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The Irish Fiscal Crisis

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Abstract

This paper considers the origins and characteristics of the current economic crisis in Ireland. In particular, it examines how fiscal policy contributed to the crisis rather than preventing it. The paper gives details of the major fiscal tightening that is under way. By 2014 the authorities will have implemented a package of ex ante cuts equivalent to one-fifth of GDP. The costs of this package, together with the more permanent effects of the recession on potential output are discussed and the legacy effects of the crisis for government indebtedness are analysed.

Keywords: fiscal policy, debt sustainability, Ireland

JEL Classification: E62; H63; H68

1. Introduction

The Irish economy is facing extremely challenging times as a result of past policy mistakes that allowed a major property market bubble to develop (and burst) and also permitted the banking system to become overexposed to the property sector. The consequences have been a severe contraction in output and a major financial crisis. Due to the collapse in economic activity in Ireland over the period 2008 to 2010 and the associated rise in unemployment, output per head had fallen back to its 2000 level by the end of 2010 (Bergin *et al.*, 2010). Because of a growing dependence of the public finances on transaction taxes on the property sector in recent years (Addison-Smyth and McQuinn, 2010), the severe economic shock had a catastrophic impact on the public finances. Government borrowing shot up to 14 per cent of GDP in 2009, having averaged a small surplus on the public finances over most of the period 2000-7.

This paper considers the origins and characteristics of the economic crisis in Section 2. The policy failures that contributed to the crisis are discussed in Section 3. Section 4 discusses the fiscal policy response. By 2014 the authorities will have implemented a package of ex ante cuts equivalent to one-fifth of GDP. The costs of this package, together with the more permanent costs of the recession on potential output are discussed in Section 4. Section 5 considers the legacy effects of the crisis for government indebtedness and the long-term sustainability of the debt burden. Conclusions are drawn in Section 6.

2. Double Trouble: Twin Housing and Credit Bubbles

The Irish economy enjoyed an exceptional period of sustained growth from 1994 through to the early years of the last decade. This growth was driven by the expansion in world trade and a rapid increase in world market share for Irish exports as a result of the competitive nature of the Irish tradable sector. This produced rapid but sustainable growth in Irish output and living standards. By the late 1990s, as unemployment fell to historically low levels, the economy found itself approaching capacity output. Substantial immigration helped relieve labour market pressures (Barrett, Fitz Gerald and Nolan, 2002) but it was clear that growth could not continue at the same rate indefinitely. The

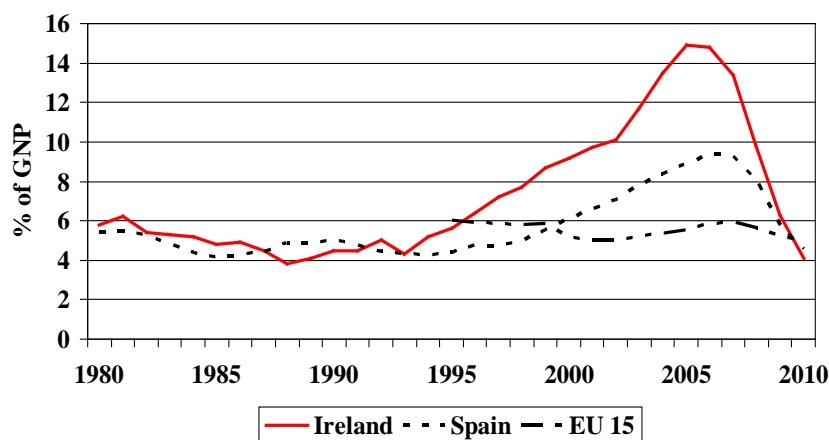
natural mechanism to slow the economy was a real appreciation of the currency. In the absence of an independent exchange rate this had to take place through a loss of competitiveness as wage rates and other prices rose more rapidly than in the rest of the Euro Area. Managing this real appreciation through differential inflation was never going to be easy without overshooting. It would have been better, as argued by the EU Commission in 2001 and by Barry and Fitz Gerald (2001), if fiscal policy had been tightened to slow the process. However, the bursting of the dotcom bubble led to a slowdown in the world economy and hence the Irish economy. This slowdown was less severe than had been initially expected and it effectively provided some breathing room for the Irish economy.

2.1 Building Bubble

Ireland's demographic structure meant that there was a rapid natural increase in the population in the 1990s. The largest cohort of the population in 2000 was aged 20-24. In addition, the number of retired people was low due to high emigration in the 1930s to the 1950s. Ireland entered the boom period under-endowed with infrastructure in the form of dwellings. The number of adults per dwelling was substantially higher than in the other EU member states (with the exception of Spain). In addition, the boom in the economy meant that many Irish emigrants returned and many immigrants came to work in Ireland, putting further pressure on public and private infrastructure. The rapid rise in incomes together with the increased availability of low cost finance as a consequence of EMU membership and the globalisation of the financial sector resulted in a boom in the building and construction sector. In its early stages this rapid expansion in house building was both sustainable and desirable: people wanted and could afford dwellings. However, from 2003 onwards the housing boom entered a phase that was unsustainable constituting a growing "bubble". As shown in Figure 1, housing investment peaked at 14 per cent of GNP in 2006, more than double the EU-15 average. In contrast to the earlier years where growth was driven by exports, the housing boom drove economic growth over the following years so that the level of actual output rose well above the potential of the economy to deliver in a sustainable manner.

Figure 1: Housing Investment as a Share of GDP/GNP

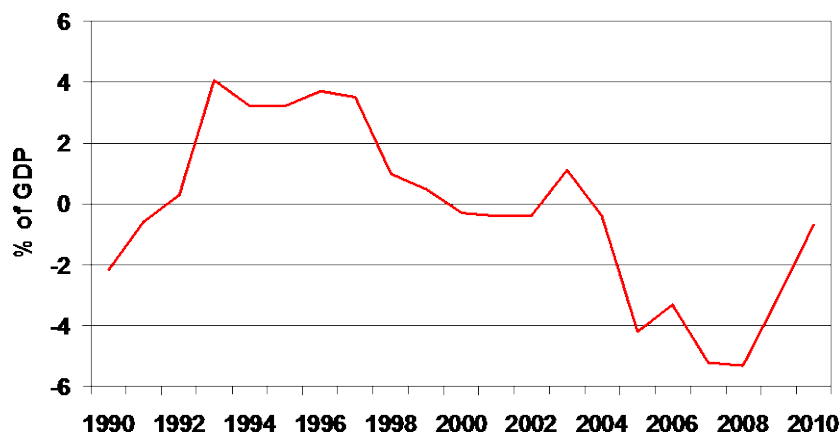
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¹ The denominator for Ireland is GNP, for Spain and EU15 it is GDP.

The bulk of the additional resources required to fuel the increase in output of the building and construction sector of the economy had to come from other sectors of the economy, leading to a reallocation of resources within the economy (FitzGerald and Morgenroth, 2006). Wage rates were driven up across the economy by the rapid growth in labour demand in the building and construction sector and, as a consequence, firms that were dependent on export markets suffered. In effect, the building and construction sector “crowded out” the rest of the economy, especially the tradable sector. This domestic imbalance began to be reflected in the balance of payments. Having run a surplus on the current account over the export-led boom years, a growing deficit emerged. From 2003 onwards the balance of payments began to move seriously into deficit (see Figure 2).

Figure 2: Balance of Payments



In 2001 Blanchard looking at the Irish and Spanish economies concluded that because of domestic imbalances reflected in the balance of payments deficit, the Spanish economy was growing beyond its potential. However, the Irish economy, with a continuing balance of payments surplus probably needed some further real appreciation through rising domestic costs. With the benefit of hind sight this may have been a bit optimistic because of the inertia in wage inflation. Nonetheless this analysis suggests that the origins of the crisis were somewhat later, as reflected in the movement to a balance of payments deficit in 2004.

