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## Future Directions for the Irish Economy

Conference Proceedings

Graham Stull



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European Commission  
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## **Abstract**

Upon successful conclusion of the financial assistance programme, Ireland has regained policy credibility and made substantial progress in addressing macroeconomic imbalances. Yet challenges remain. The three papers as well as the discussion material from this conference explore these challenges under three headings: growth policy, financial sector stability and a sustainable, rules-based fiscal policy.

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## INTRODUCTION

The crisis period which began in 2008 represented a challenging time for the people and policymakers of Ireland. Excessive imbalances built up during the boom years meant that considerable adjustment was needed to restore the sustainability of public finances, repair the moribund financial sector and address competitiveness weaknesses that had been allowed to fester. Thankfully, Ireland was prepared to meet this challenge head-on. But even so, the scale of the adjustment was such that help was required from outside. In this context, the EU-IMF Financial Assistance Programme which began in late 2010 provided vital support – not only by way of loans at favourable interest rates, but also in terms of important policy advice and support in pursuing reforms that would ensure a sustainable recovery. Ireland's successful exit from the Programme in December 2013 was thanks to the steadfast resolve of the country and its people in making the necessary sacrifices, but also to Ireland's European partners, who showed solidarity when it was most needed.

Exit from the financial assistance programme does not mean disengagement from Ireland on the part of European institutions. New economic governance arrangements have now been put in place to ensure prudent management of the public finances and to prevent the accumulation of dangerous macroeconomic imbalances for all Member States. At the same time, the twin pillars of Banking Union – the Single Supervisory Mechanism and the Single Resolution Mechanism – are being designed to ensure financial sector stability across the euro area.

Within this European context, the crossroads of Programme exit provides an important opportunity to assess the prospects of the Irish economy to achieve good growth, prevent future banking crises and lock in budgetary improvements that were achieved over the course of the Programme. It is also a natural opportunity to assess the adjustment programme, with a view to identifying lessons learned that can contribute to the academic debate, or that can serve as policy guidance for other countries facing similar economic challenges.

To this end the European Commission, in conjunction with Trinity College Dublin, organised the Conference *Future Directions for the Irish Economy* in January 2014, bringing together leading academics, national policymakers, representatives of the Troika institutions and key stakeholders, to engage on these issues.

In his introductory remarks, Minister for State **Brian Hayes** focused on the importance to Ireland of maintaining the restored credibility of Irish policy making. He stressed, in particular, the Medium Term Economic Strategy the Irish government adopted in December 2013, which sends a strong signal to markets and economic actors that Ireland remains committed to sound fiscal policies and structural reforms, to avoid repeating the mistakes of the past.

Speaking at the opening session (Chair: Sean Whelan of RTÉ), Governor of the Central Bank of Ireland **Patrick Honohan's** remarks provide an insightful recap of the position facing Ireland ahead of the Programme. He also reviews the progress made to repair Ireland's banking sector under the Programme in terms of bank recapitalisation and deleveraging, and points to outstanding challenges such as addressing mortgage arrears and completing financial structural reforms.

Presented in the first session (Chair: Frances Ruane of the ESRI), the paper by **Nicolas Crafts**, entitled *Ireland's Medium Term Growth Prospects: A Phoenix Rising?* draws on a growth theoretical approach to highlight the importance to the Irish growth model of sustaining high levels of foreign direct investment and returning to net inward migration in the medium term. This suggests policy responses to ensure the ongoing fiscal adjustment is growth friendly, and also to improve the delivery of education. Moreover, the surprisingly low levels of ICT capital penetration imply a greater role for innovation policy, in particular to bridge the gap between activities in the large, foreign-owned multinational sector and the indigenous SME sector. OECD estimates of potential growth of 3% per annum could be achieved, but risks on the external side persist. Discussing the paper, **Kevin Daly** (Goldman Sachs) cautions against assuming convergence to EU growth levels. He cites the experience of the US states, which shows that

small, regional economies can maintain disparate rates of growth and illustrates the risk that economic shocks in a monetary union can have a sustained impact on growth rates over the medium to long term. In the medium term, actual growth for Ireland is unlikely to be bound by output potential due to slack in the labour market. Thus, while the paper's growth estimates are plausible in the central scenario, a wide spectrum of outcomes is possible. Discussing the paper, **John Martin** (Bertelsmann Foundation) highlights the importance of high-quality labour market activation services in tackling hysteresis, the uncertainty around forecasts for net migration which has a substantial impact on potential growth, and the importance of providing the right incentives for up-skilling to enhance the value of Irish human capital.

Presented in the second session (Chair: Margaret Doyle of Deloitte) the paper by **Thorsten Beck** entitled *Ireland's Banking System - Looking Forward* notes the importance for Irish growth of a function banking system, with a size proportionate to the needs of the real economy. The paper argues for a re-gearing of banking away from international activities and towards investment in the local economy. In the absence of a complete banking union, a stronger role would be required of national regulators to ensure prudent lending. From a policy perspective, the author sounds a note of caution on the high degree of concentration in the Irish banking sector, but also warns against excessive government intervention to support non-bank financing. Discussant to the paper **Nigel Nagarajan** (European Commission) points to outstanding issues facing the Irish financial sector, such as the high level of mortgage arrears and the optimal strategy for the state to fully return banks to private ownership. He cautions against confounding the activities of the International Financial Services Centre (IFSC) with those of domestic banks during the lead-up to the crisis. Focussing the discussion on future challenges, discussant to the paper **Lars Frisell** (Central Bank of Ireland) alludes to the banking 'trilemma' currently facing Ireland - the high stock of arrears, a moribund market for new lending, and a domestic banking sector that has yet to return to profitability.

Presented in the third session (Chair: John Moran of the Department of Finance) the final paper, by **George Kopits**, and entitled *Ireland's Fiscal Framework: Options for the Future* argues that adopting a well-designed, rules-based fiscal framework can in fact confer on Ireland a high degree of fiscal sovereignty, perhaps counterintuitively. Reviewing Ireland's fiscal framework and its EU context, the author finds that the structural balance rules are difficult to enforce in real time, due to the uncertainty surrounding estimates of potential output and the difficulty in effectively communicating such complex rules to the wider public. He argues for the introduction of a three-year, rolling "real debt" rule, whereby discretionary spending is governed by a multiannual debt target that is recalculated in advance of every fiscal cycle. While welcoming the role of the Irish Fiscal Advisory Council (IFAC) in the fiscal framework, the author argues it should be further expanded and its resources augmented accordingly to allow it to produce independent macro-fiscal projections. Discussing the paper, **John McHale** (IFAC), notes that the current deficit rules are in fact synonymous with a debt rule. He argues Ireland's newly adopted system of multi-annual expenditure ceilings is consistent with the expenditure benchmark under the EU Stability and Growth Pact. In terms of resources, he notes the budget for the IFAC is close to the EU average for fiscal councils who have only an assessment function. Discussant **Antonio Garcia-Pascual** agrees that a debt rule, not a structural balance rule, should be the main fiscal anchor, given difficulties in real time estimation of the output gap, the volatility in Irish output data and the structural changes currently underway in Ireland which make potential output estimation particularly challenging.

The concluding roundtable (Chair: Philip Lane of Trinity College Dublin) focussed on the future policy challenges for Ireland. **Craig Beaumont** (International Monetary Fund) considered that achieving lasting economic recovery entailed reducing high public and private debts, reviving healthy financial intermediation, and raising employment from low levels. Steady fiscal adjustment should continue, while avoiding undue additional adjustment if growth is weak, and using reforms to generate savings and revenues while limiting the drag on growth and protecting core services. Financial intermediation would benefit from strengthening and broadening banks' loan resolution progress and non-banks should play a larger role in future intermediation while containing fiscal risks. Timely action to ensure training meets labor market needs, and more intensive engagement with the long-term unemployed, is important to

maximise employment gains in the medium term. **Zsolt Darvas** (Bruegel) sounded a note of caution on key challenges for Ireland. Further fiscal adjustment was needed, he argued, while the public debt ratio was high and the government faced contingent liabilities. Financial risks originate from the deleveraging process and the still too-high share of non-performing loans. Growth was exposed to possible imbalances of the economy, in particular the reliance on high-productivity export sectors like pharmaceuticals which masked low labour productivity in other sectors. And finally, Ireland faced major social challenges by having the largest share of long-term unemployed in total unemployment and the largest share of children aged 0-17 living in jobless households in the EU.

**Diego Rodriguez Palenzuela** (European Central Bank) pointed to the fragility in the debt sustainability path, noting the importance of further reforming the health sector, of opening up sheltered sectors of the economy, and of avoiding welfare traps for the unemployed. He also emphasised the need to enhance fundamentals and strengthen the basis for the knowledge economy in Ireland, improving the education system, links between industry and universities, innovative government and public policies and ensuring that competitiveness does not overly rely on tax incentives. **Martin Larch** (European Commission) highlighted the importance of a common and effective EU governance framework for sound national economic policy making in the European Monetary Union. He reviewed the main gaps in the EU framework uncovered by the post-2007 financial and economic crisis and how, over the past several years, they were filled through a series of important reforms steps. In that context he also referred to one of the key objectives underpinning the reform process notably to strengthen ownership of reforms at the national level by improving the interplay and consistency between national policy frameworks and European rules. He was confident that the upgraded governance system would play an important role in ensuring greater macro-financial stability in the euro area and its individual member states going forward.



## SPEECH BY MINISTER BRIAN HAYES

I am delighted to speak to you this evening on the eve of your seminar on the Future of the Irish Economy and to welcome you all to Dublin. As a Minister in both the Department of Finance and the Department of Public Expenditure and Reform I welcome this opportunity to share with you what the Irish people have achieved in recent years and how the Irish Government sees the way forward for the economy over the period to 2020.

Ireland has come a long way over the last three years. During that very challenging period swift and decisive Government action was necessary, and resulted in great hardship for the people of Ireland. Programme entry gave Ireland the time and opportunity to manage the crises in a more measured and less drastic manner.

I salute the resoluteness of the Irish people and acknowledge their forbearance which has inspired and sustained me and colleagues in Government through the difficult international negotiations and decisions that have brought us to this point.

For example, the measures we have taken to correct our fiscal imbalances have been enormous by any standards, involving great sacrifice from the Irish people. Wages have fallen significantly for many and services have been cut and new charges introduced. Most acutely, unemployment and emigration have been a grim reality for many families.

These efforts and sacrifices have been recognised by international observers and this has been reflected in the reduction of around 10 percentage points in Irish bond yields - a fall that has facilitated our return to the market with bond issuances up to and including a ten-year maturity.

Last Tuesday we saw very healthy demand for ten-year Irish bonds in the successful issue by our Treasury Management Agency of a €3.75bn new 10 year Irish benchmark bond. This attracted in excess of €14bn of orders at a yield of 3.543% further underlining the continuing confidence of investors in Ireland.

The correction in Ireland's underlying primary balance, projected to fall to 2.7% in 2013, is nearly 7 percentage points below its 2009 peak. The impact of our demonstrated commitment to meeting in full our deficit targets, as well as myriad other reforms and targets in the Troika support programme, have helped to restore trust in the Irish Government amongst our European partners and international observers.

### *Exiting the Troika Programme*

Following a careful and thorough assessment of all available options, and broad consultation, the Government decided on 14 November to exit the EU/IMF programme without a pre-arranged backstop.

Our decision to exit without a pre-arranged backstop, while finely balanced, was the best option for Ireland because:

Market and sovereign conditions are favourable, with the country returning to the markets in 2012, holding over €20 billion in cash reserves at year end (2013).

Market confidence in Ireland is high as demonstrated by the aforementioned 10-year benchmark bond issuance.

The public finances are under control; as reflected in our recent 2013 Exchequer figures;

Our 2014 Budget targets a deficit of 4.8% and a primary surplus and the Government is committed to reducing the deficit to less than 3% in 2015 as well as putting the debt ratio on a downward path from this year on;

Investors are assured by the comprehensive fiscal governance framework in Ireland and in Europe as well as from the ESM having been established and by last year's statement of support from the ECB for the euro area;

Domestic and international economic conditions are improving, monetary policy decisions are conducive to exit and confidence and sentiment towards Ireland has improved considerably in recent months.

We have demonstrated our commitment to getting our country back on track and exiting the programme. We have completed 290 programme actions, undergone 12 quarterly reviews, and will have drawn down €67.5 billion. Successful implementation paved the way for our exit.

#### *Medium-Term Economic Strategy*

The restoration of trust and goodwill towards Ireland has helped us to achieve important concessions from our international partners, including a lowering of the interest rate on our EU programme funding, the extension of maturities on lending and - most notably - the successful restructuring of the Promissory Note. Collectively, these reduce the repayment burden on Ireland and greatly reduce re-financing risk, decreasing our exposure to external stresses in the bond market over the medium term.

So it is clear the sacrifices and determination of the Irish people are bearing fruit. We can again look towards having the type of stable, productive and sustainable economy we all want to bequeath to the following generations.

While appropriate to acknowledge the progress made we remain acutely aware of the challenges that remain. We must not waste such hard-won progress.

Thus the Ministers for Finance and for Public Expenditure and Reform were tasked by Government to prepare a Medium-Term Economic Strategy for the post-Troika period. This Strategy, published before Christmas, underpins a range of policy efforts across the whole of Government. It serves to provide financial market stability to underpin consumer and business confidence, and ensure a focus on job creation. Its primary aims are:

- (i) to ensure that the mistakes of the past are not repeated;
- (ii) to set out a path for economic growth, from high unemployment to full employment;
- (iii) to provide an overarching whole-of-Government strategy to which all other sectoral and horizontal policies and strategies are aligned; and
- (iv) to identify new strategic priorities that will have the biggest impact on increasing the economy's potential growth.

Making this a reality involves the Government adopting policies across several headings.

#### **Priority objective of growing employment**

The Strategy focuses on the priority objective of growing employment through further improvements in competitiveness and ensuring the unemployed are supported to take up new work opportunities. The overarching aim is to make Ireland the best small country in which to do business and to return to full

employment. The key action areas to make this a reality are through creating an environment conducive to job creation and innovation; helping the unemployed back to work; meeting the future skill needs of the economy and increasing competition through better regulation.

### **Tax system**

The Strategy will ensure the tax system meets the twofold objectives of funding the provision of efficient and targeted public services while encouraging well-balanced economic growth. To this end, a number of specific overriding guidelines and principles will be observed over the next seven years including: the avoidance of increases in income tax rates to the greatest extent possible consistent with meeting our fiscal obligations; ensuring that work pays and maintaining our steadfast commitment to the Corporate Tax rate of 12.5%.

### **Financing Growth**

In relation to Financing Growth, the key Pillars and Strategies to achieve a well-financed Economy include completing the restructuring of the Irish banking sector and the restoration of public trust in and relationships between banks and their personal and business customers and strengthening its role in providing finance. In addition, the key intermediary and transmission roles of banks and encouraging activities in partnership with other financial institutions and technology companies will be reasserted.

### **Deleveraging of Household Debt**

In relation to the need for deleveraging of household Debt the Strategy provides for full and swift implementation of the Government's mortgage arrears strategy incorporating four distinct but interrelated areas – Personal Insolvency, a Mortgage Advisory Service, the Mortgage to Rent Scheme, and engagement with the Banks. More generally, the economic growth and increasing employment levels resulting from the Strategy will stabilise and increase household incomes to allow for deleveraging of excessive debt levels.

### **Non-Bank Funding**

In relation to Non-Bank Funding the Strategy will promote and support initiatives to expand the number of lenders in the Irish market and to kick-start securitisation and aggregation of loan pools. It will also encourage private sector investment as the predominant source of seed capital, venture capital and growth funding as well as ensure that SMEs operating in Ireland can source funding to grow to scale leveraging capacities on stock markets locally and internationally.

### **Ireland Strategic Investment Fund / Supranational Banks**

Following the enactment of legislation to put the Irish Strategic Investment Fund (ISIF) and NewERA on a statutory footing, additional financing will become available for SMEs and strategic infrastructure. Provided sufficiently competitive funding can be secured, this additional source of financing will be further developed to establish a Strategic Investment Bank tailored to meet the financing needs of a dynamic innovation orientated economy. A platform will also be developed to provide finance for the growth of the export sector.

### **Debt Restructuring**

In relation to Debt Restructuring the Strategy will provide for an improved bankruptcy and corporate insolvency framework for companies with a reasonable prospect of survival, including providing easier access to the courts. This should enable more viable businesses to restructure their debts and grow in the future. As well as this, it will introduce standardised debt restructuring options for SMEs and provide for

an SME Equity Investment Fund to repair the balance sheets of viable but constrained businesses through a combination of equity investment and debt restructuring.

### **Infrastructure Project Pipeline**

Under the Strategy the Government will continue to operate a multi-annual budgeting approach to infrastructure investment and publish 5-year Exchequer investment envelopes. A new infrastructure investment framework will be published in 2015 following a review of Exchequer infrastructure requirements. This will include consideration of the use of Public Private Partnerships as a delivery mechanism where appropriate.

### *European Developments*

As we start a new year, it is opportune to take a look at the progress made in Europe over the last year. The year 2013 had a number of highlights in terms of Ireland's relationships in the EU, not least our very successful Irish Presidency of the EU. Our Presidency programme was based around three pillars that are of crucial importance to all of us – “stability, jobs and growth”. We worked hard and we delivered on all three fronts.

In dossiers relating to the Economic and Financial Affairs Council, we achieved results across a range of financial services files including the Single Supervisory Mechanism, the Capital Requirements Directive (CRD IV) and the Bank Resolution and Recovery legislation.

On economic governance, we reached agreement with the European Parliament on the ‘Two Pack’ measures and ensured the effective operation of the European Semester.

On taxation we made progress, including on the fight against fraud and tax evasion, Financial Transactions Tax (FTT) and savings taxation.

And finally, we oversaw the smooth implementation of the annual EU budget processes and reached an agreement with the European Parliament on the Multi-annual Financial Framework (MFF).

In July, we passed the baton to our Lithuanian colleagues and we congratulate them on the work that they did and for their many achievements over the last six months. I would also like to extend our good wishes to our Greek colleagues as they commence their Presidency, the final part of our trio programme.

In the EU, we have learned lessons from the mistakes of the past. Now it is important that we give due recognition to the steps that we have taken to significantly reform the way we do business, particularly in terms of banking and economic governance.

We have come a long way in terms of the Banking Union project and we welcome that another step was taken just before Christmas when Ecofin agreed a general approach on the Single Resolution Mechanism. It is essential agreed political objectives are delivered and that the link between the sovereign and the banks is broken.

In terms of economic governance, great strides have also been taken. We now have a suite of new rules, introduced through the Six Pack, the Two Pack and the Treaty on Stability, Coordination and Governance. These new rules are being implemented through the European Semester process and are leading to improved decision-making which, in turn, should deliver a more robust Economic and Monetary Union.

We are already seeing the changes in the way policy is developed and implemented in the EU - the special meeting of the Eurogroup in November to discuss the draft budgetary plans of Member States was



one very visible example of the advances made. Our task now is to ensure that these new processes are fully embedded into our national and EU systems in order to ensure that the desired and required results are delivered.

#### *EU/euro area economy*

As many of you know, the exporting sector is a key source of growth for the Irish economy, especially at present when deleveraging and other headwinds will limit the scope for growth in domestic demand.

In this context, there appears to be light at the end of the tunnel. Economic activity in the UK - a key export market for Ireland, particularly in relation to the agri-food sector - continues to strengthen, with quarterly growth in third quarter of 0.8%, and other data for the final quarter have been reasonably encouraging. Across the Atlantic, the underlying growth dynamics in the US remain reasonably robust with the quarterly pace of GDP growth reaching 1.0% in the third quarter of last year.

In the euro area, growth rates moved back into positive territory in the second and third quarters of last year and the expectation is that activity is set to become more domestically-driven and more robust this year and next. That said, deleveraging, financial market fragmentation, and heightened uncertainty will continue to weigh on economic activity in the near-term.

Notwithstanding the improvement in key regions since the second quarter of last year, risks remain tilted to the downside. In the euro area, in particular, important challenges remain. Structural reforms are urgently needed, and while there has been substantial progress in recent years, further strengthening the architecture of the monetary union is required.

#### *Conclusion*

As a small open economy Ireland is more exposed than most countries to international economic conditions. We are at once buffered or propelled by economic developments in the UK, US or in our other trading partners. We cannot force a more rapid European pace of recovery. What we can do and must ensure is that, when the prevailing international headwinds abate – as appears to be the case in the UK and US – Ireland will be well-positioned to benefit from the international upturn.

I hope my remarks have given you an appreciation of the substantial progress that Ireland has made and how we are positioning ourselves for significant and, crucially, sustainable economic growth into the future.

In conclusion I thank the European Commission for organising tomorrow's seminar, one which I trust will provoke stimulating and valuable discussion and deliberation.

Thank you.



## INTRODUCTORY REMARKS BY GOVERNOR PATRICK HONOHAN

### **Ireland's EU-IMF Programme: Delivering what it said on the tin<sup>1</sup>**

#### *Introduction*

The EU-IMF programme of financial support for Ireland, negotiated in November 2010 and with the final tranches of lending being completed about now, delivered what it said on the tin. Amid turbulent market conditions, it provided a safe harbour into which Ireland was able to retreat, in order to clarify its ability and determination to deal with the severe financial problems that had so destructively erupted during the global financial crisis in September 2008. Those problems had their origin in the Irish property bubble that had already begun to deflate a little earlier, and which had not only generated the huge latent banking losses that have been so much discussed, but also incubated severe fiscal and macroeconomic imbalances.

