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European Public Finances and the Great Recession: France, Germany, Ireland, Italy, Spain and the United Kingdom Compared*

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Abstract

We compare economic trends over the financial crisis, and the tax and benefit reforms implemented in response, across six EU countries. Countries where the crisis led to a relatively greater increase in public spending than a decline in tax revenues – in particular, France and Italy – are found to have implemented consolidations that are more reliant on tax increases than spending cuts. While in Italy households with children have lost less from tax and benefit reforms than pensioner households, the reverse is true in Ireland and the United

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Kingdom. The pattern of cuts to public services also varies: France, Ireland and the UK chose to protect spending on health and schools from cuts, while Italy and Spain chose to cut spending on these services relatively deeply. One clear improvement has been the introduction of greater independence and transparency in the production of economic and fiscal forecasts. Unfortunately, in many cases, the fiscal response to the crisis missed opportunities to improve the overall efficiency of the tax system.

Policy points

- The countries that experienced the largest deteriorations in their underlying public finances as a result of the Great Recession tended to be those that were previously most heavily reliant on revenues from the financial sector and the taxation of property and other assets. Risks to tax and spending forecasts and how they are correlated should be an important consideration when setting fiscal policy.
- The period since the Great Recession provides numerous examples across Europe of missed opportunities to improve the efficiency of the tax system as countries implemented significant fiscal consolidations. In the next phase of reforms, these opportunities should be taken. Failing that, policymakers should, at least, avoid adding to existing deficiencies.
- In some cases, reforms have proven to be fragile. Unstable reforms risk increasing uncertainty; policymakers should instead try to ensure that their reforms are implemented in a way that makes them as robust as possible.
- A clear improvement across most European countries has been the introduction of greater independence and transparency in the production of economic and fiscal forecasts. There are opportunities to improve this further and, at a minimum, care should be taken to ensure that the progress made in the last few years in this area is not lost.

I. Introduction

The global financial crisis led to deep recessions across many advanced economies. These were associated with falls in employment rates and sharp increases in budget deficits. The size and duration of these adverse effects varied substantially across countries. The fiscal response also varied, but typically comprised two parts: an active fiscal stimulus package, which was temporary and aimed at limiting the length and depth of the recession, and a fiscal consolidation, which was permanent and aimed at restoring the financial sustainability of the public finance position.

This special issue of *Fiscal Studies* contains papers examining the evolution of the public finances in six European countries – André et al. for France, Blömer et al. for Germany, Keane for Ireland, Figari and Fiorio for Italy, Martí and Pérez for Spain and Emmerson and Tetlow for the United Kingdom. Each paper looks at the evolution of GDP, employment and unemployment rates, and the public finances in the run-up to, and through, the financial crisis. Each then describes the scale, timing and nature of the fiscal response to the crisis, and the impact of the reforms on the incomes of different households and on spending on different public services. Each paper also assesses the extent to which policymakers took advantage of the crisis to improve the efficiency of the overall tax and benefit system.

Compared with usual cross-country macroeconomic assessments of public finances (for example, by the IMF or the OECD), this special issue relies heavily on the use of micro data and detailed microsimulation models and hence presents a deeper analysis that aims at enhanced comparability between these countries. In particular, the papers ask: 'Which taxes have been increased?', 'Where has public spending been cut?', 'How do these changes affect incentives to work, save and invest?' and 'Which households have experienced the greatest losses from these changes?'.

This introductory paper provides a brief comparison and discussion of some of the key stories and common themes that emerge from the six papers. Section II looks at the impact of the financial crisis on GDP per head, employment and unemployment, and the evolution of the underlying public finance position. Section III compares the fiscal consolidations implemented in each of these countries up to the end of 2014, in terms of their scale and composition. Section IV provides an assessment of the reforms carried out after the crisis, in terms of their ability to increase the efficiency of public interventions. Section V concludes.

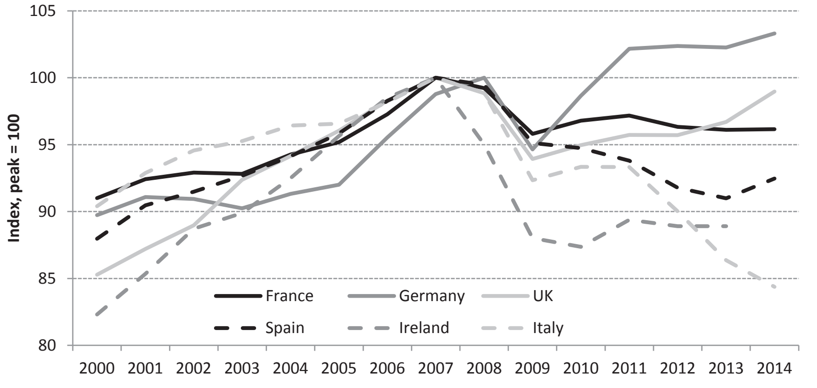
II. Impact of the crisis

All six countries experienced sustained growth over the pre-crisis period, from 2000 to 2007, as shown in Figure 1. Growth in GDP per capita was fastest in Ireland (averaging 2.8 per cent per year) and the UK (2.3 per cent), while the weakest growth was seen in France, Germany and Italy (all below 1½ per cent per year). All countries experienced a decline in GDP per capita as the financial crisis struck – France, Ireland, Italy, Spain and the UK all experienced contractions from 2008 onwards, while Germany's economy started to contract a year later. In 2009, GDP per capita was 4–8 per cent below its peak level in five of our six countries, with the smallest drop being in France (4.2 per cent). The outlier was Ireland, which experienced the most dramatic initial decline in GDP per capita: Irish GDP per capita was 12.0 per cent lower in 2009 than it had been at its 2007 pre-crisis peak.

Perhaps even more striking than the differences in the size of the initial decline in GDP per capita is the divergent paths from 2009 onwards. By 2011,

FIGURE 1

Evolution of real GDP per head



Source: Data from each country's statistical office provided by the authors of the papers in this issue.

German GDP per capita was already 2.2 per cent above its pre-crisis peak. In contrast, by 2013, France and the UK had regained less than half their lost output. Even less recovery had been seen in Ireland, and Italy and Spain continued to see declines in GDP per capita. By 2014, Italian GDP per head was 15.6 per cent lower than its pre-crisis peak; this is the largest decline among our six countries.

Even these large drops in GDP per capita understate the decline relative to where countries would have expected to be prior to the crisis happening. With GDP per capita tending to grow over time, we would have expected it to be substantially above 2007 levels by some six or seven years later. Furthermore, those countries that had experienced stronger growth before the crisis might also have expected to continue growing more quickly. This suggests that the drop in GDP per capita relative to pre-crisis expectations might have been somewhat larger in the UK and Ireland, and somewhat smaller in France and Italy, than the simple peak-to-trough drop would suggest. This counterfactual is important to bear in mind because it was on the basis of that level of expected future output that each of the countries is likely, either explicitly or implicitly, to have been planning its public finances (in particular, its tax structures and levels of public spending) in the run-up to the crisis.