2.2 Credit Bubble

The second strand of the Irish crisis is the failure of the financial sector. The combination of EMU membership and the globalisation of financial markets meant there was less concern about the balance of payments deficit than there would have been in the past. It was seen as being easily financeable. While domestic savings were sufficient to fund the housing boom up to around 2003, thereafter they proved increasingly inadequate. Instead, the banking sector financed the boom by borrowing increasing sums abroad and relending these funds domestically to the property sector. Because the foreign borrowing by the banks was undertaken on a short-term basis, while the property loans were long-term in nature, this left the banking sector increasingly exposed to any shock. The regulatory authority permitted this dramatic increase in exposure. To finance the housing boom the banking sector borrowed extensively abroad so that the net foreign liabilities of the banking system rose from a low of 10 per cent of GNP in 2003 to over 60 per cent of GNP by 2007

(see Figure 3). The share of lending by banks in Ireland to the property/housing sector increased dramatically over this time period (see Figure 4).

Figure 3: Net Foreign Liabilities of Banking System

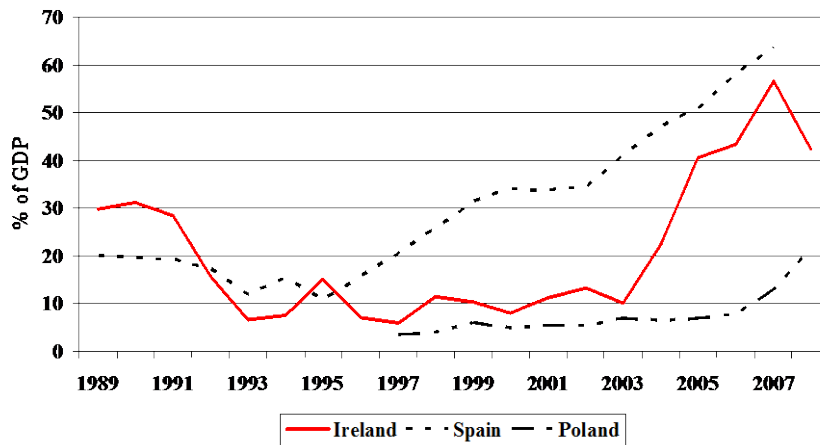
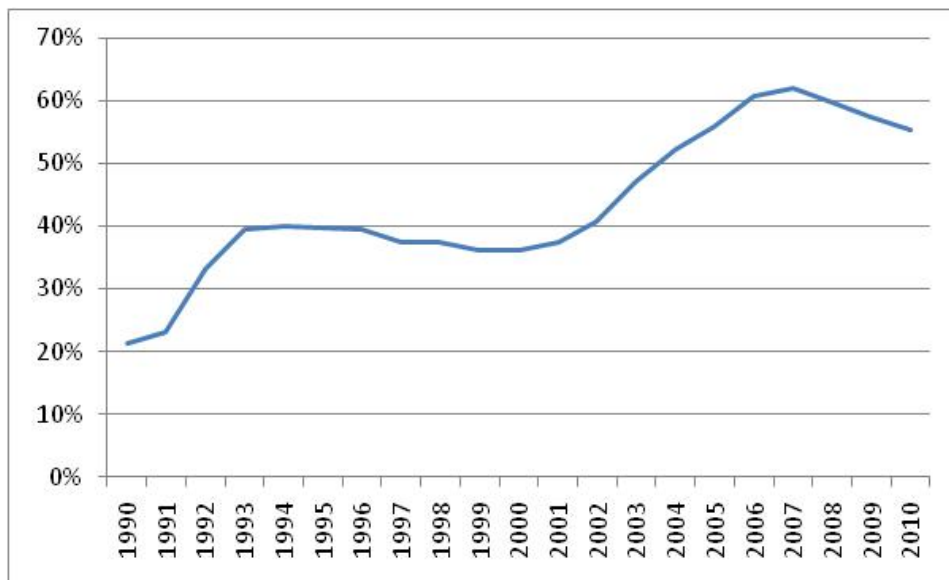


Figure 4: Property related lending as a share of outstanding private sector credit



Source: Central Bank Quarterly Bulletins, various issues

3. Policy Failures

As discussed earlier, the origins of the crisis which hit the Irish economy in 2008 go back to the early years of the decade. A very large property market bubble was allowed to develop over the period 2001-7, financed by the domestic financial sector. When it finally burst, it did huge damage to both the financial sector and the real economy.

Over the years 2001-7 some attention was given in public debate to the potential dangers in the property market (FitzGerald, 2011). However, these warnings were not widely accepted by policy makers (Nyberg, 2011). A false sense of security lulled households and many companies into believing that the boom was sustainable and it also persuaded policy makers that a soft landing was

likely. This hubris was not just confined to domestic policy makers who failed to see the gravity of the problem; O'Leary (2010) shows that the EU Commission and the IMF also failed to warn of the need for a change in domestic policy. We now know the results of this false sense of security.

One element in the failure by external onlookers to suggest a change in fiscal policy stance was the fact that Ireland was respecting the Stability and Growth pact guidelines over the period to 2007². The existence of this rule seemed to absolve external observers from undertaking a rigorous analysis of the actual situation on the ground in Ireland. Meanwhile, the deterioration in the balance of payments from 2003 onwards should have provided ample warning of the dangers arising from growing domestic imbalances.

There was nothing inevitable about the crisis. If the tell-tale signs of danger had been heeded in time the bubble and its consequences could have been avoided by either (or both) appropriate fiscal policy action or appropriate action by the financial regulator. Thus the crisis was the result of a failure of domestic economic policy in two main areas:

- The stance of fiscal policy was inappropriate for most of the period 2001-7 and
- The regulator of the financial sector did not move to defuse the growing crisis by imposing an appropriate regulatory framework on the domestic financial system³.

3.1 Fiscal Policy

The advent of Economic and Monetary Union in 1999 enhanced the role and importance of fiscal policy in all member states of the union. While individual member states had independent monetary policies it was always open to the national central banks to adjust interest rates to directly influence investment in the building and construction sectors of their national economies. However, from 1999 onwards, with monetary policy being set by the ECB to maintain inflation at a low level and with idiosyncratic property markets within the euro zone, monetary policy could not play this role for individual regional economies.

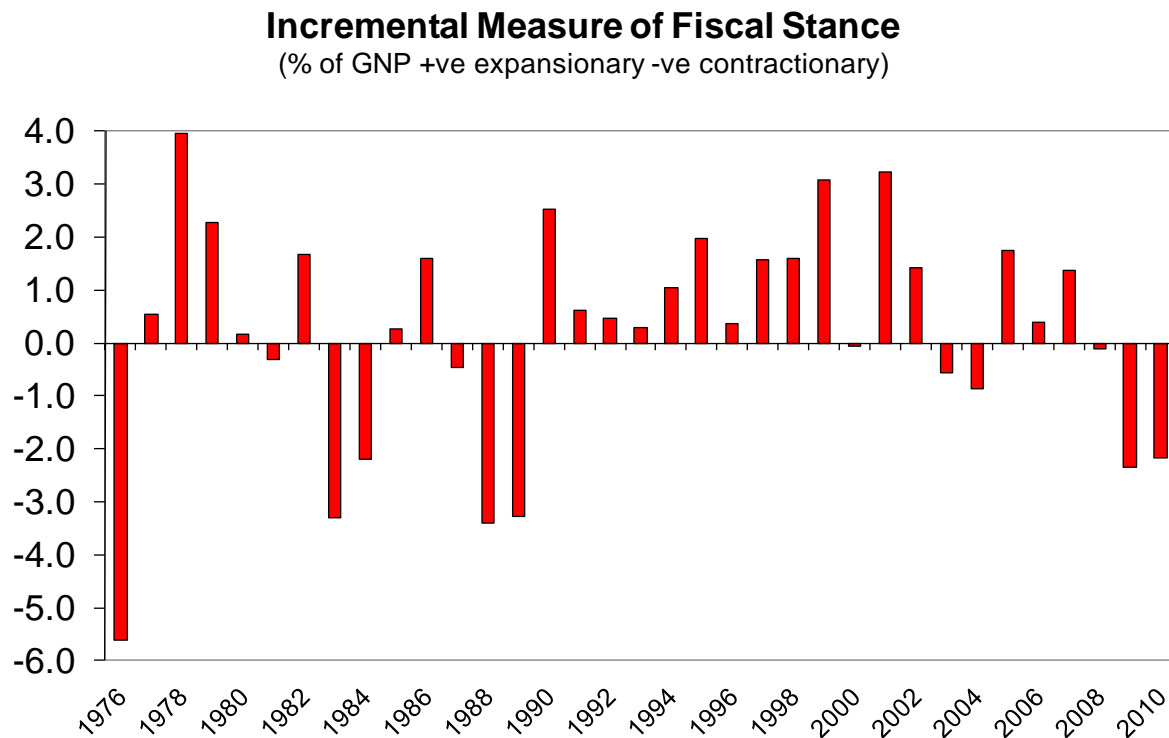
The fact that monetary policy could no longer be used to influence regional asset market bubbles meant that fiscal policy was left as a key instrument for this purpose (Conefrey and FitzGerald, 2010). Where a regional economy in EMU is growing more rapidly than potential output, and domestic costs are rising at an inappropriate rate, there are medium term dangers which need to be addressed (Blanchard, 2007). With an independent exchange rate, if the imbalances get out of hand and adjustment must be made to restore competitiveness, this can be achieved rapidly without much disruption through changing the exchange rate. By contrast, within a monetary union a real exchange rate depreciation can only be achieved by adjusting domestic prices, especially the price of labour. Such an adjustment can be painful and it also takes a number of years to effect even if labour markets are flexible. Where labour markets are inflexible this can be a very long drawn out affair. Under these circumstances the instrument of choice for controlling domestic inflationary pressures is fiscal policy. In particular, if there is a danger of a domestic property market bubble getting out of