The key to the return of market confidence to the extent that now exists has undoubtedly been rigorous adherence to fiscal goals. Over the three years, a continuation of the momentum of fiscal adjustments already initiated in 2008 has brought the public finances back within striking distance of EU norms. The debt-to-GDP ratio has reached a peak and is on target to fall in the coming year. Economic growth, albeit modest, has returned on a broad front; both full time and part-time employment have been growing for many months now. Residential property prices in the capital have bounced back a little from their lows of two years ago, and have on average been broadly stable in the rest of the country also for some months. Later I will speak a bit about how far the economy is nevertheless away from where we need it to be. But it cannot be denied that, reflecting both policy and general economic conditions, market confidence in Irish creditworthiness is higher than at any time since well before the Greek crisis developments of May 2010. It was not always obvious that this restoration of market confidence was going to work out. The IMF staff appraisal of the initial programme proposal in December 2010 emphasized that the risks were high. And, after the programme began, the euro area slipped into a second dip recession which had its effect in slowing the Irish recovery. The cumulative change in GDP, consumption and employment over the three years may have been as much as 2 percentage points lower than projected (though GNP did not undershoot by much), and we end with an unemployment rate at around 12½ per cent instead of coming in below 12 per cent as was expected. Still, compared with the experience of other countries, the macroeconomic and especially the fiscal outcome have been notably close to projection, and the macroeconomic shortfalls seem attributable to the disappointing external factors and not to any miscalculation about the inevitable extent to which the fiscal contraction would dampen the recovery (relative to the infeasible alternative of unchanged fiscal stance). In addition to fiscal discipline, improved financing terms that emerged in various manners in the course of the programme represented a major contributing factor to the improvement in debt sustainability and in market confidence, enabling the Irish state to fund itself in the coming years. In my remarks this morning, I will concentrate on the matters where the Central Bank was most closely concerned, namely the broad liquidity, fiscal and debt issues and repair of the banking system. A large number of other policy areas have seen action, consistent with what was set out at the start. Many of these would no doubt have happened in time, given that they had been long on the national policy agenda; some were no doubt accelerated. My overall impression is that most of the specific measures urged on the Government by Troika staff as the programme unfolded were sensible or inevitable; few were really bad ideas. And, as had been foreseen, the Government had a considerable leeway in choosing specific measures to meet the quantitative budgetary targets.

#### *Going into the programme*

The contributing factors to Ireland becoming the second euro area country to seek the protection of a loan from the IMF and European partners included fiscal and banking factors, and a market reappraisal of Europe's attitude to sovereign bondholder bail-ins. On the fiscal side the market began -- by the second half of 2010 -- to realize that, despite significant fiscal adjustment since late 2008, the Government's budget remained widely unbalanced since tax receipts had collapsed in the immediate aftermath of the

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<sup>1</sup> This speech has already been published by the ifo Institutue. See CESifo Forum (2014), Vol. 15, No. 2, p.3-7.

property bust, and with the additional spending costs related to the associated surge in unemployment. Announced budgetary plans were not going to close this gap. The scale of banking losses, already acknowledged by April 2010 to imply a net budgetary cost in the tens of billions, also continued to creep up during the summer, especially noticed after the Government finally decided to wind-down Anglo Irish Bank. The degree to which property-backed lending had distorted the banks' balance sheets meant that placing a credible bound on potential future losses was hard: the potential for tail risks to generate losses that might be unaffordable for the Exchequer to cover could not be convincingly ruled out. When a huge block of Government-guaranteed banking debt matured in September, the banks required much more central bank refinancing; not surprisingly, the ECB also began to focus on the Irish outlook with increased concern. Talk of default in many quarters added to market anxiety and an outflow of deposits resumed, with about €100 billion (almost three-quarters of that year's GNP) leaving in the course of the year, the bulk of it in the last five months, and a good segment financed by emergency liquidity assistance.

With the Deauville agreement (on future EU policy with regard to sovereign creditor haircuts) casting further doubt on the sovereign's ability to continue to underpin both the continuing part of the banking guarantee and its bond issuance, Irish credit spreads moved out to unsustainable-looking levels<sup>(2)</sup>. With all of these factors, by early November, it was clear that the protection of an official programme would be needed to enable the Government's spending programme (which by then had been revised to deliver a convergent path for the public finances) to be maintained.

#### *Changing terms of Government debt in the programme*

As initially agreed, the programme disappointed the Irish negotiators in a number of dimensions, especially the rate of interest and the other side's inability to factor in the banking risks in a way that would break the pernicious link between the sovereign and the banks, a link which continued to inhibit the funding of both. Had the stress test of 2011 obliged the Government to inject as much as €35 billion into the banks (as was pencilled-in by the Troika staff) – more than twice the figure finally struck in March 2011 – the sustainability of the Government's debt profile would have been even weaker.

As we said publicly and privately at the time, alternative financing approaches, such as an insurance scheme against extreme loan losses, or a direct recapitalisation by a European entity, would have allocated risk more efficiently. But they were ruled-out by the other side, who argued that no mechanism was available to accomplish this. That was certainly the case for the IMF. Arguably, though, it would have been an appropriate time for further European institutional innovation. Actually, had a European entity invested an equity stake, it could have also used its own strong balance sheet to engineer<sup>(3)</sup> much lower funding costs of the banks; and it would have had an incentive to do so as it would thereby have generated a sizable additional upside potential to the profits from its equity investment. This opportunity was not taken.

More generally, forgoing -- or at least lacking -- the enhanced risk-sharing that such mechanism would have afforded, the lenders proceeded with a programme which, at the outset, had less favourable debt sustainability than was possible to achieve. Accordingly, the lenders entered into what was in fact a riskier situation for them than necessary, although we can now say that this risk has not materialized.

The interest rate initially charged on the European funds was in part modelled on the IMF lending rate conventions, which envisage a sizable spread over the cost of funds. That is what had been set for Greece in May 2010 and it was presented to the Irish negotiators as non-negotiable. Whereas for developing

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<sup>(2)</sup> Deauville came just after the market had relaxed following the build-up of uncertainty with the big guaranteed bank debt repayments at end-September. To be sure, the post-Deauville impact on spreads was not as large as spread movements that were seen later in the euro crisis, but it was enough to move Ireland very much into the danger zone.

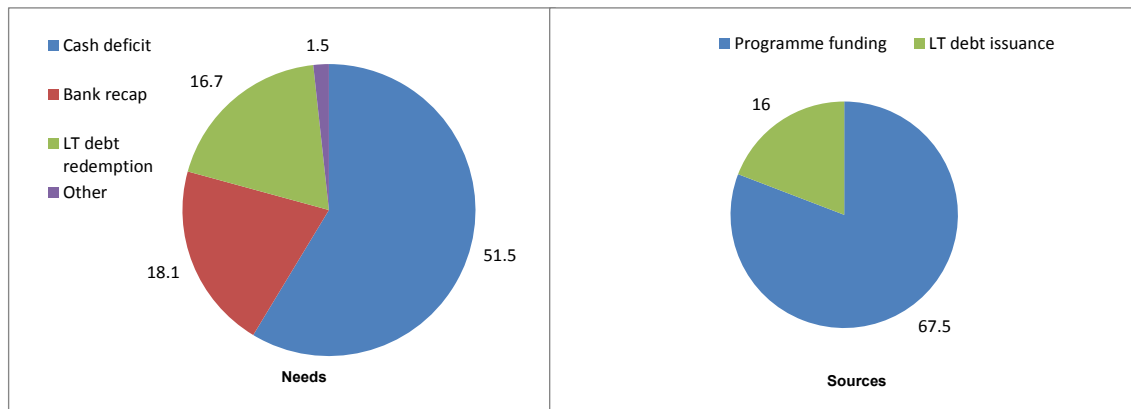
<sup>(3)</sup> For example by adding its guarantee to mortgage-backed securities.

countries such rates are typically attractive and sustainable given the modest debt ratios that generally prevail, applying them to the levels of indebtedness involved in the European loans was always going to be problematic. All calculations (including those published by the IMF at the programme's outset), indicated serious sustainability concerns at the terms offered.

I will not review here again the vexed question of guaranteed and unguaranteed bank debt. Suffice it (in the present context) to say that the relevant unguaranteed Irish bank debt that was still outstanding in November 2010 was left to mature, and largely did so before official Europe had finally accepted a more incentive-compatible understanding of how the cost of bank failures should be allocated. The bulk of the Government indebtedness attributable to the bond-holder bailouts has, following the liquidation of IBRC (successor to Anglo Irish Bank), now been folded into a portfolio of very long-term floating-rate notes (issued in place of the non-transferable promissory notes, which would have been unsuitable instruments for the Central Bank to hold).

In the event, the €67.5 billion borrowed from the European and IMF sources almost covered the Government deficit from December 2010 to the end of 2013, of which about one-quarter represented cash bank recapitalisation. There were long-term Government debt repayments also in that period, but these were roughly balanced by new issues. This pattern is seen from the "sources and needs" table summarised in Figure 1<sup>(4)</sup>.

Graph 1: Funding needs and sources during the Programme



Source: NTMA

Indeed many countries experienced banking failures in 2008 of comparable absolute magnitude to that of the Irish banks. Like Ireland, each of Britain, Germany, the Netherlands, Spain, France and Belgium saw banking failures that required their governments to step in for €50 billion or even more. Given its smaller overall economy, however, such a sum, when combined with the sudden erosion of the tax base, proved to be more than Ireland's public finances could easily absorb. (Banking losses in Cyprus and Iceland were even larger than those of Ireland in relative terms).

Gradually, Europe began to realize the broad interdependence of member states, especially among euro area members in the banking sphere: poorly performing member economies contributed to heightened systemic risk and slower growth across the entire euro area. The single banking market and the single

<sup>(4)</sup> Which is based on the NTMA presentation at <http://www.ntma.ie/business-areas/funding-and-debtmanagement/funding-needs-and-sources/>. The pie chart excludes changes in cash balances and short-term borrowing; note also that "cash deficit" includes promissory note instalment payments.

currency implied such an interdependency and had encouraged policy thinking that focused on the euro area as a whole, and not on individual countries. Awareness of the interdependency led, fairly early on, to a lowering of the interest rate on the official borrowings from Europe and an extension of the maturities. When combined with the lengthy maturity of the floating rate notes issued by the Government in respect of the liquidation of IBRC, these new terms for a large fraction of official indebtedness (amounting to over 50 per cent of GDP) have made all the difference to debt sustainability calculations, both in terms of net present value, and also in terms of refinancing risk.

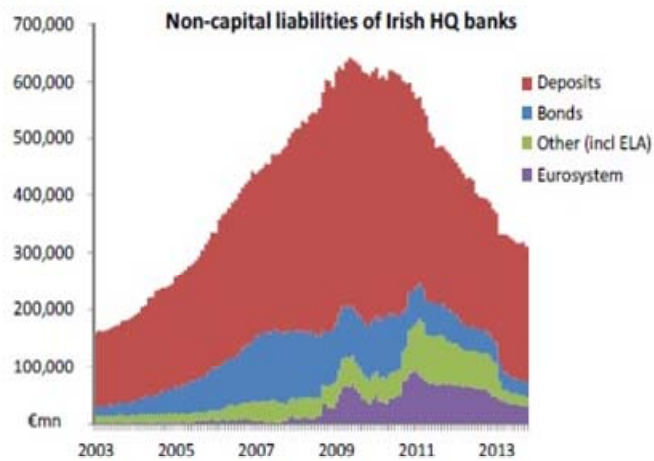
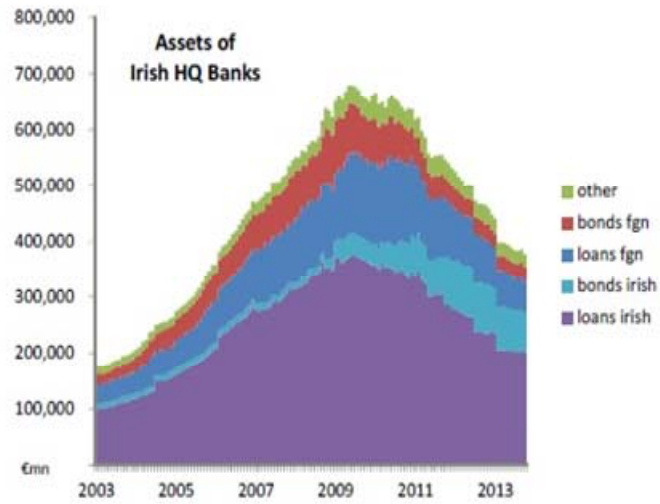
#### *The banks: liquidity*

What happened to all the money that flowed in during the 2000s? The answer can be expressed in different ways, and I will be selective here. From one point of view, the money flowed out again: the pension funds, insurance companies, banks, sovereign wealth funds and others who had invested in Irish bank bonds and wholesale deposits were repaid, at first out of borrowings made from the eurosystem, and then increasingly out of the realization and sale of assets and the repayment of loans made by the banks. Given all of the emphasis that has been placed on the different elements here, it is perhaps worth looking at the magnitudes. Figure 2 looks at the “Irish headquartered group” of credit institutions which is the most relevant for our purposes. There has been massive downsizing of this category of banks<sup>(5)</sup>. (There has also been downsizing of the other banks active in Ireland, but these are less central to the fiscal-banking nexus that has been at the heart of the Irish crisis, so I will not dwell on that here).

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<sup>(5)</sup> This downsizing has generally been labelled “deleveraging”, though I prefer not to use that term, as it could equally refer to a situation where total balance sheet size is maintained, but financed with a higher proportion of equity

Graph 2: Assets and non-capital liabilities of Irish HQ banks



Source:

A few points are worth noting from these figures. First, the relative importance of bonds and deposits: deposits very much larger at all time periods; bonds<sup>(6)</sup> disproportionately invested by foreign concerns. Second, the changing relative importance of foreign business on both the asset and liability side – growing up to the beginning of 2009, shrinking thereafter. Third, the way in which central bank financing was used effectively in the classic lender of last resort function during the crisis.

#### *The banks: troubled loans*

As was already foreseen at the outset of the programme, repairing the banks is a lengthy process. At first, negotiators on the other side were inclined to wonder why more action had not already been taken. But already by the time the programme had been negotiated, they realised that this was going to take time. As IMF staff put it at that time: “The critically weakened banking sector can be returned to health only at a calibrated pace.”

Indeed, the textbook first steps: triage the viable banks from the nonviable; recapitalize the former, and resolve the latter; were hampered both by the straitjacket created by the guarantee, and by the potential scale of needed recapitalization, and its threat to the Sovereign.

This meant no asset fire-sales, and the target, ultimately achieved, of sharply reducing the loan-to-deposit ratio was kept under review, not least to try to prevent the outbreak (frequently threatened) of a destructive deposit price war. On the other hand, for example, the other side’s insistence that deposits should be promptly transferred out of the two fatally damaged banks, Anglo and INBS, actually suited the authorities’ intention to wind these entities down as soon as the guarantee (which had effectively precluded such action) had ended.

Had there been sufficient fiscal headroom, or if the damage had been limited to a segment of the banking system, instead of infecting it all, more drastic de novo approaches to establishing a well-functioning banking system might have been available options.

In the event, even injecting the proposed amount of capital in mid-2011 presented fiscal risks. Although seen as newly flush with capital, the banks still lacked the confidence of the market, which saw the fiscal situation as an over-arching threat to the banks. Paradoxically, the attempt to strengthen the banks by sharply recapitalising was sufficiently credit negative for the sovereign as to limit at first improvement in the banks’ access to the market.

Only after sufficient further consolidation of the fiscal position (and a stabilization of the wider situation in the euro area) did the market’s assessment of the creditworthiness of both sovereign and banks improve.

That said, other parts of the banking repair have taken much longer than expected. Even with Troika pressure the complex bankruptcy law reforms have come slowly; and on the ground, the mortgage arrears and wider impaired assets problems are only now showing clear signs of coming under control. These represent the major unfinished business as Ireland exits the programme. Progress is being made, and more is needed before the banks can be regarded as restored to fully effective and self-reliant operation. We will not relax in this area.

#### *Conclusion*

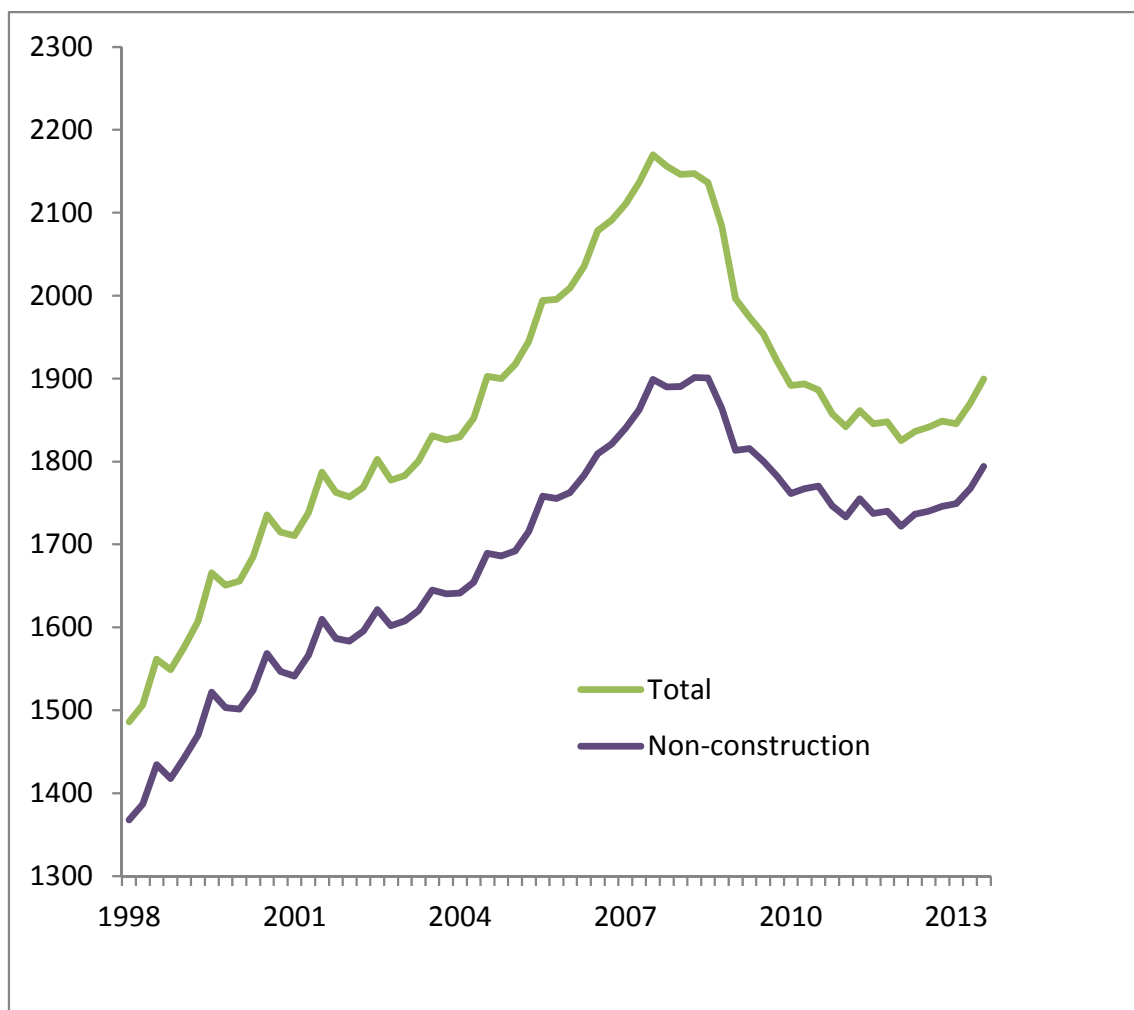
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<sup>(6)</sup> This term includes a wide range of different instruments, such as commercial paper, certificates of deposit, and notes as well as “own-use” bonds issued with a government guarantee and either held as an asset or employed in repo transactions. So there are a number of definitional complexities here.



So where has the Irish economy arrived in macroeconomic terms after three years of the programme? Perhaps the best single picture for illustrating the pattern of macroeconomic stabilization is Figure 4 which shows that aggregate employment started growing again in 2012 and suggests that this resumes a gradually slowing trend that was in place for more than a decade before interrupted by a construction related surge in the mid-2000s. To those who wish to get back to the favourable and soundly-based economic conditions of the late 1990s, this is probably the most encouraging indicator. There is plenty of scope for disagreement on the quantification, but the pattern is likely to be valid.

Graph 3: Ireland: Employment, construction and total (1998 – 2013, thousands)



Source: CSO

At the same time the figure also hints at how far below previous trend and medium term potential the economy remains at this point. Unemployment, albeit moderated by emigration and labour market exit, stands at 12.4 per cent.

In any assessment of the major macroeconomic adjustments that have occurred, the impact on income inequality needs to be taken into account. Actually, we don't yet have the comprehensive survey figures on this for 2012, but, while the available statistics indicate that the downturn has had a broadly similar

average percentage effect on incomes across the distribution,<sup>(7)</sup> an equal proportionate reduction in incomes of course hits lower income groups harder: there has been a substantial increase in the proportion of poor households suffering deprivation in the years since the crisis broke. A return to higher levels of employment will be a macroeconomic key to reversing this situation.

