 7 per cent on its 6 per cent share of total employment before the recession). The only really significant low paid sector to see a

significant fall in employment is retail, wholesale and repair of cars and motor vehicles, which has declined 4 per cent on its 16 per cent share of total employment in 2008.

Higher paying sectors of the labour force are, by contrast, over-represented among occupational sectors of the economy experiencing falls in employment. These include: public administration and defence (down 12 per cent on its 5 per cent share of the labour force); manufacturing (a fall of 10 per cent on its 9 per cent share); construction (down 8 per cent and accounting for 7 per cent of jobs in 2008); and financial services (down 5 per cent and accounting for 4 per cent of the labour force). The only large occupational sector among the higher paid segments of the labour force to see a significant increase in its share of workforce jobs was professional, scientific and technical, up 25 per cent on a 7 per cent initial share of employment.

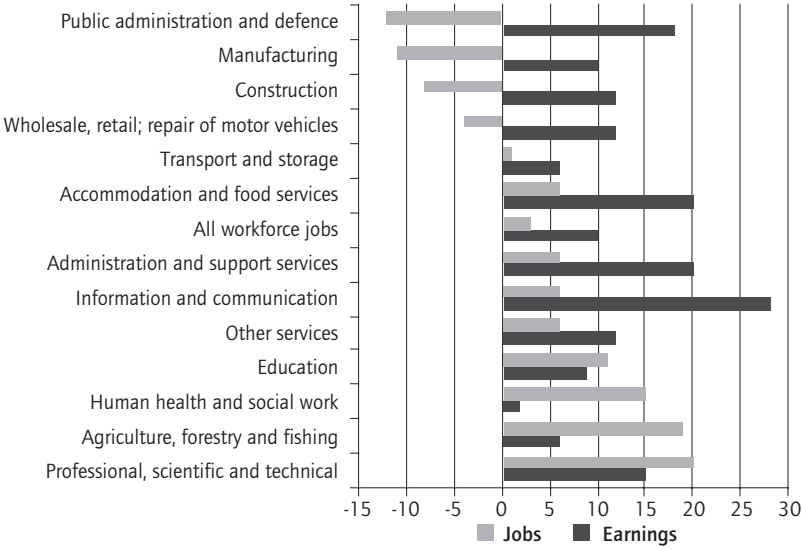
A salient feature of changes affecting the upper end of the earnings distribution has been the dramatic fall in numbers and employment share in, mainly, public administration and defence, reflecting the tight squeeze on public sector employment under conditions of austerity although, as noted earlier, the continued rise in the public sector payroll suggests it is mainly lower skilled public jobs that have been lost. On the other hand, health and social care (mostly in the public sector) saw a large increase in headcounts. Cyclical parts of the economy, such as construction and manufacturing – traditionally a source of large numbers of moderately well-paying jobs – have also taken a heavy hit. However, in the case of manufacturing this is merely the continuation of a long-term trend of declining employment, while the contraction in employment in construction (–8.9 per cent) was considerably less than in the 1990s recession (–10.9 per cent).

These findings echo a 2013 survey by the TUC which claimed that much of the job creation since 2010 has taken place in industries where the average wage is less than GBP 7.95 an hour, particularly in the retail and residential care sectors, although these still record an overall decline in employment since 2008.[14] A detailed study of shifts *within* sectors for the TUC in 2014 by Incomes Data Services found that employment in the

14. 'The UK's low-pay recovery. Four in five jobs created since June 2010 have been in low-paid industries', TUC, 2013.

financial services industry, a sector with well above average earnings, fell by a fifth between 2008 and 2013.[15] Within the high-paying financial, insurance and real estate sector, by contrast, there has been a shift between towards lower-paying real estate jobs from higher paying financial and insurance activities. This was only partly offset by growth in the high-paying head office and management consultancy sectors, which employ proportionately much smaller numbers of people. There was also a marked increase in part-time work in low-paying sectors such as accommodation and food services. Other low-wage industries seeing strong growth in employment include social care, facilities management and leisure. Also noticeable was a shift in employment for 16–24 year olds towards part-time jobs, often in the same low-paying sectors.

Figure 6 **Changes in employment and weekly earnings by sector, %, March 2008 to March 2014**



Source: LFS and author's calculations.

15. 'Earnings and Settlements. A Research Report for the Trades Union Congress', Incomes Data Services, 2014.

5. Explanations: impact and policies

As noted in Section 2, while macroeconomic policy was clearly very supportive of growth and helped to avoid an even deeper recession, we need to look elsewhere for at least part of the explanation for the United Kingdom's employment performance over the past six years. Three other facets of the problem are examined here: first, the likelihood that employment was preserved at the expense of real wages and productivity, which declined sharply; second, that labour 'hoarding' took place, whereby firms were encouraged by memories of labour shortages following previous recessions to maintain their headcounts; and third, that active labour market policies and the flexibility of the UK labour market in general were responsible for the good jobs performance.

Obviously, these explanations are largely complementary, not alternatives. For example, the first set of factors, declining productivity, is an automatic consequence of the second, labour hoarding. The third factor, the policy environment, may have facilitated this. Of critical concern for policymakers is therefore the extent to which persistently poor productivity will eventually be reversed once firms' personnel decisions are not primarily motivated by the uncertainty that is characteristic of recession and its immediate aftermath. The fact that productivity has continued to lag even as growth and employment have improved does not bode well for the sustainability of the recovery and suggests that, in tandem with evidence presented here about sectoral polarisation, parts of the UK's labour market may have settled into a lower-wage, lower skills equilibrium that will require sustained investment in human and physical capital to resolve.

5.1 Real wages and productivity

As the two leading examples of 'liberal-market economies', characterised by flexible, decollectivised labour markets, many international comparisons of labour market performance bracket together the United Kingdom and the United States. What is apparent from the data, however, is that labour market adjustments following the downturn took place more on the wages and productivity side for the UK, and on the employment side for the US. Figure 7 below shows the extent of the collapse in GDP relative to the falls in employment and hours worked.

Figure 7 **Output, employment and hours since 2008Q1**

Source: Office for National Statistics.

Two clear trends that emerge from this recession and its aftermath have been the sharp and sustained fall in real wages in the United Kingdom and an accompanying fall in labour productivity. Between 1999 and 2007, the United Kingdom experienced the highest real wage growth of any G7 country (19 per cent), and has since experienced the biggest fall (6.1 per cent) (Taylor, Jowett and Hardie 2014). The fall in real wages has been fairly uniform across sectors, with only financial services seeing a peak to trough fall of more than 20 per cent (see Table 3). Puzzlingly, real wages have not begun to pick up even though short-term unemployment has fallen rapidly; the number of workers moving job-to-job has climbed rapidly since 2012 and is now close to its pre-crisis level, according to the Bank of England.[16]

One explanation for the slack in wages may be continued under-employment of workers, reflected in sustained weak productivity. Productivity performance, measured by output per unit of labour, also shows a sharp break with the past. UK productivity increased on average by 2.2 per cent annually between 2000 and 2007 but fell at an annual average rate of 0.6 per cent from 2008 onwards. Unit labour costs in the UK rose by 13.7 per cent between 2007 and late 2011. Apart from Italy, the United Kingdom experienced the weakest recovery in productivity

16. 'Inflation Report', Bank of England, November 2014.

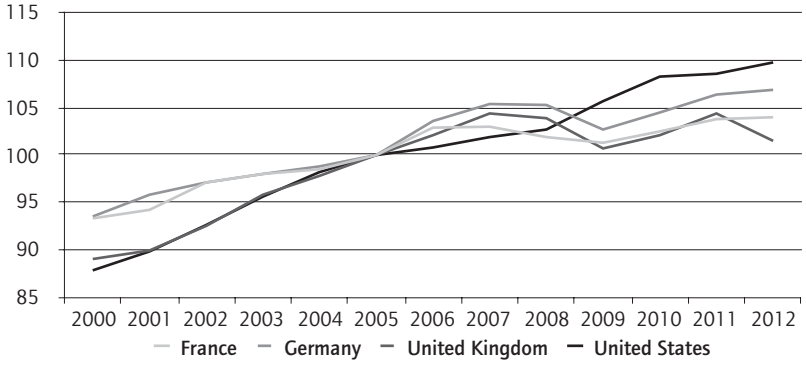
between 2009 and 2012. This presents a contrast to previous recessions when UK productivity recovered quickly after growth resumed.[17] By contrast, the United States largely maintained its strong productivity performance (see Figure 8 below).

Table 3 **Comparisons of changes in real wages across the G7, 2000–2012**

	Canada	France	Germany	Italy	Japan	UK	US
2000	3.0	1.5	2.1	0.3	0.3	4.9	3.4
2001	–0.3	0.6	0.5	0.4	–0.3	4.1	0.8
2002	–1.2	2.6	0.7	–1.2	–1.7	2.0	0.8
2003	0.0	0.4	0.0	–0.5	0.0	1.8	1.2
2004	2.8	1.6	–0.1	2.0	0.2	1.2	1.8
2005	4.3	1.2	–0.2	1.1	1.7	–0.3	0.1
2006	3.0	1.2	0.3	0.3	–1.1	1.6	1.6
2007	2.4	0.5	0.1	0.0	–0.9	2.6	2.0
2008	1.2	–0.4	0.6	–0.3	0.3	–1.6	–0.7
2009	1.0	2.5	0.1	0.2	–1.4	1.0	0.8
2010	0.3	1.5	0.3	1.3	1.9	–2.0	0.5
2011	1.1	0.3	1.7	–1.5	2.4	–2.3	0.3
2012	2.3	0.4	1.0	–1.9	–1.4	–0.3	–0.2

Source: ONS/OECD.