1. Labour market

The declines in GDP per capita in part reflected labour market changes, as shown in Table 1. In general, those countries that experienced larger declines in output also saw larger falls in employment rates and larger increases

TABLE 1

Peak-to-trough or trough-to-peak changes in labour market outcomes

	Real GDP per head (%)	*Employment 16–74 (ppt)*	*Unemployment 16–74 (ppt)*	*Employment 16–29 (ppt)*	*Unemployment 16–29 (ppt)*
France	–4.2	–1.2	+1.6	–3.5	+2.2
Germany	–5.4	No fall	No rise	No fall	No rise
UK	–6.1	–2.2	+1.9	–6.2	+3.7
Spain	–9.0	–11.2	+13.7	–24.1	+16.8
Ireland	–12.6	–9.1	+5.7	–18.9	+7.5
Italy	–15.6	–2.7	+3.4	–10.3	+5.6

Note: Changes are calculated based on the change between the peak and the trough of a given series (over the period 2007 to 2014) – the year in which each peak/trough occurred may differ between series. For example, in the UK, the maximum decline in GDP per head (6.1 per cent) happened between 2007 and 2009, while the maximum fall in employment of younger adults (6.2 per cent) happened between 2007 and 2012. Employment and unemployment data all relate to 16- to 29-/74-year-olds between 2007 and 2014, except for: Germany, where the data start at age 15; Ireland, where the data start at age 15; Italy, where the data only run to 2013; and Spain, where the data relate to those aged up to 64 rather than 74.
Source: Data are taken from the papers in this issue, except that data for Ireland are from the OECD.

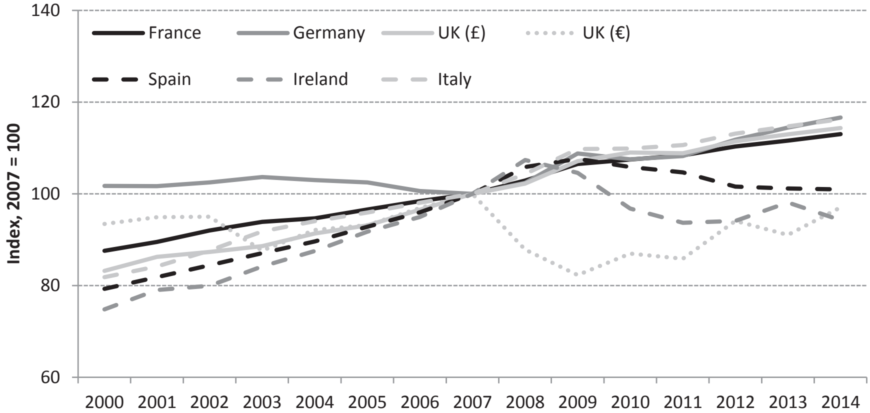
in the fraction of the population unemployed.[1] However, there is not a perfect correlation between GDP declines and changes in employment and unemployment. One factor that is likely to have been important in determining how changes in economic output translated into changes in employment rates is the evolution of unit costs of labour in each country, which are shown in Figure 2. (All of the series are indexed such that 2007 equals 100.)

The devaluation of sterling against the euro meant that unit costs of labour in the UK (when measured in euros) declined sharply between 2007 and 2009, which helped to improve the competitiveness of the UK compared with its eurozone counterparts. This in itself was, at least in part, the result of different monetary policy choices. The Bank of England (BoE) loosened monetary policy more aggressively than the European Central Bank (ECB): the BoE's base rate fell from 5¾ per cent to ½ per cent between December 2007 and March 2009, whereas the ECB's fell from 4 per cent to 1½ per cent over the

[1]It is worth noting that in this special issue we focus on a non-standard measure of the 'unemployment rate'. The definition that we use of being unemployed follows the International Labour Organisation (ILO) standard. However, the percentage unemployed that we report is calculated as the share of the whole population who are 'unemployed', whereas the ILO rate is usually reported as the number unemployed as a share of the number active in the labour force (i.e. the number unemployed plus the number in paid work). We prefer to show the fraction of the entire population unemployed, rather than the more standard measure, because our denominator (i.e. population size) will be (largely) unaffected by the crisis, whereas the number active in the labour force can be significantly affected during recessions (for example, as a result of changes in education decisions).

FIGURE 2

Nominal unit labour costs



Source: Authors' calculations using data from AMECO, the annual macroeconomic database of the European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN).

same period. In addition, the BoE started a programme of quantitative easing in March 2009, whereas the ECB did not do this until much later.

Unit labour costs also fell in Ireland and (to a lesser extent) in Spain, although in these cases this decline in labour costs reflected a prolonged period of low (and even negative) nominal wage growth. In both these countries, public sector wage moderation was a significant contributing factor: the Irish government agreed to impose an effective four-year nominal pay freeze for public sector workers as part of its agreement with the 'troika' (the IMF, ECB and EU) in return for financial assistance, while the Spanish government also imposed tighter public sector wage settlements after 2010.

In contrast to Ireland and Spain, Italy did not experience a decline in unit labour costs, despite a larger decline in GDP per capita. However, the effect of this on employment and unemployment (shown in Table 1) is masked by the fact that there was extensive use of a wage supplementation scheme in Italy (*Cassa Integrazione Guadagni*).[2] This allowed workers to work no (or very few) hours and yet still receive 80 per cent of their previous salary and not count as unemployed. The weak relationship between falling GDP and the labour market in Italy has been documented by Jenkins et al. (2013).

The country that is a notable outlier in Table 1 and Figure 2 is Germany, which had experienced essentially no change in unit labour costs between 2000 and 2007 and experienced virtually no rise in unemployment during the Great

[2]It is also the case that profits and gains to entrepreneurial activity in Italy declined more sharply in response to declining GDP than employment income did.

Recession. One factor that is thought to have been important in both of these trends is the specific governance structure of German labour market institutions – in particular, traditional cooperation between employer associations, trade unions and works councils.[3]

Although these countries saw very different changes in overall employment and unemployment rates, the difference in impact across age groups displays some remarkable regularities. First, in all five countries (excluding Germany), the fall in employment rates (and the rise in unemployment rates) has been significantly larger among those aged 16–29 than across the adult population as a whole. Second, and even more strikingly, the falls in employment rates (and rises in unemployment rates) among those aged 55–74 have been much smaller than those for the adult population as a whole. In four of the five countries (France, Italy, Spain and the UK), the employment rate among older individuals actually continued to grow throughout the crisis and its aftermath. This is in sharp contrast to the experience of younger adults. For example, in Italy between 2007 and 2013, when employment among those aged 16–29 fell by 10.3 percentage points, the employment rate of those aged 55–74 rose by 5.3 percentage points.