The crisis will have a lasting unfavourable legacy. The accumulation of debt, public and private, will continue to weigh on growth prospects in a variety of ways. And many households are being affected by long term unemployment. But the damage can be ameliorated by a variety of means, including work on labour market activation and continued improvement of fiscal policy and measures.

Limiting the legacy damage is also the rationale for the Central Bank's persistence in pressing the banks, in accordance with our mortgage arrears resolution strategy and targets, to accelerate their work to ensure that non-performing loans are brought back into performing status, and dealing with over-indebtedness by moving to sustainable solutions. These are tasks which remain work in progress, though progress that is now accelerating.

In cushioning the impact of the loss of market confidence resulting from the crisis, the programme did no more and no less than was promised on the tin. The rest is up to us.

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<sup>(7)</sup> At least if we are to go by the CSO SILC survey results stating that, in 2010-2011, the Gini coefficient was the same or even a little better than the levels that prevailed in the years before the crisis.

# PART 1

## IRELAND'S MEDIUM-TERM GROWTH PROSPECTS: A PHOENIX RISING?

Nicholas Crafts, CAGE

### **Abstract**

This paper considers Ireland's growth prospects through 2030. Real GDP growth averaging 3 per cent per year is possible but will require a stronger labour productivity growth performance than is currently projected by OECD. Success depends on a favourable external environment and would be jeopardised by a return to the pre-crisis 'bubble economy' but can be underpinned by exploiting the remaining scope for catch-up growth. 'Appropriate growth theory' provides a useful lens through which to review Ireland's growth policy and performance as a 'close-to-frontier' economy and this underlines the importance of further strengthening and rationalizing innovation policies.

This version of the paper has been updated since its presentation at the conference to reflect comments received. I am grateful to participants and especially to my discussants, Kevin Daly and John Martin, for helpful comments. An anonymous referee made useful suggestions. I have also received significant help from Frank Barry and Philip Lane. The usual disclaimer applies.

## *Introduction*

The objective of this paper is to review medium-term growth prospects for Ireland in a context where it is generally agreed that the level of potential output has been significantly reduced by the financial crisis but it is still not clear what, if any, are its implications for the trend growth rate. The analysis is based on the related propositions that insights can be obtained from growth economics and that supply-side policy matters for growth performance.

The proximate sources of growth can be found in rates of increase of factor inputs including capital, human capital and hours worked and of the productivity of those inputs. At a deeper level, economics highlights the importance of micro-foundations of growth in terms of the key role played by the incentive structures which inform decisions to invest, to innovate and to adopt new technology and which depend on an economy's institutions and its policy framework but are also influenced by circumstances beyond policymakers' control such as the scope for catch-up growth.

These general ideas can usefully be applied to Ireland but it is also important to take into account aspects of the Irish economy which to some extent make it a special case. Key features which have made pre-crisis Irish economic growth distinctive include a very high degree of openness and, linked to this, an unusual reliance on foreign direct investment, a relatively large ICT production sector and migration flows which are characteristic of a 'regional economy'. The 1990s saw a remarkable, *sui generis*, growth spurt in the 'Celtic Tiger' phase as Ireland seemed to benefit more than most economies from globalization.

Against this background, the key question to be addressed is how far it may be possible to return to, or even to improve upon, the growth rates observed in the early 21<sup>st</sup> century before the crisis. The paper proceeds as follows. In section 2, key ideas are briefly reviewed before in section 3 the contours of growth in the 20 years or so prior to the crisis are described. Section 4 turns to medium term-growth projections by OECD and, in particular, considers prospects for both employment and productivity growth. Some policy implications of this review are drawn out in section 5. Section 6 concludes.

## *Appropriate Growth Theory*

As an identity, a country's output equals the amount of labour inputs employed multiplied by average labour productivity. In terms of growth rates it follows that:

$$\Delta \ln Y = \Delta \ln L + \Delta \ln(Y/L) \quad (1)$$

The growth of employment will reflect labour force participation as well as labour force growth. For Ireland, net migration is, of course, an important aspect of labour force and employment growth.

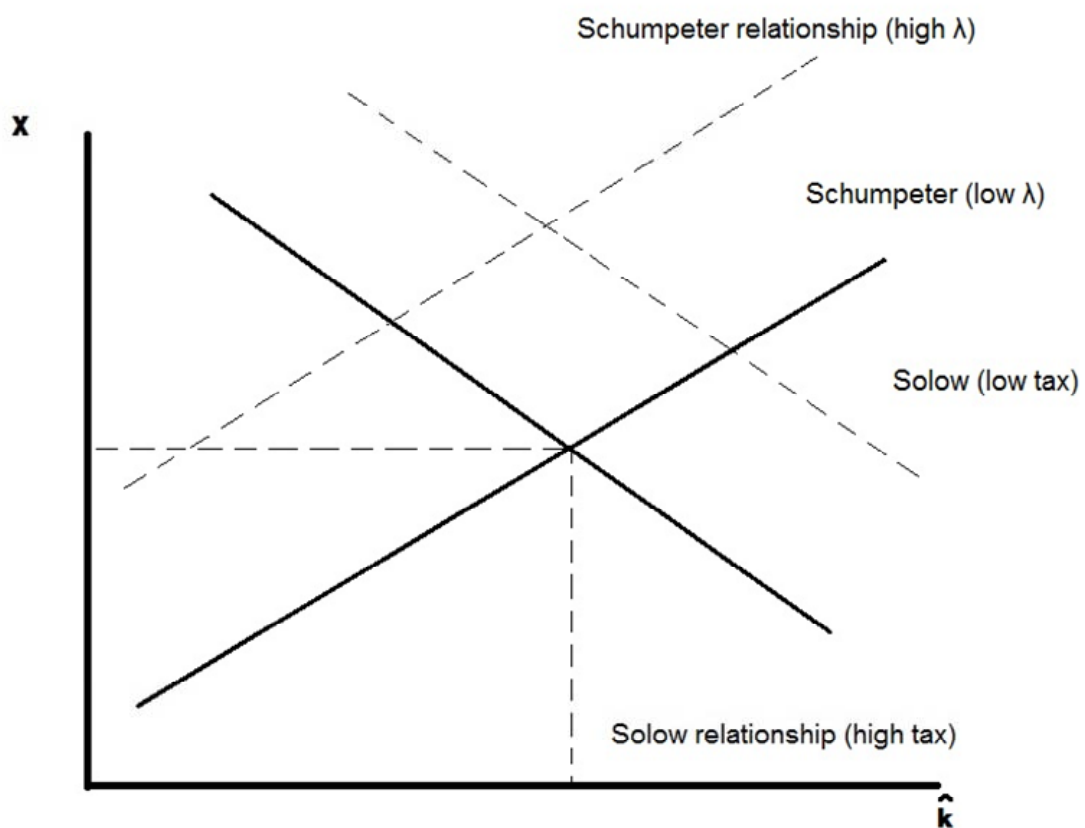
In traditional neoclassical economics the standard expression for the proximate sources of labour productivity growth can be written as follows:

$$\Delta \ln(Y/L) = \alpha \Delta \ln(K/L) + \Delta \ln A \quad (2)$$

This gives a decomposition of the percentage rate of growth of labour productivity into contributions from the percentage rate of growth of capital per labour input (capital deepening) and from the percentage growth rate of total factor productivity (TFP). If this formula is linked to the steady-state growth path of the neoclassical growth model, since in equilibrium the capital and output to labour ratios grow at the same rate, then the labour productivity growth rate is predicted to be  $\Delta \ln A / (1 - \alpha)$  and the usual interpretation of the model is that capital stock growth will adjust to match the exogenously determined

rate of TFP growth. A further prediction of the neoclassical model is that in the steady state, growth is independent of the rate of investment. Increased investment will, however, raise the level of capital and output per worker and there will be a temporary increase in the growth rate of both the capital stock and of output as the economy adjusts to these new levels.

Graph 1.1.1: Endogenous Growth



Modern growth economics based on the idea of endogenous innovation modifies this set-up by making TFP growth endogenous. The key ideas are captured in Figure 1, which is adapted from Carlin and Soskice (2006), in which  $x$  is the rate of (labour-augmenting) technological progress and  $\hat{k}$  is the capital to effective labour ratio. Here the downward-sloping (Solow) line represents the well-known inverse steady-state relationship between technological progress and the capital-intensity of the economy for a given savings rate in the neoclassical growth model.<sup>(8)</sup> The upward-sloping (Schumpeter) line reflects

<sup>(8)</sup> The intuition for the Solow line is as follows. Steady-state growth means that the rate of growth of the capital stock is equal to the rate of growth of the labour force plus the rate of growth of labour-augmenting technological progress ( $\Delta K/K = \Delta L/L + x$ )

the endogeneity of technological progress based on the assumption that with a higher capital (and output) to labour ratio stimulates innovation through increases in market size, inter alia. The equilibrium rate of technological progress is established by the intersection of these two lines and, in turn, this determines the rate of economic growth.

Figure 1 implies that the rate of innovation increases when either the Solow and/or the Schumpeter line shifts upward. In the former case, this will be the result of an increased rate of investment which in this model does have growth rate effects. In turn, investment will respond to changes in the economic environment which affect its expected profitability such as the corporate tax rate. In the latter case, 'higher  $\lambda$ ' will be the result of an increase in innovative effort for any given market size which will reflect such changes as greater technological opportunity, lower R & D costs, increased appropriability of returns, and intensified competitive pressure on managers. An important implication of Figure 1 is that the growth rate will be affected by institutions and policies both through their impact on technological progress and on investment.

Aghion and Howitt (2006) develop a Schumpeterian growth model which endogenises TFP growth and, in effect, seeks to explain  $\lambda$ . They assume that

$$Y/L = (K/L)^\alpha A^{1-\alpha} \quad (3)$$

and

$$\Delta A = \mu n(\gamma - 1)A + \mu m(A^F - A) \quad (4)$$

so that

$$\Delta A/A = \mu n(\gamma - 1) + \mu m(A^F/A - 1) \quad (5)$$

Here  $\mu n$  is the frequency at which 'leading-edge' innovations arise,  $\mu m$  is the frequency at which 'implementation' innovations arise and  $\gamma$  is a scaling factor. The second term takes  $\mu m$  to be a function of the TFP gap with the frontier economy and captures the idea that TFP growth depends in part on scope for catch-up. The actual rate of TFP growth depends on the size of  $\mu n$  and  $\mu m$  which Aghion and Howitt (2006) argue will reflect the quality of institutions and policies. This highlights an interesting distinction between 'close-to-frontier' and 'far from frontier' economies. Growth in the former (latter) will depend relatively heavily on  $\mu n$  ( $\mu m$ ). Accordingly, it is suggested that tertiary education and strong competition policies will matter more for close-to frontier economies which can only achieve strong TFP growth through high  $\mu m$ .

To apply the above models to Ireland, it is important to recognise the implications of its high degree of openness, especially with regard to factor flows. In the neoclassical case, the transitory growth impact of an increase in investment will be stronger and of longer duration because the endogeneity of the labour force reduces the effect of diminishing returns to capital. Similarly, an increase in TFP will attract inflows of capital and labour to re-establish equalization of factor rewards at the margin while a negative labour market shock will have the opposite effects (Barry and Devereux, 2006). In the endogenous innovation model, the tendency for positive shocks to raise market size by more will make the Schumpeter line steeper and thus have a stronger positive effect on the rate of innovation.

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and  $\Delta K/K = sY/K$ . So, capital stock growth is inversely related to the average product of capital. In the neoclassical model, it is assumed that marginal and average product of capital fall as the capital to labour ratio increases so the rate of growth of the capital stock is inversely related to the capital to labour ratio. In equilibrium faster technological change requires faster capital stock growth and for a given value of  $s$  this requires a lower capital to labour ratio. Hence the slope of the Solow line.

These aspects gain added salience in the context of financial crises which can certainly be expected to have adverse effects on the level of potential output. These can arise through reductions in labour inputs, perhaps through hysteresis effects in the labour market, through reduced levels of capital per worker consequent on impairment of the banking system and higher real interest rates, and through lower levels of TFP as innovation is interrupted (Oulton, 2013). Each of these effects will tend to be amplified by the response of factor flows in the Irish case.

The long-run growth rate effects of banking crises are less clear but in theory they are likely to be negative, at least in the context of the endogenous innovation model in Figure 1 where there could be adverse shifts in either or both curves. These may come from the fiscal implications of a legacy of increased public debt to GDP ratios and structural budget deficits or through adverse implications of higher public debt for the equilibrium capital to labour ratio (Checherita and Rother, 2010). A further possibility is that the policy response to the crisis entails modifications to supply-side policies which lower  $\lambda$ , for example, through a lurch to protectionism (Crafts, 2013).

#### *Irish Economic Growth: the Rise and Fall of the Celtic Tiger*

The Celtic Tiger years comprise the period from the late 1980s till the turn of the 21<sup>st</sup> century. Growth performance for that period is reported in Table 1. It is generally agreed that GNP is a better measure of output for Ireland than GDP because of the distortions resulting from transfer pricing by multinationals. Labour productivity growth in terms of GNP per hour worked averaged 4.0 per cent per year during the 1990s. Based on strong growth in employment, hours worked grew at 2.8 per cent so that real GNP increased by an impressive 6.8 per cent per year. Growth rates of this magnitude have only previously been observed in Western Europe during the postwar Golden Age. Growth accounting estimates are also displayed in Table 1.1.1. These estimates are based on a modified version of equation (2) which takes into account the contribution of education to labour quality. Here the standout feature is a strong contribution from TFP growth.

Table 1.1.1: Growth of Real Output and Labour Productivity (% per year)

<b>Growth Rates</b>						
	<b>GDP</b>	<b>GNP</b>	<b>Hours</b>	<b>GDP/HW</b>	<b>GNP/HW</b>	
1990-2000	7.5	6.8	2.8	4.7	4	
2001-2007	5.1	4.1	2.8	2.3	1.3	
2008-2012	-1.3		-2	-3.8	2.5	1.8

<b>Accounting for Growth of GDP/HW</b>					
	<b>K/HW</b>	<b>Labour Quality</b>	<b>TFP</b>	<b>GDP/HW</b>	
1990-2000	1.2	0.2	3.2	4.7	
2001-2007	2	0.4		-0.1	2.3
2008-2012	3.2	0.2		-0.9	2.5

Source: The Conference Board Total Economy Database

At the start of the Celtic Tiger period, Ireland had considerable scope for catch-up growth. In 1987 labour productivity was 48 per cent of the US level and only just above 50 per cent of the European leaders. Unemployment was 17.2 per cent of the labour force. Ireland had underperformed in the Golden Age partly because it was slow to abandon protectionism, had a malfunctioning labour market, and went through a period of macroeconomic disarray prior to a successful stabilization in the late 1980s. As appropriate growth theory suggests, the catch-up of the 1990s was not automatic but depended on favourable supply-side policies and good institutions. It was also predicated on the continuing globalization that characterised the late 20<sup>th</sup> century.

Rapid growth in employment in the 1990s came from a combination of large reductions in unemployment which had fallen to 4.6 per cent by 2000, a change in net migration flows that saw the tradition outmigration turn into net inflows that amounted to 67,000 between 1987 and 2000, and rising labour force participation, especially of women. The period saw a large reduction in the NAIRU underpinned by wage moderation under the auspices of social partnership and increases in human capital per worker (Bergin and Kearney, 2004; Walsh, 2004). In the context of favourable shocks to labour demand, an elastic labour supply prolonged the boom (Barry, 2002).

A central aspect of the Celtic Tiger economy was the prominence of foreign direct investment (FDI). Already by the early 1980s the stock of inward FDI per person was far ahead of the EU15 average (Table 1.1.2). 'Export-platform' FDI transformed Ireland's revealed comparative advantage, dominated



production in high-skill and knowledge-intensive sectors, and by 2000 accounted for almost half of manufacturing employment and 80 per cent of manufacturing exports (Barry, 2004). Overall, the side-effects of FDI were modestly positive in terms of employment creation in indigenous businesses (Gorg and Strobl, 2005) and labour productivity in domestic firms (Ruane and Ugur, 2005). A major result of FDI was a very large ICT production sector which accounted for a much higher share of gross output than in any other EU country, including Finland, and contributed a little over 2 percentage points per year to TFP growth during the 1990s (van Ark et al., 2003).<sup>(9)</sup>

Table 1.1.2: Inward FDI Stock/Person (current \$)

	<i>Ireland</i>	<i>UK</i>	<i>EU15</i>
1985	9091	1131	780
2000	33252	7820	5898
2012	63127	20928	17609

*Source:* UNCTAD, World Investment Report (various issues)

<sup>(9)</sup> Exports of ICT production were associated with declining net barter terms of trade which implied that real national income grew less rapidly than real GNP by around 1 percentage point per year (Crafts, 2005).

Table 1.1.3: PMR (Product Market Regulation, 0-6), EP (Employment Protection, 0-6) and DB (Ease of Doing Business, Ranking)

	<b>PMR 1998</b>	<b>PMR 2008</b>	<b>EP 1998</b>	<b>EP 2013</b>	<b>DB 2013</b>
Austria	2.25	1.38	2.75	2.37	30
Belgium	2.13	1.37	1.76	1.81	36
Denmark	1.52	0.99	2.13	2.2	5
Finland	2.01	1.12	2.31	2.17	12
France	2.45	1.39	2.34	2.38	38
Germany	2	1.27	2.68	2.87	21
Greece	2.91	2.3	2.8	2.12	72
Ireland	1.59	0.86	1.44	1.4	15
Italy	2.53	1.32	2.76	2.51	65
Netherlands	1.59	0.9	2.84	2.82	28
Norway	1.83	1.15	2.33	2.33	9
Portugal	2.18	1.35	4.58	3.18	31
Spain	2.47	0.96	2.36	2.05	52
Sweden	1.86	1.24	2.7	2.61	14
Switzerland	2.41	1.12	1.6	1.6	29
United Kingdom	1.01	0.79	1.03	1.03	10
Czech Republic	2.93	1.56	3.31	2.92	75
Estonia		1.24		1.81	22
Hungary	2.17	1.23	2	1.59	54
Latvia				2.69	24
Lithuania					17
Poland	3.86	2.2	2.23	2.23	45
Slovakia		1.54	2.47	1.84	49
Slovenia		1.38		2.6	33

(1) Employment protection is for regular employment

Source: OECD Product Market Regulation database and Employment Protection database; World Bank Doing Business 2014 database.

A major factor in Ireland's success in attracting FDI has been the corporate tax regime starting with the Export Profit Tax Relief introduced in the 1950s. It is clear from the literature that the semi-elasticity of FDI with respect to the corporate tax rate is quite high, perhaps of the order of -2.5 or even -3.5 (OECD, 2007). At the start of the Celtic Tiger period the Irish tax rate for manufacturing FDI was easily the lowest in Europe and a study by Gropp and Kostial (2000) suggested that the stock of American

manufacturing investment in Ireland was about 70 per cent higher than if Ireland had had a tax rate equivalent to the next lowest in the EU. As trade costs fell, the impact of low taxes on FDI appears to have been accentuated significantly and their relative importance for location compared with proximity to demand increased (Romalis, 2007).

Table 1.1.4: Effective Average and Effective Marginal Corporate Tax Rates (%)

	EATR 2000	EMTR 2000	EATR 2012	EMTR 2012		EATR 2000	EMTR 2000	EATR 2012	EMTR 2012
Austria	29.1	17.9	21.6	13.1					
Belgium	33.2	17.1	16	13.5	Czech Republic			16.1	8.3
Denmark	28.2	19.8	22.4	16.3	Estonia	31.1	38.6	25.2	32.2
Finland	26.1	19.6	22	16.2	Hungary	16.1	6.2	18.6	12.5
France	32	19.2	29.8	17.9	Poland	25.5	14.8	16.7	10.7
Germany	32.8	17	27	18.2	Slovakia			15.8	7.3
Greece	32.3	13.5	16.1	5.2	Slovenia	19.6	4.5	15.7	9.7
Ireland	8.8	11.1	5.3	7.3					
Italy	33.8	16.3	23	-10					
Netherlands	30.4	20.4	19.1	8.1					
Norway	25.6	20.5	25.9	21.5					
Portugal	29.2	14.8	25.2	14.9					
Spain	34	20	30	18.2					
Sweden	24.7	17.2	23.2	16					
Switzerland	30.9	19.5	24.9	22.6					
United Kingdom	26.9	20	24.8	22.2					

Source: Oxford University Centre for Business Taxation Corporate Tax Database

Growth performance for the post-Celtic Tiger pre-crisis period of 2001-7 is also reviewed in Table 1.1.1. Growth in hours worked continued at a similar pace. There was no further contribution to employment growth from a falling unemployment rate but the contribution of immigration to labour force growth strengthened with 338,000 non-Irish employed in 2007 compared with 59,900 in 2000. Growth of real GNP and of labour productivity slowed down quite markedly, from 6.8 to 4.1 per cent per year and from 4.0 to 1.3 per cent per year, respectively. This was entirely accounted for by a sharp decrease in TFP growth from 3.2 to -0.1 per cent per year which more than offset bigger contributions from physical and human capital deepening. In a tight labour market, slackening productivity growth and wage inflation were accompanied by a marked reduction in international competitiveness with the ECB index based on relative unit labour costs standing at 128.1 in 2007Q4 (1999Q1 = 100).