Figure 8 **Labour productivity (output per person employed) from 2000**



Source: OECD.

17. 'Assessment and Recommendations', OECD Economic Survey of the United Kingdom 2015.

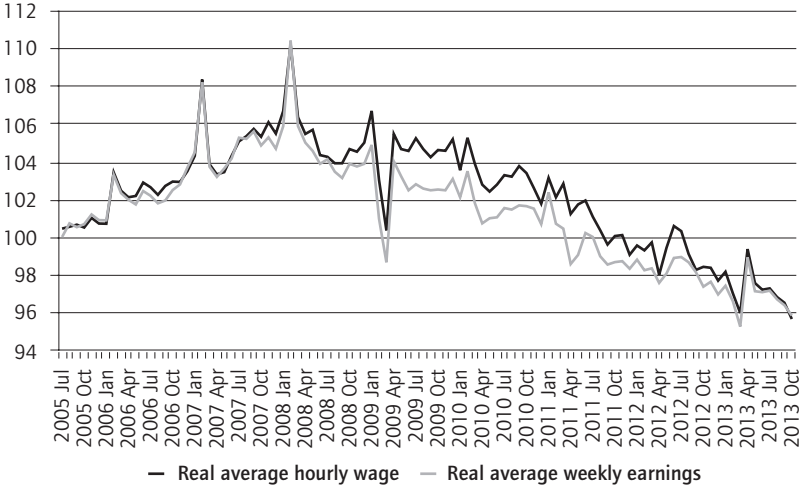
There is obviously a relationship between behaviour of real wages and productivity but it is not immediately clear from the data where the causality lies. On one hand, the fall in demand from lower national economic output may reduce the value of what a worker can produce, with firms responding to this by offering lower wages. On the other hand, the decline in real wages could have contributed to the resilience of employment relative to output and therefore to the fall in labour productivity.

Most analysts cleave to the latter view, which is largely supported by the data. The Institute for Fiscal Studies points out that the proportion of the working age population who are economically inactive today is the lowest since 1991, contrary to the experience of previous recessions when inactivity rates increased sharply as many individuals gave up looking for work. This suggests that more people are willing to work at a given real wage and/or are less responsive to falls in the real wage (Disney, Jin and Miller 2013).

One of the causes of the decline in real and nominal wages has obviously been a fall in the demand for labour. In the recession and its immediate aftermath there was a clear reduction in the weekly number of hours worked, reflected in real hourly and weekly earnings. Weekly earnings fell faster than hourly pay between 2008 and mid-2010, indicating the drop in weekly hours worked, although it has since picked up again (see Figure 9 below). Non-wage costs also jumped sharply between 2009 and 2010 after the government levied a 1 percentage point increase in national insurance contributions (a payroll tax) in an effort to deal with the growing budget deficit. According to the CBI, 55 per cent of private sector firms were operating a pay freeze in 2009, though this dropped to 14 per cent a year later.[18] As demand for labour fell, many employees appear to have switched from full-time to part-time work in order to preserve their jobs, which accounts for the expansion of part-time jobs and self-employment noted above.

18. CBI Industrial Trends Survey 2010.

Figure 9 **Real average hourly and weekly earnings, 2005=100**



Source: ONS.

5.2 Did UK firms 'hoard' labour?

One contending explanation for the United Kingdom's good employment performance during the recession is that firms consciously chose to absorb the fall in demand for labour by maintaining headcounts at the cost of large falls in productivity. Employees enjoyed greater job stability than in previous recessions, but sacrificed wages and hours. By contrast, US firms did roughly opposite, allowing employment to take the hit while maintaining productivity. At face value this matches the data. But why did they do this?

There are indications that UK firms entered the recession in better shape financially than on previous occasions. Despite the depth of the credit crunch, non-bank companies' cash flow was well above levels of earlier recessions, partly thanks to ultra-low interest rates. Returns on domestic capital employed and profitability were also resilient (Martin and Rowthorn 2012). A possibility worth investigating is that, with healthier balance sheets, firms responded to economic difficulty by maintaining their workforces as much as possible rather than engaging in short-term cost-cutting.

Richard Lambert, a former director general of the Confederation of British Industry, has suggested that British industry is much more highly skilled than it used to be, with a much greater proportion of employees acquiring firm-specific skills, which encouraged employers to take a longer-term view on skills retention (Lambert 2010). CBI surveys conducted during and immediately after the recession noted unprecedented degrees of cooperation between management and labour over the challenges facing firms, with two-thirds of company respondents citing employee engagement as their top concern.[19] The net reduction in private sector employment which occurred in 2008–2011 was not, in contrast to earlier recessions, due to higher rates of job loss, but reflects a sustained period of lower job creation in newer workplaces, especially SMEs, which were most vulnerable to the squeeze on bank lending (Buther and Bursnall 2013).

Another possibility, which is not inconsistent with the explanation above, is capital shallowing. The fall in the price of labour relative to the cost of capital may have encouraged firms to substitute labour for equipment. Pessoa and Van Reenen argue that this accounts for the fact that labour productivity has fallen faster than total factor productivity. They estimate that capital shallowing caused by changes in factor prices account for up to half the fall in labour productivity since the start of the Great Recession, with a correspondingly large impact on employment (Pessoa and Van Reenen 2014).

Increases in employment continue to track the recovery in GDP, which is fortunately not consistent with the disquieting possibility that firms, having under-utilised labour while demand was weak, would fail to generate jobs when activity picked up again.

5.3 Labour market 'flexibility' and active labour market policies

Pro-market commentators have inevitably pointed to the flexibility of the United Kingdom's labour market as being behind its good employment performance during the recession, especially its low level of job protection. Certainly, in the United Kingdom – and the United States – the short-term drop in the employment rate in 2008–2010 was larger than in countries with more stringent levels of employment protection.

19. CBI Industrial Trends Survey 2010.

The less flexible French labour market saw employment levels decline by only 1 per cent initially. However, they have stayed stubbornly high in comparison with the 'Anglo-Saxon' labour markets, which quickly bounced back.

On the OECD's index of labour market protection the United Kingdom has averaged about 1.2 on a scale of 1–5 over the past decade, compared with an OECD average of 2.1 (for individual and collective dismissals, regular contracts). However, the reality is likely to be more complex. Certainly, the willingness of both employees and firms to cut wages and hours may have helped to preserve employment initially in the face of the demand shock. However, since many of the key reforms aimed at increasing flexibility were enacted in the late 1980s, for this to be decisive we should observe differences between the performances of the labour market between, on one hand, the 1980s recession, and the later recessions of the 1990s and 2008 when these reforms were in place; in fact, the key difference is between the first two and the third.

It seems more plausible that it was the slight re-regulation of the UK's labour market since 1997 that was responsible for its good performance, in particular the enactment of a number of policies to increase the employability of low-skilled workers and improve mechanisms for job search. Although spending on active labour market policies (ALMPs) in the UK is quite low by international standards it was stepped up considerably over the past 15 years under the last Labour government, and saw a further step-change in importance during the recession. OECD figures show UK spending on ALMPs, as a proportion of GDP, was up by 20 per cent in 2010 compared with FY 2007/08. Moreover, there is no necessary connection between spending on ALMPs and their effectiveness in creating jobs and the OECD has praised the UK for the effectiveness of its ALMPs.[20] The coalition government, which took power from Labour in May 2010, continued many of Labour's policies in one form or another, as well as introducing some of its own.

Key policies introduced over the past 15 years include:

— 'New Deals': A workfare programme first introduced in 1998, these provided training, subsidised employment and voluntary work to the unemployed, funded by a one-off windfall tax on privatised utility

20. OECD Employment Outlook, 2013.

companies. Five New Deals were launched, covering the young unemployed (18–25), older workers, lone parents, the disabled and older workers.

— Work Programme: The coalition's replacement for the New Deal was launched in 2011. It uses private and voluntary sector providers to target the 'hard to reach' cases, particularly long-term unemployed and young and unskilled jobless who claim Employment and Support Allowance (EWA) rather than Jobseeker's Allowance. Forecasts are that, between June 2011 and March 2016, 2.1 million people will be referred to the Work Programme at a cost of GBP 2.8 billion. However, performance has been patchy, with only 11 per cent of EWA claimants gaining jobs compared with a target of 22 per cent, and 32 per cent of all clients gaining a job, compared with original forecasts of 42 per cent.[21]

— Future Jobs Fund: A major public and voluntary sector employment programme, the Future Jobs Fund (FJF) was introduced in October 2009 to support the creation of subsidised jobs for unemployed and disadvantaged young people. Official Statistics indicated that, between October 2009 and March 2011, just over 105,000 jobs were created under the FJF at a cost of BGP 680 million. The coalition government maintained the FJF but halved its funding. Twenty months after the start of their job, approximately 42 per cent of FJF participants were still claiming an out-of-work benefit.[22]

— New Enterprise Allowance: Designed to help unemployed people start their own business, the NEA may have supported increases in self-employment during and after the recession, with the government reporting that 65,000 people were in receipt of the allowance by 2014.[23] On the other hand, levels of this associated with the NEA began to increase well before the recession.