This growth in employment among older adults is also in contrast to the experience of many earlier recessions. This pattern may in part be a response to deliberate policy changes, such as increases in eligibility ages for publicly-provided pensions (as happened in France and the UK from 2010, in Spain from 2011, in Italy from 2012 and in Ireland from 2014).[4] It may also reflect rigidities in labour markets. For example, in France (as André et al. discuss), legal barriers to renegotiating contracts and barriers to laying off workers made it hard for employers to reduce nominal wages of existing permanent (often older) members of staff and so – in the face of declining productivity and low levels of inflation – French firms preferred to stop recruiting (typically younger) staff or to stop renewing short-term contracts for (also typically younger) staff. While these may be contributing factors, the contrast between continued growth in employment of older workers and sharp falls in employment of younger workers is stark in all of these countries, despite substantial differences in the flexibility of their labour markets and other policies; these patterns warrant further investigation.

Table 1 may understate the negative effect of the crisis on employment across these countries because it looks only at employment and unemployment but not at 'underemployment' (that is, individuals working but for fewer hours than they would like). One other adjustment that happened, which cushioned

[3]Dustmann et al., 2014.

[4]France, Ireland, Italy and Spain legislated for changes in their public pension eligibility ages as a direct response to the problems caused by the financial crisis, whereas the increase in pension age in the UK had begun to be legislated many years earlier (in 1995).

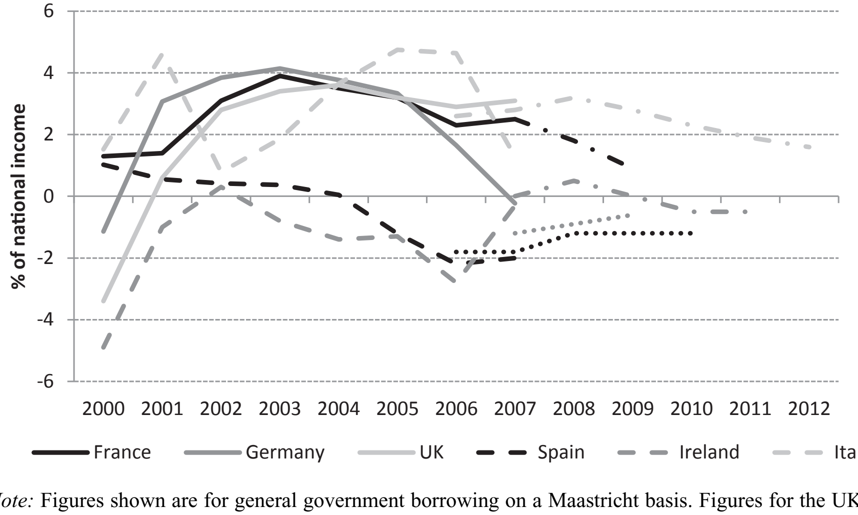
the impact of the crisis on unemployment rates, was a reduction in hours worked by those in employment. For example, many individuals working in the private sector in the UK have seen their hours of work reduced, leading to an increase in 'underemployment',[5] while in Germany and Italy the hours response has been subsidised explicitly by the government to limit detrimental employment effects.[6]

2. Public finances

The evolution of these six countries over the years running up to the financial crisis, and where they stood on the eve of the crisis, varied somewhat – as Figure 3 shows. On the face of it, the weakest fiscal positions were those of France and the UK, which both ran deficits of between 2 and 4 per cent of national income between 2002 and 2007, although both were intending to implement a medium-term fiscal consolidation after 2007. For these countries (as André et al. and Emmerson and Tetlow discuss), the deficits in the mid 2000s reflected, in part, repeated over-optimism in the official forecasts for borrowing. Therefore, the officially-projected improvement in the fiscal

FIGURE 3

Government borrowing before the crisis: out-turns and pre-crisis forecasts



Note: Figures shown are for general government borrowing on a Maastricht basis. Figures for the UK are for financial years (April–March).
Source: Data are taken from the papers in this issue.

[5] Bell and Blanchflower, 2013.
[6] See the papers by Blömer et al. and Figari and Fiori respectively.

position beyond 2007 (shown in Figure 3) was probably somewhat optimistic in both cases, given planned policy.

Italy had net borrowing persistently above 3 per cent of GDP just prior to the crisis. However, efforts to increase tax revenues in 2007 resulted in borrowing falling to 1.3 per cent of GDP. While this was superficially a sustainable fiscal position, there was concern prior to the crisis that high taxes and stagnant economic growth threatened longer-run sustainability and so the focus pre-crisis was on policies that could stimulate the economy.

Like Italy, Germany had also already undergone a period of fiscal tightening prior to 2007, having become the subject of an excessive deficit procedure by the European Commission in 2002. Between 2002 and 2006, Germany implemented a series of measures to improve the structural position of its public finances – culminating in 2007 with a balanced budget, which was expected to be maintained in the medium term.

Ireland and Spain, on the other hand, ran significant fiscal surpluses in 2006 (in excess of 2 per cent of national income), following a period of fiscal strengthening between 2002 and 2006. Although both were expecting some fiscal loosening after 2007, their fiscal forecasts still suggested they would remain well within the limits imposed by the Stability and Growth Pact. Both Spain and Ireland also had relatively low levels of government debt on the eve of the crisis (35.5 per cent and 24.0 per cent of GDP respectively).

With the exception of Germany, all of these countries experienced a significant structural weakening of their public finances in the wake of the financial crisis – the scale of which had not been anticipated. To examine what happened to the underlying position of the public finances, we need to adjust out-turn figures for public borrowing to strip out the effect of policy measures adopted in direct response to the crisis. In particular, borrowing will have been affected by any initial fiscal stimulus and subsequent austerity measures. Each of the papers in this special issue presents a measure of 'underlying' borrowing, which strips out the estimated impact of policy measures announced and implemented since the crisis began. For example, in Italy,[7] net borrowing was 2.7 per cent of national income in 2008 and this had climbed to 3.2 per cent of national income in 2014. But to describe the crisis as having nudged up borrowing by just 0.4 per cent of national income would be to ignore the fact that net tax increases and net spending cuts were implemented between 2008 and 2014, and these are estimated to have reduced borrowing in 2014 by a sizeable 5.2 per cent of national income. Therefore, a better estimate of the impact on the underlying deficit in Italy over this period is that it was increased by 5.6 per cent of national income. This is explained by an estimated increase in underlying spending as a share of national income of 5.9 per cent being offset slightly by an increase in underlying tax revenues of 0.4 per

[7]See figure 9 of the paper by Figari and Fiorio.