By 2000, real GNP per hour worked was 65.5 per cent of the American level, quite similar to the relative position of leading European countries at the end of the Golden Age in the 1970s when their productivity growth slowed down by around 2.5 percentage points per year.<sup>(10)</sup> In each case there were big declines in TFP growth as scope for catch-up was reduced but even so TFP growth continued, albeit at a slower pace. So, Irish TFP growth post 2000 can only be described as very disappointing. Beyond reduced scope for catch-up, the reasons for this poor performance include a reduced contribution from the ICT production sector, a shift towards construction and non-market services which together accounted for 35.2 per cent of employment by 2007, and excessive capital-deepening which contributed to negative TFP growth in manufacturing.<sup>(11)</sup> The first was largely unavoidable as the weight of the ICT sector declined (Oulton, 2012) but the other two reflected policy errors. The loss of international competitiveness, which was a big factor in a major reduction in export growth (Nkusu, 2013) and held back output and employment

<sup>(10)</sup> Comparing 1950 to 1960 with 1970 to 1990, labour productivity growth fell by 2.45 percentage points per year in France and 2.48 in West Germany; TFP growth fell from 2.6 to 0.8 percent per year and from 2.0 to 0.7 per cent per year, respectively (Bosworth and Collins, 2003).

<sup>(11)</sup> The data in EUKLEMS show that in non-ICT manufacturing the capital to labour ratio grew at 9.6 per cent per year during 2001-7 while TFP growth averaged -1.3 per cent per year.

growth in manufacturing, reflected pro-cyclical fiscal policy and, in particular, growth of public consumption (Lane, 2009). The construction boom was fuelled by an explosion of mortgages and loans to property development (Whelan, 2014).

Table 1.1.5: Sources of Labour Productivity Growth in the Market Sector, 1995-2005 (% per year)

	<i>Labour Quality</i>	<i>ICTK/HW</i>	<i>Non-ICT K/HW</i>	<i>TFP</i>	<i>Labour Productivity Growth</i>
Ireland	0.2	0.4	2.1	1.8	4.5
Sweden	0.3	0.6	1.1	1.6	3.6
Finland	0.1	0.6	-0.1	2.6	3.2
UK	0.5	0.9	0.4	0.8	2.6
Netherlands	0.4	0.6	0.1	1	2.1
France	0.4	0.4	0.4	0.9	2.1
Austria	0.2	0.6	0.1	1.1	2
Portugal	0.2	0.6	1.3	-0.3	1.8
Belgium	0.2	1	0.4	0.1	1.7
Denmark	0.2	1	0.2	0.2	1.6
Germany	0.1	0.5	0.6	0.4	1.6
Spain	0.4	0.3	0.5	-0.8	0.4
Italy	0.2	0.3	0.5	-0.7	0.3
USA	0.3	1	0.3	1.3	2.9

(1) growth accounting with standard neoclassical formula adapted to distinguish to types of labour productivity measures in terms of hours worked (HW)  
*Source:* Timmer et al. (2010)

Table 1.1.5 highlights another surprising weakness in Irish productivity performance, namely, the relatively low level of ICT capital-deepening. At 0.4 per cent per year its contribution is lower than in any other country apart from Italy and Spain. In 2005, across the whole economy ICT capital per hour worked was only 13 per cent of the American level compared with the EU15 average of 51 per cent (Inklaar and Timmer, 2008). This is all the more surprising given that Ireland scores well in international comparisons for not having onerous regulation and for educational attainment of the labour force which are the variables that empirical analysis flags up as most important for the diffusion of ICT (Cette and Lopez, 2012). However, a closer look suggests a serious weakness in ICT skills in the Irish labour force; 24.2 per cent of 16-34 year olds in OECD's skills survey failed the ICT core test (OECD, 2013c).

As a relatively 'close-to-frontier' economy, it might be expected that the emphasis of Irish supply-side policy would change as the Celtic Tiger period came to an end and this was indeed the case. In particular, with a view to increasing the role of leading-edge innovations, Ireland increased support for R & D in a number of ways including the establishment of Science Foundation Ireland in 2000 to promote research excellence in ICT, biotechnology and, later, energy, introducing an R & D tax credit in 2004 and adopting

a target of 2.5 per cent of GNP by 2010 (Haugh, 2013). Payoffs from these policy moves would, however, take time.

#### *Medium-Term Post-Crisis Growth Projections*

The obvious starting point is the high-profile OECD modelling exercise, the most recent version of which is in OECD (2013a). The core of this approach is a conditional convergence framework in which there is scope for catch-up but the eventual steady state growth path on which productivity advance is at the rate of the leader allows for different levels depending on policies, institutions etc. It is assumed that the crisis has only had a levels effect – substantial in the Irish case – but no effect on the trend growth rate. Catch-up is accentuated in the case of countries with scope for structural reforms because it is assumed that they make steady progress towards best practice which has a productivity payoff. The aftermath of the crisis is assumed complete by 2018 after which actual growth matches potential growth.

The OECD projections for the period 2018 to 2030 are summarised in Table 1.1.6. Using the decomposition of equation (1), Ireland is projected to have real GDP growth at 3 per cent per year comprising 1.3 per cent employment growth and 1.7 per cent labour productivity growth. Both components are questionable and, *prima facie*, employment growth seems a bit optimistic and productivity growth a bit pessimistic.

Table 1.1.6: OECD Long-Term Growth Projections

	Potential Real GDP Growth (% per year)				Growth of Potential Real GDP/Worker (% per year)			
	2001-2007	2012-17 (actual)	2012-17 (potential)	2018-30	2001-2007	2012-17	2018-30	
OECD	2.1	2.2	1.9	2.3	OECD	1.3	1.3	1.8
Euro Area	1.7	1.2	1	2	Euro Area	0.8	0.9	1.8
USA	2.4	2.5	2	2.1	USA	1.7	1.5	1.7
Austria	2.1	1.7	1.7	1.8	Austria	1.1	1	1.6
Belgium	1.8	1.3	1.5	2.2	Belgium	0.8	0.8	1.9
Denmark	1.4	1.2	1	1.8	Denmark	0.9	0.8	1.6
Finland	2.7	1.5	1.5	2.1	Finland	1.5	1.4	2.3
France	1.7	1.6	1.5	2.3	France	0.8	1.2	2.1
Germany	1.2	1.1	1.2	0.9	Germany	0.8	1	1.5
Netherlands	1.9	1.3	1.4	2.1	Netherlands	0.9	0.9	2.1
Norway	3	3	2.7	2.4	Norway	1.7	1.6	1.9
Sweden	2.6	2.6	2.7	2.5	Sweden	2	1.9	2.2
UK	2.5	1.8	1.7	2.6	UK	1.6	0.9	2
Switzerland	1.9	2	2.1	2.2	Switzerland	0.8	1	1.9
Greece	2.8	0.1	0.5	3.2	Greece	1.6	0.2	2.6
Ireland	5.4	2.5	1.4	3	Ireland	2.4	1.1	1.7
Italy	1.1	0.3	0.1	2	Italy	0.2	0	1.6
Portugal	1.6	0.5	0.2	2.1	Portugal	1.2	0.5	1.8

Source: OECD (2013a, ch. 4)

Labour force growth in Ireland depends heavily on net migration and, as the last 25 years has underlined, this has varied greatly over time. Based on projections by CSO (2013), employment growth at 1.3 per cent per year would require a migration component of a little over 30,000 per year, similar to the early 2000s and in the top quartile of the last quarter century and slightly above the high-migration scenario presented by CSO (2013). By contrast if the migration component were 10,000 per year or -5,000 per year, the middle and low migration scenarios in CSO (2013), labour force growth would be only 0.7 or 0.3 per cent per year, respectively.

Table 1.1.7: Potential Impact on Real GDP per Person of Structural Policy Reforms (%)

	Labour Market	Taxation	Product Market Regulation	Education	R & D Incentives	Total
<b>Moving to OECD Average</b>						
USA	0.3	1.4	0	2.5	0	4.2
France	4.5	10.9	2.2	2.1	1.5	21.2
Germany	6.1	9.9	0	0	0	16
Netherlands	1.8	1.3	0	0	0.1	3.2
UK	1.1	0	0	4.6	0	5.7
Greece	6	10.1	22	5.8	0	43.9
Ireland	6.8	0.9	9.7	0	0	17.4
Italy	0.3	10.8	0.3	5.4	0.2	17
Portugal	7.3	0.7	8.5	21.8	1.3	39.6
Spain	3.5	4.6	0	6.3	1.4	15.8
<b>“10 per cent Reforms”</b>						
OECD Average	5.1	3.3	3.8	11.6		23.8

Source: Barnes et al. (2011)

OECD’s labour productivity growth places Ireland just below the Euro Area average and well below Greece which is projected to outperform Ireland because it has more scope for catch-up and a much greater opportunity to improve productivity by structural reforms, given that supply-side policies in Ireland are much closer to ‘best practice’ (cf. Table 1.1.7). Unlike every other country listed in Table 1.1.6, including the Euro crisis countries, Irish performance in 2018 to 2030 is projected to be weaker than in 2001 to 2007. The projection implies no catching-up of the United States which is also expected to achieve labour productivity growth of 1.7 per cent per year. This seems an unlikely baseline in terms of the conceptual framework of OECD’s model and seems to result from an unfortunate implementation in which the scope for catch-up is proxied by the real GDP per person gap with the United States. If, instead, this is measured in terms of labour productivity based on Irish real GNP per hour worked, then Irish labour productivity growth would be projected at least to be a bit better than Netherlands and the UK.<sup>(12)</sup> In any event, with labour productivity at about 70 percent of the American level the scope for catch-up growth is surely not exhausted.

It certainly seems possible that real GDP growth might average 3 per cent per year between 2018 and 2030 but, if so, this might more plausibly be on the basis of employment growth of 0.7 per cent per year combined with labour productivity growth of 2.3 per cent. However, this analysis is quite superficial and

<sup>(12)</sup> Real GNP per hour worked in Ireland in 2012 was 1990GK\$27.96 compared with real GDP per hour worked of \$33.64 in Netherlands, \$29.77 in UK and \$40.02 in USA. Both Netherlands and UK have less scope for structural reform to raise productivity according to Table 7.

a closer look is required. A first step is to consider the contributions of TFP, labour quality and capital deepening that might deliver labour productivity growth 2.3 per cent per year.

On the standard neoclassical balanced growth path,  $\Delta Y/Y = (\Delta L/L + \Delta A/A)/(1 - \alpha)$ . Taking  $\Delta L/L = 0.9$  per cent per year, based on the middle migration labour force growth of 0.7 plus a continuation of early 21<sup>st</sup> century labour quality growth of 0.2, and  $\alpha = 0.4$ , this implies that TFP growth of 0.9 per cent per year would be required to yield real GDP growth at 3 per cent. This path would entail a capital deepening contribution of 1.2 per cent per year, roughly the rate observed in the Celtic Tiger years, so that real GDP per hour worked grew at 2.3 per cent per year.

Table 1.1.8: ICT and Long-Run Growth Potential (% per year)

	ICT-Use Own $\beta$	ICT-Use Swedish $\beta$	ICT-Output	ICT Income Share (%GDP)	ICT Output Share (%GDP)
Austria	0.46	0.76	0.22	4.25	3.15
Belgium	0.64	0.73	0.13	6.03	1.9
Czech Republic	0.53	0.81	0.27	4.54	3.81
Denmark	0.62	0.7	0.2	6.13	2.88
Finland	0.67	0.76	0.57	6.14	8.21
France	0.48	0.68	0.17	4.91	2.46
Germany	0.44	0.68	0.33	4.45	4.75
Hungary	0.58	0.79	0.44	5.08	6.27
Ireland	0.39	0.94	0.51	2.88	7.24
Italy	0.36	0.7	0.19	3.52	2.67
Netherlands	0.51	0.71	0.1	5.36	1.36
Slovenia	0.28	0.62	0.28	3.09	3.97
Spain	0.53	0.76	0.1	4.83	1.39
Sweden	0.7	0.7	0.24	6.93	3.39
UK	0.6	0.66	0.16	6.34	2.26
<b>Un-weighted Average</b>	<b>0.52</b>	<b>0.73</b>	<b>0.26</b>		

(1) These projections are based on a neoclassical growth model with 2 types of capital, ICT capital and other capital and 2 types of output, ICT production and other production. Each output has a similar production function  $y = AkN^{\alpha}ICT^{\beta}$  where  $y$  is output per worker and  $k$  denotes capital per worker with  $\alpha$  and  $\beta$  the same in each case but  $\Delta A/A$  is bigger in the ICT sector. The relative price of ICT capital falls in line with the TFP growth differential. In the traditional model with one type of capital, steady state labour productivity growth is  $(\Delta A/A)/s_L$ , where  $s_L$  is labour's share of national income. In the modified model, the weighted average of TFP growth in the two sectors is augmented by an additional term  $(\beta \Delta p/p)/s_L$  where  $\Delta p/p$  is the rate of decline of the price of ICT capital goods relative to other capital goods. The estimates assume that the real price of ICT equipment falls at 7% per year. ICT income and output shares were obtained from the EUKLEMS database.

Source: Oulton (2012)

The key to this calculation is the TFP growth rate so what chance is there that 0.9 per cent per year might be achieved? Here the starting point is the contribution from a relatively large ICT production sector. Estimates of its possible contribution might be based on those of Oulton (2012) reported in Table 8 which put the prospective Irish TFP contribution at 0.5 per cent per year. Clearly, these estimates make assumptions both about the sector's weight and the scope for continued technological progress in ICT. A recent review of the prospects for further technological advances concludes that there is, of course, considerable uncertainty but that the rate of TFP growth in the sector assumed by Oulton (2012) is about at the midpoint of the possible outcomes (Byrne et al., 2013). This implies that the TFP growth contribution of the rest of the economy would need to be 0.4 per cent per year which would look quite reasonable by historical standards if the policy errors of the early 21<sup>st</sup> century, and the imbalances that they generated, are not repeated.

Going beyond this simple formulation, three refinements of the argument can be made. First, to deal adequately with the possible impact of ICT on future growth it is useful to move beyond the one sector neoclassical growth model to a two-sector formulation where the economy has ICT and other goods production sectors and uses two types of capital, namely, ICT capital and other capital, as in Oulton (2012). Given that TFP growth in the ICT production sector is relatively fast and that this makes ICT capital relatively cheaper over time, steady-state growth will be characterised by the ICT capital stock growing faster than non-ICT capital. Growth will be positively related to TFP growth in ICT production and to both the income share of ICT capital and the output share of ICT production.<sup>(13)</sup>

The implications of this formulation for Ireland are shown in Table 8. Paradoxically, while Ireland has the second largest ICT- production sector it makes the least use of ICT capital of any of these countries. Even so, there is considerable scope for relatively rapid growth of the ICT capital stock to raise labour productivity growth in the medium term – by 0.39 per cent per year at existing income shares. Were the further diffusion of ICT to raise its income share to the Swedish level, then the steady-state growth contribution would rise to 0.94 per cent per year.<sup>(14)</sup> Clearly, this is a rather stylised calculation but it does underline the possible upside from continuing technological progress in ICT and offers scope for catch-up.

Second, in the past and especially in the Celtic Tiger period, Ireland's growth has depended heavily on FDI. This raises the question of whether Ireland is still well-positioned to punch above its weight in attracting FDI. Success in this regard would help sustain the re-balancing of the economy away from non-tradables such as construction and back towards exportable manufacturing and services activities in which multinationals account for about 90 per cent of exports. Obviously, some of Ireland's original advantages have either disappeared or been reduced. Even in 1999 hourly labour costs in Ireland were only about 65 per cent of the German level but by 2012 this had risen to 96 per cent and the accession countries now play the role of the low-wage locations within the EU with hourly labour costs at 25 to 30 per cent of the Irish level. Ireland remains an economy with a low corporate tax rate but, as Table 1.1.4 shows, gaps have narrowed and the accession countries generally have lower tax rates than the EU15. Ireland's scores on product market regulation and employment protection have improved since the late 1990s and still are close to top of the class but again gaps are narrowing and more countries offer a relatively-low regulation profile (Table 1.1.3). Ireland continues to achieve a high 'Doing Business' ranking but continues to be held back by low scores for construction permits and electricity supply.

Nevertheless, there are good reasons to believe that Ireland will continue to benefit from a strong share of FDI based on a different mix of advantages that will attract and retain multinationals producing higher value-added services such as software and hi-tech manufacturing in sectors such as pharmaceuticals and medical devices (Barry and Bergin, 2012). These activities can be attracted by continuing to upgrade the

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<sup>(13)</sup> So, technological progress in ICT raises growth in a country with no ICT production through the growth of the (imported) ICT capital stock.

<sup>(14)</sup> The impact is relatively large for Ireland because the share of labour in output is relatively small.



national innovation system, by further increasing the supply of highly educated workers and by the agglomeration benefits offered by already established clusters. Ireland has sustained a very strong revealed comparative advantage in high-tech knowledge-intensive services in recent years (Ruane et al., 2013).

Third, as a very open economy, Ireland is exposed to external shocks. While these were favourable in the Celtic Tiger period, arguably they could be adverse in future. In particular, Ireland is exposed to problems in the Eurozone, as was highlighted recently in ESRI's *Medium-Term Review*. This presented two scenarios 'recovery' and 'stagnation'; in the former, growth resumes in the Euro area rather as OECD supposes but in the latter the EU is a 'zombie economy'. Comparing these two scenarios which are summarised in Table 1.1.9, with 'stagnation' average output growth between 2015 and 2030 is lower by 1.2 and employment growth lower by 1.0 percentage points per year while the investment rate is lower by an average of 2.3% of GNP and the unemployment rate is higher by 6.2 percentage points. Clearly, this would undermine relatively rapid growth based on a resumption of in-migration and the repercussions are more serious in the context of Ireland as a 'regional economy'.

Table 1.1.9: 'Recovery' versus 'Stagnation'

<b>Recovery</b>	<b>2015-2020</b>	<b>2020-2025</b>	<b>2025-2030</b>
<b>Average Growth Rate (% per year)</b>			
Real GDP	4	2.2	2
Employment	2.2	0.8	1
Labour Productivity Manufacturing	6.1	4	1.8
Labour Productivity Services	1.2	0.7	1.2
Investment (%GNP)	20.1	20.1	20.2
Unemployment Rate (%)	8.2	5.4	4.7
<b>Stagnation</b>	<b>2015-2020</b>	<b>2020-2025</b>	<b>2025-2030</b>
<b>Average Growth Rate (% per year)</b>			
Real GDP	1.4	1.4	1.8
Employment	0.3	0.3	0.3
Labour Productivity Manufacturing	6.1	3.1	-0.5
Labour Productivity Services	0.2	0.4	0.8
Investment (%GNP)	16.5	18.1	19.3
Unemployment Rate (%)	12.6	10.5	6.8

Source: Bergin et al. (2013)

While seeing the EU as a zombie economy is no doubt exaggeration, there are good reasons to doubt the OECD's optimism about future growth prospects for the Euro area. Until the architecture of the Eurozone is fully repaired, the possibility of another financial crisis cannot be completely discounted. More worryingly, if fiscal orthodoxy is the route back to Maastricht, this will entail a long period of high public debt to GDP ratios. The implications of this are unlikely to be favourable for growth and could

have a significant negative impact. Although the claim of a 90% threshold beyond which growth declines sharply is probably not robust, the evidence does suggest that growth is likely to be adversely affected by high debt ratios (Egert, 2013) and continuing fiscal consolidation will undermine growth in the absence of offsetting policy stimulus. Economic history also suggests that slow recovery in the Eurozone with few degrees of policy freedom will not be positive in the longer term either for European economic integration or structural reform (Crafts, 2013).

Overall, it is quite possible that the OECD (2013a) estimate of Ireland's GDP growth potential as 3 per cent per year for 2018-30 is correct but, if so, this is likely to be achieved with a higher contribution from productivity and a lower contribution from employment growth than OECD suggests. Ireland has enduring supply-side strengths which will allow FDI-based growth to continue but optimism has to be tempered by worries about its exposure to shocks from and/or stagnation in the Euro area.

#### *Some Policy Implications*

This section briefly discusses four areas of 'horizontal' industrial policy which have implications for growth performance over the medium term, all of which are flagged up in Department of Finance (2013), and where there may be scope to improve.

#### **Fiscal Consolidation**

The design of fiscal consolidation matters. Generally speaking, relying mostly on cutting public expenditure rather than raising taxes is more likely to be growth friendly. However, this depends on current rather than capital expenditure bearing the brunt. Investment in public capital has positive effects on real GDP where an output elasticity of about 0.2 is a reasonable assumption and also 'crowds in' private capital in the medium term (Kamps, 2005a). Using the formula in Kamps (2005b, Table 7), the growth maximizing rate of public investment is 3 per cent of GDP if trend growth is 3 per cent per year.

Ireland is emerging from the crisis with a very high public debt; gross debt in 2013 was 126 per cent of GDP. The rules of the Eurozone prescribe a gross government debt ratio of 60% and the debt-convergence rules adopted in the light of the crisis indicate that 1/20th of the excess over this level shall be removed each year. OECD (2013a) calculates that to stay within this rule for every year from 2014 to 2023, Ireland will have to maintain a primary budget surplus of about 3.5% of GDP. The obvious concern is that there may be a prolonged period when capital expenditure is well below 3 per cent of GDP given that it has already fallen to under 2 per cent and that past episodes of fiscal stringency have been notable for their negative impact on public investment (Mehrotra and Valila, 2006). This outcome should be avoided.<sup>(15)</sup>

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<sup>(15)</sup> Ideally, the appropriate fiscal policy for Ireland will be conducive to rebalancing towards tradables which also argues for squeezing public consumption rather than capital spending (Lane, 2009).