— Job Centre Plus: The latest iteration of a series of reforms to improve facilities for job search among the unemployed.

21. NAO Report, The Work Programme, National Audit Office 2014.
22. 'Impact and Costs of the Future Jobs Fund'. Department for Work and Pensions, 2012.
23. 'New Enterprise Allowance Official Statistics', Department for Work and Pensions (DWP), 19 December 2014.

— Work Capability Assessments: Under the coalition, claimants of Employment and Support Allowance are now medically assessed to see whether they are fit for work, with the aim of cutting the numbers of people deemed unable to work for medical reasons.

— It is also worth noting that levels of the United Kingdom's national minimum wage, introduced in 1999 and reached through agreement between the social partners, are set quite low, with most authors agreeing that any negative impact on employment is low or non-existent.

Finally, it has been suggested in some quarters that employment levels held up because of a large expansion in the number of workers on 'zero hours' contracts (defined as contracts without a guaranteed number of hours of work), a regrettable feature of very lightly regulated labour markets. LFS estimates showed a doubling in the number of people on such contracts between October to December 2013 compared with the same period in 2012. However, the ONS attributes most of the increase to changes in status on the part of people who were already in the employment estimates but in another category of flexible employment, implying little impact on the overall employment figures.[24]

6. Conclusion

Although the United Kingdom suffered its deepest recession since the 1930s, early and decisive intervention by the authorities to shore up growth undoubtedly spared the country an even worse outcome. For once, GDP and incomes took the hit while the job market was spared the worst. Firms appear to have responded to pro-growth signals from the government and the Bank of England to maintain employment where possible by adjusting wages instead. For their part, many workers, particularly older ones, have apparently concluded that it is better to accept insecurity, lower pay and/or lower skilled employment rather than become unemployed, while younger workers have opted to remain in education to ride out the downturn.

24. 'Analysis of employee contracts that do not guarantee a minimum number of hours,' Office for National Statistics, 2014.

It is here that decades of reforms to enhance the operation of labour markets by ironing out structural rigidities and improving mechanisms for job search appear to have borne fruit. While it is reasonable to point out that most of the United Kingdom's impressive employment performance is grounded in expansion of part-time and temporary work, high labour participation rates in the face of such a severe downturn at least help to preserve skills and avoid hysteresis.

Nevertheless, the coalition government's self-congratulation on its employment record glosses over deep-seated problems with the productivity of the labour force and indeed, with the entire structure of UK capitalism, which remains unbalanced and unable to nurture high-skilled employment. Much of the progress made over the past 15 years in up-skilling the labour force appears to have been thrown into reverse. With the economy now firmly in recovery mode and, indeed, probably nearing the peak of the current growth cycle, it is sobering to note that UK workers are still less productive per hour than they were before the financial crisis struck. Good headline GDP and employment data obscure an underlying picture of a low-wage, labour-intensive economy falling steadily behind its competitors. With wages low, profitability ought to be increasing, and this seems indeed to be happening. But firms still lack the confidence to invest in upgrading their product strategies and improving the skills of their workforces. Addressing this problem by restarting productivity growth is critical to the United Kingdom's long-term prosperity and the promise of proper pay rises.

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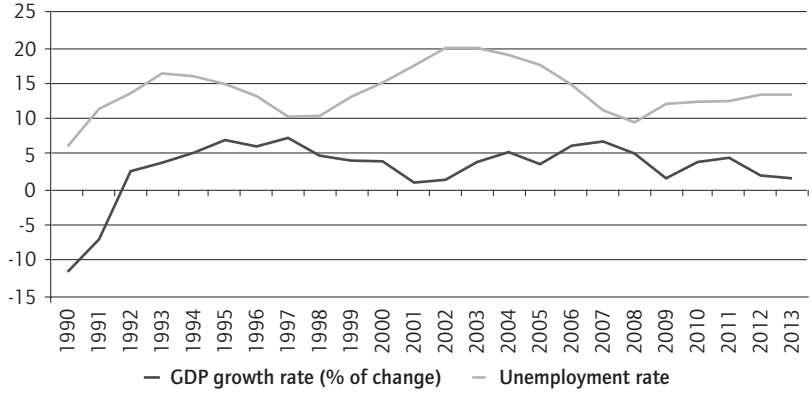
Chapter 7
The silent and crawling crisis: international competition, labour market reforms and precarious jobs in Poland

Małgorzata Maciejewska, Adam Mrozowicki and Agnieszka Piasna

Introduction

Poland did not experience recession after the outbreak of the global economic crisis of 2008 and thus stands out, not only in the central and eastern European region, but in the whole of the EU. At the peak of the economic crisis, Poland's GDP growth slowed from 6.8 per cent in 2007 to 1.6 per cent in 2009, with its slowest rate – 0.4 per cent – recorded in the first quarter of 2009 (GUS 2015b). After a short improvement, the second economic slowdown occurred in 2012 (2.0 per cent GDP growth) and 2013 (1.6 per cent) (Figure 1). Unemployment did increase to 13.4 per cent in 2012, thus breaking with the pre-crisis downward trend, with the lowest value registered in October 2008 (8.8 per cent) (GUS 2014). However, the rise was not as pronounced as in the neighbouring countries. Such a successful economic performance amidst the Great Recession raised obvious questions about its roots, among other things with the aim of pointing to policy solutions as a model to be emulated by other troubled countries.

Figure 1 **GDP growth rate and unemployment rate in Poland 1990-2013**



Source: Central Statistical Office of Poland.

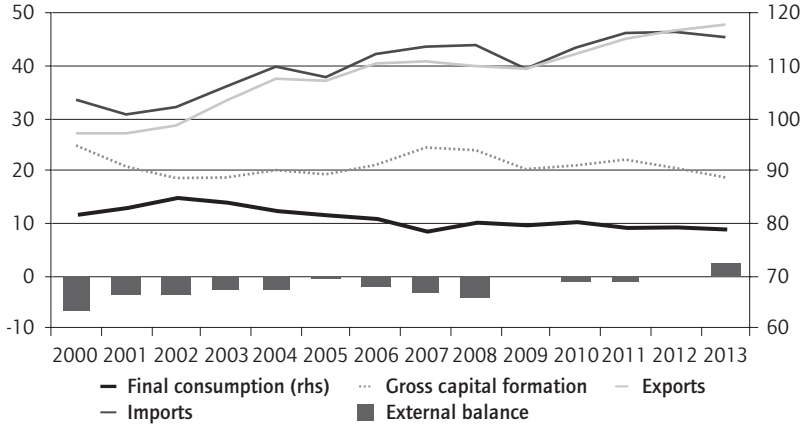
We propose to frame our analysis in terms of the concept of a 'silent and crawling crisis', emphasising the long-term and gradual character of the changes under scrutiny. In line with the argument developed by Nölke and Vliegenthart (2009: 672), the strategy of keeping labour costs low to ensure the inflow of capital via foreign direct investment (FDI) has been a permanent feature of the 'dependent market economy' developed in the course of market reforms in Poland. Labour market deregulation has constantly been claimed to be the answer to the long-term strategic objective of attracting FDI. In Poland, the transition to a market capitalist system has been approached on the liberalising path taken in recent decades by Western developed capitalist economies. Foreign capital has played an important role in improving Poland's competitiveness, but little attention was paid to the domestic capital base (Rae 2013). Foreign investors were seen as the main partners in the modernisation process (Poznański 1996). The great importance attached to foreign investment is a key feature of policymakers' approach to competitiveness, which has outlasted the transformation period. For instance, Poland's National Development Plan for 2004–2006 lists the substantial inflow of FDI in the 1990s among the present-day strengths of the Polish economy. Accordingly, high labour costs are diagnosed as a weakness and labour market flexibilisation is regarded as an opportunity.

Policymakers expected the expansion of flexible employment to add yet another competitive advantage on top of the relatively low labour costs. During the 'crawling' crisis a variety of measures were taken to maintain competitiveness, putting downward pressure on wages and social security. As we demonstrate, Poland has been following the policy of liberalisation and deregulation in the labour market since the systemic transformation. This enables us to explore whether a flexible labour market was a key element in the country's apparent resilience in the face of the global economic downturn. It certainly appears to be the view of policymakers in Poland, who responded with even more deregulatory measures after 2008, notwithstanding the relatively good economic performance. Flexible employment combined with a lean and barely protective social security system – first used as a tool for EU accession – became one of the main austerity measures used to ease the repercussions of the global financial crisis. Some measures, which were initially laid down in the 'special' anti-crisis law designed to operate between 2009 and 2011 – for example, flexible working time – were permanently inscribed in labour law. This policy direction was similar to measures adopted elsewhere under the heading of 'internal devaluation'.