TABLE 2

Estimated change in underlying public finance aggregates since the crisis

	Real GDP per head (%)	*Borrowing (% of GDP)*	*Receipts (% of GDP)*	*Spending (% of GDP)*
France	–4.2	+7.0	–0.3	+6.7
Germany	–5.4	+0.1	+1.9	+2.0
UK	–6.1	+6.9	–2.3	+4.5
Spain	–9.0	+17.0	–6.6	+10.4
Ireland	–12.6	+23.0	–21.1	+1.9
Italy	–15.6	+5.6	+0.4	+5.9

Note: UK data relate to the financial rather than calendar year.
Source: Data are taken from the papers in this issue.

cent of national income. These figures, and equivalent figures for the other countries, are summarised in Table 2, which ranks countries according to the peak-to-trough fall in GDP per person over the crisis.

Germany is a clear outlier from the other five countries. It saw a negligible underlying increase in borrowing (just 0.1 per cent of national income), with an increase in underlying spending of 2.0 per cent of national income being offset by an increase in underlying tax revenues of almost the same amount. In other words, for Germany, the recent recession was little different from a 'textbook' recession – that is, a temporary period of economic weakness resulting in temporarily high borrowing, which disappears as the economy recovers without requiring policy action. This was not the case in the other countries, which all experienced an increase in underlying borrowing in response to the crisis – meaning that spending plans and tax systems that were in place pre-crisis would not be sustainable in the post-crisis world.

France and the UK are estimated to have experienced similar increases in borrowing – 7.0 per cent of national income for France and 6.9 per cent for the UK. In France, this is almost entirely due to an increase in spending as a share of national income, with only a relatively modest decline in tax revenues. The UK experienced both a structural decline in revenues as a share of GDP and a structural increase in spending. The decline in tax revenues in the UK arose because of a decline in the fortunes of the financial sector, which pre-crisis had contributed a relatively large share of corporation tax receipts, and a decline in asset prices – both property and stock market – which depressed receipts of capital taxes. The structural increase in spending largely came about because plans for levels of cash spending on public services that had been set out prior to the crisis now constitute a much larger share of national income than had been anticipated.

But these increases in borrowing are dwarfed by those seen in Spain and Ireland. Using the relatively simple method described above to estimate the change in the underlying public finance position, structural borrowing in Spain is estimated to have increased by 17 per cent of national income. However, as Martí and Pérez point out, this may well overstate the impact of the crisis if the post-crisis austerity measures have also had the effect of depressing economic output. An alternative estimate for Spain, allowing for these fiscal multiplier effects, is that underlying borrowing increased by over 14 per cent of national income during the crisis (see Martí and Pérez). Even this is a large number. In Spain's case, two-thirds of the deterioration in the borrowing position was due to spending increasing as a share of national income. The remaining third came from a fall in revenues as a share of national income, as pre-crisis revenue windfalls unwound.

The underlying deterioration in Ireland's public finances was even greater than that seen in Spain, with the vast majority of it being due to a fall in tax revenues as a share of GDP (from their already low level relative to the other economies). The drop in revenues is largely explained by a decline in receipts of capital taxes – such as stamp duties – which had grown strongly during the property price increases and associated construction boom in the years leading up to the financial crisis.

Having had the strongest fiscal positions in 2007, Ireland and Spain experienced the most dramatic deteriorations in their fiscal positions as the crisis hit – highlighting the extent to which, with the benefit of hindsight, they had been reliant on unsustainable forms of economic activity and sources of revenue. The UK also suffered a decline in revenues as the income previously received from taxing the financial sector and asset transactions dried up. For France and Italy, the main difficulty for the public finances (which affected the other countries too) came from inertia in public spending, as their economies shrank relative to pre-crisis expectations while spending plans set pre-crisis took time (and active policy decisions) to adjust.

III. Fiscal response to the crisis

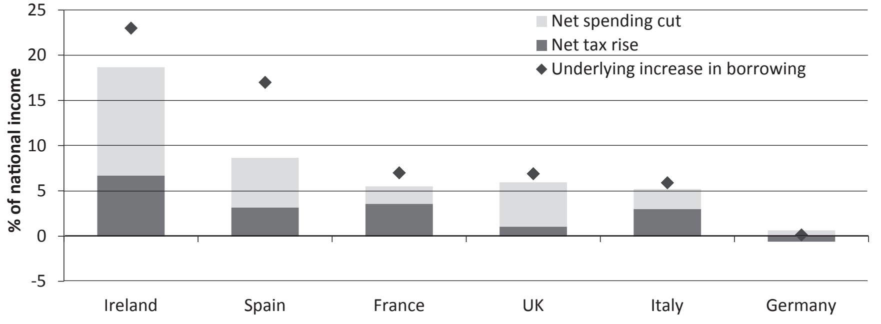
1. Public finance response

The size of the damage done to the public finances in France, Ireland, Italy, Spain and the UK required a significant fiscal tightening to be implemented at some point if borrowing were to be restored to a sustainable path. Germany, on the other hand, did not need to make any net fiscal adjustment in response to the crisis.

By 2014, all of the countries (except Germany) had made some progress towards implementing the required tax rises and spending cuts to reduce public borrowing, but none had done enough to bring borrowing back down to

FIGURE 4

Size and composition of post-crisis fiscal policy response up to 2014



Note: UK data relate to the financial rather than calendar year. For Italy, the changes are measured up to 2013.
Source: Data are taken from the papers in this issue.

pre-crisis levels. The change in underlying borrowing and the effect of post-crisis net tax rises and spending cuts are shown in Figure 4 for each country.

France, Italy and the UK have all so far implemented sizeable, and similarly-sized, fiscal tightenings in response to the crisis – amounting to between 5 and 6 per cent of national income. Spain has done a larger fiscal tightening, approaching 9 per cent of national income. Ireland has gone much further, complying with the plan agreed with the troika and implementing measures totalling 18.5 per cent of national income by 2014, which led to the country successfully exiting the financial assistance programme in December 2013.

The composition of measures chosen has differed across the countries. France and Italy have – so far at least – relied relatively heavily on tax rises (comprising 65 per cent and 58 per cent of measures, respectively). Ireland, Spain and the UK have reduced borrowing mainly through reductions in public spending (comprising 64 per cent, 63 per cent and 82 per cent of measures, respectively). This pattern is notable given that France and Italy saw essentially no decline in tax revenues relative to national income as a result of the crisis, while the other countries did. This means that, up to 2014 at least, the net effect of the crisis and post-crisis measures was to move France and Italy towards being higher-tax economies than they were pre-crisis, while Ireland, Spain and the UK have become lower-tax economies than they previously were.

Figure 4 shows that none of the countries (except Germany) has yet implemented a large enough fiscal tightening to offset all of the rise in public borrowing that happened as a result of the crisis. In other words, all five countries have, at least up until the end of 2014, chosen to allow borrowing to remain higher than was expected pre-crisis. However, as the papers on each of the countries set out, further fiscal consolidation is planned beyond 2014 in France, Ireland, Italy, Spain and the UK; in all cases, this consists mostly of further cuts to public spending rather than further increases in taxation. For some countries (France, Italy and Spain), this will still leave public borrowing at a higher level than was intended pre-crisis; for the others (Ireland and the UK), current fiscal plans imply borrowing falling to significantly below the levels planned pre-crisis.