Table 1.1.10: Educational Standards in 2012: Cognitive Skills and Tertiary Years

	PISA	Adult Skills	Adult ICT Skills (%)	Tertiary Years		PISA	Adult Skills	Adult ICT Skills (%)	Tertiary Years
Austria	506	272.2	32.4	0.48					
Belgium	510	278	34.5	0.93					
Denmark	499	274.6	38.6	0.63	Czech Republic	503.5	274.8	33.1	0.32
Finland	532	284.8	41.6	0.81	Estonia	531	274.5	27.5	0.92
France	497	258.2		0.64	Hungary	485.5			0.53
Germany	519	270.8	36	0.64	Latvia	496.5			0.61
Greece	460			0.93	Lithuania	487.5			0.84
Ireland	511.5	261	25.2	1.01	Poland	522	263.4	19.2	0.46
Italy	489.5	248.8		0.33	Slovakia	476.5	274.8	25.7	0.38
Netherlands	522.5	282.2	41.6	0.82	Slovenia	507.5			0.51
Norway	492	278.4	41	0.85					
Portugal	488			0.3	Japan	541.5	292.2	34.6	1.21
Spain	490	248.8		0.83	South Korea	546	268	30.4	1.13
Sweden	481.5	279.2	44	0.84	USA	490	261.3	31.1	1.71
Switzerland	523			0.62					
United Kingdom	504	267.1	34.7	0.68					

(1) PISA is average of maths and science scores; adult skills are average of literacy and numeracy; adult ICT skills is % at levels 2 and 3 in problem-solving; average years of tertiary education are for population aged 25 and over.

Source: Barro and Lee (2013); OECD (2013b) (2013c)

## Education

There is evidence that the quality of education as measured by cognitive skills has strong positive effects on growth. On this measure, Irish schooling quality is above the OECD average but still well below the best performers (Table 1.1.10). It has been estimated that increasing the PISA score in maths and science from 511.5 in 2012 by 25 points, to roughly the average of Finland and South Korea, would raise the long-run growth rate by about 0.3-0.4 percentage points (Hanushek and Woessmann, 2012). It may be that the PISA account of cognitive skills overstates Irish skills since the OECD adult skills survey measures (also reported in Table 1.1.10) are significantly less favourable in which case improving educational quality is likely to matter even more.

What does this imply for policy? The obvious point might seem to be that education spending should be protected during fiscal consolidation. That said, it may be more important effectively to address principal-agent problems in the delivery of education. Across countries, about 80 percent of the variance in cognitive skills is explained by the organization of the education system (Woessmann et al., 2007). The most important implications of this study for Irish schools may be to review the regulation of private operation of schools and to ensure stronger accountability in the provision of schooling. The key point is that designing better incentive structures could improve the quality of schooling even at a time when expenditure is under pressure.

## Innovation Policy

Innovation policy is an area which matters both in terms of diffusion of new technologies from abroad and home-grown technological advance and the return to R & D accrues from both aspects (Griffith et al., 2004). As a small, close-to-frontier, country both facets are of importance for Ireland. A weakness that is frequently pointed out is innovative activities are dominated by multinational firms and that 'indigenous' SMEs are less innovative than their international counterparts. If this indicates a weakness in absorptive

capacity, as seems likely, this may be a greater concern than that Ireland has not yet realised its ambition to see R & D expenditure at 2.5 per cent of GNP (Table 1.1.11).

Table 1.1.11: R & D Expenditure (%GDP) and Innovation Active Businesses (%)

	R & D (GERD) 2000	R & D (BERD) 2000	R & D (GERD) 2011	R & D (BERD) 2011	Innovation Active 2008-10		R & D (GERD) 2000	R & D (BERD) 2000	R & D (GERD) 2011	R & D (BERD) 2011	Innovation Active 2008-10
Austria	1.86		2.75	1.87	55						
Belgium	2.04		2.04	1.37	61	Czech Republic	1.33	0.8	1.85	1.12	51
Denmark	2.3	1.54	3.09	2.09	54	Estonia			2.41	1.52	57
Finland	3.4		3.78	2.66	55	Hungary	0.8	0.35	1.21	0.75	31
France	2.18		2.24	1.42	52	Latvia					30
Germany	2.49		2.88	1.94	80	Lithuania					34
Greece	0.66	0.2	0.6	0.17		Poland	0.66	0.24	0.74	0.23	28
Ireland	1.35	0.97	2.12	1.46	60	Slovakia	0.65	0.43	0.68	0.25	35
Italy	1.11		1.25	0.68	55	Slovenia			2.47	1.83	50
Netherlands	1.9		1.85	0.89	56						
Norway	1.62	0.94	1.68	0.86	43	Japan	2.99	2.12	3.39	2.61	
Portugal	0.8		1.49	0.69	60	South Korea	2.65	1.96	4.03	3.09	
Spain	0.94		1.33	0.7	41	United States	2.72	2.04	2.77	1.89	
Sweden	3.96	3.03	3.37	2.34	60						
Switzerland	2.57	1.9	2.87	2.11							
United Kingdom	1.84	1.21	1.77	1.09	44						

(1) Ireland as %GNP; Greece data for 2007; Switzerland data for 2008.

Source: OECD, Main Science and Technology Indicators; Community Innovation Survey

Recognition of the potential importance of strengthening support for innovative activities has led to a plethora of programmes and agencies seeking to address the issue. Haugh (2013) pointed out that there is a clear need for evidence on the effectiveness of policies to promote innovation especially those targeted at SMEs. UK experience strongly suggests that this is right, especially at a time of fiscal consolidation because the benefit-cost ratios of different initiatives vary greatly even though, in general, the social returns to policies to promote innovation by SMEs are high. Based on an analysis of increases in turnover, Foreman-Peck (2013) found that the social rate of return to all SME innovation policies was at least 46 per cent and probably considerably greater than this; however, the UK grant-based schemes such as SMART and SPUR achieved benefit-cost ratios which were double those from the UK R & D tax credit.

## Competition Policy

It is now generally agreed that strong (though not perfect) competition in product markets is good for productivity performance by putting greater pressure on management to perform (Bloom and van Reenen, 2007), especially in liberal market economies like Ireland. The value of effective competition policy is greater in close-to-frontier economies where it matters for its effects on  $\mu$ n as well as  $\mu$ m (Aghion and Howitt, 2006).

Before the crisis, reviews of Irish competition policy suggested room for improvement. On a scale of 0 to 6, OECD's methodology rated Ireland at 2.34 which was the median rating in the EU15 (Hoj, 2007) and OECD economists suggested that there were too many sectors where producers were sheltered from competition (Rae et al., 2006). Nevertheless there was a clear trajectory towards strengthening competition legislation as revealed by the 2002 and 2006 Competition Acts. Gorecki (2012) notes that the crisis threatened to reverse this by allowing concerns for financial stability to prevail in merger policy and a growing number of exemptions being proposed. A return to a stronger pro-competition stance was, however, a result of the conditionality imposed by the EU and IMF in the context of the Irish bailout.

This still leaves Ireland below best practice in competition policy. A new set of indicators from OECD places Ireland at 8<sup>th</sup> equal, 13<sup>th</sup> and 8<sup>th</sup> of the EU15 in scope of action, policy on anti-competitive behaviour and probity of investigations, respectively (Alemani et al., 2013). Free of pressure from the troika, Ireland has more policy discretion and it would have been encouraging to see stronger emphasis on maintaining and strengthening competition in *A Strategy for Growth*.

### *Conclusions*

Ireland's GDP could quite possibly grow at 3 per cent per year from the late 2010s to 2030. If this is to be achieved, it will probably require labour productivity growth in excess of 2 per cent per year which will need a resumption of internationally respectable TFP growth. Scope for catch-up growth is not by any means exhausted, Ireland is still an attractive location for FDI and its overall policy stance remains conducive to good productivity performance.

The risks to this scenario come primarily from the possibility of an adverse external economic environment in which the good fortune of the 1990s is superseded by bad luck in the 2020s. In particular, it is important to recognise that the implications of shocks or policy decisions are relatively large for Ireland because of its 'regional economy' characteristics where migration makes labour force growth endogenous.

Ireland's long-term growth prospects would not be well-served by a return to the early 21<sup>st</sup> century economy. The most obvious indictment of growth performance in that period, prior to the financial crisis that resulted from a badly regulated and supervised banking system, is the weakness of TFP growth. As is widely understood, strong Irish growth will be better sustained by a resurgence of the exportables sector and by policies that guard against a repeat of the appreciation of the real exchange rate that characterised the bubble economy years.

Good supply-side policies have been integral to past growth success. There is, however, some scope for improvement, including in competition and innovation policies, and there are some worries that continuing fiscal stringency will undermine public investment. A priority is to ensure the cost effectiveness of policies to promote the adoption and innovative use of new technologies by SMEs.

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## KEVIN DALY, FIRST DISCUSSANT

### *Summary*

Crafts (2014) provides a comprehensive and robust treatment of Ireland's medium-term growth prospects and, as a central case, we find his estimates to be plausible. However, we emphasise two caveats: First, the experience of the US suggests that regional growth shocks within a monetary union are typically not reversed over time and that economic shocks have permanent effects on regional capital and labour. This makes forecasting the long-run prospects for small regional economies within a monetary union particularly difficult. Second, while Crafts (2014) provides estimates of 'potential' or 'trend' output growth, there is clear evidence that aggregate demand in the Irish economy is significantly below potential. Given a large output gap, potential growth is unlikely to be a binding constraint on Ireland's growth prospects for some time.

### *Introduction*

Crafts (2014) provides a comprehensive and robust treatment of Ireland's medium-term growth potential. He argues that Ireland can achieve real GDP growth of 3% per year in the long run, with 2.3% labour productivity growth and 0.7% employment growth. Crafts' projections assume a degree of convergence to US productivity levels and that net outward migration from Ireland is partially reversed over time.

His projections for real GDP are similar to the medium-term GDP growth projections provided by the OECD (2013), albeit with a different assumption about the breakdown between productivity and employment growth (Crafts assumes stronger productivity growth but weaker employment growth than the OECD).

In our view, his findings represent an improvement on the OECD's medium-term projections and – as a central case – we find his estimates to be plausible. However, we emphasise two caveats:

### **1. Small regional economies can experience permanent shocks**

The key assumption underlying projections of this type is that, given the right economic policies and institutions, labour productivity levels will converge over time to the 'productivity frontier' (which is typically assumed to be the US). For emerging market economies – whose productivity levels are a long way below the productivity frontier – the key determinant of GDP per capita growth is the rate of convergence to that frontier. But, for advanced economies – such as Ireland – where the scope for convergence is more limited, productivity growth is assumed to be reasonably close to the US average. Meanwhile, the labour force assumptions underlying these models are typically based on the actuarial projections of fertility, longevity and migration provided by the UN or by national sources.

It is important to recognise the uncertainty surrounding these assumptions, particularly for small regional economies (for which labour and capital is relatively mobile) and particularly within a monetary union (where the cost of adjusting to region-specific shocks is more often borne by factor mobility).

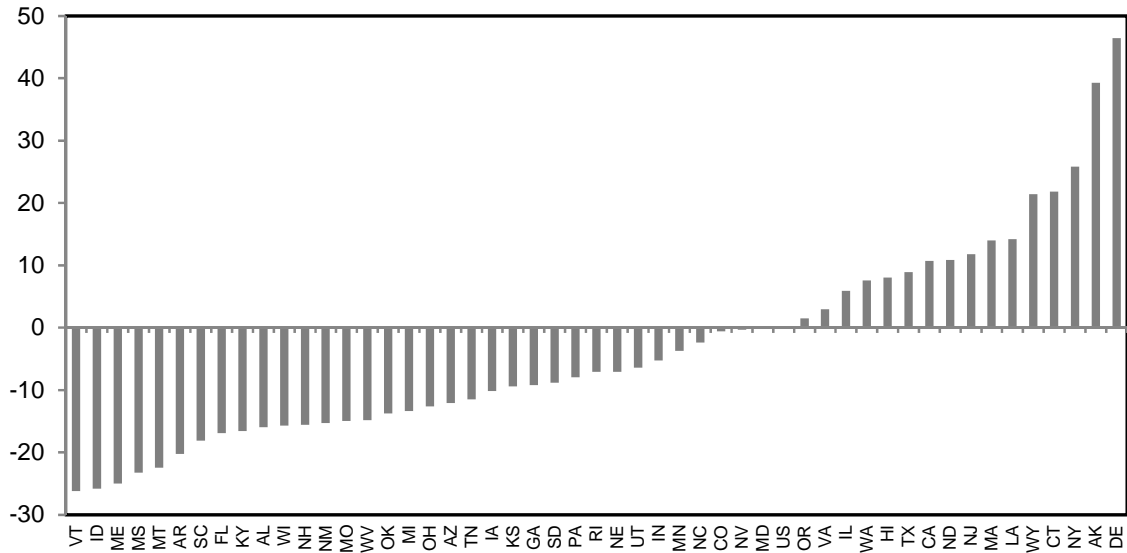
One reason to question the assumption that productivity gradually converges to the US average is that there is significant variation in regional productivity levels within the US itself (Graph 1.2.1). And, despite the similarity of institutions, tax structures, etc. that exist within the US, these differences in regional US productivity levels have been reasonably persistent in the past 30 years.<sup>(16)</sup> Thus, while Ireland could converge to the US average – and this seems reasonable as a central case – it is also

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<sup>(16)</sup> The economic literature on growth and convergence distinguishes between 'sigma-convergence' (a reduction in the dispersion of levels of income across economies) and 'beta-convergence' (income per capita in poor economies rising faster than rich ones). Most recent studies find little evidence of 'sigma-convergence' across US states in the past 30 years, despite some limited evidence of beta-convergence (i.e., to the extent that states are converging towards each other, random shocks are simultaneously pushing them apart). See, for instance, Young, Higgins and Levy (2008).

plausible that it converges towards something much higher or lower than the US average (or that it doesn't converge at all).

Graph 1.2.1: Significant divergence in productivity across US states - Productivity level (2012) relative to the US

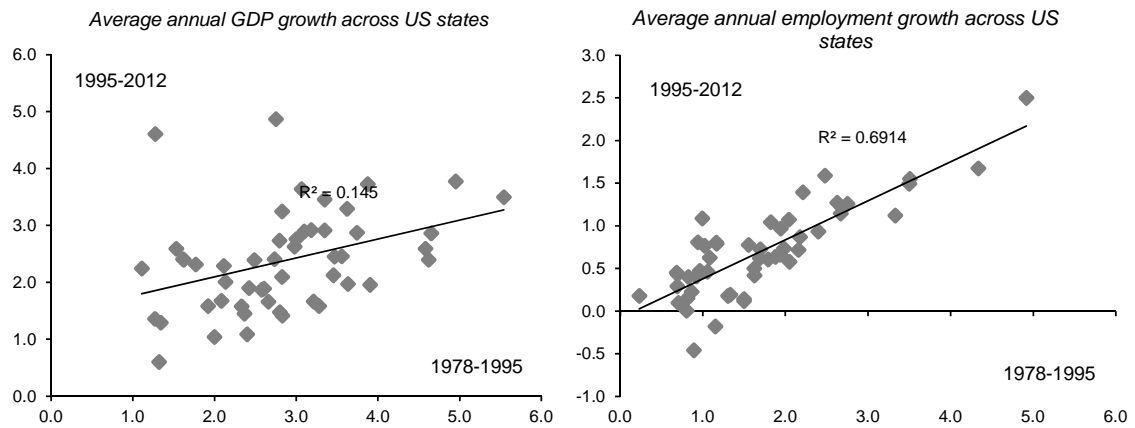


Source: BEA, Goldman Sachs Global Investment Research

Related to the divergence in productivity levels, the US experience also suggests that GDP and employment growth in small regional economies can persistently diverge from the US average. Graph 1.2.2 displays average GDP and employment growth for US states over two 17-year periods. Rather than exhibiting alternating periods of outperformance and underperformance, states that outperformed the US average in the first period typically did so again in the second period. Impulse response functions based on panel-date estimates for US states using annual data – which we do not report in full here – also suggest that state-specific GDP and employment shocks are typically not reversed over time. In the long run, US workers tend to migrate to the states where labour demand is highest.<sup>(17)</sup>

<sup>(17)</sup> The literature on agglomeration and ‘clusters’ and its interaction with the ‘new’ trade literature is relevant in this respect, in particular the pre-EMU debate on whether greater European integration would lead to more specialisation and increase regional volatility. The evidence from the US (and, it seems, from the Euro area crisis) would appear to indicate a positive link between monetary union and regional volatility but we do not explore this point in any detail here.

Graph 1.2.2: High persistence in growth and employment across US states



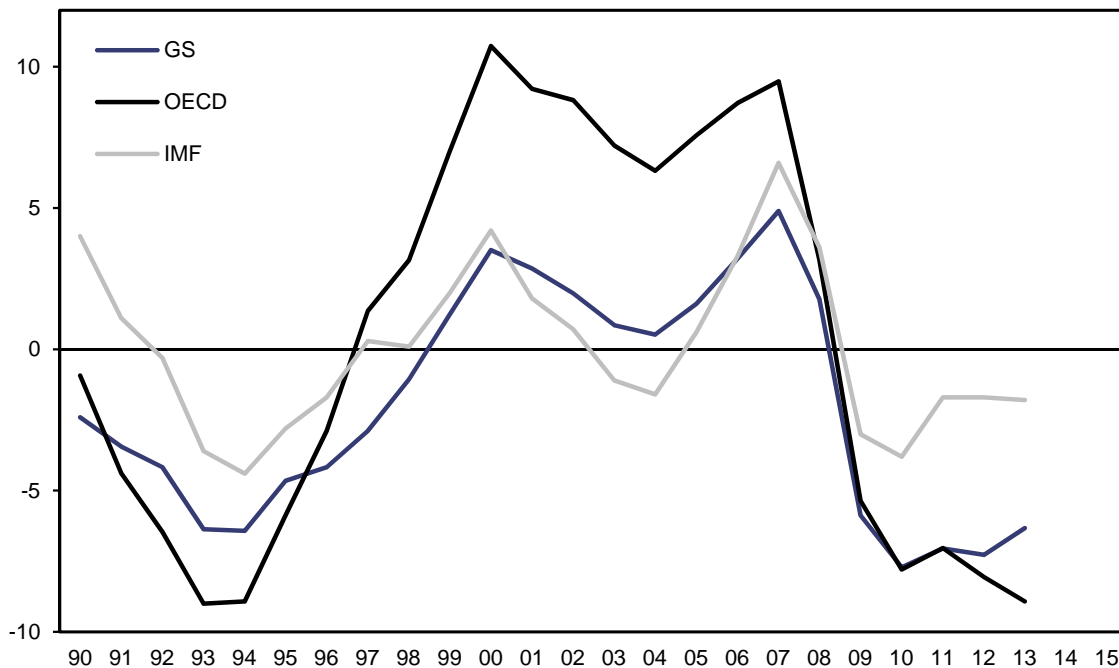
Source: BEA, Goldman Sachs Global Investment Research

## 2. Ireland's output gap appears large

Crafts (2014) and the OECD (2013) provide estimates of 'potential' or 'trend' output growth. Taking these estimates as an unbiased indicator of future growth implicitly assumes that the economy is currently operating close to its potential (or that any deviation from potential will persist).

However, it is clear that aggregate demand in the Irish economy is significantly below potential. While estimates of the output gap are uncertain, the most plausible estimates – ones which are based on production function estimates rather than on statistical trending techniques – suggest that Ireland output gap is currently equal to between 5 and 10% of GDP (Graph 1.2.3). Given such a large output gap, potential growth is unlikely to be a binding constraint on Ireland's growth prospects for some years.

Graph 1.2.3: Ireland economy's is operating 5-10% below potential output - Output gap (% of potential GDP)



Source: OECD, IMF, Goldman Sachs Global Investment Research

### Conclusion

The experience of US states suggests economic shocks within a monetary union tend to have permanent effects – the impact on GDP and employment is not reversed over time and productivity divergences are reasonably persistent. If this is true of small regional economies in the US (despite the similarity of institutions, tax structures, etc. that exists there), then it seems likely to be the case for small Euro area economies also (given institutions, tax structures etc. that are often very different). This makes forecasting the medium/long-run prospects for small regional economies in the Euro area particularly difficult.

Moreover, given a significant degree of spare capacity within the Irish economy, the level of potential output is unlikely to represent a ‘binding constraint’ on Ireland’s growth prospects in the coming years.

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## JOHN MARTIN, SECOND DISCUSSANT

Nick Crafts paper covers a topic of immense importance for everyone in Ireland. But it also has a wider resonance beyond our shores. The Celtic Tiger era attracted great publicity for the Irish growth model in the outside world: the *Economist* once hailed it as a model for small open economies hoping to catch up on the rich countries. Even though the Tiger died a painful death after 2007, there is great current interest in the rest of the world in how the nascent Irish recovery will develop after the steep recession, the Troika bailout and our recent exit from it. So this is a very timely paper by one of the profession's leading economic historians and I, for one, found it a very stimulating read.