Overall, we argue that labour market reforms in Poland have had a tremendous impact, promoting insecure and precarious jobs at high social cost; on the other hand, we find very little evidence that the apparent economic success in recent years can be attributed to deregulation. Contrary to the apparent belief on the part of policymakers that labour market reforms and a highly flexible employment system might have helped Poland to avoid entering a recession, a number of other macroeconomic tools were used, which provide a much more convincing explanation. Above all, government spending in Poland during the economic slowdown after 2008 was relatively high as a share of GDP (in 2010 twice as high as in the euro zone, Eurostat) (see Figure 2). This can be partly linked to infrastructure development in preparation for the Euro 2012 football championship, and partly to the continuous stream of EU structural funds. Moreover, there was no significant collapse in the banking and financial sectors in Poland, due to relatively low personal debt levels and a relatively well regulated banking sector. Poland was also able to retain some competitiveness through a devaluation of the Polish zloty, which was not tied to the euro exchange rate (Rae 2013). However, the exchange rate has fluctuated over the years, with some significant devaluations alternating with revaluations, without any clear relationship to export performance. There was a substantial devaluation relative to the euro in late 2008 and early 2009, such that the average 2009 level was 19 per cent below the average 2008 level, but this was largely restored in the following years. The 2010 level was only 6 per cent below that of the immediate pre-crisis year (2007) and above the 2005 average.

We focus our analysis on the supply-side labour market policies aimed at reducing labour costs and, more recently, at flexibilising employment. In particular, we explore the role that a flexible labour market – with a high incidence of nonstandard, low paid and relatively unprotected contracts – might have played in the adjustment of the Polish economy when the crisis hit most of the developed world. In order to substantiate our thesis, we look first at the labour market and social policies pursued in Poland during the transformation to a market economy after 1989, their evolution on the eve of Poland's accession to the EU and in the aftermath of the global economic crisis. We then consider how far changes in unemployment and selected economic indicators relate to the policies pursued. Drawing comparisons with neighbouring countries, where the mix of policies pursued has not been uniform, we conclude that there is no demonstrable evidence that the liberalising and deregulatory

Figure 2 **GDP and main components — Current prices, % of GDP**



Source: Eurostat.

policy path undertaken in Poland has in fact helped to keep a competitive advantage in attracting foreign investment and preserving economic growth.

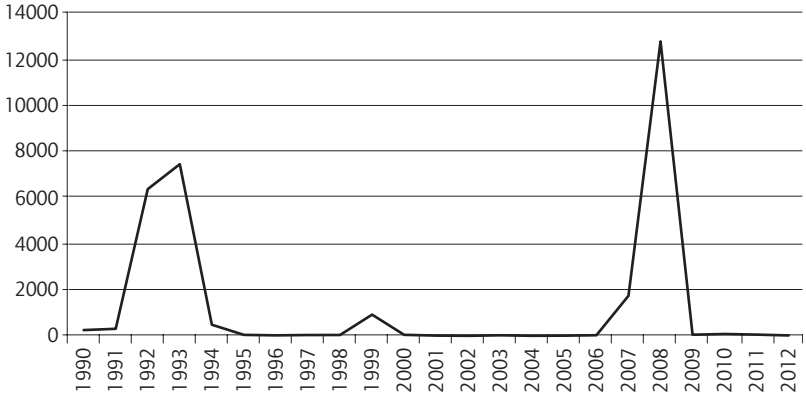
1. Pathways to labour market deregulation

1.1 Systemic transformation and the challenge of unemployment in Poland

A prerequisite for understanding how labour market policies and a strategy of economic competitiveness developed in Poland is to consider them in a longer-term perspective, since the systemic transformation. At the beginning of the 1990s, in the aftermath of the Solidarity movement and economic recession of the second half of 1980s, Poland underwent a systemic shift in economic policy widely known as 'shock therapy'. It transformed the existing state planned economy into a market economy (Kowalik 2009; Hardy 2009; Tittenbrun 2007). This process was ushered in by decisions taken in 1990 by the newly elected government, guided by foreign economic advisors (Kowalik 2009; Tittenbrun 2007, Vol. 2). They introduced a package of fiscal, trade, wage and employment reforms; these measures deepened a systemic crisis that lasted until the second half of the 1990s.

The particular direction of industrial policies, as part of shock therapy, was a consequence of pressures from several sides: the European Round Table of Industrialists (in order to protect their interests in a newly opened market), the World Bank and the IMF (in order to restructure Polish debts) (Tittenbrun 2007, Vol. 3). The shock therapy, with its mantra of macroeconomic stabilisation, liberalisation and privatisation, lost momentum, partially as a result of political choices aimed at reducing the social costs of transition by building on the existing welfare state (Bohle and Greskovits 2012: 153) and partially as a consequence of massive strikes in 1992 and 1993 (see Figure 3).

Figure 3 **Number of strikes in Poland**



Source: Central Statistical Office of Poland.

The social pressure forced the government to maintain social protection in terms of unemployment benefits and early-retirement schemes, as well as to introduce institutions of national social dialogue (the Tripartite Commission on Social and Economic Affairs), albeit with rather limited prerogatives and an overall goal of 'maintaining social peace'. For instance, pension expenditure as a proportion of GDP was increased from 6.5 per cent in 1989 to 14.7 per cent in 1992 (Bohle and Greskovits 2012: 156). On the other hand, in 1994 elements of conditionality were introduced into the social security system,[1] for example, with regard to

1. In 1991 the government adopted the Act on Employment and Unemployment (Dz.U. 1991 nr 106 poz. 457, http://isap.sejm.gov.pl/DetailsServlet?id=WDU19911060457), which was superseded in 1994 by the Act on Employment and Unemployment Prevention (Dz.U. 1995 nr 1 poz. 1, http://isap.sejm.gov.pl/DetailsServlet?id=WDU19950010001). At present, the

unemployment. Henceforth, the unemployed could be deprived of that status for a period up to six months for various reasons (such as refusal to accept a job offer or undergo a medical check-up, or if their income rose above 50 per cent of the minimum wage). Consequently, combined with the changes in the health care system and other social security provisions in the late 1990s, it opened up the possibility of restricting access to these public services and tightly linking it with the applicant's employment history. The law also limited the scope of entitlement to unemployment benefits. First, it excluded groups in atypical employment and, in 1994, graduates. In practice, this deprived the great majority of unemployed of any financial support. While in 1990 79.2 per cent of the registered unemployed were entitled to benefits, in 2000 the figure was only 20 per cent. The level of allowances was also reduced to 36 per cent of the average wage in 1994.

In 1998–2001, Poland underwent a second wave of neoliberal reforms led by Solidarity Electoral Action. They exacerbated the encroaching commercialisation of public services by restructuring health care, public administration, education and pensions. In the early 2000s, the expectation was that competitiveness would be promoted by freezing the minimum wage (in 2002) and then by keeping its increases low. As Bohle and Greskovits observed (2012: 87), the second wave of reforms also reflected EU pressure to 'ensure compliance with the Maastricht criteria of Economic and Monetary Union (EMU) enlargement'; they also point out that 'further convergence on the EU requirements has entailed a rush for monetary and exchange rate stability, fiscal discipline and welfare state retrenchment'. Slashing corporation tax (from 40 per cent in 1989 to 19 per cent in 2004) and labour market reforms were introduced to attract new, mainly foreign investments (Bohle and Greskovits 2012).

During the first four years of transition (1989–1993) unemployment grew from nearly zero (officially) to 3 million and the unemployment rate increased to 16.4 per cent in 1994 (see Figure 1). As estimated by Kabaj (2001), between 1990 and 2001 job losses, mainly in the public sector, reached 5.1 million. The first wave of unemployment at the beginning of the 1990s (see Figure 1) was related to the liquidation of (mainly) state-owned heavy industry. It resulted from the need to replace an outdated

applicable law is the Act on Employment Promotion and Labour Market Institutions, enacted in 2004 (Dz.U. 2004 nr 99 poz. 1001, http://isap.sejm.gov.pl/DetailsServlet?id=WDU20040991001).

and distorted industrial infrastructure, increased adaptation pressures in the liberalised goods and services market and changed fiscal policies aimed at halting wage growth in the public sector and increasing interest rates for state-owned enterprises. Furthermore, the deregulation of food and services prices and liberalisation of foreign trade induced hyperinflation, which pushed down real wages. At the same time, the government introduced new labour market policies to tighten control over the unemployed and limit their access to benefits and social security.

In the first years of transformation (until 1997), there was no systematic government programme to combat unemployment. Indeed, the threat of job loss was used by employers to discipline the labour force (Kozek 2013). In 1989–1993, average real wages declined by around 29 per cent (Kieżun 2012: 131), which sharply diminished domestic demand and led to higher inequality and impoverishment, especially among production workers and farmers, amounting to a radical change in the class structure. While the share of income from business activities in total income grew to 60 per cent between 1989 and 1993, the wage share and the proportion due to individual agricultural activity halved, while the share of income from social security benefits (such as pensions and unemployment allowances) increased by one quarter (Kowalik 2007: 3).