² The situation was rather similar in Spain (Conefrey and FitzGerald, 2010).

³ We do not focus on financial regulation in this paper, but with the benefit of hindsight the collapse of the domestic financial system could and should have been prevented, firstly by the management and boards of the commercial banks (Nyberg, 2011), and, secondly, by the financial regulator who should have seen the dangers and prevented the disaster (Regling and Watson, 2010).

hand, fiscal policy can be used to reduce overall demand pressure and to specifically target exorbitant property market pressures.

Figure 5: Incremental Measure of Fiscal Stance



In the light of the rapid growth in house prices Barry and FitzGerald (2001) suggested that a tax on mortgage interest payments could have been used to raise the cost of borrowing for households, mirroring the effect of a rise in interest rates. The UK Treasury, 2003, recognised the significance of this new role for fiscal policy if the UK were to join EMU and they suggested a similar mechanism might be required to manage the UK economy in such an eventuality.⁴ In the case of Ireland, instead of tightening fiscal policy in the early years of the last decade, tax incentives to invest in certain property assets were increased and a general tax exemption for mortgage interest payments was maintained.

Figure 5 shows our estimates of the fiscal stance in Ireland over recent decades. Using the ESRI HERMES model of the Irish economy, this is estimated by comparing a scenario where both government expenditure and taxes are indexed with the actual budgetary outturn for each year. The methodology is described in Kearney *et al.* (2000). A positive difference implies an expansionary budget and a negative sign indicates a contractionary budget.

⁴ The Treasury suggested using stamp duty as the mechanism to temporarily raise the cost of housing and discourage overinvestment. While this mechanism would work to cut housing demand, by raising the price for buyers it could lead to higher household indebtedness. In the case of a mortgage interest tax the effect would be to reduce the ability of households to take on additional debt, reducing their long term liabilities.

Scanning across Figure 5 we can see that the origins of the fiscal crisis of the mid 1980s can be traced to inappropriately stimulatory fiscal policy in the late 1970s and early 1980s. While tough budgets in 1983 and 1984 began the process of bringing the deficit under control, the process was only completed with further very tough budgets in 1988 and 1989 (Honohan, 1999). A consequence of this long drawn out adjustment was a lost decade in terms of growth. This experience argues for a more concentrated period of adjustment this time around.

The current problems for the economy have their origins in the early and mid years of the last decade. As the economy was growing close to or above capacity over much of the decade, the effect of the substantial fiscal stimuli of the 1999-2002 period was to add to inflationary pressures, especially pressures on the housing market. The stimulatory budgets of 2005-7 further aggravated the situation. The run up to the election years of 2002 and 2007 saw a significant fiscal stimulus. The generally pro-cyclical policy of the government was encapsulated in the then Minister for Finance's statement: "if I have it, I'll spend it".⁵

The budgetary tightening over the period 2008-11, equivalent *ex ante* to 13 per cent of GDP, had a cumulative *ex post* impact of 7 ½ per cent of GDP. While this is very severe our estimates suggest it was not as severe as the sum of the austerity budgets of 1983, 1988 and 1989 together at 10 per cent of GDP. The reason for this is relatively straightforward, while the nominal cuts introduced in these recent budgets (2008-11) may well be unprecedented, in real terms their effect is more muted since prices and wages were also falling in the economy. By contrast in the 1980s, relatively high rates of inflation meant that a nominal freeze in pay rates or welfare payments translated into a more severe real reduction.

As discussed in Lane (2010) it would have been much more appropriate to have run a much tighter fiscal policy over the course of the last decade, resulting in a substantial and increasing surplus up to and including 2007. Such a policy was implemented in Finland and Sweden who had had previous experience of a financial crisis at the end of the 1980s. If tighter fiscal policy over the last decade had included specific measures to target the property market bubble, the major dislocation of the last four years could have been avoided. In addition, the surpluses run up over the decade would have provided a buffer against the effects of the international recession. Finally, by avoiding the property market bubble the catastrophic losses in the banking system would almost certainly also have been prevented.

4 The economy after the crisis

The depth of the fiscal crisis, coupled with mounting costs for the government from the financial crisis, forced the Irish authorities to make very significant interventions to stabilise the deficit. To date, the total amount of *ex ante* cuts implemented is equivalent to more than €20 billion (13 per cent of GDP), with a further €10 billion in cuts planned for 2012-2014. We discuss the knock-on effects of this austerity programme on the wider economy in this section. In addition to the costs of these policy actions, the recession has left a deep scar on the Irish economy with a permanent loss of output of between 15 and 20 per cent per head. Taking these effects together, the question arises as to the future growth prospects of the economy. While the permanent costs have been very high, the traded sector of the economy has so far emerged relatively unscathed with exports performing

⁵ <http://www.irishtimes.com/focus/budget2006/mccreevyprofile.htm>

well.⁶ The substantial reduction in the Irish cost base over the past three years should see substantial continuing growth in Irish exports over the next few years once world output picks up.

4.1 Fiscal consolidation and the costs of austerity

Since the summer of 2008 the Irish fiscal position deteriorated very rapidly. Beginning in autumn 2008, the authorities responded to this deterioration with a series of austerity budgets designed to stabilise the deficit. The speed of the widening of the deficit, even in the face of these measures, warranted a supplementary budget in the spring of 2009 and it was not until 2010 that the measures undertaken were sufficient to see the deficit stabilise. Table 1 summarises the *ex ante* measures undertaken over the period 2008-2010, in total they were equivalent to over €14 billion or 9 per cent of 2010 GDP. By the end of 2010 the general government deficit had stabilised, however at a very high level of 11 ½ per cent of GDP. In November 2010 the Irish government agreed a package of loans from the EU/IMF designed to help fund Irish debt over the period 2011-2013. That agreement also mapped out a further package of austerity measures designed to bring the deficit below 3 per cent of GDP by the middle of the decade.

Table 1 also summarises the agreed measures for 2011-2014. Roughly two-thirds of the actual and planned austerity package relates to cuts in expenditure, both current and capital. In 2009 and 2010 significant cuts in public sector pay levels were introduced, equivalent to up to 15 per cent of gross salary. There have also been very large cuts in expenditure on capital projects. On the revenue side, taxes on income have risen substantially in these years. Over the period 2011-2014 the consolidation measures total €15 billion, or 10 per cent of 2010 GDP. This means that cumulatively by 2014 the Irish authorities will have introduced *ex ante* austerity measures equivalent to 20 per cent of GDP over a continuous seven year period.