It opens with a brief presentation of an augmented-growth-accounting framework to analyse Irish growth since 1990. It is very helpful to be reminded of how much total factor productivity (TFP) growth contributed to the very rapid GDP growth which Ireland recorded in the decade of the 1990s: over that period TFP growth accounted for two-thirds of total growth. But over the period 2001-2007, the heyday of the "bubble economy", TFP growth slumped alarmingly to become slightly negative on an annual rate. I would have welcomed more discussion of this dramatic slump in TFP performance and its likely causes as this would have helped set the stage better for the discussion of future growth prospects.

Linked to this, I was surprised that the role of the euro received so little attention in the paper. Ireland joining the Eurozone, after all, heralded a dramatic fall in real interest rates for Irish borrowers, fuelling the construction boom and the shift in the production structure from tradeables to non-tradeables. While the paper discusses the latter phenomenon, it could have stressed more how this was linked to the significant *real exchange-rate appreciation* which the Irish economy experienced as domestic wages and prices outstripped German wages and prices and there was no underlying improvement in productivity performance to help maintain external competitiveness. This loss in cost competitiveness bore heavily on the traded sector and is only now being painfully and slowly unwound. Therein lies a very valuable lesson for the future: we will need to align our wage and price-setting behaviour to that in Germany unless other structural reforms serve to boost trend productivity growth. I wonder if this lesson from the Great Irish Recession has been internalised by Irish wage and price setters or will they lapse back to myopic behaviour now that the domestic economy is recovering and Irish unemployment is falling, albeit from double-digit levels.

Given my background in labour economics and the central role of labour input growth in accounting for GDP growth, I will confine my remaining remarks on the paper to four topics: (i) the hysteresis challenge; (ii) the future path of net migration; (iii) the quality of human capital; and (iv) work incentives for the low-skilled.

### *Hysteresis*

A key question for Ireland's medium-term growth prospects is how best to lower the current unemployment rate of 12.3% (November 2013, seasonally adjusted) to a more acceptable level and how quickly this can be accomplished. There is a real danger of hysteresis in Irish unemployment with negative implications for productivity growth. The best indicator of the hysteresis challenge is the extraordinarily high incidence of long-term unemployment (defined as those out of work continuously for 12 months and over) in total unemployment. In 2012, the incidence of long-term unemployment in Ireland was 61.7% compared with an OECD average of 34.3%<sup>(18)</sup>. In 2007, the equivalent figure for Ireland was only 29.5%, in line with the OECD average.

Now it is a well-known stylised fact that the exit rate from unemployment to a job declines with the duration of the unemployment spell, especially after a year in unemployment. While a strong and sustained recovery in labour demand would undoubtedly serve to reduce the numbers of long-term unemployed, OECD evidence suggests that this will be most successful if it is backed by an effective

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<sup>(18)</sup> See OECD (2013a, Statistical Annex, Table L).

strategy for *activating job seekers*<sup>(19)</sup>. Designing and implementing such a strategy successfully in Ireland is a huge challenge.

While lip-service was paid to activation policies in Ireland in the Celtic tiger era, an OECD review which was published in 2009 highlighted how ineffective and far away from best international practices the reality was<sup>(20)</sup>. At the same time, the Irish public employment service (Fás) became mired in scandal just at the wrong moment when the number of its clients soared to levels not seen since the late 1980s. In order to restore public confidence in the employment service and make it more effective, the government forced a merger of the reemployment services with the benefit offices run by the Department of Social Protection. This was a long overdue reform which OECD and other international organisations had recommended for many years to successive Irish governments to no avail – at least the crisis had a positive side-effect in this domain!

A new “one-stop shop” service (Intreo) is currently being rolled out nationwide as a key building-block in the government’s Pathways to Work initiative which aims to put in place an effective activation strategy. At this point, I should declare a personal interest. I am a member of the recently formed Labour Market Advisory Council which has been established by the coalition government to advise it on the implementation of Pathways to Work.

The Pathways to Work initiative is operating under a very tight timetable. It involves not only creating the physical infrastructure in terms of the new Intreo offices, but also integrating the staffs of two large public agencies which prior to the merger had very different objectives and organisational cultures. Current caseworker/client workloads are extraordinarily high by best-practice OECD standards and there is an imperative need to train and deploy more skilled caseworkers to handle the heterogeneous needs of the long-term unemployed while at the same time rebuilding confidence with local employers that Intreo can supply them with the types of workers needed to fill their job vacancies. In addition to these tasks, the government has decided to augment the supply of reemployment services by engaging private providers to assist the long-term unemployed to find work and remunerating them under performance-related contracts. This step which was inspired by the UK’s Work Programme and the Australian innovation, Job Services Australia, will put major strains on the capacity of the relevant government departments to oversee the delivery of such a mixed activation strategy effectively<sup>(21)</sup>.

Ireland now has a real opportunity to put in place an effective activation strategy which, by bringing back many of the long-term unemployed to work in the coming years, would boost growth prospects. But in order to achieve this aim, it will need to find the right balance between so-called “carrots” (i.e. effective active labour market policies) and “sticks” (i.e. close monitoring of job-search and employability behaviour by benefit recipients backed by the threat of benefit sanctions). It will also need to invest heavily in state-of-the-art evaluations in order to find out what policies work best for specific client groups and adjust programme spending accordingly. Neither of these tasks will be easy to achieve in the Irish context.

#### *The future of net migration*

Nick’s paper rightly highlights the large degree of uncertainty surrounding projections of future Irish labour force growth given the large role played by international migration. Will the coming years see a resumption of the strong net immigration which characterised the Celtic Tiger era or, on the contrary, will we see a continuation of the high net emigration rates of the post-2007 years?

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<sup>(19)</sup> See OECD (2013a, Chapter 3) for a review of lessons learned from OECD reviews of activation policies in seven OECD countries about what has worked as well as the pitfalls to avoid.

<sup>(20)</sup> See Grubb, Singh and Tergeist (2009).

<sup>(21)</sup> See OECD (2013a, Chapter 3) for some details on the UK experience and OECD (2012) for an exhaustive evaluation of Job Services Australia.

Like soothsayers, we can only speculate on the answers. Much will depend on the strength and persistence of the recovery in labour demand in Ireland. At the same time, there is a question mark about the relative attractiveness of Ireland as a destination for potential migrants in the future, especially high-skilled migrants. There is a global competition for such talent in which Ireland has to compete, not only with other EU countries but also with the other English-speaking countries outside the EU who have a proven track record as attractive destinations for migrants, especially high-skilled migrants.

How well we succeed in integrating the recent inflows of immigrants into the Irish economy and society will have a knock-on effect on Ireland's attractiveness as a potential destination for migrants. So will our ability to attract home many of the recent Irish emigrants. Return migration rates can be very significant: OECD (2008) cites a range of estimates using different methods and data sources that between 20% and 50% of immigrants leave within five years after their arrival either to return home or move on to a third country. Studies show that return migrants bring back both human and financial capital with them, and can thereby help spur innovation and growth.

While it is galling to admit that we have few answers about the likely future path of net migration, there is no denying that it will play an important role in determining future growth prospects in Ireland, especially as population ageing begins to bite.

#### *The quality of Irish human capital*

Growth models, both of the Solow-Swan and endogenous types, typically stress the role of improvements in the quality of human capital. Nick's paper rightly assigns an important role to this factor in the Irish context. Much of the discussion about the quality of Ireland's human capital stock compared with competitor countries focuses on the performance of the schooling system, as measured by the test scores of 15-year-olds in the OECD's PISA Programme, and enrolment rates in tertiary education. Judged in terms of these two indicators, Ireland's human capital stock is in line with, or slightly above the EU average, but well below the leading international performers.

However, as Nick notes in his paper, these two indicators tell us nothing about another important dimension of human capital quality, namely the levels and distribution of skills among the working-age population (i.e. the age-group 16-64) in Ireland compared with competitor countries. Here the recently-released results of the OECD Programme for the International Assessment of Adult Competencies (PIAAC) are very revealing<sup>(22)</sup>.

PIAAC directly measures proficiency in several information processing skills: literacy, numeracy and problem-solving in technology-rich environments. It also assesses how these skills are linked to a wide range of economic and social outcomes and how they are used in the workplace. The recent publication presented skills data for 22 OECD countries including Ireland and two non-OECD countries, Russia and Cyprus. The PIAAC data base is extraordinarily rich: it contains data on almost 160 000 adults in the 24 countries and the data collection period ranges from late-2011 to end-2012 depending on the country<sup>(23)</sup>.

The PIAAC data paint a less favourable picture of the quality of human capital in Ireland than does PISA. The mean proficiency scores of the Irish working-age population in literacy and numeracy are significantly below the average of the other OECD countries in the survey<sup>(24)</sup>. Indeed, on most of the

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<sup>(22)</sup> For full details of the PIAAC results, see OECD (2013b).

<sup>(23)</sup> In addition to the 24 countries covered in the first wave of PIAAC, it is being currently implemented in nine other countries, six of whom are OECD countries. The results for the additional countries will be released in 2016.

<sup>(24)</sup> Ireland participated in the first international survey of adult skills, the International Adult Literacy Survey (IALS), which was organised and implemented by OECD and Statistics Canada between 1994 and 1998. It has proved possible to compare the Irish literacy scores from IALS with a subset of the PIAAC questions. It is extremely disappointing to note that there was no improvement in the mean literacy scores of Irish adults in PIAAC compared with the performance of their counterparts in IALS, well over a decade earlier.

indicators of skills presented in OECD (2013b), Ireland ranks among the bottom quintile of the countries surveyed. This relatively poor performance is not totally unexpected since the older Irish cohorts surveyed, those aged 45-54 and 55-65, do not have relatively high levels of educational attainment compared with their peers in many other OECD countries. However, it is much more of a concern that the younger cohorts in Ireland performed relatively poorly as well in terms of literacy and numeracy skills.

Nick's paper rightly stresses the importance of the ICT sector to the Irish economy in terms of exports and productivity growth. Now a unique feature of PIAAC is that it tested for proficiency in problem-solving in technology-rich environments -- which can be described in shorthand as "ICT skills"<sup>(25)</sup>. Once again, Irish adults performed poorly on these skills. More surprisingly, perhaps, so did younger Irish adults, especially at the highest proficiency level for ICT skills. It should now be a very high priority for research to determine why Irish adults performed so poorly on the PIAAC tests compared with their peers in other EU and OECD countries.

The skills measured in PIAAC do matter for labour market outcomes. Hanushek *et al.* (2013) show that there are significant returns in the form of large earnings premia to the skills measured in PIAAC. They also highlight substantial heterogeneity in the returns to skills across countries, with Ireland being one of the countries with the highest returns.

In sum, the PIAAC results do not show the skill levels among the working-age population in Ireland in a particularly favourable light. So upskilling the adult population, especially in terms of the key information-processing skills, has to be a high priority for policy makers. This too will be a very complex and ambitious task. Not only will it have to include designing and implementing a modern apprenticeship system to replace the failed, narrow crafts-based system of the past, but it will also have to devise incentives to encourage both employers and workers, especially those with low skills, to invest more in on-the-job training.

#### *Increase work incentives for the low-skilled*

Employment rates among low-skilled Irish workers are well below the OECD average. If we define "low-skilled" as those with less than secondary education, OECD data show that the employment/population rate for Ireland was 45.7% in 2012 compared with an OECD average of 55%; the best-performing EU countries (Sweden and the Netherlands) had employment rates of 68% and over.

The explanations for relatively low employment rates among low-skilled workers in Ireland are complex and involve a range of supply and demand factors. But one factor is the lack of sufficient financial incentives to take a job or work extra hours which face many low-skilled workers due to the interactions of the tax and benefits system. OECD data show that many Irish low-skilled workers face relatively high benefit replacement rates and high marginal effective tax rates (METRs) once allowance is made for housing and childcare costs and other non-monetary benefits such as free medical cards. The Irish Public Policy Institute has highlighted this work incentive problem in a recent policy note.

What can be done to improve work incentives for this group? There are no easy solutions. One could cut welfare benefits. One could increase the minimum wage. Or one could increase in-work benefits. All three options have their drawbacks in terms of undesirable side-effects. Benefit cuts would increase poverty. The ratio of the minimum wage to the median wage in Ireland is already high in international comparison and pushing it higher would likely entail job losses, especially for low-productivity workers. Expanding in-work benefits such as the Family Income Supplement or the length of earnings tapers attached to the withdrawal of welfare benefits look more attractive options at first sight but they would involve more public spending and they would push high METRs further up the earnings distribution,

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<sup>(25)</sup> Four countries (Cyprus, France, Italy and Spain) opted out of the assessment of ICT skills.



lowering work incentives for middle-skilled workers. However, UK evidence suggests that the in-work benefits route can increase employment rates among sole parents if it is combined with effective active labour market policies and assistance with childcare costs which are very burdensome in Ireland. On the other hand, such a policy is likely to do little to raise labour productivity growth.

Probably the most effective solution in the medium term is to increase investment in upgrading skills but this will not be easy given the relatively low skill levels revealed by the PIAAC results cited above and the bias which employers show in favour of investing much more in upgrading the skills of those workers who already have high skills.

### *Conclusions*

This very stimulating paper makes it clear that Ireland still has significant scope to catch up on the frontier economies. It also highlights how such catch up will require a significant improvement in TFP performance compared with the dismal record since the beginning of the 21<sup>st</sup> century. Nick is surely correct when he surmises that this will require sustained structural reforms combined with a favourable external environment. Increasing employment rates and improving both the quantity and quality of human capital are two keys for the Phoenix to rise again, and my comments have tried to highlight some of the challenges and possible solutions for achieving these objectives.

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# Part 2

## Ireland's Banking System - Looking Forward

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### **Abstract**

This paper discusses the medium- to long-term perspectives for the Irish banking system. Consistent with the finance-growth literature, financial deepening had a limited impact on growth in Ireland before the crisis and cannot be expected to contribute significantly over the short- to medium-term. The paper documents that, compared to its benchmark, the Irish banking system is still very unbalanced, with a heavy reliance on international funding, and limited competition. Given its membership in the Eurozone and the EU, Ireland depends very much on global and European regulatory reform trends, some of which are more important for Ireland than other European economies. Critically, the shape and resilience of Irish banking will depend on the shape the Eurozone banking union will take.

Helpful comments and discussions with Lars Frisell, Philip Lane and Nigel Nagarajan as well as suggestions from an anonymous reviewer are gratefully acknowledged without implicating them.

## *Introduction*

Ireland has gone through one of the most severe banking crises in its history and has also been one of the countries most affected during the recent Global Financial Crisis and the Eurozone crisis. With the notable exception of Latvia, Ireland is the country with the highest economic cost of the recent crisis, as measured by foregone output (Laeven and Valencia, 2010). The crisis has been explained by the preceding housing price and mortgage credit bubble, in turn triggered by low interest rates after the introduction of the Euro. A lenient if not complacent regulatory regime encouraged aggressive risk taking and regulators mis-diagnosed problems at the start of the crisis, mistaking liquidity problems for solvency problems, as documented by numerous ex-post reports on the crisis (e.g., Honohan, 2010; Regling and Watson, 2010; Nyberg, 2011). Unlike Iceland, the Irish government proceeded to guarantee almost all bank liabilities, which in turn added substantially to government debt when supposed liquidity problems turned out to be solvency problems and, ultimately, a Troika program, which Ireland just exited. While seen as sole success story so far among the Eurozone program countries, doubts remain about sovereign debt sustainability, given uncertain growth perspectives of the export-oriented Irish economy and possible additional recapitalization needs of Irish banks after the European asset quality review and stress test results to be published later in 2014. High household overindebtedness and negative equity by many mortgage holders and, consequently, latent bank losses can still cause new fragility.

The crisis experience and subsequent Troika program raises the question on the future role and structure of the Irish banking system. There have been doubts about the contribution of the financial system to rapid growth (“Celtic tiger”) episode in the 1990s (Honohan, 2006) and the International Financial Services Centre (IFSC) might have brought short-term benefits but was largely disconnected from the rest of the Irish economy. Given this rather negative experience, what role, if any, can we expect from the financial sector in the recovery phase and in the medium- to long-term future? What is the optimal structure of Irish banking in the future, in terms of ownership and types of banks and integration with international financial markets? What impact will the global and European regulatory reforms have on Irish banks and what should the focus be on the national level? More importantly, Ireland is a good case to study the possible benefits and risks of a banking union as currently discussed by the Eurozone authorities. What impact will the ultimate shape of the banking union have on the Irish banking system?

This paper takes a forward looking perspective on the Irish financial system, comparing the size and efficiency of the Irish banking systems in international comparisons. It discusses the importance of the financial system for the Irish economy, relating both to the academic literature and the recent Irish experience. The paper also gauges the potential impact of recent regulatory reforms and the banking union currently under discussion within the Eurozone. This paper, however, does not add to an already large and very informed literature on the recent crisis, but rather takes a forward-looking perspective, informed by the recent crisis, the recent literature and the Irish experience.

Discussing the Irish financial system requires taking into account the specific characteristics and challenges of a small open economy such as Ireland. The economic structure of Ireland, with the presence of a large number of multinational companies and, in general, relatively easy access to international sources of finance, points to a somewhat different role of finance for the Irish economy. Similarly, it is important to distinguish between the role of the financial sector for financing the domestic Irish economy and the services provided by the Irish Financial Services Centre (IFSC). Most importantly, being part of a currency union has not only proven critical during the recent boom-bust period but will also be important for the future of the Irish banking system. I will discuss these different issues throughout the paper.

The remainder of the paper is structured as follows. The next section discusses the role of financial systems for growth in high-income countries, with a focus on the Irish situation. Section 3 uses a global

benchmarking exercise to gauge the development of the Irish financial system over time. Section 4 discusses recent regulatory reforms on the national, European and global level, while section 5 focuses on the importance for Ireland of the current discussions on the Eurozone banking union. Section 6 concludes.

### *Finance and growth in Ireland*

Ireland has seen high growth over the decade leading to the Global Financial Crisis, while at the same time experiencing a rapid expansion of the financial system. This positive correlation between financial deepening and growth is seemingly in line with the findings of a large cross-country literature that has documented a positive relationship between financial development and growth (see Levine, 2005 and Beck, 2009, for surveys). As we will discuss in the following, and as pointed out by other observers, the co-movement of the two variables over this relative short period does not imply causality, however. It can rather be related to a boom-bust period in a small open economy driven by a credit-fuelled real estate price cycle.

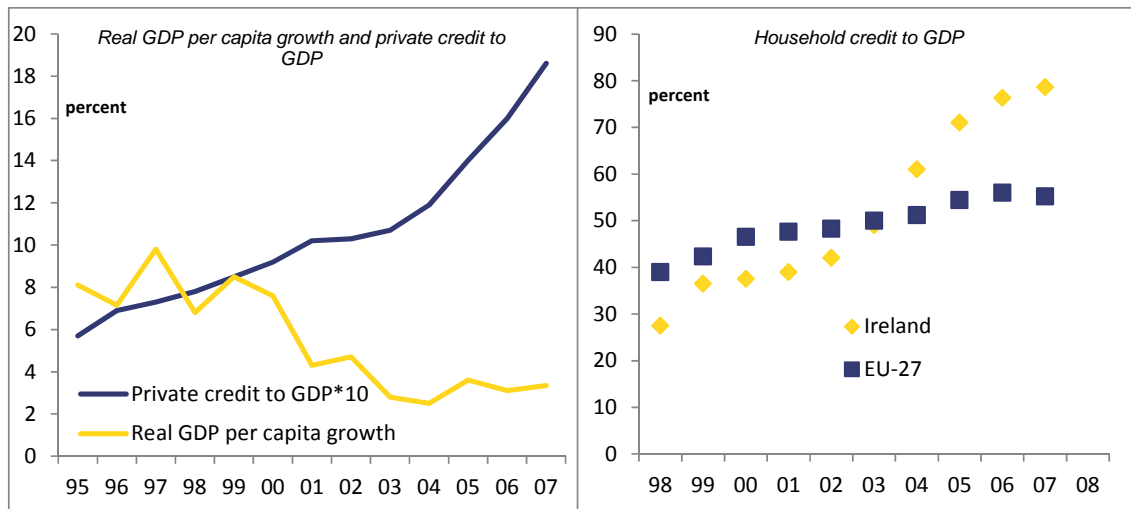
The theoretical and empirical finance and growth literature has pointed to the role of financial institutions and markets in screening and monitoring investment projects and enterprises and thus their allocation function as the most critical function in fostering economic growth. Observers, however, have pointed to the access of Irish and multi-national enterprises to international sources of finance during the Celtic tiger period of the mid- to late 1990s (Honohan, 2006), although small and medium-sized enterprises, which constitute an important part of the Irish economy, tend to depend more on domestic financial sources. In addition, the more sustained and rapid increase in bank lending started in 2003, when growth rates starting decreasing (Graph 2.1.1, left).

More recent cross-country research on the relationship between financial development and economic growth has pointed to important non-linearities in this relationship and can also provide some insights into the Irish situation. There is evidence that the effect of financial development is strongest among middle-income countries, whereas other work finds a declining effect of finance and growth as countries grow richer.<sup>(26)</sup> More recently, Arcand, Berkes, and Panizza (2012) document that the finance and growth relationship turns negative for high-income countries, identifying a value of 110 percent private credit to GDP as approximate turning point, with the negative relationship between finance and growth turning significant at around 150 percent private credit to GDP, levels reached by some high-income countries in the 2000s, including several countries subsequently hit by the Global Financial Crisis, such as Ireland.