Economic slowdown at the beginning of 2000s, as well as industrial and public sector restructuring (Charkiewicz 2009; Hardy 2009) ushered in the next wave of job losses, resulting in a rise in the unemployment rate to 20 per cent in 2002 (see Figure 1). The number of employed persons decreased from 15.5 million in 2000 to 12.7 million in 2004 (GUS 2006) and the unemployment rate remained at high levels until 2005. In the context of high unemployment, wage pressure decreased. The situation improved in the years leading up to the global economic crisis, but since 2009 Poland has experienced further growth in unemployment (up to 13.4 per cent in 2013), with a slow but stable fall in employment, largely in line with the cyclical fluctuation in output. Between 2009 and 2013 the total number of employed people fell by more than 300,000 (of whom 73 per cent were women), which contributed to a decrease in workers' labour market bargaining power. In 2014, some recovery in employment was observed. However, in 2008–2014 employment fell in, among other things, manufacturing, water supply, construction, agriculture and retail.

1.2 Labour market reforms

We argue that, as a political strategy, both macroeconomic and labour market policies experienced three turning points related to three stages of economic recession in Poland. The first was observed at the beginning of the 1990s. It took the form of 'shock therapy' and served as a tool to introduce neoliberal capitalism in Poland. In this phase we cannot speak about coherent labour market policy but rather a neoliberal macroeconomic package that effected a systemic shift mainly through market liberalisation and a low wage policy. The second phase occurred at the turn of the 1990s and 2000s and aimed at stabilising the economy on the eve of EU accession. It involved, among other things, the second wave of privatisation of state-owned enterprises, the partial commercialisation of public services and legal changes to bring the country's laws into line with EU law. The third stage took place as an outcome of the 'silent' crisis that came to Poland after some delay at the beginning of 2010. It encompassed, among other things, the further liberalisation of the Labour Code – in particular with regard to the use of fixed-term contracts and working time regulations – the introduction of 'new public management' elements in employment policies and a variety of austerity measures to restrain the growth of the public debt and public deficit.

One important conclusion of studies of labour market policy in Poland (Kozek 2013; Męcina 2009) is that it is characterised by incoherence, frequent changes and dependence on electoral logic. Until 1997, there was no strategic government document concerning the long-term planning of labour market policy. The situation changed at the beginning of the 2000s, however. The systemic shift from a policy of full employment and the creeping deregulation and decentralisation of the social security system in the 1990s, coupled with rapid unemployment growth (see Figure 1) and a collapse in trade union density (from 38 per cent in 1987 to 12 per cent in 2014; cf. Czarzasty and Mrozowicki 2014) created very unstable conditions in the labour market in terms of both employment protection and unemployment security. This situation overlapped with preparations for systemic adjustment to EU accession. As a result, a coherent political strategy on structural problems in the labour market was urgently needed. New policies developed in the early 2000s aimed at increasing employment and adjusting Poland's legal framework to those of western European countries. As remarked by Kozek (2013) and Giermanowska (2013), the labour market policies largely reflected EU documents such as the European Employment

Strategy from the late 1990s. Flexible forms of employment were a particularly important tool in this policy approach.

With regard to flexible employment, the most important developments took place in 2003—2004, especially concerning the Labour Code. Until the 2000s Poland had medium-level labour market regulation, characterised by relatively strict protection of standard employees, fairly weak protection of the unemployed and a policy of supporting early retirement as a way of enhancing accelerated restructuring of state-owned enterprises (Rymsza 2005). Two years before EU accession, the government – emphasising the need to increase employability and employment flexibility – implemented legislative changes in support of labour market deregulation. The most important of these were: (i) legislation on temporary work agencies; (ii) introduction – in 2003–2004 – of the possibility of concluding an unlimited number of fixed-term contracts (previously, up to three fixed-term contracts for a period of up to three months, currently, the third contract must be open ended); (iii) exemption of SMEs from obligation to establish a company social fund; and (iv) suspension of collective agreements for employers in a difficult economic situation. Looking at the OECD's index of employment protection (OECD 2014), we observe that the outcome of labour market reforms in 2002–2003 was a decrease in workers' protection against collective dismissal. If we examine the various aspects of employee protection more closely, we can see that in 2013 Poland had a higher level of protection against individual dismissals (a score of 2.20 for regular contracts) than the United Kingdom (1.12) or the United States (0.49), but that employees were less protected in this respect than in some countries in continental Europe, such as Germany (2.72). When provisions for collective dismissals are also taken into account, protection for workers in Poland (2.88) was the same as in the United States, slightly higher compared with the United Kingdom (2.62), but significantly lower than in Germany (3.63).

On top of that, within the framework of the new Act on the Employment Promotion and Labour Market Institutions enacted in 2004 the new labour market policies were applied which further deregulated the labour market, while imposing controls on the unemployed. The new regulations reduced the duration of unemployment allowance to a maximum of six months and fixed the amount of unemployment allowance at 120 euros per month (in 2014 it amounted to 170 euros for the first three months and 135 euros for the next three months). Hence, the only people entitled

to financial support were those whose contracts had been terminated for company reasons. This new law also limited the range of groups entitled to training and internships to those under 25 and above 50 years of age, people without qualifications and disabled and single parents with at least one child under 7 years of age. However, the new policies that required new activities were not secured with extra financial support. Between 2005 and 2011 total expenditure on labour market policies of all kinds declined (see Table 1). This decline is to be accounted for first and foremost by the reduction of expenditure on out-of-work income maintenance and support (mostly unemployment benefits) and early retirement benefits, which were relatively high in Poland in the 1990s with a view to softening the negative effects of neoliberal transformation.

Table 1 **Expenditure on labour market policy (% of GDP)**

Type of measures	2005	2006	2007	2008	2009	2010	2011
EU28 average	1.99	1.81	1.59	1.6	2.15	2.15	1.89
Total (Poland)	1.28	1.16	1.01	0.9	0.96	1.04	0.72

Source: Eurostat.

As the data show, the global crisis began to affect the Polish labour market relatively late compared with other EU economies and employment outcomes proved to be less profound than in earlier systemic crises. Nonetheless, in 2009 the Polish government undertook anti-crisis measures and adopted the Act on Alleviating the Effects of the Economic Crisis on Employees and Employers. One of the assumptions of the anti-crisis measures was that the development of even more flexible employment would create a cushion for companies undergoing economic downturn. The new law made it possible to conclude an unlimited number of fixed-term contracts in a period of 24 months, extended the reference period for calculating average weekly working time from 4 to 12 months (in consultation with trade unions in unionised enterprises) and, finally, introduced the 24-hour work cycle of flexible working hours and public subsidies for enterprises suffering from 'temporary financial difficulties'.

Even though the anti-crisis package was intended to be a temporary measure, in 2013 reforms were passed in continuity with previous regulations that pushed labour market flexibilisation even further. Among other things, in 2013 the government returned to an idea that first emerged in 2009, permanently inscribing in the Labour Code the possibility of extending the reference period for calculating working time

to 12 months if that can be justified by 'objective', technical or organisational reasons. Finally, as shown by Sztandar-Sztanderska (2013), the changes in the Act on Employment Promotion and Labour Market Institutions (enacted in 2014) indicate a convergence towards 'New Public Management' (commercialisation of the public sector). On the one hand, they aim at 'rationalising' expenditure on active labour market instruments by introducing the 'profiling' of the unemployed, which was previously unknown in Poland. On the other hand, they establish strict measures of 'efficiency' and 'competitiveness' ('targets') for labour market institutions (both public and private) by linking the financing of such institutions with their efficiency (according to centrally established indicators). It is important to note that the changes were introduced without trade union consent. This contributed to the stalemate in national-level social dialogue and a joint trade union decision to leave the Tripartite Commission on Social and Economic Affairs in June 2013.

In this way, the 'state of emergency' became the status quo. Social discontent has been growing in Poland, not manifest in another wave of strikes but in public demonstrations, whose intensity has increased since 2010 (Urbański 2014). The most spectacular example was the 'Days of protest' in September 2013 when over 100,000 people (mostly union members) rallied in Warsaw against the amendments to the Labour Code on flexible working time, pension reforms, the expansion of junk contracts and the lack of social dialogue with the government. In recent years, policies aimed at fighting unemployment by any means, regardless of the quality of jobs created, have begun to be challenged by trade union campaigns against the expansion of precarious employment ('junk contracts'). Trade union actions seem to indicate an important change in the public attitude to labour market issues in Poland, which stands in clear opposition to the austerity agenda of the past.

2. Facing the crisis: have supply-side labour market policies ever worked in Poland?

In the following step, we consider the impact of the liberalising and deregulatory measures pursued before the crisis, as well as after 2009, as described in the previous section. We first consider economic performance and discuss whether it was the policies pursued – and in particular devaluation – that mattered in Poland with regard to attracting FDI and possibly helping to avoid recession by maintaining positive

economic growth. We then move on to the effects on the labour market, focusing on the unemployment rate, the structure of employment and precarious work with related social costs.