Germany has implemented only a modest net tightening since the start of the crisis, with spending cuts being used mainly to finance net tax cuts. This modest package of measures also includes a number of changes that had already been planned prior to the crisis or that were simply due to following earlier judgements by the Federal Constitutional Court, so they are not strictly a response to the crisis.

2. Tax and benefit changes

Although the size of tax and spending measures implemented in each of the countries has varied a lot, there are some similarities in the types of measures that France, Ireland, Italy, Spain and the UK have relied on – as well as some noteworthy differences.

All the countries except Germany have used increases in the main rate of VAT to boost revenues. France increased the main rate from 19.6 per cent to 20 per cent and the intermediate rate from 7 per cent to 10 per cent; Ireland increased its main rate from 21 per cent in 2010 to 23 per cent in 2012; Italy increased its main rate from 20 per cent to 22 per cent; Spain increased the main rate from 16 per cent to 21 per cent and the reduced rate from 7 per cent to 10 per cent; and the UK increased its main rate from 17½ per cent to 20 per cent.

A number of countries have also made changes to their income tax systems to focus revenue-raising more heavily on higher-income individuals. France increased the top marginal tax rate from 40 per cent to 45 per cent and introduced an additional tax on incomes above €150,000 and the temporary (two-year) 75 per cent marginal tax rate on earnings above €1 million. Italy introduced a new ‘solidarity tax’ on incomes above €300,000, while reducing the tax burden for low-wage workers and increasing tax credits. The UK introduced a new 50 per cent top rate of income tax on incomes over £150,000 (later reduced to 45 per cent), while increasing the tax-free personal allowance (and tapering this away from those with incomes over £100,000). Spain increased the top marginal tax rate from 43 per cent to 52 per cent, deepened the progressivity of the income tax code and eliminated a number of uniform tax credits. Ireland is something of an exception to this pattern, having implemented a number of income tax changes that will have increased the tax burden on lower-income, as well as higher-income, individuals.

All five of these countries have used increases in social security contributions (including mandatory pension contributions) to boost revenues as well.

There have also been some consistent patterns in changes to corporate taxation. Both France and the UK have reduced the effective corporation tax rate, while broadening the tax base to which it applies. The UK has done this by cutting the headline rate of corporation tax alongside a reduction in capital allowances. France has announced a significant expansion of the corporate tax base, accompanied by a new corporate tax credit, which is based on the firm's wage bill.

In contrast to these consistent patterns of tax changes, there was a lot of variation in the role played by changes to benefits across the countries. Benefits were virtually unchanged in Spain, and in France and Italy benefits for some groups were actually increased. In contrast, Ireland and the UK have implemented significant benefit cuts – in both cases focusing cuts on benefits for those of working age rather than benefits for older individuals. For example, benefit cuts made in the UK are thought to have reduced spending by around 1.7 per cent of GDP relative to unchanged policy, with much of this coming through less generous indexation of benefit rates.

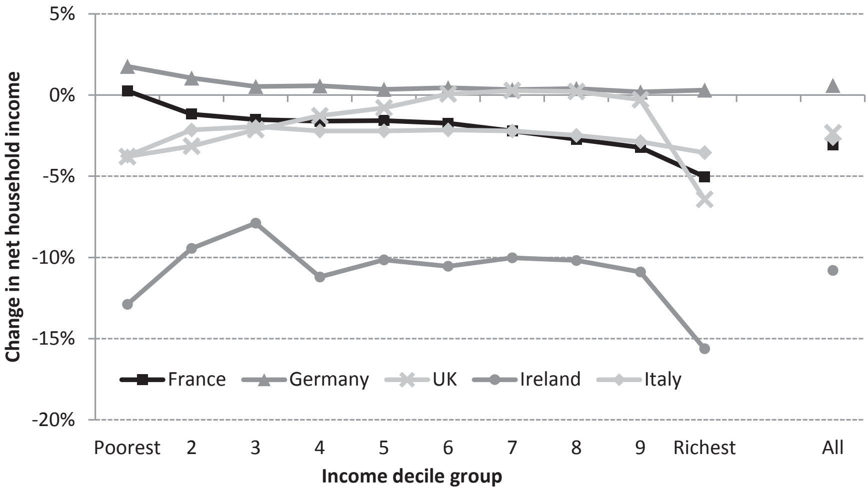
The estimated distributional impact of the tax and benefit measures implemented since the crisis began is shown in Figure 5 for those measures where it is possible to determine how household income would have been affected – in other words, Figure 5 excludes most corporate tax measures as well as other measures that are difficult to assign to specific households. In Germany, the modelled measures correspond to an overall small net giveaway to households (averaging just 0.6 per cent of net income). In France, Italy and the UK, the estimated net takeaway from households was larger, averaging 3.1 per cent, 2.7 per cent and 2.3 per cent respectively. A much larger net takeaway has been seen in Ireland, with the estimated direct impact on household incomes being to reduce them by a sizeable 10.8 per cent. Unfortunately, similar analysis is not available for Spain.[8]

In France, Ireland and the UK, the largest losses from the modelled post-crisis measures were for the highest-income tenth of the population. In Italy, the largest losses were seen among the poorest and richest income deciles, with relatively similar-sized losses (typically just over 2 per cent of income) across the rest of the income distribution. That the richest households experienced the largest losses in most countries at least in part reflects the set of measures across all the countries (described above) that targeted income tax rises on higher-income individuals, while cutting income tax for lower-income people in many cases.

[8]A similar type of analysis for Spain, but only covering measures implemented up to 2012, is provided by Avram et al. (2013).

FIGURE 5

Distributional impact of post-crisis fiscal measures implemented by 2014



Note: Comparable analysis is not available for Spain. UK analysis includes reforms taking effect in April 2015.
Source: Data are taken from the papers in this issue.

In France, overall, the measures look straightforwardly progressive on average, with the lowest income decile actually seeing a net increase in household income from the measures modelled here. In contrast, in the UK, the biggest losses as a share of income were, with the exception of the highest-income tenth of the population, seen in the bottom half of the income distribution, as a result of the benefit cuts described above. In Ireland, the pattern outside the highest-income tenth of the population is less clear, with losses looking, if anything, fairly constant as a share of income across the income distribution. New carbon and property taxes and cuts to welfare benefits reduced the incomes of the lowest-income households by significantly more than those of higher-income households. However, the latter group was also hit by other tax changes targeted at those on higher incomes – in particular, the introduction of the universal social charge, which applies to incomes above a certain threshold and whose rate increases with income.

Analysis by household structure reveals differences in the extent to which the post-crisis measures affect different groups. In Germany, single-adult working-age families – both with and without children – on average gained from the post-crisis measures, whereas there was little impact on the overall incomes of either working-age individuals in couples (either with or without children) or pensioners.