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<sup>(26)</sup> Rioja and Valev (2004a, 2004b) and Aghion, Howitt, and Mayer-Foulkes (2005).

Graph 2.1.1: Real GDP per capita growth and Private Credit to GDP over time



Source: World Bank (2013) and World Development Indicators; Beck et al. (2012)

There are several, not exclusive, explanations for such non-linearities, as put forward by the recent literature and partly informed by the recent crisis. First, the measures of financial depth and intermediation the literature has been using might be simply too crude to capture quality improvements at high levels of financial development. Recent research has tentatively established that it is quality, as measured by productivity of banks, rather than quantity, i.e. total credit outstanding, that can explain economic growth in high-income countries (e.g., Hasan, Koetter and Wedow, 2009). In addition, the financial sector has gradually extended its scope beyond the traditional activity of intermediation towards so-called “non-intermediation” financial activities, including investment banking and trading activities (Demirgüç-Kunt and Huizinga, 2010). As a result, the usual measures of intermediation services have become less and less congruent with the reality of modern financial systems.

Second, some argue that the reason for the non-linearity of the finance-growth relationship might be that financial development helps catch up to the productivity frontier, but has limited or no growth effect for countries that are close or at the frontier (Aghion, Howitt, and Mayer-Foulkes, 2005). On the other hand, evidence from the U.S. in the 1970s and 80s and France in the 1990s shows significant growth benefits from financial liberalization, even though these countries could be considered being at the productivity frontier (Jayaratne and Strahan, 1995; Bertrand, Schoar and Thesmar, 2007).

A third reason for non-linearities might be the beneficiary of the credit as argued by Beck et al. (2012) who explore the differential growth effects of enterprise and household credit. Consistent with theory they find that the growth effect of financial deepening comes through enterprise rather than household credit. Most of the financial deepening in high-income countries, including in Ireland, has come through additional household lending, which thus might explain the insignificant finance-growth relationship across high-income countries.

Fourth, the financial system might actually grow too large relative to the real economy if it extracts excessively high informational rents and in this way attracts too much young talent towards the financial industry (Bolton et al., 2011; Philippon, 2010). Kneer (2013 a,b) provides empirical evidence for this hypothesis, both for the U.S. and for a sample of high-income countries. Fifth, and related to the previous point, the financial system can grow too large due to the safety net subsidy we will discuss below that results in too aggressive risk-taking and overextending of the financial system.

Finally, recent research has shown that long-term growth benefits of finance come through its intermediation role, but not necessarily through a large contribution to GDP in form of employment or value added (Beck, Degryse and Kneer, 2014). These results refer to a discrepancy between different views on the role of the financial system within an economy, with the intermediation view focusing on the service role of financial institutions and markets for the rest of the economy and the financial center view focusing on comparative advantages of the financial system in providing and possibly exporting financial services, implicitly aiming at a large as possible share of the economy engaged in financial and ancillary services, such as legal and accounting professions.

The above discussion can be applied directly to the case of Ireland, with several of the reasons being applicable to its recent experience in the period leading up to the crisis. While the role of finance in pushing a country to the frontier (with no further growth-enhancing impact beyond it) has been documented, the structure of the Irish economy during the Celtic Tiger years of the mid- to late 1990s argues against such a role. As pointed out by Honohan (2006) “there is little evidence to suggest either that recent Irish growth has been finance-rich in the sense understood by the literature, or that the previous low-growth experience was explicable in terms of a weak financial system.” Specifically, both multi-national corporations and larger domestic enterprises had relatively easy access to financial resources outside Ireland, as also reflected in the indicators presented in the next section. Obviously, this does not speak against the role of financial development for economic growth, but it confirms that it is access to financial services per se and not necessarily who provides them that matters.

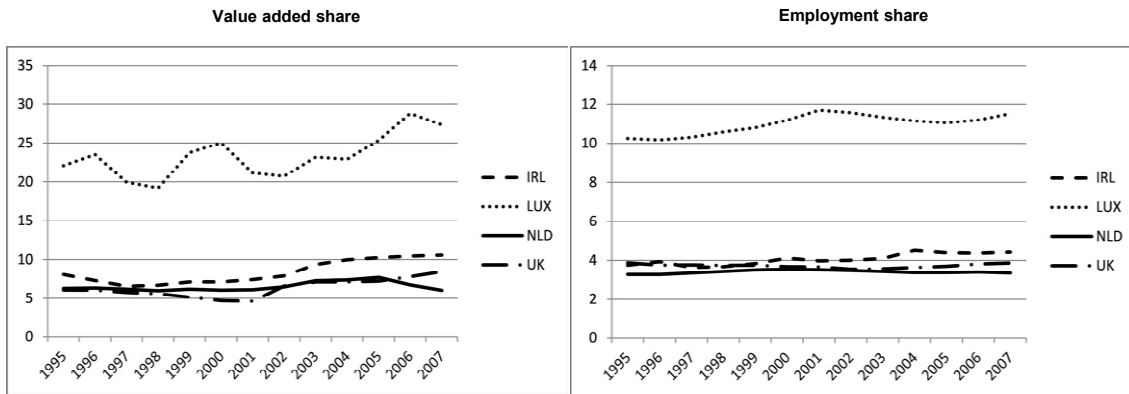
Behind the increase in Private Credit to GDP after 2003 was a marked increase in household credit to GDP, mainly mortgage credit, linked to the housing boom-and-bust cycle of the first decade of this century.<sup>(27)</sup> This increase in household credit was even more pronounced than in the average EU country, which also saw an increase over the same period (Graph 2.1.1, right). As discussed above, financial deepening associated with household credit is not significantly associated with higher economic growth, at least not in the long-term. This does not imply that household credit is something bad, per se, or to be avoided, rather that the positive impact of financial deepening on growth cannot be expected through household but rather enterprise credit.

Like other European countries, Ireland tried to create a financial centre in the 2000s, and as in other countries, with some short-term growth benefits. The two panels of Graph 2.1.2 show that both value added and employment share of the financial sector were higher in Ireland than both UK and Netherlands over the period 1995 to 2007, but significantly lower than in Luxembourg. As in the other countries, there was an increase in the importance of the financial sector over time. The IFSC attracted a large number of international banks due to tax and regulatory subsidies and made Ireland a focus point during the Global Financial Crisis. However, I would argue that the direct negative impact of IFSC during the crisis beyond job losses was rather limited. As also pointed out by Honohan (2006), even though employment at the IFSC amounted to 40% of financial sector employment in Ireland at the end of 2005, it still amounted to less than two percent of overall employment (Graph 2.1.2, right).

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<sup>(27)</sup> It can be assumed that the importance of this real estate cycle was important for the overall credit stock beyond mortgage credit as it also helped finance the construction industry.

Graph 2.1.2: Financial sector's contribution to Irish economy



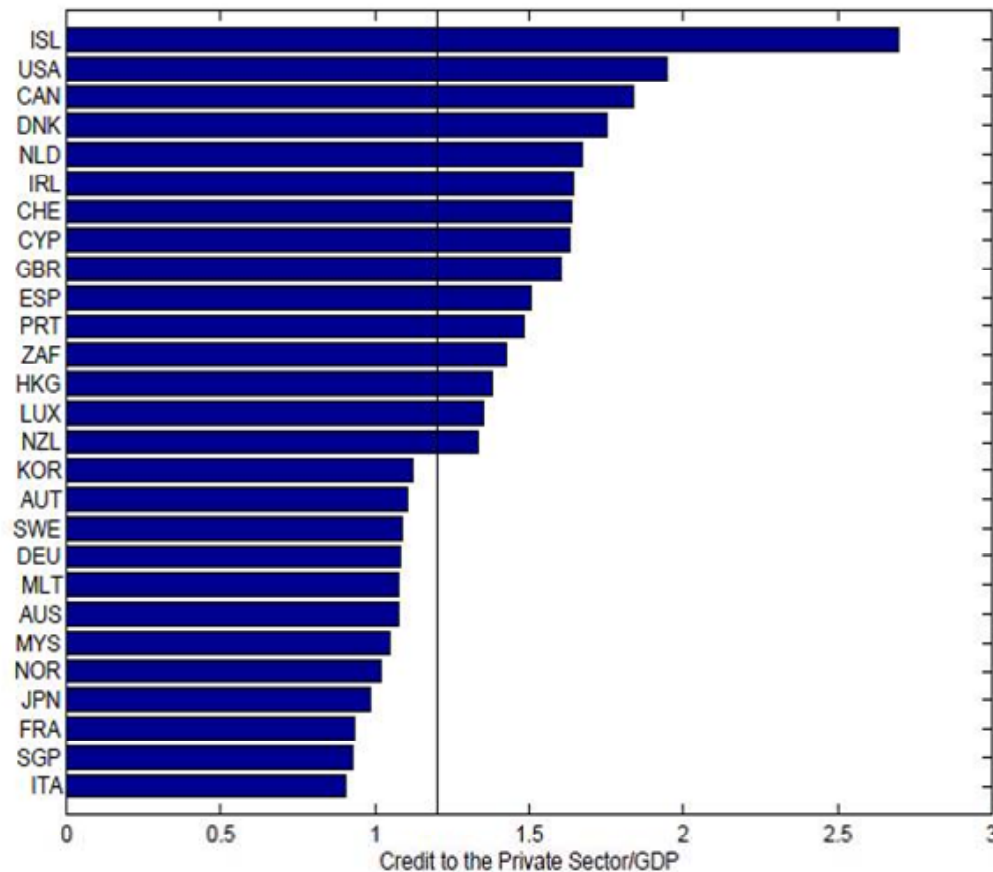
Source: Beck, Degryse and Kneer (2014)

Finally, the lack of a positive growth impact of the large Irish financial system can be explained with an overextension of the financial system due to favourable tax and regulatory policies beyond the IFSC. Such an overextension goes beyond high salaries, bonus payments and rapid growth (and thus additional earning possibilities) drawing talent from the real into the financial sector (Kneer, 2013 a,b) to the regulatory framework. As documented by several reports on the Irish crisis, there was strong political pressure on Irish regulators to apply light-touch regulation and supervision, partly driven by close links between the governing parties and both the construction industry and the individuals behind the IFSC. The introduction of the Euro and the consequent lower and more stable interest rates reduced market discipline vis-à-vis banks and the government. This can explain the rapid extension of the financial system as well as aggressive risk-taking, with a consequent negative growth impact, as posited by Arcand, Berkes and Panizza (2012) and illustrated in Figure 2.1.3, where Ireland is one of the countries beyond the threshold where the finance-growth relationship turns negative and significant.

Credit expansion beyond a certain threshold is not just by itself potentially negative for growth, but rapid credit expansion has also been found to be a very good crisis predictor (Demirguc-Kunt and Detragiache, 2001). Recent evidence also suggests that it is especially increases in household credit that are robustly related to banking crises, while the evidence is weaker for booms in enterprise credit (Büyükkarabacak and Valev, 2010). Credit, especially mortgage credit, expanded very rapidly in the years leading up to the 2008 bust, and the banks with the highest growth rates (e.g. AIB) were the ones with the greatest problems during the crisis, after having served as role model in the years leading up to the crisis.



Graph 2.1.3: Finance and growth – the range of a negative relationship



(1) This graph plots the 2006 level of Private Credit to GDP for all countries, for which the value was above 90%. The vertical line is at 110%. For more details see Arcand et al. (2012).

Source: Arcand, Berkes and Panizza (2012).

In summary, the experience of Ireland over the decade before the crisis is not inconsistent with a positive role of finance on economic growth. The initial Celtic Tiger growth episode was financed often from outside the Irish banking system, rapid credit expansion in the five years before the bust was mostly to households, and there are no indications that having a large financial centre focusing on exporting financial services has long-term growth benefits beyond its direct contribution to GDP, but might bring higher volatility.

This literature and the recent Irish experience (in line with the experience of several other smaller European countries) have also important policy implications going forward. First, most crisis recoveries, especially after credit booms, are not driven by bank credit, even where crisis resolution is undertaken aggressively (which in Ireland it was, at least in relative terms, i.e. compared to other European countries) (Abiad, Dell’Ariccia and Li, 2011). This points to a more limited role of the financial system in the immediate wake of the crisis. Second, fewer growth benefits can be expected in Ireland compared to countries of similar size and income level, given its economic structure and reliance on international sources of finance. Third, there is an optimal sustainable size of the financial system and expansion

beyond this size does not bring any growth benefits but high risks. Fourth, financial sector expansion through regulatory and tax subsidies does not support sustainable long-term growth and even less so, if focused on household credit.

#### *Benchmarking Ireland's financial system*

Comparing the development and structure of financial systems across countries and over time is made difficult as demand and supply factors determining the equilibrium depth or breadth of the financial sector vary across countries and within countries over time. Variation and changes in demographic structures might determine savings and investment behaviour. The cost of financial service provision might vary with country characteristics, such as income levels. Rather than picking specific countries to which Ireland to compare, I will therefore use several indicators of financial system development and compare them to a synthetic benchmark based on a large cross-country panel estimation. This exercise builds on the frontier concept as discussed by Barajas et al. (2013) and Beck and Feyen (2013). Specifically, the benchmarks are based on estimates from the following regression

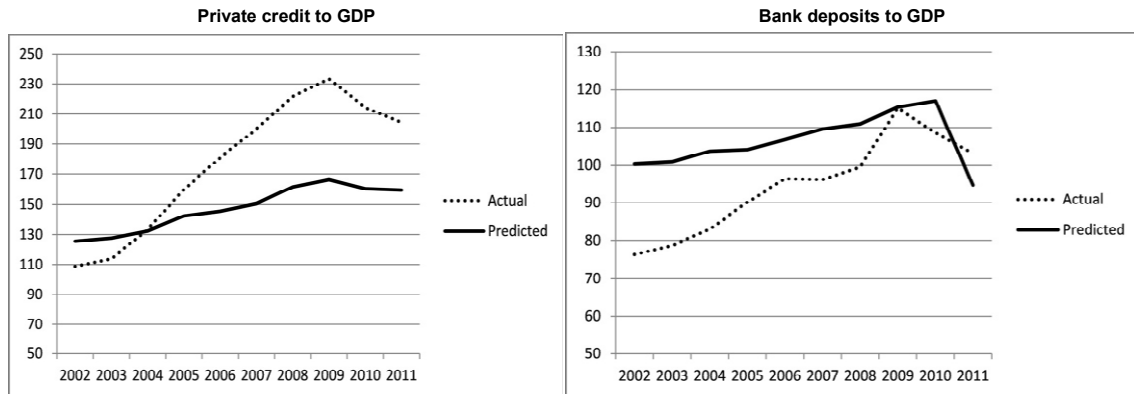
$$FD_{i,t} = \beta X_{i,t} + \epsilon_{i,t} \quad (1)$$

where FD is the log of an indicator of financial development, X is an array of structural country-specific factors, and the subscripts  $i$  and  $t$  relate to countries and years, respectively. Among the structural factors included are: (i) the log of GDP per capita and its square (to account for possible non-linearities), (ii) the log of population to proxy for market size, (iii) the log of population density to proxy for the ease of service provision, (iv) the log of the age dependency ratio to control for demographic trends and corresponding savings behavior, and (v) other fundamental factors (an off-shore center dummy, a transition country dummy and an oil-exporting country dummy) to control for specific country circumstances. The regression results are then used to predict the benchmark level of financial development  $FD_{i,t}^B$  for each country in each year for which data are available.

The benchmark level of financial deepening has different interpretations. On a most basic level, the benchmark represents the predicted value of different indicators of financial development based on the socio-economic structure of the host economies. This time-variant benchmark thus depends on the level of financial development across all sample countries. One can also interpret the benchmark as the long-run sustainable level of financial development, in the absence of any adverse or promoting policies towards the financial sector. A gap between actual and predicted level of financial development would thus indicate the lack of the necessary institutional and policy framework underpinning and effective financial system, while a situation where the actual is above the predicted level would either indicate an institutional and policy framework very conducive for the financial sector or an unsustainable level of financial deepening. Finally, the gap between actual and benchmark levels of financial development can also be interpreted over time, with the difference between actual and benchmark values possibly indicating an unsustainable credit bubble or long-term overextension, subsidized with taxpayer resources.

Applying this benchmarking exercise to Ireland over the period 2002 to 2011 shows that deposit collection by Irish banks has been below the level predicted by the global benchmarking exercise in most of the years, while credit to the private sector has been consistently above the benchmark starting in 2004 (Graph 2.1.4). While the benchmark level of both credit and deposits to GDP also increased over time, reflecting both changes in socio-economic factors in Ireland as well as a global trend towards larger financial systems, the actual ratios of deposits and credit to GDP increased even faster in Ireland. In 2008, the actual loan-deposit ratio was almost twice the predicted value, in line with the relative positions of credit and deposits relative to their benchmarks, pointing to the important role of non-deposit funding for Irish banks. The actual levels of deposit and credit to GDP reached their peak in 2009 before decreasing over the next years. It is important to note, especially in the case of credit, that these are stock numbers and thus include a certain number of underperforming loans that have not been taken off banks' books.

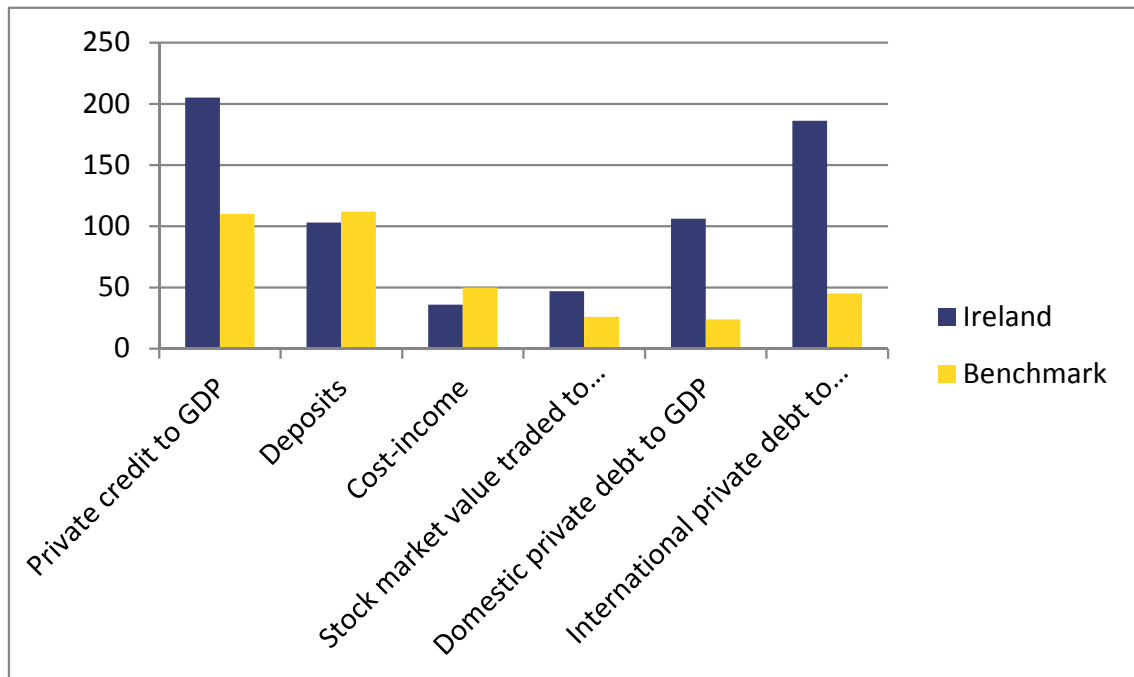
Graph 2.1.4: Benchmarking Irish banking development over time



Source: Beck and Feijen (2013) and author's calculations

Comparing actual and benchmark values for an array of financial system indicators for 2011 (Graph 2.1.5) shows that the level of outstanding domestic and international private debt securities is significantly above the level predicted by the benchmarking exercise for the global sample, in line with the previous discussion on the use of international sources of financing by Irish corporations. Similarly, total value traded on the Irish stock exchange is above the level predicted by the benchmarking exercise, although the difference is not as stark as in the case of the bond market indicators. Finally, bank efficiency, as gauged by the cost-income ratio, is better than predicted by the global benchmarking exercise.