2.1 Economic performance

Following the government's stance and taking the FDI inflows as a criterion of economic success, the policy package implemented in Poland seemed to work in the mid-1990s. The FDI inflow reached its first peak in 2000 and the share of foreign investment in GDP grew from 2 per cent in 1994 to 5.9 per cent in 2000 (MGPiPS 2003). In parallel, Poland's overall economic performance improved: the unemployment rate decreased from 16.4 per cent in 1993 to 10.3 per cent in 1997 (see Figure 1) and annual GDP growth increased from 2.6 per cent in 1992 to 7.3 per cent in 1997. However, as the FDI inflow began to decline soon afterwards (until 2004), new sources of competitive advantage had to be sought. The labour market reforms of the early 2000s were designed to play that role, as well as to combat rapid unemployment growth. Judging by the macroeconomic developments in the mid-2000s, the policy package seemed to work again. New foreign investments flowed into Poland, both exports and domestic demand grew, while unemployment rates fell (see Table 2). The share of exports in GDP grew from 33.4 per cent in 2000 to 38.8 per cent in 2007 (its value grew almost threefold in that period), the inflow of FDI grew rapidly from 2004, reaching its historical peak in 2007 of 17.24 billion euros (see Figure 4). There was a major acceleration of domestic demand growth (9.5 per cent in 2007 as compared with –1.3 per cent in 2001, see Table 2). The registered unemployment rate, having reached its peak of 20 per cent in 2003, also fell, slowly but steadily (in 2008 it was 9.5 per cent). Even if other, external factors arguably contributed to these developments, the overall positive economic performance seemed to have reinforced trust in the dominant policy line.

While in the mid-2000s, the imposition of greater flexibility in exchange for higher wages seemed to work, the economic crisis halted this trade-off, which was dubious in any case. As a result of (i) a slowdown in outward migration and (ii) the increasingly difficult situation of companies in some sectors, labour market bargaining power and wage pressure (at both individual and collective levels, that is, via strikes) declined. Moreover, the outcomes of the policies aimed at further employment flexibilisation to improve competitiveness became

questionable. After 2012 there was an economic slowdown: GDP, FDI, exports and domestic demand lost their momentum in 2012 and 2013, and there was slow but stable growth in unemployment.

Table 2 **Export, domestic demand, individual household consumption and foreign direct investment (FDI) in Poland**

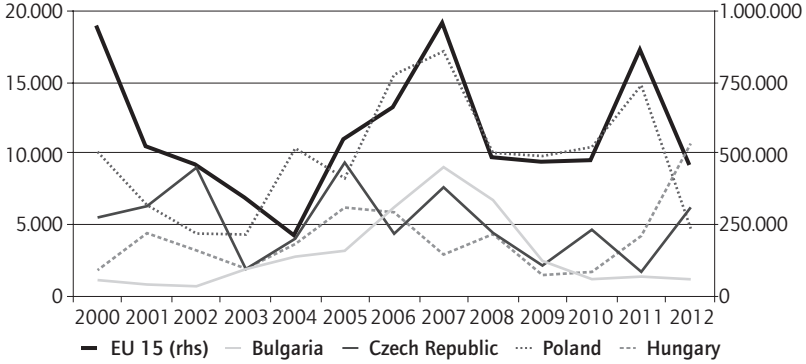
	2001	2002	2003	2004	2005	2006	2007
GDP per capita (% change)	1.2	1.5	4	5.4	3.7	6.3	6.8
Export (% change)*	7.4	13	24.9	30.2	6.1	19	12.4
Export (% of GDP) (Eurostat)	–	–	33.4	34.6	34.9	38.2	38.8
Domestic demand (% change)	–1.3	1	2.8	6.2	2.4	7.2	9.5
Individual household consumption (% change)	6.2	6.7	2.4	7.5	4.2	6.2	8.3
	2008	2009	2010	2011	2012	2013	
GDP per capita (% change)	5.1	1.5	2.9	4.5	2.0	1.6	
Export (% change)*	4.9	4.4	13.7	16.1	8	7.4	
Export (% of GDP) (Eurostat)	38.3	37.6	40.5	43.1	45.1	46.1	
Domestic demand (% change)	5	–0.3	4.2	3.8	–0.4	0.2	
Individual household consumption (% change)	10.3	4.6	5.8	7.4	5.1	1.4	

Note: * previous year=100%
Sources: Central Statistical Office of Poland (GUS), except for Export of goods and services as % of the GDP (Eurostat).

However, a closer look at the pattern of FDI flows between 2000 and 2012 reveals that developments in Poland were nothing exceptional when compared with central and eastern Europe, but also the EU15 (Figure 4). The increase in FDI inflows after 2003 was noted also in the neighbouring countries despite a very different mix of policies (Myant and Drahokoupil 2014). After the 2008 economic slowdown, the pattern of foreign investment flows in Poland duplicates those in the EU15 as a whole.

What is more, adjustments in the cost of labour are not demonstrably related to Poland's attractiveness to foreign capital. When the labour

Figure 4 **Direct investment flows (million euros)**

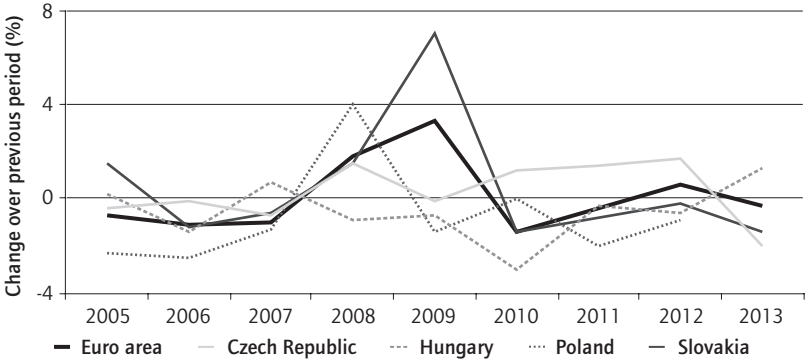


Source: Eurostat.

market situation further deteriorated in 2012, a decline in real wages was observed for the first time since 1993. Despite the growth of the minimum wage (up to 392.73 euros in 2013), it still remained relatively low compared with western European countries. In 2008–2012, real labour productivity per employee grew faster than real wages, while real unit labour costs kept on declining from 2008 onwards (Figure 5). In 2013, labour costs in Poland were among the lowest in the EU28: labour costs per hour were 8.1 euros compared with 24.6 euros in the EU28, with lower costs only in Hungary, Lithuania, Latvia, Bulgaria and Romania (Eurostat 2014). Despite these downward pressures on wages and a continuous decline in real unit labour costs after 2008, the pattern of FDI flows in Poland seemed to develop no more favourably than in the Czech Republic, where labour costs increased in the same period. It thus becomes hard to argue that specific labour market policies pursued in Poland made any discernible difference.

Although supply-side labour market policies combined with low labour costs were still pursued as a means of maintaining the competitive advantage of the Polish economy, the positive correlation between deregulatory measures and a positive economic performance clearly ceased after 2008. Looking at macroeconomic data, the situation got worse in 2009 (Tables 2 and 3). Despite the growth in GDP per capita in 2010 (2.9 per cent) and 2011 (4.5 per cent), the positive economic performance was overshadowed by a growing public deficit and debt pressure. Following the growth in the public deficit in 2009 (7.4 per cent of GDP) and 2010 (7.6 per cent of GDP), its level almost returned to that

Figure 5 **Real unit labour costs**



Source: Eurostat.

of the pre-crisis period. Public debt grew from 45 per cent in 2007 to 55.7 per cent of GDP in 2013 (see Table 3). In 2013 GDP per capita growth returned to the level of 2009 (1.6 per cent) and domestic demand growth was very low (0.2 per cent), as was that of household consumption (1.43 per cent). FDI inflows fell from 10.9 billion euros in 2011 to 2.2 billion euros in 2013 and export growth also slowed down, from 16.1 per cent in 2011 to 7.4 per cent in 2013 (see Table 2). Even though the share of exports in GDP continued to grow and current estimations of domestic demand growth (4.6 per cent) and GDP growth (3,3 per cent) in 2014 are optimistic (GUS 2015a), further flexibilisation and dualisation of the labour market at the same time pushed many Polish households into precarity.

Thus, the Polish economy's ability to attract foreign investment can hardly be linked to a political strategy for developing the labour market alone. Instead, a range of other factors has been pointed out as playing a key role in attracting skill-intensive foreign investments in the mid-1990s, such as high unemployment, relatively low labour costs (compared with other European economies), a wide range of tax exemptions for private businesses and decreasing corporate taxes (from 40 per cent in 1989 to 30 per cent in 2000 and 19 per cent in 2004), as well as the legacy of complex-manufacturing experiences from the period of state socialism (Bohle and Greskovits 2012: 44). For instance, in order to stimulate foreign direct investments, the Law on Special Economic Zones was passed in 1994, creating the framework for tax incentives for investors. Indeed, analysis of foreign investment in transition economies found it

to be predominantly attracted to countries with existing industries and good geographical positions, close to the economic heart of Europe (Myant and Drahokoupil 2012).