Table 1: Summary of actual and planned austerity measures over period 2008-2014, €bn.

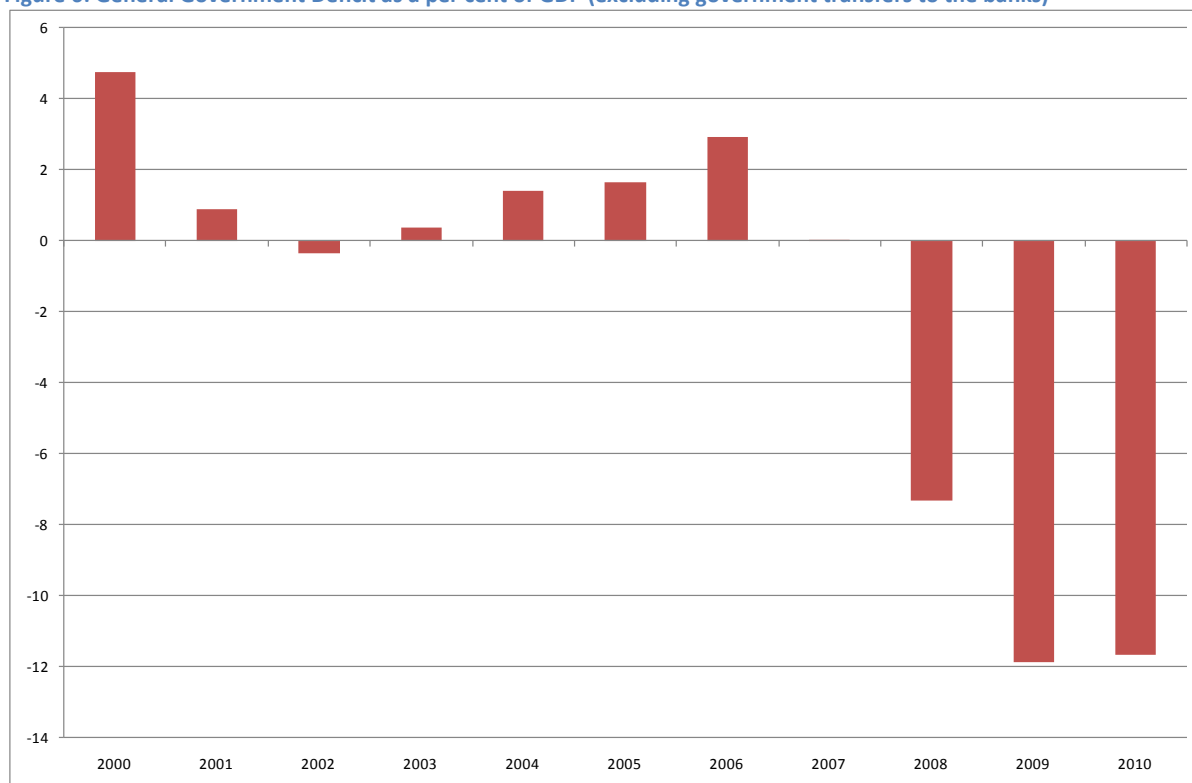
	2008-2010	2011	2012	2013	2014	2011-2014
Revenue	5.6	1.4	1.5	1.1	1.1	5.1
Expenditure	9.2	3.9	2.1	2.0	2.0	10.0
<i>of which Capital</i>	1.6	1.9	0.4	0.4	0.4	3.1
Total	14.7	5.3	3.6	3.1	3.1	15.1
Per cent of 2010 GDP	10%	3%	2%	2%	2%	10%

As shown in Figure 5 above, these packages have had significant effects on the real economy. Using the measure of fiscal stance described in Section 3.1 above, we estimate that the cumulative *ex post* effect of the 2008-2010 consolidation was 4.6 per cent of GDP less than half the *ex ante* measures.

⁶ Exports of goods and services grew by 6.3 per cent in 2010 in real terms (8.1 per cent in nominal terms).

As can be seen in Figure 6, these measures have been sufficient to stabilise the explosion in the deficit.

Figure 6: General Government Deficit as a per cent of GDP (excluding government transfers to the banks)



The new package of €15 billion in austerity measures, €5.3 billion of which have been introduced in 2011, will prove more difficult to implement, following on from three years of significant fiscal cuts. There are a number of reasons for this. Firstly the “low-hanging fruit” have been picked so that the additional measures that will be needed will have a higher opportunity cost. Secondly the Irish economy now faces very high unemployment and, at best, sluggish domestic demand, so that a continuation of a policy of increasingly costly austerity measures will only exacerbate the problems facing the domestic sector. Having pursued a pro-cyclical fiscal policy for most of the first decade, the authorities now find themselves faced with the same perverse policy outcome in the first years of this decade. The one advantage that Ireland has, in the face of such a very large adjustment, is that the process of fiscal adjustment will lead to a substantial reduction in imports⁷ and a reallocation of resources to the export sector. This will help transmit some of the effects of the fiscal adjustment to Ireland’s EU neighbours.

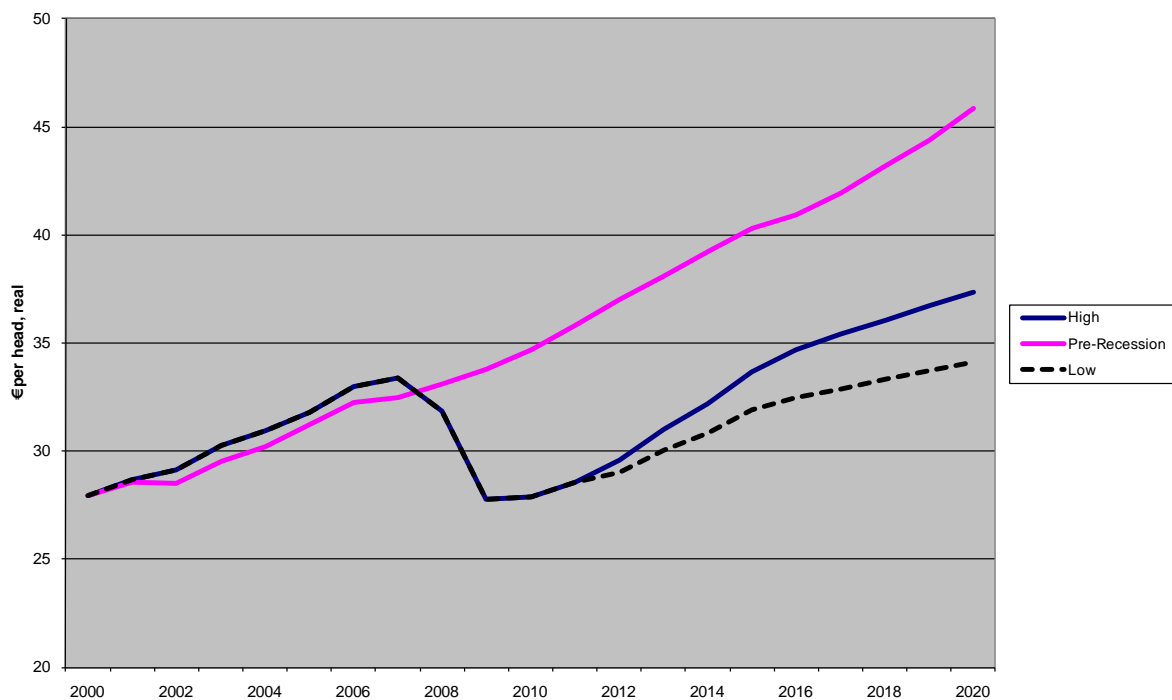
⁷ Observers who are unfamiliar with the structure of the Irish economy tend to overestimate the domestic multiplier effects of fiscal retrenchment. Bergin *et al.* 2009 sets out estimates of the multiplier effects of raising different types of taxes and cutting different types of government expenditure. The magnitude of these multipliers is much lower than would be the case in larger more closed economies such as the UK, Germany and France. The reason why fiscal impulses have a lower impact in open economies is because so much of what is consumed is imported. In the case of Ireland the import share of final output rose rapidly from the 1960s through to the 1990s. Table 2 from FitzGerald *et al.* 2005 (Chapter 2) shows the import content, direct and indirect, of each component of final demand for a range of years. Further details of this analysis are given in McCarthy and O’Malley, 2006.