In Italy, there were losses, on average, across the income distribution among households with children. However, these were smaller than the losses among households containing an individual aged 65 or over. This distributional outcome arises from the increase in property taxes on main residences and the partial indexation of pension benefits, both of which have a larger impact (at least at the moment) on the older population. In France, pensioner households have been less affected than the average population, while households with children have fared relatively badly, especially those in work and in the upper half of the income distribution. Households where no adult is in work have been largely protected. This is mainly because of the decrease in the cap of the quotient familial, the income tax reductions that children can provide.

In Ireland, there have been losses across all the family types considered. While these are considerable for households containing retired individuals (5.3 per cent of net income for single retired individuals, 5.9 per cent for retired couples), their losses are on average considerably smaller than those for other family types due to the fact that the main benefits paid to those over 65 were not reduced, unlike those paid to working-age families. For example, one-earner couples with children have experienced average losses of 12.1 per cent of net income. A similar pattern is observed in the UK, where the smallest losses have been experienced by pensioners and working-age adults without children, while working-age families with children have experienced the largest losses on average.

3. Cuts to spending on public services

Part of the cuts to public spending has come from reductions in spending on public services. In order to assess how public service spending plans have changed in response to the crisis, we need to use countries' own classifications and ways of reporting spending plans, rather than standard international spending classifications. However, this makes comparing changes in spending on public services across countries rather more difficult. First, countries tend to use different aggregations of spending – for example, responsibility for spending on different areas of public service provision will fall to different departments or ministries in each country. Second, different services are the responsibility of different tiers or areas of government in each country and these different entities may report spending in different ways. For example, in France, health spending is funded out of the social security budget and so is reported in a way that makes it not easily comparable to spending on other public services in France, such as education. Third, the measure of public spending cuts depends heavily on the counterfactual trend in the absence of policy measures, and the methodology used – not always explicitly presented – varies from country to country. These difficulties in cross-country comparisons of public spending highlight the much less developed analysis of the public service spending side of public finances in international settings; however, notwithstanding these constraints, we are still able to draw some interesting comparisons.

In Germany, cuts to spending on public services were small (and, as described above, mainly used to finance tax cuts) and came mainly from reductions to spending on administration and the military.

In France, Italy and Spain, virtually all of the reduction in public spending has been brought about by cuts to spending on public services, while Ireland and the UK have implemented significant cuts to public service spending on top of their cuts to benefit spending. The scale of these cuts is significant and they vary in their timing and composition. For example, in 2014–15, spending on public services in the UK was 9.2 per cent lower in real terms than it had been in 2010–11. In France, while the initial cuts to public spending were limited, central government spending is planned to be 8.7 per cent lower in real terms in 2017 than it was in 2010. In Ireland, there were only relatively small changes to spending on health and education (of +3 per cent and –3 per cent respectively), cuts of 13 per cent to spending on justice and deep cuts of 30 per cent or more to many other areas of government between 2007 and 2014.

All of these countries – to a greater or lesser extent – have used nominal freezes (and, in the cases of Ireland, Spain and higher earners in Italy, nominal cuts) to public sector wages as a way of limiting public spending growth.

Some reductions are intended to be brought about by reducing inefficiency. For example, Spain has focused on reducing duplication between tiers of government, while Italy has abolished provinces (the intermediate tier of government between municipalities and regions) and France has replaced its previous 22 regions with 13 new ones, with a similar objective.

However, it is implausible that all of the spending reduction across these countries will come entirely through efficiency savings and the removal of duplication; some of it will be reflected in fewer and/or poorer-quality services. Exactly which services have been targeted for cuts reflects both the preferences of the governments in each country and the public spending mechanisms in place, which affect how easy it is for central government to constrain spending in particular areas.

One example of the importance of the degree of central control over spending can be seen by contrasting the examples of the UK and Spain. The UK central government imposed a significant part of the desired spending cut on local government services. This was possible because local governments in the UK are severely constrained in their ability to borrow (and to raise additional revenue locally) and so reductions in the grant from central government to local government feed directly into reductions in local government spending.[9] In contrast, the cuts seen to public spending in Spain up to 2011 were much smaller than intended because of significant spending slippage by regional governments resulting from a lack of transparency and misreporting of their budgets,[10] while as of 2012 strengthened national fiscal rules led to significant spending cuts in regional spending, mainly on education and health.

Another example is apparent from comparing spending on health care in France and the UK. France has a social insurance health care system, meaning that – subject to meeting the contributory and eligibility criteria – individuals can receive health care on demand from (private and public) providers, who are then reimbursed by the public health care insurance based on prices set by the government. Therefore, the only way for the French government to limit health spending is indirectly by explicitly changing the eligibility criteria or the rates at which it reimburses health care providers for different treatments. This contrasts with the UK, where health care is largely publicly provided, with health authorities essentially rationing care throughout the year to stay within fixed budgets.[11]

Bearing in mind these potential differences in the ability of each government to control spending in different areas, we can examine which services fared better or worse in each country. France and the UK both afforded relative protection to spending on schooling and health,[12] in contrast to Italy and Spain where cuts to these services were larger than average. Also, Ireland, Italy, Spain and the UK have all chosen to cut investment spending by more than day-to-day spending.

IV. Was the crisis an opportunity for reforms aimed at improving the efficiency of public interventions?

1. Tax design

The effect of the post-crisis measures on the coherency of the tax and benefit system seems to have been mixed, both within and across countries. Since all the countries we have examined (except Germany) have implemented significant tax increases over the last few years in an effort to reduce public

[9] Innes and Tetlow, 2015.

[10] See the paper by Martí and Pérez in this issue.

[11] This is an oversimplification of the UK and French systems. In practice in the UK, public health providers can and do run deficits and governments sometimes top up health spending in response to public pressure if the quality of services provided deteriorates too much. And in France, the government has introduced additional rules (fixed budgets) for funding health care providers, in order to achieve health care spending targets set in the budget. However, health spending is still far less subject to demand pressure in the UK than in France.

[12] In both France and the UK, health spending is not being cut in real terms. However, this implies a lower level of spending relative to a counterfactual of continued real-terms spending growth.

borrowing, the net effect is likely to have been to disincentivise economic activity (at least relative to what would have been expected pre-crisis). However, some countries more than others have taken this opportunity to improve the structure and efficiency of their tax system.

In many countries, tax increases have taken the form of VAT increases (France, Ireland, Italy, Spain and the UK), with the idea that indirect taxation is a good way to raise revenues efficiently with little detrimental impact on incentives. In reality, VAT increases have detrimental impacts on incentives to work and save and the efficiency gain should be specifically assessed in each country. In the UK, given a relatively narrow VAT base, the increase in the main rate of VAT will have come at the cost of increasing distortions for both producers and consumers. In France, on the contrary, increases in the reduced rate of VAT will have reduced the distortions provided to producers and consumers. Ireland has had a mixed record of a succession of VAT changes (increases, reductions and then increases again), creating unnecessary uncertainty and distortions.