Table 3 **Selected economic indicators, Poland, 2000–2013**

	2000	2001	2002	2003	2004	2005	2006
Public deficit (% of GDP	–3	–5.1	–5	–6.3	–5.7	–4.1	–3.6
Public debt (% of GDP)	36.8	37.6	42.2	47.1	45.7	47.1	47.7
Harmonised indices of consumer prices, annual average rate of change (%)	10.1	5.5	1.9	0.8	3.5	2.1	1
Average nominal wage growth per year (%)	12.7	7.2	3.5	3.2	4	4	4.1
Real labour productivity per person employed (annual % change)	n.d.	n.d.	n.d.	4.8	4	1.4	2.9
Real unit labour costs growth (% change)	–	–	–	–	–	–2.3	–2.5
Minimum wage (% change)	32.6	8.6	0	5.3	3	3	5.9
Real wage (% change)	1	2.5	0.7	3.4	0.7	1.8	4
	2007	2008	2009	2010	2011	2012	2013
Public deficit (% of GDP	–1.9	–3.7	–7.4	–7.6	–4.9	–3.7	–4
Public debt (% of GDP)	45	47.1	50.9	53.6	54.8	54.4	55.7
Harmonised indices of consumer prices, annual average rate of change (%)	2.5	4.2	3.5	2.6	4.3	3.7	0.9
Average nominal wage growth per year (%)	8.6	9.4	5.4	3.9	5.4	3.6	3.6
Real labour productivity per person employed (annual % change)	2.6	0.1	2.3	6.5	4.2	1.6	1.7
Real unit labour costs growth (% change)	–1.3	4	–1.4	0.0	–2.0	–0.9	n.d.
Minimum wage (% change)	4.1	20.3	13.3	3.2	5.2	8.2	6.7
Real wage (% change)	5.5	5.9	2	1.4	1.4	–0.1	1.9

Source: Public Deficit, Public Debt, HICP, RLPPE and RULCG – Eurostat, NWG, MW – GUS/Central Statistical Office of Poland (authors' calculation), RW – GUS/Central Statistical Office of Poland.

On the other hand, the policy focus on foreign investment, as well as export-led strategy for growth arguably overestimated their role in the overall performance of the Polish economy (see Figure 2). In 2007, exports of goods and services accounted for 40.8 per cent of Polish GDP, while in the neighbouring Czech Republic, Hungary and Slovakia their share was twice as high (Myant and Drahokoupil 2012). If we are to look

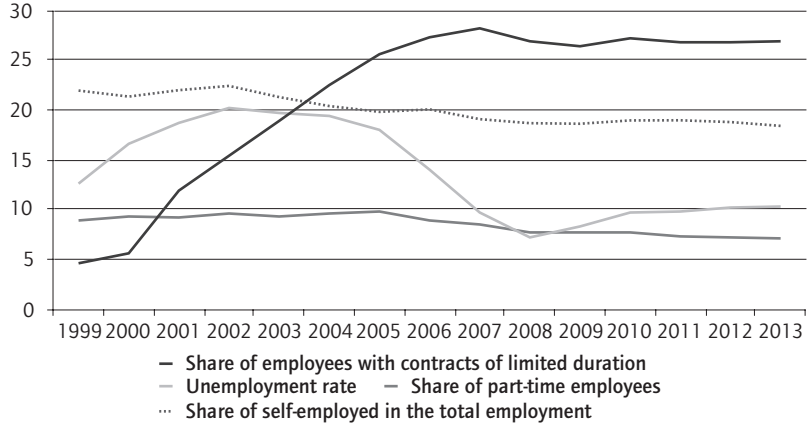
for alternative explanations of Poland's relatively good GDP performance, the role of domestic demand should be considered and its relatively small drop in 2007 can provide part of the explanation. In this respect, it was not wage moderation, but wage increases that might have translated into a positive trend. As argued by Meardi (2012), the improved labour market situation boosted workers' bargaining power in Poland and led to stronger labour assertiveness in pay demands. Indeed, a wave of strikes was triggered in 2006 (24,600 people went on strike in comparison with 1,600 in 2005), reaching its peak in 2008 when 209,000 workers went on strike and 12,765 strikes took place; the highest number since 1989 (see Figure 3). In the aftermath, we saw an increase in nominal wages (by 8.6 per cent in 2007 and 9.4 per cent in 2008) and real wages (by 5.5 per cent in 2007 and 5.9 per cent in 2008) and an extremely high increase in the minimum wage (by 20.3 per cent in 2007 and 13.3 per cent in 2008, see Table 3).

2.2 Employment and social outcomes

The flexibilisation of employment triggered by legal changes in the first half of the 2000s, resulted in a spectacular expansion of temporary jobs (see Figure 6). This was strengthened by the anti-crisis regulations adopted in 2009 that pushed labour market flexibilisation even further. By 2014, Poland had become notorious for temporary contracts in the EU: in the second quarter of that year, 28.4 per cent of employees had a contract of limited duration, as compared with 14 per cent in the EU28. According to the Eurostat labour force survey, temporary employment affects young people above all: in 2012, 70 per cent of people aged 15–24 had this kind of contract. We can also see the symptoms of a dual labour market in which temporary employment is grouped mainly among workers with secondary/non-tertiary and lower levels of education (72.6 per cent). As demonstrated in Table 4, growth of temporary employment in 2008–2014 was observed in most economic sectors except for manufacturing, construction and financial, insurance and real estate activities. In absolute terms, the biggest increase in temporary employment was in wholesale and retail (up by 74,200 workers in 2008–2014). Importantly, growth in temporary jobs was observed both in sectors in which total employment declined (such as agriculture, forestry and fishing or wholesale and retail) and in sectors in which it grew, including a range of services. In the latter case, the growth of temporary employment was often faster than total employment growth (for example,

electricity and gas supply, IT services, transportation and storage, human health and social work activities and others). Finally, there are also some sectors in which employment growth was accompanied by a decline in temporary jobs, namely financial and insurance activities and real estate activities. Overall, the patterns of temporary job creation do not seem to follow clear sectoral lines.

Figure 6 **Changes in unemployment and atypical employment in Poland 1999–2013**



Source: Eurostat.

Nevertheless, labour market flexibilisation was expected to ease the unemployment crisis by providing incentives for employers to create jobs. The analysis of patterns of job creation over the long term (Figure 7) casts doubt on the effectiveness of the measures taken. In fact, it seems that the periods pre- and post-2008 are quite different in their patterns of job creation and in particular in the role of temporary employment. In the periods of growing unemployment (2000–2002) and its stabilisation at a high level (2002–2004), permanent jobs were declining steadily and substantially, while temporary jobs grew substantially each year. This development brought little change in the total number of jobs and in the unemployment rate, suggesting that what was occurring was a replacement of permanent employment by temporary work and not job creation. However, since 2008 there has been relatively little net change in temporary jobs, and the higher unemployment rate seems to be driven by overall weak job creation, along with a sharp decline in permanent jobs (but only in 2010) (see Figure 7). Thus, there is little evidence that

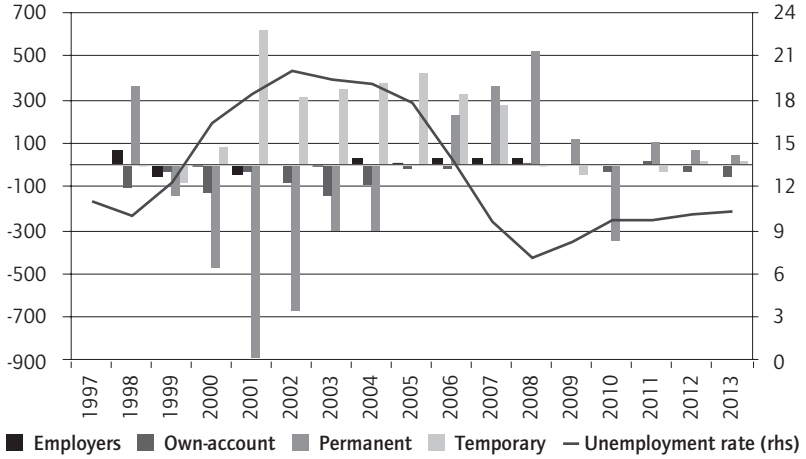
Table 4 **Employment, employees and temporary employees by branch, Poland, 2008, 2014**