In Bergin *et al.* (2010) we simulated the effects of an illustrative package of expenditure cuts and tax increases of €15 billion over the period 2011-2014 on the wider economy. GDP would be reduced by a cumulative 4 per cent over the 4 years with higher unemployment and emigration as a consequence. The fact that the negative effects of such a large package on the domestic economy are not greater reflects the openness of the economy and the relatively low fiscal multipliers. On the basis of this analysis, while the €15 billion in cuts over the period 2011-14 will act as a substantial drag on demand and output, it should be sufficient to bring the external balance into surplus over the medium term and to produce a significant primary surplus. The ex post effect on the government deficit would be a reduction in the range of 4.5 to 5.5 per cent of GDP. In addition, the balance of payments surplus would be increased by around 5 percentage points of GDP.

4.2 The permanent cost of the crisis to the real economy

The current crisis is estimated to have caused significant permanent damage to the economy. Bergin *et al.* (2010) estimate the permanent loss of output due to the recession range from 15 to 20 per cent of GNP per head by 2015 (Figure 7). A significant part of this loss of output reflects the costs resulting from a huge rise in the burden of government debt.

Figure 7: GNP per Head = permanent loss of output (Bergin *et al.* (2010))



The financial crisis could have an additional serious long-term impact through two channels: the cost and availability of capital and labour supply. As a result of the financial crisis there has been a big rise in the cost of capital for Irish business dependent on the domestic banking sector for finance. There is also evidence of credit rationing as a result of the ongoing problems in the banking system. This highlights the problems for a peripheral economy with a national rather than an EU-wide banking system (Barrell *et al.*, 2011). The exposure of the tradable sector to developments in Irish capital markets is uneven. In the high technology manufacturing sector the bulk of output and

employment is in foreign owned firms who will not be affected by the cost or availability of finance in Ireland. In the case of the food processing sector the Irish owned firms are multinationals with substantial foreign operations. They too may be less dependent on the Irish capital market. Similarly a significant part of the business and financial services sector that is exporting is also foreign owned. The sectors where Irish firms are important is in some key sectors of business and financial services (IT services) and in traditional manufacturing and certain other services serving the domestic market. In those cases investment and output in the medium term could be affected by developments in the financial sector. The very high propensity for Irish workers – and especially highly skilled workers - to migrate when unemployment rises poses a difficulty for future potential labour force growth. While the experience of the 1990s was that most of the emigrants of the 1980s returned, it is not certain that this experience will be repeated later in this decade for those currently leaving. If the current emigration, especially of skilled workers, proved long-term in nature, it could have a permanent effect on the potential output of the economy⁸.

5. Growth, the deficit and implied debt dynamics

In this section we examine the current and likely future debt burden. Based on current forecasts, both from domestic and international agencies, our analysis suggests that in the absence of any new shocks the net debt burden will exceed 100 per cent of GDP in the early years of this decade. Beyond 2013 we estimate that net debt will stabilise and start to decline. In these circumstances, the current and future debt burden, while very high, could prove sustainable.

As the end of 2010 the total Gross General Government Debt was €148 billion. This is equivalent to 96 per cent of GDP or 119 per cent of GNP. As shown in Figure 8 this is composed of €90 billion of government bonds, €31 billion promissory notes and €27 billion of other debt⁹. These are very high gross debt to income ratios, and stabilisation will require either substantial economic growth or significant reductions in borrowing in the coming years. However, the Irish authorities are unusual in holding such large liquid financial assets and, when these liquid financial assets are taken into account, the position looks less dramatic. At the end of 2010 the government held liquid financial assets valued at €31 billion¹⁰. Including these liquid financial assets, the net indebtedness of general government at end-2010 was 76 per cent of GDP or 94 per cent of GNP.

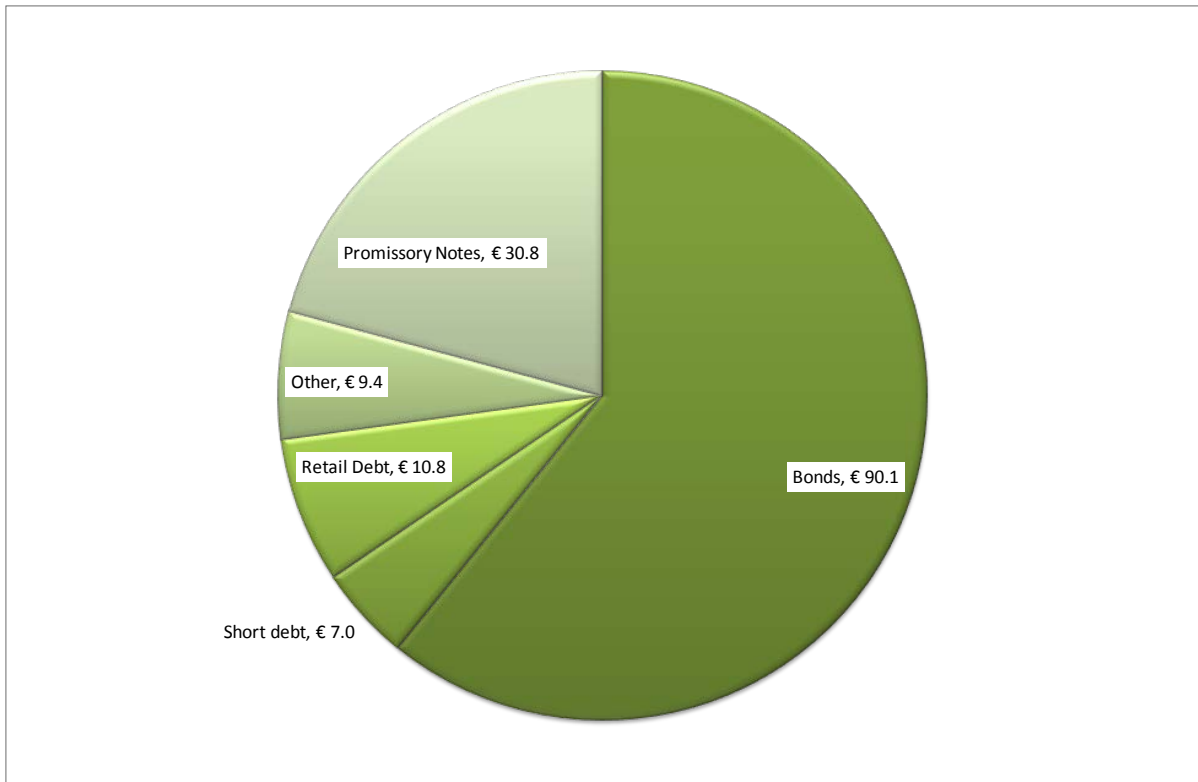
In the autumn of 2010 the government still expected to be able to fund itself on financial markets. To facilitate this process they held a large amount of liquid financial assets so they would not be forced to have recourse to the markets till towards the end of the following year. However, the need to fund the huge losses in the banking system meant that the government had to seek aid from the IMF/EU towards the end of 2010.

⁸ However, it should also be noted that research has shown that returned emigrants earned approximately 7% more than non-emigrants, presumably as a result of experience and skills obtained working abroad (Barrett and Goggin, 2010).

⁹ Other debt includes short-term debt (Treasury bills and commercial paper), retail debt., local government debt and other debt instruments.