A number of countries have changed personal income taxation by targeting tax increases on the richest households (France, Spain and the UK). Both France and the UK increased their top marginal income tax rate to 45 per cent (the UK via a rate of 50 per cent), but France went further in targeting top incomes with an additional levy pushing its top marginal tax rate above 60 per cent (setting aside the temporary 75 per cent marginal tax rate for earnings above €1 million). In addition, income tax increases in France have particularly targeted capital income. All these tax increases have reduced incentives to work and save. Spain also targeted top incomes, but subsequent reductions, particularly in income tax rates faced by those on lower incomes, have simplified the system. The introduction of tax credits targeted at groups such as low-income families with children will have boosted the incentive for these groups to enter paid work. In Ireland, the most significant revenue raised was from a new tax on all forms of income above a threshold, which, at the very least, will have avoided introducing new distortions (apart from the obvious incentive to decrease one's income, especially from just above the cliff edge at which the tax starts to apply). This tax has a lower exemption limit than the main income tax, therefore bringing lower earners into the tax net. Ireland did not specifically target tax increases on those with higher incomes. The new tax introduced does, however, have a progressive rate structure; therefore the proportional liability for this tax increases with income. The addition of a new income tax not integrated into the previous system will have resulted in a more complicated system, however, and the progressive rate structure may distort behaviour and create disincentives to work.

Company taxation was generally less subject to tax increases. Reforms to corporate tax in the UK have made it more efficient, with particularly large tax cuts for high-profit, non-capital-intensive firms, which might be relatively footloose. Similarly, in Spain, the tax base was broadened, while the rate has recently been cut from 30 per cent to 25 per cent. In France, the introduction of a corporate tax credit that effectively reduced employer social security contributions should have helped to boost labour demand during the recession.

In Ireland, a carbon tax and a residential property tax were both welcome additions to the Irish tax system. These are reforms that would typically hit the lowest income groups hardest, but the combined effect of the other measures more than offset this, such that the losses were greatest among the richest income group. A swathe of new environmental taxes were also introduced in Spain.

The German reforms were of a different nature from those implemented in the other countries. Not only were they, on average, a net giveaway to households but they were also ones that were largely planned to be implemented before the crisis; they were also on a much smaller scale than those in other countries.

A general judgement on the tax reforms carried out since the crisis emerges from the authors of this special issue: overall, reforms have not been used as opportunities to increase efficiency. In particular in countries where the design of the tax system can be questioned, little effort has been dedicated to designing a simpler and more efficient system. Figari and Fiorio point out that Italy still lacks a clear longer-term tax strategy and so the tax reforms that have been made are fragile and subject to frequent revision, sometimes even prior to implementation. André et al. note that the complexity of the French tax system has been increased. The tax credit reducing employer social security contributions – a positive step in itself – is a prime example: instead of reducing social security contributions directly, the French government chose to create a corporate tax credit, computed on individual earnings of firms' employees – credit that can then be claimed by employers a year later in the form of reduced corporate tax liability. Reducing the high employer social security contributions would have been a better alternative for the overall design of French taxation. In Ireland, the instability of the tax strategy, with numerous changes to tax rules – for instance, to the rate of capital gains tax, which since October 2008 has been increased from 20 per cent to 22 per cent, then to 25 per cent, then to 30 per cent and then to 33 per cent – has not contributed to the design of a more stable and efficient tax system. In Spain, the most recent tax reform falls short of a much-needed comprehensive review of the tax system, in particular with regards to the excessive role of social security contributions.

The relatively negative assessment from most of the authors in this issue suggests a more general conclusion. Periods of crisis require a number of difficult choices for governments with little fiscal space, perhaps leaving little room for potentially politically costly reforms, even though they could improve efficiency over the longer term. The example of Germany could be considered a case in point – while it did manage to implement some efficiency-improving reforms to the tax system, these were announced before the financial crisis.

2. Public spending

On the spending side, there is no doubt that in one domain – pension provision – the financial crisis has rather been an opportunity for reforms that have helped assure the long-term financial sustainability of pension schemes, even in the absence of macroeconomic shocks. Recent pension reforms in France, Ireland, Italy, Spain and the UK have all boosted the employment of older individuals. In France, the 2010 pension reform led to increases in the minimum retirement age from 60 to 62 and the full-rate pension age from 65 to 67. The then government pressed for a rapid phase-in, using the financial crisis as the main motivation. Ireland increased its state pension qualification age from 65 to 66 in 2014, with further increases to 67 in 2021 and to 68 in 2028 announced. It also reduced the pensions of public sector retirees. Italy passed legislation in 2012 to increase the statutory retirement age of women to align it with that for men at age 66 years and 7 months in 2018, and then for the statutory retirement age of both men and women to rise in line with life expectancy so that it reaches at least 67 in 2021. In Spain, a rise in the retirement age from 65 to 67 was phased in from 2013 despite only being legislated in 2011. A further tranche of pension reforms, which reduced how generously benefits are indexed, has also improved the long-run financial sustainability of Spanish fiscal policy. The UK has accelerated the previously-planned increases in the state pension age for men and women so that it will now reach 66 in 2020 and 67 in 2028, and an automatic review process has been established to consider further increases in future. And again, Germany is here the counter-example, having legislated a pension reform that expanded early retirement and pension expenditures.

The assessment of most authors is less positive about some of the changes to public services. Many countries have opted to cut spending as a share of national income through the use of nominal freezes. Few examples of public spending cuts based on careful studies, such as previous policy evaluation, can be found in our countries of interest. A counter-example is Spain, where the Commission on the Reform of Public Administrations was established in 2012 and came up with a number of initiatives to improve the efficiency of public administration and to increase the average hours of work of public employees from 35 to 37½ per week.

3. Other structural reforms

In matters of structural reforms to labour markets and goods and services markets, Germany, Ireland and the UK stand out. The UK, with a relatively flexible labour market and relatively open product market, did not see much need for the scale of structural reforms that other European countries felt they needed to boost their economies. It could have taken the opportunity to liberalise its land-use planning significantly but did not.[13] Ireland too had a relatively flexible labour market before the crisis. Germany also stands out because it made structural reforms to its labour market before the advent of the crisis: the Hartz reforms (2003–05) led to a general overhaul of the labour market rules in Germany, introducing more flexibility in hiring and dismissal procedures, reducing unemployment insurance and introducing mini-jobs (see Blömer et al.).

With a dramatic rise in unemployment, Spain has pushed for a sequence of labour market reforms (2010–12), with the major reform in 2012 aiming to emulate the German Hartz reforms: reduced unemployment benefits, more flexible dismissal procedures, and new regulations aiming to reduce the impact of collective bargaining.[14] In France, the labour market reforms have been much more limited, mostly attempting to reduce dismissal costs and uncertainties. In Italy, the so-called Jobs Act was introduced in early 2015 with a similar aim of reducing dismissal costs and also aiming to reduce the segmentation in the Italian labour market, enhance the incentives for firms to hire or convert more workers to permanent contracts, and extend income support to all the unemployed.