	Total employment ('000)		2008–2014 change %	Total number of employees ('000)		2008–2014 change %	Share of employees in total empl. (%) 2014	Temporary employment rate (%)		Change in temp. empl. rate (%)
	2008Q1	2014Q1		2008Q1	2014Q1			2008Q1	2014Q1	
All sectors	15 477.0	15 543.1	0.43	11 932.5	12 203.7	2.3	78.5	26.4	27.2	2.72
Agriculture, forestry and fishing	2 101.7	1 786.2	–15.01	202.2	204.5	1.1	11.4	26.0	35.6	37.11
Mining and quarrying	205.0	250.0	21.95	205	249.7	21.8	99.9	12.1	11.7	–3.39
Manufacturing	3 212.7	2 989.9	–6.93	3 017.5	2,794	–7.4	93.4	31.7	31.0	–2.26
Electricity, gas supply	162.1	170.1	4.94	162.1	167.5	3.3	98.5	4.5	8.1	78.97
Water supply; sewerage, waste management	166.7	156.5	–6.12	159.2	153.6	–3.5	98.1	16.6	22.1	33.48
Construction	1 176.5	1 124.4	–4.43	939.4	859.6	–8.5	76.4	39.1	37.9	–3.18
Wholesale and retail	2 286.6	2 261.4	–1.10	1 717.3	1 779.8	3.6	78.7	32.2	35.2	9.43
Transportation and storage	892.3	907.8	1.74	742.5	774.3	4.3	85.3	15.9	20.8	30.64
Accommodation and food service activities	300.8	342.4	13.83	251.1	291.6	16.1	85.2	42.5	45.5	7.09
Information and communication	303.9	367.3	20.86	257.5	301.4	17.0	82.1	25.4	27.6	8.56
Financial and insurance activities	335.1	359.5	7.28	301.8	303.5	0.6	84.4	20.2	17.9	–11.17
Real estate activities	147.0	155.6	5.85	134	130.7	–2.5	84.0	16.0	13.3	–16.64
Professional, scientific and technical activities	391.0	560.3	43.30	246	353.1	43.5	63.0	27.0	25.4	–5.88
Administrative and support service activities	370.5	440.0	18.76	336.6	397.6	18.1	90.4	55.1	57.2	3.82
Public administration and defence	952.1	1 048.5	10.12	952.1	1 048.5	10.1	100.0	13.3	12.6	–5.19
Education	1 197.7	1 231.9	2.86	1 173.6	1 192.3	1.6	96.8	16.0	16.1	0.63
Human health	831.2	923.6	11.12	782.9	844.1	7.8	91.4	15.4	17.2	11.08
Arts, entertainment and recreation	202.4	201.0	–0.69	182.8	176.4	–3.5	87.8	21.5	23.0	6.79
Other service activities	218.4	232.6	6.50	146.8	151.7	3.3	65.2	37.0	33.3	–10.00
Households as employers	19.6	26.2	33.67	18.5	24.1	30.3	92.0	66.5	76.3	14.83

Source: Eurostat.

high levels of temporary employment in Poland have cushioned the effects of the global economic crisis by allowing rapid adjustment of staffing levels. If anything, employment adjustment in the recent crisis was achieved by permanent staff reductions.

Figure 7 **The net changes in employment by type, '000s (lhs), % (rhs)**



Source: Eurostat. Notes: Age 15-74.

Turning to other forms of economic activity, as demonstrated in Figures 6 and 7, self-employment in Poland remains relatively stable and thus its impact on employment and unemployment is not evident. Contrary to EU trends, the share of part-time employees in Poland has declined, from 9.3 per cent in 2000 to 7.3 per cent in the second quarter of 2014 (in the EU as a whole, the figures are 15.8 per cent in 2000 and 19.7 per cent in 2014). The reason for the difference between Poland and the EU as a whole is the low wages, which make it difficult for part-time employees to support themselves. Another reason is the prevalence of civil law contracts, which offer more advantages for employers than standard part-time contracts. In the case of civil law contracts (freelance contracts and specific-task contracts), the minimum wage and in fact most labour code regulations do not apply. As far as specific-task contracts (and self-employment) are concerned, employers do not need to cover social security contributions, contributions to national health insurance system or training and health and safety costs, which have all been shifted to the employee. Although the overall level of temporary work remained stable after 2008 (Figure 6), there is some evidence of a shift towards civil law contracts. According

to the Central Statistical Office of Poland (GUS 2014), the number of people solely on civil law contracts in 2012 amounted to 1.35 million (as compared with 546,700 in 2010), or around 10 per cent of employed people. Unfortunately, no data have been collected in Poland to show the sectoral differentiation of civil law contracts.

An important development, which should not be overlooked when analysing unemployment changes in Poland, is mass migration. Between 2002 and 2007 nearly 1.5 million people left Poland and as a result the number of Poles living abroad almost tripled (to 2.27 million, Table 5). To put this figure in perspective, 1.5 million corresponds to nearly 9 per cent of the economically active population in Poland in 2007. This outflow coincided with the fall in unemployment from 20 per cent in 2002 to 11.2 per cent in 2007; that is, from 3.1 million to 1.7 million people (see Figure 1). Although the unemployed constituted a relatively small share – some 2 per cent – of post-2004 migrants from Poland (GUS 2013), their departure significantly reduced the competition for jobs among those who stayed. Therefore, while it is difficult to assess the relative impact of migration on the market situation as compared with the role of economic growth, employment policy or a better environment for foreign investors, it is simply impossible to disregard such a mass outflow of workers in such a short time span.

Table 5 **Level of foreign migration, Poland, 2004–2011 ('000)**

	2002 Census	2004	2005	2006	2007	2008	2009	2010	2011 Census
Total	786	1,000	1,450	1,950	2,270	2,210	2,100	2,000	2,017
EU	451	750	1,170	1,550	1,860	1,820	1,690	1,607	1,622

Source: Central Statistical Office of Poland.

While the expected positive impact of labour market deregulation on unemployment levels does not emerge from the analysed data, a range of its other social consequences and costs are well documented. As indicated by the literature (for example, Sochańska *et al.* 2013: 11) the growing number of flexible jobs seems to be related to a tendency to minimise employment costs and protect companies against bankruptcy rather than to the creation of an 'efficient, flexible labour market based on high employee mobility'. Therefore, the spread of temporary employment, which had a clear impact on lowering labour costs, also limited the purchasing power of temporary workers. Based on EU-SILC

data, Kiersztyn (2012) suggests that, regardless of occupation, temporary employees earn less than permanent workers, by around 30 per cent on average. The same analysis shows that workers with contracts of limited duration are significantly more often at risk of poverty and economic deprivation (50.8 per cent households of temporary workers compared with 23.8 per cent of the households of permanent workers) and financial exclusion (16 per cent compared with 5.9 per cent of permanent workers). A lack of prospects for stable and good quality employment can contribute to the migration of graduates or discourage those already living abroad from returning to Poland. Precarity associated with temporary work undermines the sense of economic security much needed at the stage of family formation, thus negatively affecting both fertility rates and women's employment (Piasna and Plagnol 2015). Moreover, the spread of non-standard employment associated with lower investment in human capital (Forrier and Sels 2003; Cutuli and Guetto 2013) does not form a solid basis for a knowledge-based economy and the growth of skill-intensive sectors. This raises questions about the sustainability of such a direction of development in the long run.

3. Conclusions

When the crisis struck most of the developed world in 2008, Poland stood out among its neighbours as the only country that preserved positive economic growth, albeit at a slower pace than in preceding years. Poland's competitiveness has traditionally relied, according to national strategies for development and policymakers, on attracting foreign investment. In light of the supply-side labour market policies that have been implemented in Poland over the past two decades, contributing to a high level of labour market flexibility and precarity, the question arises of how successful they were in attracting FDI flow and the extent to which it can account for Poland's apparent resilience in the economic downturn. The evidence considered challenges such assertions; instead, relatively low dependency on exports, resilience of the financial sector and continuing public spending explain why the crisis was not so deep in Poland.

Due to a number of intervening factors – among others mass migration, the effects of EU enlargement and the inflow of EU funds – the outcomes of labour market and economic reforms in the early 2000s are difficult to assess. On the one hand, the establishment of a flexible labour market and a favourable fiscal environment for business in the early 2000s

coincided with economic growth in the following years and a fall in unemployment. Indeed, most of the positive macroeconomic developments in the period 2004–2007 that coincided with the political strategy of labour market flexibilisation and fiscal discipline might be interpreted as evidence of enhanced performance by the Polish economy as a result of such policies. We could observe export growth and an inflow of FDI, as well as substantial GDP growth. At the same time, the unemployment rate slowly started to fall and the employment rate started to grow for the first time since the mid-1990s. Workers' better bargaining position led to a wave of strikes and wage increases (both minimum and real wages).

On the other hand, it can be suggested that these developments unfolded in parallel rather than in a causal sequence (the familiar fallacy expressed by 'post hoc ergo propter hoc'). A series of comparisons with other countries in the region seems to support such an assertion. Moreover, in the long run, the policies pursued came at the price of externalised social costs. The changes in the Labour Code and new labour market policies led to the flexibilisation of employment, including a spectacular expansion of temporary employment. Thus, the side effect of the supply side labour market policies implemented in the 2000s purportedly to counteract extremely high unemployment was the emergence of a dual labour market in Poland, with a growing number of lower-paid, insecure jobs and increasing control over the unemployed, limiting their access to institutional and financial support. The outcome of labour market deregulation in the 2000s for labour market performance is difficult to assess, also due to the systematic 'exit' of workers from the Polish labour market via migration.

In sum, policymakers' belief in the positive role of lowering labour costs and labour market deregulation in attracting FDI to Poland cannot be supported with hard evidence. International comparisons of cyclical fluctuations in foreign investment, labour costs and economic growth suggest that labour market reforms were not a crucial factor in determining Poland's attractiveness to investors. However, the negative consequences of such policies are evident in terms of increased precarity for workers and externalised social costs. This should raise concerns about government claims that labour market reforms are necessary to help Poland to avoid recession and restore economic competitiveness.

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