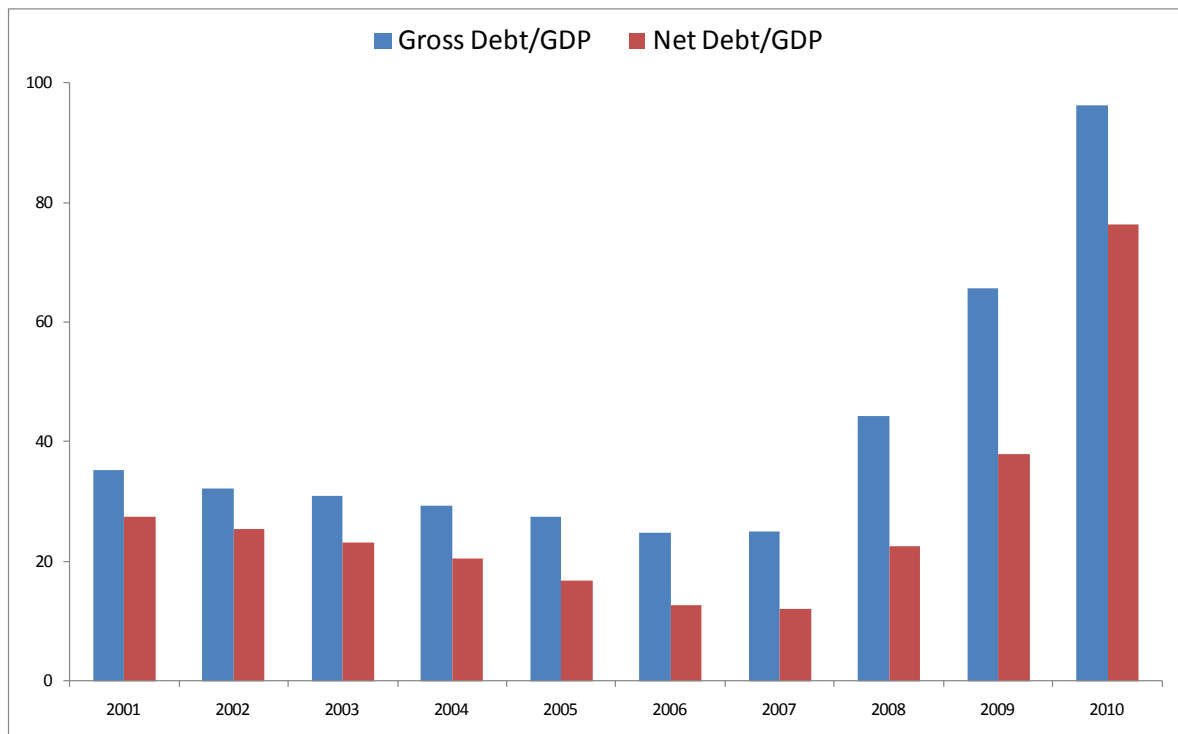
¹⁰ This includes €16.2 billion in cash deposits and €14.9 billion in so called “discretionary funds” held at the state’s sovereign wealth fund, the National Pension Reserve Fund (NPRF). The total value of the NPRF at the end of 2010 was €24.4 billion, of which €9.5 billion is in the “Directed Portfolio” constituting injections of capital into two of the large Irish bank, Allied Irish Bank and Bank of Ireland. These are excluded from liquid assets.

Figure 8: General Government Debt in billions of euro at year end 2010.



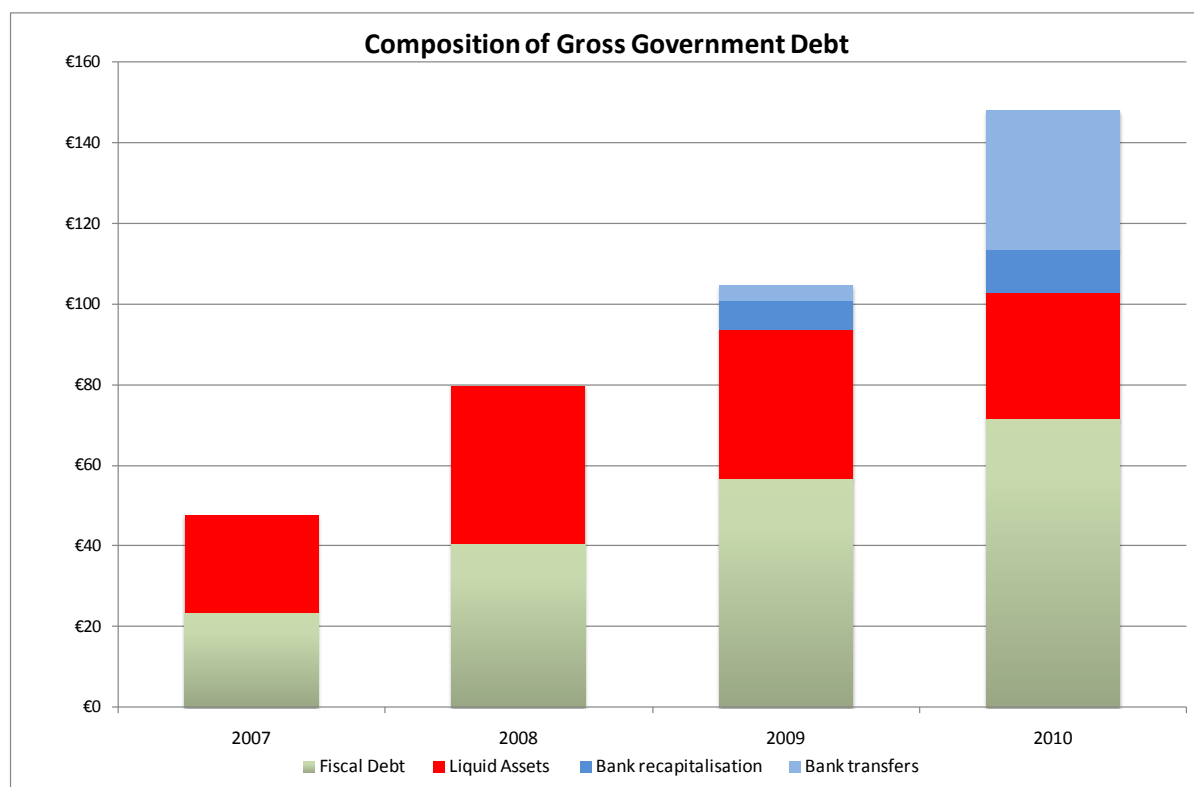
Over the period 2000 to 2007 Irish government debt was low and falling (see Figure 9). In 2001 the government set up the National Pension Reserve Fund (NPRF) which invested 1 per cent of GDP in each year to fund future pension requirements. The value of the fund grew rapidly to a peak of €24 billion in 2007. Along with some cash balances and surpluses on a number of other managed funds, these investments meant that the gap between gross and net government debt grew steadily between 2001 and 2007 from 8 percentage points of GDP in 2001 to 13 percentage points of GDP in 2007. By the end of 2007 while gross government debt was just 25 per cent of GDP, net government debt was a mere 12 per cent of GDP. In 2008 the Irish authorities pre-funded future deficits by borrowing significant additional sums which increased total liquid assets by €15 billion in 2008 so that liquid assets – in the form of both cash holdings and the NPRF sovereign wealth fund – amounted to almost half of total gross government debt in 2008 (Figure 9).

Figure 9: Gross and net debt, per cent of GDP



The very rapid deterioration in the fiscal position from 2007 onwards, together with significant transfers of funds to the banking system and injections of capital into the banks meant that by the end of 2010 gross and net government debt amounted to 96 per cent of GDP and 76 per cent respectively. Figure 10 shows the dramatic impact that government intervention in the banking system since the beginning of 2009 has had on the government debt figures. By the end of 2010 the government's total direct intervention in the banking system amounted to over €45 billion, of which €35 billion was a direct transfer.

Figure 10: Composition of general government debt in billions of euro 2007-2010



In examining the dynamics of the debt over the medium-term we adopt assumptions on the time path for the nominal growth rate and the general government deficit, together with the level of bank recapitalisation funds required as detailed in Appendix 1. There remains the possibility that growth in the post 2012 recovery phase could significantly exceed this figure. There is also the possibility that further shocks to the economy could postpone the return to substantial growth beyond 2013 or 2014.