Reforms in goods and services markets have also been sparked by the crisis. In France, a long list of small reforms aiming to reduce regulations in a number of businesses have been legislated in 2015. Similarly, in Spain, a number of reforms have been implemented related to easing regulations in product markets, including the retail sector and the housing market, but with so far limited impact.[15]

4. Reforms to the budget and forecasting process

One clear improvement over the period since the crisis hit across all six countries in our study has been the introduction of greater transparency and independence in the production of forecasts for both economic and fiscal outcomes. In line with being signatories of the European Fiscal Compact, five of these countries have introduced independent fiscal councils, which are responsible for producing these forecasts: France (the Haut conseil pour les finances publiques, HCFP), Germany (the Stability Council), Ireland (the Irish Fiscal Advisory Council, IFAC), Italy (the Parliamentary Budget Office) and Spain (the Independent Fiscal Responsibility Authority, AIReF). The UK, while not a signatory of the European Fiscal Compact, also introduced

[13] Crafts, 2013.
[14] Ortega and Peñalosa, 2013.
[15] Ortega and Peñalosa, 2013.

a new independent fiscal council (the Office for Budget Responsibility, OBR) charged with producing the official economic and fiscal forecasts. The exact responsibilities of these councils vary from country to country, but in all cases recent reforms have been a step forwards – to improving the transparency of fiscal out-turns and forecasts and to reducing the extent to which official forecasts contain undue (and politically-motivated) optimism about the prospects for economic growth, public spending and revenues. However, further improvements are possible. For example, in France, while the HCFP produces the macroeconomic forecasts underpinning the budget, the French Treasury retains control over the scoring of policy measures.

Fiscal targets have also been revised in light of the financial crisis. The eurozone countries are now covered by the target set under the ‘Two-Pack’ agreement. In addition, Germany has introduced a balanced budget (‘debt brake’) rule, which includes limits on structural net borrowing for both the federal government (from 2016) and federal states (from 2020) with only limited escape clauses. The UK government also has new targets for achieving an overall budget surplus and for reducing the debt to GDP ratio. The target to achieve an overall budget surplus is more stringent than the UK’s pre-crisis fiscal rule, which required that the current budget (i.e. excluding net investment spending) should be balanced over the course of each economic cycle. In Spain, legislation – including constitutional reform – has been implemented that places greater restrictions and monitoring on the borrowing, debt and spending of different tiers of government, including the introduction of limits on structural net borrowing (from 2020), a debt to GDP ratio rule and an expenditure rule, in all cases for the central, regional and local governments, with only limited escape clauses.

V. Conclusions

All six of the countries in our study experienced a sharp decline in GDP as the global financial crisis struck. However, while the magnitude of the drops varied from country to country, perhaps more striking is the difference in subsequent recoveries. By 2011, national income per head in Germany was already above its 2008 level; in France, Ireland (which had experienced a much larger drop) and the UK, a much more gradual recovery was underway; while output per head was still falling in Spain, and Italy was about to experience a two-year drop in national income per capita that was almost as great as it experienced between 2007 and 2009.

These heterogeneous shocks to output led to different magnitudes of deterioration in the underlying public finance position of these six countries. Ireland and Spain experienced the largest weakening of their public finances, followed by France, Italy and the UK. A notable exception is Germany, whose underlying deficit was hardly affected. Countries’ tax revenues tend to have been affected more severely in cases where they were relatively reliant pre-crisis on revenues coming from the financial sector and from the taxation of property and other assets.

In response so far, the largest fiscal consolidation package has been implemented by Ireland. The majority of this tightening has been from spending cuts rather than tax rises – in line with the Irish agreement with the troika. The consolidations implemented so far in France, Italy, Spain and the UK have been smaller than that in Ireland but still significant – all in excess of 5 per cent of national income. The majority of the fiscal consolidations implemented so far in France and Italy have been from tax rises rather than spending cuts, while Spain and the UK (like Ireland) have relied more heavily on spending cuts. Only Ireland and the UK have made significant cuts to benefit spending; the other countries have only made cuts to spending on public services.

The tax rises and spending cuts have naturally reduced household incomes. One common theme across the five countries that have implemented significant fiscal consolidation (i.e. all except Germany) is that those in the richest tenth of the population have, on average, seen their incomes reduced by a larger percentage than those further down in the income distribution. The pattern of losses across the rest of the income distribution varies across the five countries: in France, poorer households have tended to lose less than richer ones; the pattern of losses is flatter (or at least more complicated) in Ireland and Italy, while poorer households have tended to lose more than richer ones (with the exception of the richest) in the UK.

There is also no common pattern of losses across different demographic groups. In Italy, households with children have lost less, on average, than pensioner households. In contrast, in Ireland and the UK, average losses for pensioner households have been smaller than the average losses seen among working-age households with children.

The distribution of cuts to spending on public services also varies across the five countries. France, Ireland and the UK chose to protect spending on health and schools from cuts, while Italy and Spain chose to cut spending on both these services relatively deeply.

The impact of the tax and benefit reforms introduced since the crisis on the coherency and efficiency of the overall tax and benefit system has been mixed. France has increased its reduced rate of VAT, which will have reduced the distortions provided to producers and consumers. In contrast, the increase in the main rate of VAT in the UK, which applies to a relatively narrow set of goods, will have increased this distortion. Reforms in Spain have simplified the income tax schedule, whereas the UK has introduced two new effective income tax rates for those on the highest incomes, which has made the tax schedule more complex. The UK has, however, implemented corporate tax cuts targeted at high-profit firms, which might be relatively mobile. The reforms to the tax system in Italy and Ireland have been particularly unstable – with some reforms being changed before implementation or subsequently reversed – leading to uncertainty that would have best been avoided.

The one clear improvement has been the introduction of greater independence and transparency in the production of economic and fiscal forecasts, although even here there is room for improvement with, for example, the French Treasury still retaining control over the scoring of policy measures.

In many countries, however, this will not be the end of the story. In 2014, France, Ireland, Italy, Spain and the UK all still had deficits above 2 per cent of national income, and all had deficits above the level they were at in 2007 prior to the crisis. The intervening period has also seen the stock of government debt increase significantly. So further borrowing reductions are planned, with all these countries now relying mainly on further spending cuts, rather than tax rises, to bring about the remaining fiscal consolidation. The need for further spending cuts and/or tax rises could be an opportunity for countries to make reforms that improve the efficiency of the tax and benefit system. However, the lesson from the reforms made so far is that we perhaps ought not to be too optimistic on this front and instead may have to be content to settle for reforms that do not add to existing deficiencies.

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