On these macro-economic assumptions, our projections imply that the government finances would move into surplus net of debt interest – the primary balance – by 2014. Despite this, gross funding needs over the period 2011 to 2014 are estimated to be approximately €108.9 billion (see table 2). Of this, €67.5 billion is available from EU/IMF funds out to 2013. The authorities also have €31 billion in liquid assets available. We assume that out to 2014 €26 billion of these liquid assets will be used to fund the debt. This means that a total of €15.4 billion would have to be borrowed from sovereign debt markets between 2013 and 2014.

Table 2. Decomposition of the gross funding needs of the Irish government

	2011	2012	2013	2014	Total 2011-2014
General Government Deficit	16.3	13.0	10.0	8.3	47.6
Bank recapitalisations	20.0	0.0	0.0	-3.0	17.0
Refinancing needs					
- bonds	4.6	5.8	6.1	11.9	28.3
- Promissory notes	3.1	3.1	1.3	1.5	9.0
- other	7.0	0.0	0.0	0.0	7.0
Gross Funding need	€50.9	€21.8	€17.4	€18.7	108.9

The strategy in relation to the use of liquid assets will be critical in determining how soon the Irish government would have to return to the markets and also will affect the total interest bill over the period 2011-2014. In table 3 we compare our illustrative figures (detailed in Appendix 1) with the latest figures from the Department of Finance, IMF and European Commission¹¹. Our figures contain two critical differences with the other agencies. The first is that we assume that €3 billion of the PCAR¹² bank recapitalisation monies will be refunded in 2014 bringing the total cost of bank recapitalisations to €17 billion. The second is that we assume that €26 billion of liquid assets will be used to finance the deficits over the period. This compares with an estimated €15 billion implicit in the Department of Finance (DOF) numbers, €12 billion in the EC figures and just €10 billion in the IMF figures.

¹¹ The Department of Finance figures are from the *April 2011 Stability Programme Update*; the IMF figures are from the *IMF Ireland Country Report 11/109*, (May 2011) and the European Commission figures are from the *The Economic Adjustment Programme for Ireland, Spring 2011 Review*, April 2011.

¹² The Prudential Capital Assessment Review (PCAR) was completed at the end of March 2011. It determined that the Irish banks would need a total of €24 billion to fully capitalise them under stressed scenarios.

Table 3. Cumulative gross and net debt figures 2011-2014, and gross funding requirements €bn

	Own estimates	DOF	EC	IMF
General Government Deficit end 2010	148.1	148.1	148.1	148.1
Cumulative Deficits 2011-2014	47.6	49.8	52.2	51.6
<i>of which:</i>				
Cumulative Interest Payments	31.5	34.7	34.6	34.3
Cumulative "Primary" Deficits	16.1	15.1	17.6	17.3
Bank recapitalisations	17.0	20.0	19.0	19.0
Change in liquid assets*	-26.0	-15.3	-11.7	-10.4
General Government Debt end 2014	186.7	202.6	207.6	208.3
Liquid assets end 2014	5.1	15.1	18.1	21.1
Net Government Debt end 2014	181.6	187.5	189.5	187.2
Gross Funding Needs 2011-2014	110	115	117	116
Market Funding Needs* 2011-2014	17	33	38	38

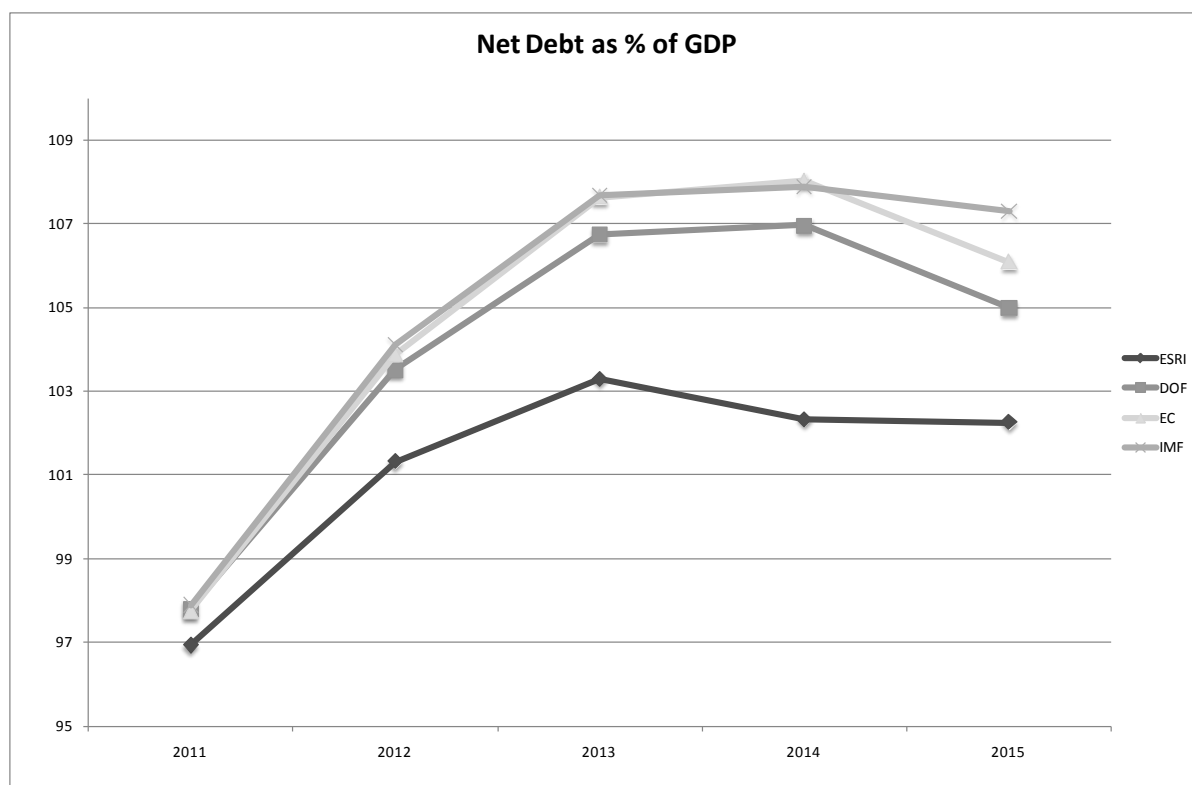
*imputed residual

** Additional to funding from EU/IMF programme and liquid assets.

Because our figures include a much more significant run-down of liquid assets, the residual funding needs out to 2014 are much lower. In comparison to the EU/IMF figures, residual funding needs are some €20 billion lower. This in turn means that the cumulative interest bill under our projections is significantly lower. While there is clearly a strong argument for having a buffer fund in times of financial crisis, the figures here do give an indication of just how expensive a strategy this is with an interest cost of an additional €3 billion attendant on holding very large cash balances at a time when the interest rate on new government borrowing is between 5 and 6 per cent.

On these figures, the gross debt to GDP ratio would fall beyond 2013 but the net debt to GDP ratio stays above 100 per cent out to 2015. Figure 11 shows the net debt trajectories implicit in our macroeconomic assumptions, and also the official forecasts from the Department of Finance, European Commission and IMF. All of these scenarios involve a net debt to GDP ratio above 100 per cent out to 2015. This is very high and is one of the reasons there are concerns around the sustainability of Ireland's current debt position. Nonetheless these figures do indicate that the debt will stabilise by 2014 or 2015 if current fiscal targets are followed.

Figure 11: Net Debt as a per cent of GDP



There are a number of methods of stabilising the debt at an earlier date. At one extreme, eliminating the primary deficit (expected to be €10bn in 2011) immediately, while exceptionally painful, would serve to stabilise the gross debt to GDP ratio below 100 and bring the net debt figure to around €150 billion in 2012, equivalent to 90 per cent of GDP or 115 per cent of GNP. While less extreme, a more rapid reduction in the primary balance than currently envisaged would produce a stabilisation of the debt to GDP ratio at an intermediate figure.

Alternatively, a lower initial level of debt would also see the dynamics stabilise earlier and at a lower level. If there were a reduction in the initial level of debt of around €20 billion, the debt to GDP ratio would stabilise significantly below 100 per cent by 2015. Any reductions in the current stock of debt – through privatisation of state assets, disposal of assets, or burden-sharing – could have a very significant effect on the trajectory of the debt in the middle part of the decade. In the longer term, the sale of the state's stake in Allied Irish Bank and Bank of Ireland (total investment of €29.4 billion) can be envisaged as a means of reducing the state's public debt burden. It is uncertain how much of a reduction such a sale would realise, but even on conservative assumptions of the market value of the nationalised banks this sale alone would be enough to reduce the debt to GDP ratio by a significant amount.¹³

There are few easy options in tackling the current levels of debt facing the Irish government. The current programme of austerity, with an agreed package of cuts totalling €30 billion over the period

¹³ After the planned recapitalisation the tier 1 capital in these two banks will amount to over 20 per cent of GDP.

2008-2014, will, on these assumptions, be sufficient to all but close the primary deficit by 2013. However the very high current levels of debt mean that if growth were to prove less than assumed it would still not be sufficient to stabilise the debt to GDP ratio. On the other hand, a more robust recovery would both improve the primary balance more rapidly and also ensure that the debt to GDP ratio began to fall at an earlier date.

6. Conclusions

Major domestic policy failures in the last decade played a key role in the build up to the Irish economic crisis of 2008-10. If an appropriate fiscal policy had been pursued the property market bubble and related financial collapse could have been avoided. Appropriate regulation of the financial sector could also have prevented the financial collapse. In restricting the availability of credit it could also have halted the property market boom before it became dangerous. Thus the crisis is the result of twin policy failures.

Since the financial collapse began in late 2008 there has been a corresponding dramatic reduction in output. It seems probable that this loss of output will not be restored and that the economy will be permanently “scarred” as a result. However, there appears to have been limited damage to the tradable sector of the economy. Already this sector has rebounded and exports have reached record levels (exports are greater than GDP). This export growth is not very job intensive so that recovery in the labour market will await a recovery in domestic demand.

In order to restore order to the public finances and to help fund the huge losses in the Irish banking system since the middle of 2008 fiscal policy has seen major tightening, with a combined ex ante adjustment of almost 10 per cent of GDP between 2008 and 2010. Further adjustment of a cumulative 10 per cent of GDP is planned for 2011-2014. This should ensure that the burden of debt stabilises by 2013 or 2014. This will be achieved through running a primary surplus by 2014. However, the effect of this very tight fiscal policy will be to delay recovery in domestic demand.

With the need for continuing fiscal tightening for the next 3 years it seems unlikely that domestic demand will recover before 2013. However, with a rapidly growing balance of payments surplus, when domestic demand eventually does recover there could be a period of quite rapid growth.

Finally, the debt GDP ratio, which has risen so dramatically between 2007 and 2010, is likely to reach a plateau by 2013. When holdings of liquid assets are taken into account, the net debt to GDP ratio is likely to peak at between 100 and 105 per cent of GDP. In addition, when the recapitalised banks are eventually sold any proceeds that accrue to the government would result in a significant step reduction in the debt burden. In the interim the Irish economy remains vulnerable to any new shocks which might negatively impact on growth or add to the woes of the domestic banking system.

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Appendix 1: Details on debt dynamics

In examining the dynamics of the debt over the medium-term we adopt assumptions on the time path for the nominal growth rate and the general government deficit, together with the level of bank recapitalisation funds required. Our projections for GDP and GNP growth in 2011 and 2012 are based on forecasts from the *Spring 2011 Quarterly Economic Commentary*. The GDP figures for 2013-2015 are based on an assumed 4 per cent nominal growth in GDP¹⁴.

Along with these growth and deficit projections, we make the following assumptions in relation to bank recapitalisation, the treatment of liquid assets and the likely timing of a return to the markets:

- We assume that the bank bailout in 2011 will cost the exchequer an additional €20 billion.¹⁵ This is largely financed through a reduction in cash balances of €8 billion and the NPRF discretionary portfolio of €10 billion. Therefore it has a marginal effect on the gross debt in 2011 of €2 billion. We further assume that €3bn of these monies will be repaid in 2014 as foreseen in the recent PCAR agreement¹⁶.
- We assume that the EU/IMF funds not needed to recapitalise the banks will still be made available to Ireland by the end of 2013. This would ease the funding pressures on the government and facilitate an orderly return to the markets in 2014/15.
- We assume that the government does not borrow from the markets until 2014¹⁷. Instead it uses the EU/IMF facility together with a run-down of liquid assets to fund its borrowing needs out to 2014.
- By 2015 we assume liquid assets have been all but run down with a residual of just €3 billion.
- In relation to interest rates, we assume that the interest rate on EU/IMF borrowing will fall from 5.8 per cent in 2011 to 5.5 per cent thereafter. The interest rate on new borrowing from 2014 onwards is assumed to be 6 per cent, with interest rates on retail debt assumed to be 3.5 per cent. The interest rate on liquid asset holdings is assumed to be just 0.5 per cent. Hence there is a very significant cost to holding these assets over a prolonged period of time.

¹⁴ The general government deficit figures are consistent with these forecasts.

¹⁵ We assume that €4 billion of the €24 billion needed to recapitalise the banks comes from a reduction in the liabilities to subordinated bond holders.

¹⁶ On 31 March 2011 the Minister for Finance announced the results of PCAR stress tests of the Irish domestic banks. The results suggested that the banks would need a total of €24 billion in additional capital in order to fully recapitalise the banking system.

¹⁷ There is one exception here. We assume that retail debt will increase by €1.2 billion in 2011 and 2012, and by €1 billion in subsequent years. The most recent data from the NTMA indicate that over €0.7 billion in retail debt was raised in the first quarter of 2011 so this assumption is likely to be conservative.

Table A1. Debt and deficit dynamics

		2010	2011	2012	2013	2014	2015
FLOWS:							
GDP in current prices, €bn		153.9	158.1	164.1	170.6	177.5	184.6
Borrowing needs:							
A. General Government deficit, €bn		49.9	16.3	13.0	10.0	8.3	7.1
B. Bank recapitalisation, €bn			20.0	0.0	0.0	-3.0	0.0
C. Change in liquid assets €bn			-18.2	0.0	-2.8	-5.0	-2.1
Total New Borrowing €bn	A+B+C		18.1	13.0	7.2	0.3	5.0
STOCKS:							
Bonds outstanding**		90.1	85.5	79.8	73.7	61.8	61.8
Other***		27.2	21.4	22.6	23.6	24.6	25.6
Promissory Notes		30.8	27.7	24.6	23.3	21.8	20.2
EU/IMF borrowing €bn		0.0	31.5	52.1	65.8	67.5	67.5
Residual Funding needed: €bn		0.0	0.0	0.0	0.0	11.0	16.6
Total Gross Government Debt	A+B+C	148	166	179	186	187	192
<i>% of GDP</i>		96	105	109	109	105	104
Liquid Assets		31	13	13	10	5	3
<i>% of GDP</i>		20	8	8	6	3	2
Total Net Government Debt	A+B	117	153	166	176	182	189
<i>% of GDP</i>		76	97	101	103	102	102

* net of debt interest

** Based on stock of debt as of end December 2010

*** Short term debt, retail debtlocal government debt, etc.

Table A1 shows our stylised estimate of the debt and deficit dynamics out to 2015. These numbers compute the funds that would be needed in each year from the EU/IMF funds based on the sum of the projected deficit, bond refinancing, bank recapitalisation and change in liquid assets.

New borrowing needs for 2011 are projected to be €18.1 billion, which is comprised of a projected deficit of €16.3 billion, bank recapitalisation costs of €20 billion and a run-down in liquid assets of €18.2 billion. In addition to new borrowing, there will also be significant debt roll-over. In 2011 there are €4.6 billion in government bonds and €3.1 billion in promissory notes to be paid. In addition, we assume that there will be no roll-over of short-term debt with a consequent repayment of €7.0 billion in short-term debt, offset by an additional €1.2 billion in retail debt raised. So the total amount borrowed from the EU/IMF of €31.5 billion includes €18.1 billion in new borrowing and €13.5 billion in debt rollover.