Graph 2.1.5: Benchmarking the Irish financial system, 2011

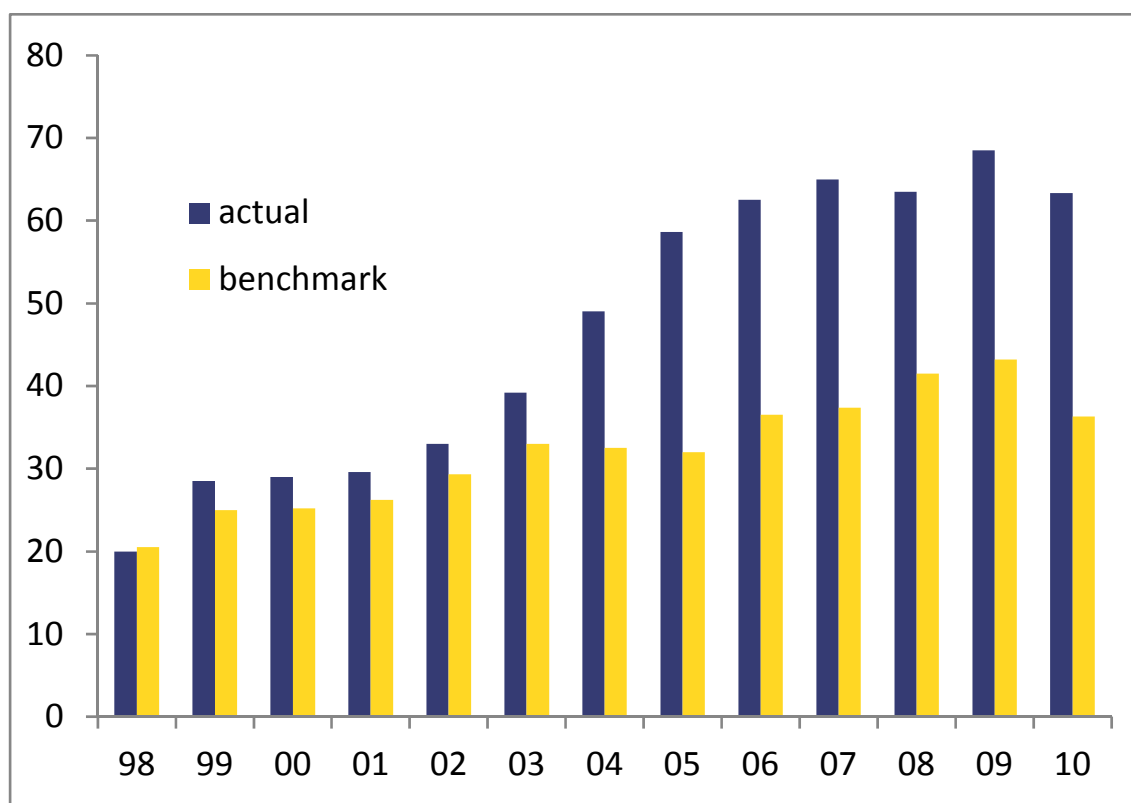


Source: Beck and Feijen (2013) and author's calculations

The findings of Graphs 2.1.4 and 2.1.5 suggest that the Irish financial system is larger than predicted by socio-economic factors, which on the one hand, could reflect the structure of the Irish economy, but also, on the other hand, an unsustainably large financial system related to the idea of a financial centre. The increase in private sector lending, driven by household and especially mortgage credit expansion, relative to the benchmark, clearly suggests an overheating. This is also illustrated in Graph 2.1.6, which shows the level of mortgage credit to GDP in Ireland over time relative to an international benchmark, based on the same model as above. While actual and benchmark value tracked each other until around 2002/3, the actual value rose well above the benchmark value in 2004, in line with other work that shows that real estate prices pulled away from levels predicted by fundamentals around this time.

In summary, the benchmarking exercise shows a rather unbalanced financial system, between liability and asset sides of the banking system and a rather heavy reliance on international sources of finance, both in the banking and the non-bank corporate sectors. It also indicates, that further downward adjustments in the size of the banking system can be expected.

Graph 2.1.6: Benchmarking Mortgage Credit to GDP over Time



Source: Badev et al. (2013)

One important dimension of financial sector development is competition in the banking system. Given its size, the Irish banking system has been traditionally very concentrated, with the largest three banks capturing 70 and more per cent of the overall market. Comparing Ireland to similar markets, however, shows similar structures. The 5-bank concentration ratio in 2010 stood at 86% in Ireland, compared to 90% in Denmark, 91% in Portugal, 92% in Belgium and 93% in the Netherlands (World Bank, 2013). Considering a behavioural measure, such as the H Statistic, the elasticity of output to input prices, show a similar picture. With a value of 0.71, Ireland is considered relatively competitive and lies between

Belgium (0.72) and Austria (0.70).<sup>(28)</sup> The Lerner index, on the other hand, shows a relatively high level of market power, with profit-costs margins of 27%, among the OECD countries to be surpassed only by Iceland, Czech Republic and Korea. Finally, the Boone indicator (profit-cost elasticity indicating to which extent more efficient banks can increase their market share, with more negative numbers indicating a higher degree of competition) shows again a relatively high value, with 0.01, whereas most OECD banking systems have average negative values.

Overall, this indicates a lack of competition in the Irish banking system, compared to other OECD countries. It is important to stress the current circumstances of a banking system that is still working through a large share of non-performing and doubtful assets, so that these indicators (especially the behavioural ones) do not show equilibrium behaviour. However, the recent withdrawal of several foreign banks (most recently ACC Bank and Danske Bank) indicates a trend to be carefully watched. We will return to the issue of foreign bank entry below.

On a final note, the concentrated nature of the Irish banking system puts a higher premium on alternative non-bank financing sources. A diverse financial system with a number of different player, such as large banks and more local, “grass-roots” financial institutions can be helpful. On the other hand, trying to “implement” certain financial structures, which in other countries have grown over generations, via government initiatives and regulatory policies might be less successful. Any policy proposals to create or foster new types of financial institutions should be evaluated on the basis of whether the socio-economic conditions that made them successful in other countries are in place in Ireland. Attempts to jump-start new types or segments of the financial system through regulatory or direct government subsidies or even implicit political suasion and support are to be treated with a high degree of caution.

Given the retrenchment of the Irish banking system and the limited access to financing by SMEs, calls for additional state-supported funding programs have been made, including financing through the pension system. Such calls are again to be treated with caution, in my opinion. On the one hand, long-term investment by the National Pensions Reserve Fund into equity funds is certainly laudable if done with proper screening and diversification, as it adds to the diversification of long-term financing sources in the economy. Similarly, partial credit guarantee schemes can be beneficial if appropriately priced, targeted and managed.<sup>(29)</sup> Such policies, however, rely on limited access to credit being the decisive growth constraint for the enterprise sector. On the other hand, a more direct involvement of government authorities in financial service provision can have important negative side effects as already alluded to above. While temporary nationalization following a banking crisis might be a valid if not necessary policy action, long-term government ownership and management has important downsides for both efficiency and stability, as a large literature has documented.

#### *The impact of the regulatory reform*

In the wake of the crisis, there have been efforts on the national, European and global level to adjust the regulatory and supervisory frameworks, learning from the lessons of the Global Financial Crisis and minimizing the risk of future financial fragility (see Allen, Beck, and Carletti, 2013 for an overview). What are the effects of these reforms on Ireland? What should be the focus of the Irish authorities in terms of regulatory reform agenda?

During the Global Financial Crisis and the early phases of the Eurozone crisis, most claim holders in financial institutions could expect to be bailed out, at the expense of taxpayers. This expectation can also, partly, explain why many financial institutions and market participants took aggressive risks in the

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<sup>(28)</sup> It is important to note that the computation of the H Statistics relies on strong assumption of the banking system being in equilibrium, an assumption that seems rather heroic for Ireland in 2010.

<sup>(29)</sup> There is still limited evidence on the effectiveness of partial credit guarantees, but several studies including for developed economies have shown the possible benefits. See, for example, Allinson, Robson and Stone (2013) on a recent UK scheme and Lelarge, Sraer, and Thesmar (2010) and Bach (2014) on French schemes.

run-up to the 2007 crisis in the first place. Critical in the context of the reform debate has therefore been the issue of turning bail-out expectations into bail-in commitments. Ireland was a poster child for fulfilling the bail-out expectations when in 2009 it decided to guarantee senior creditors of its failing banking system. While European Union decisions foresee bail-in of non-insured creditors after 2018, recent idiosyncratic and systemic resolutions (SNS Reaal in the Netherlands and the Cypriot banking system) suggest that this bail-in regime is effectively already in place.

While as part of the European Union, Ireland is subject to mostly supranational reform efforts, some dimensions of the reform debate seem more important for the Irish financial system than for others. As a lesson of the past crisis, the most critical part of the regulatory reform process seems to be the resolution part. While higher capital and liquidity requirements as well as activity restrictions can make a financial system less susceptible to shocks, bank failure is part of a market-based system and authorities should not try to minimize its probability down to zero. The challenge is rather to minimize the externalities from bank failure on the rest of the financial system and the real economy. Structuring a resolution framework in a way that forces financial sector risk decision takers to internalize the losses that they potentially impose on the rest of the financial system and the real economy can also have a healthy ex-ante effect by reducing aggressive risk-taking. Such a resolution framework would entail both bail-in rules for junior and potentially senior debt holders as well as different options to restructure and resolve banks in a loss-minimizing way for the rest of the financial system and the real economy, such as through good-bank-bad-bank structures or purchase-and-assumption structures.

Reforming the resolution framework, however, is not just important on the bank-level, but also on the enterprise and household level, where antiquated insolvency laws prevent a proper work-out of non-affordable mortgage loans for households and restructuring of viable enterprises. However, it might also require a build-up of new skills and capacities within banks in terms of better screening and risk management systems after having relied too long on collateral-based lending, especially to households and the construction sector. Only the combination of reforms in (i) bank regulatory framework, (ii) insolvency framework and (iii) internal bank systems can thus refocus the banking system towards a more productive role in the economy's resource allocation process.

Another critical dimension of the regulatory reform agenda for Ireland is a sound macro-prudential framework. Small and open economies such as Ireland with concentrated banking systems face stronger challenges in terms of credit cycles and herding effects. Stronger safeguards in terms of concentration and exposure limits are needed. An effective monitoring system of such trends and rule-based macro-prudential regulation with an additional discretionary element might be best suited to address potential systemic fragility pro-actively in the future.

Most important (and most difficult to legislate), however, is the role and position of the regulatory authorities in Ireland. Given the small size of the economy and reliance on relationships in business and politics and the especially close relationship between construction sector and political parties, there is a premium on independent and powerful while at the same time accountable regulators. While this does not imply that there is such a concern with the current management of the Central Bank of Ireland, reports assessing the recent crisis have pointed to such problems in the past.

### *Ireland and Europe*

The Irish financial system is closely integrated into the Single European Market in Banking. As with other "peripheral" countries, the introduction of the Euro and consequently low interest rates took away the disciplining function of financial markets (Honohan, 2009) and can partly explain the housing and credit bubble in Ireland. The crisis resolution was also dominated by the lack of national and Euro-zone structures to deal with systemic banking distress. While Ireland benefitted from the Single European Market in Banking through entry of new players in the 2000s and also allowed Irish banks to more easily expand abroad, the Irish financial system is also suffering from the slow disintegration of this single

market that can be observed in the Eurozone and European Union, undermining competition in the Irish market. The future of the Irish banking system and the optimal domestic regulatory structure will depend critically on the structure of the banking union.

The problems of Ireland can be best illustrated by the comparison with the US state of Nevada (Gros, 2012). Ireland and Nevada are of similar economic size and both suffered real estate and credit boom-and-bust periods in the 2000s. The critical difference between the two is that Nevada is part of a banking union, where risk is being diversified across the different states of the U.S. This has allowed Nevada to avoid any direct negative impact of the housing bust on the state government's finances (nevertheless, with a strong indirect effect through the recession following the housing bust). Through the diversification effect of the U.S. banking union, there were also less strong additional negative effect of the bank fragility on access to credit by enterprises in Nevada (beyond and above the construction recession).

Going forward, the shape of the Irish banking system and the Irish financial safety net will be influenced by the structure of the European Banking Union that is currently being "constructed". As on the national level, an effective financial safety net consists of supervision, resolution and deposit insurance (the fourth pillar, lender of last resort, has been taken on by the ECB quite successfully over the past five years, maybe even too successfully according to some observers). Such a structure would resemble the U.S. banking union and would thus leave Ireland in a similar situation as Nevada. Small and open economies as Ireland therefore stand to benefit most from such a banking union, even if (or maybe because) this implies a loss of regulatory power over the Irish banking system in Dublin.

The comparison between Ireland and Nevada is, of course, not a complete one, as there are important other differences between the U.S. and Europe, including the bank-based nature of financial systems in Europe. This bank-based nature has also resulted in European banks holding traditionally a large share of government bonds, unlike in the U.S., where government bonds are held mostly by non-bank financial institutions. More critical, however, is the fact that banks in the Europe hold government bonds of their own country, which has resulted in the vicious cycle of bank and sovereign fragility, also referred to as deadly embrace. Interestingly, this seems less of a problem in Ireland than in other peripheral countries, given the stronger role of insurance companies and pension funds. A banking union by itself will therefore not solve some of the structural problems in the interlinkages between finance and government in Europe.

In line with many other economists, I have argued for a full-fledged banking union rather than a sequential approach. As it currently stands, the Single Supervisory Mechanism will take effect in 2014, while the other two pillars (common resolution mechanisms and a joint deposit insurance fund) are still in the planning stage, with many observers being doubtful that political agreement will be achieved on establishing effective second and third pillars of the banking union.

The ultimate shape of the Eurozone Banking Union will therefore have critical repercussions for the Irish banking system. A full-fledged banking union, along the lines discussed above can provide the necessary certainty and incentives for banking in the member countries. A half-baked banking union, as it currently seems more likely, on the other hand, will impose a larger burden on the national authorities. Specifically, it will impose a stronger reliance on national resolution frameworks. It might require stronger restrictions on the banking system in terms of capitalisation and growth and a heavier reliance on macro-prudential regulation.

In the case of a full-fledged and effective banking union it is also to be expected that the trend towards disintegration of the Single European Market in banking can be reversed, with the Irish banking market potentially seeing again a larger role for foreign banks. The ultimate goal in this context would be a return to the branch model across the banking union, with cross-border externalities evidenced before and during the crisis to be internalized by the supranational financial safety net. On the other extreme, in the

absence of an effective banking union, the European banking market will most likely proceed along national lines, with regulators focusing mostly on national stability interests. In the case of Ireland, this would imply a rather cautious approach vis-à-vis foreign bank entry in the form of branches, but also restrictions on Irish banks expanding abroad. In summary, the future regulatory approach appropriate for Irish banking is to a large degree determined by the shape that Europe's banking union will take.

### *Conclusions*

The Irish banking system is slowly recovering from the crisis and its aftermath. Important lessons will have to be learned. While cross-country evidence suggests that the banking system plays a limited role in the recovery phase after a systemic banking crisis, a sound and an effective financial sector that caters to the intermediation needs of the Irish real economy is critical in the medium- to long-term. This would require a stronger focus on enterprise over household credit and on financial services for the local economy rather than the IFSC.<sup>(30)</sup> This requires reforms of bank regulatory and insolvency frameworks as well as adjustments in banks' lending policies and risk management systems.

Critically, future financial sector policies in Ireland will have to be contingent on the shape of the European banking union. In the absence of a full-fledged banking union, a more conservative approach to bank regulation is called for, with higher capital requirements and an effective national resolution regime. Among the necessary adjustments should be appropriate risk weights and concentration limits for government bonds. If the Eurozone manages to move towards a banking union, there will still be important tasks for Irish bank regulators, including micro- and macro-prudential regulation, where the latter has to be tailored to Irish macro-economic circumstances.

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<sup>(30)</sup> While there might not seem an immediate trade-off between the two, scarce regulatory capacity should be focused on the intermediation services rather than the IFSC. Also, a clear separation of the two for purposes of the explicit and implicit financial safety net is advisable.



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## NIGEL NAGARAJAN, FIRST DISCUSSANT

### *Introduction*

With Ireland's recent successful graduation from the EU/IMF programme, there will no doubt be many studies looking at what the programme has achieved and what lessons can be learned. Thorsten Beck's chapter in this volume on the future of Ireland's financial sector has many interesting things to contribute to this topic, and I broadly agree with many of the points he makes.

Although the perspective he takes is mostly forward-looking, it can still be useful to review the reports produced by both the European Commission and the IMF at the beginning of the programme in order to gain some insight into how the respective teams in the so-called 'Troika' saw the different challenges that the programme would need to confront. The initial programme report produced by the European Commission services highlighted two key challenges confronting the banking sector as a result of the crisis.<sup>(31)</sup> The first was the deterioration in the *quality of banking assets*, while the second was the *vulnerability of banks' funding structures*. Both of these were seen to be the result of the rapid expansion of bank assets as a result of Ireland's credit and property boom, which the report saw as stemming, in turn, from intensified competition for profits among banks in the overheating economy and property market. Increased access to international wholesale funding markets by Irish banks in the 2000s is seen by many commentators to be an important factor behind these developments. Interestingly, studies have found that the main source of this cross-border funding was banks and other financial institutions in the UK and the US (and not the euro area).<sup>(32)</sup> However, as that first Commission services report makes clear, the boom in bank lending was not stemmed by Ireland's 'light touch' approach to supervision and regulation.<sup>(33)</sup>

I suspect that other studies will place greater emphasis on both asset quality and funding issues than Thorsten has chosen to do in his chapter. He focuses instead on the appropriate size of the financial sector in Ireland and why the shape of European banking union matters for a small country. Still, it would be a mistake to ignore the first two issues completely, especially if one wants to have something useful to say on whether the programme has achieved its objectives. Furthermore, while Thorsten's comments on European banking union are welcome, I would not want to draw the conclusion that the fate of Ireland's financial system is now largely in European hands, and that domestic developments and policy choices are no longer so important.

As Governor Patrick Honohan highlighted in his opening address to the conference, the EU/IMF programme achieved what it set out to do. In relation to the financial sector, the two key achievements were arguably the *recapitalisation* of the domestic banks on the basis of a rigorous stress test conducted early in the life of the programme and the *deleveraging* of bank balance sheets. In relation to the former, the recapitalisation needs of the banking sector were certainly very large in comparison to most other crisis countries – a reflection of the size of Ireland's property/credit bubble – but were still below what was assumed at the time the programme was negotiated. In relation to the latter, the aim of the deleveraging process was to shrink bank balance sheets and reduce their funding vulnerabilities, while at the same time minimising the negative impact of this on the real economy (by emphasising disposals of non-core assets and avoiding fire sales). A possible measure of programme success in the financial sector is that funding conditions for Irish financial institutions have improved considerably, no doubt benefiting as well from the improved position of the Irish sovereign. From today's perspective (early 2014), there has been a stabilisation of deposits, significantly reduced reliance on official funding from monetary authorities and very good progress by all three Irish-headquartered institutions in returning to funding

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<sup>(31)</sup> See European Commission (2011), page 9.

<sup>(32)</sup> Coates and Everett (2013) point to UK banks and the international interbank market as the main sources of cross-border funding. They find that funding originating from banks in the UK accounted for the most pronounced contraction after the crisis erupted. A BIS study (Van Rixtel and Gasperini, 2013), looking not just at Ireland but at euro area banks, emphasises the role played by US money market funds in cross-border funding.

<sup>(33)</sup> Regling and Watson (2010) criticise the response of Irish supervisors to the build-up of risks in the financial sector, which "was not hands-on or pre-emptive" (page 6). They contrast the weakness of supervision in Ireland "with experience in those countries, where supervisors, faced with evident risks, acted to stem the tide" (page 6).

markets.<sup>(34)</sup> Notwithstanding these achievements, progress in arresting the rise in non-performing loans (NPLs) and in working through the high level of mortgage arrears has taken longer than originally anticipated, and weak loan growth (notably to SMEs) has also been a concern – although subdued demand for credit is probably a large part of the explanation (see below).

I have highlighted three main areas where I believe Thorsten's chapter has something particularly interesting to say about the Irish experience:

- The finance-growth nexus and the costs and benefits of having a large financial sector
- The importance of the financial sector for Ireland's recovery
- The direction of future credit growth

*The finance-growth nexus and the costs and benefits of having a large financial sector*

In relation to the first of these, I appreciated Thorsten's useful overview of the literature on the finance-growth nexus and its application to Ireland. My own sense of what this literature tells us, from both an Irish and an international perspective, can briefly be summarized as follows:

At least for emerging economies, there is some evidence that greater financial development is growth-positive. But there is a point beyond which it can lead to greater financial fragility and increase the likelihood of boom-bust credit cycles. However, especially for developing countries, many studies still find that the growth gains can outweigh the costs associated with the bursting of credit bubbles.<sup>(35)</sup>

But it may not be so easy to draw the same conclusion for Ireland, especially given the very large costs associated with its crisis, and also given the doubts which previous studies have raised about the financial sector's contribution to growth in Ireland, and which are referenced in the chapter.<sup>(36)</sup> Furthermore, Ireland's crisis had a very important fiscal dimension, and it is not straightforward to distinguish this from the financial one.

Furthermore, measuring the Irish financial sector's contribution to value-added is not straightforward, especially when Irish banks' business models mean that they do not charge explicit fees for many of the services they provide.<sup>(37)</sup>

From an Irish perspective, this still leaves us with three questions. Firstly, much of the literature on the nexus between finance and growth is based on the experience of developing and emerging countries. Can we draw strong conclusions from their experience for mature, advanced economies like Ireland?

Secondly, what conclusions would we draw if the financial system had been as large as it was during the boom years, but if Irish banks had pursued different business models? If banks had chosen to rely more on lending to finance productive investment opportunities instead of property? For that matter, if banks

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<sup>(34)</sup> Perhaps understandably, early assessments of the impact of the programme were either cautious or not so positive. For example, Whelan (2011) noted that the announcement of the EU/IMF programme was met with both an increase in deposit outflows and greater reliance on central bank funding. Writing shortly after the results of the 2011 stress tests were released, he was uncertain about whether they would help stabilise the funding situation of the banks.

<sup>(35)</sup> Tornell, Westermann and Martinez (2004) go a bit further than this. They argue not only that occasional crises need not forestall growth, but that crises may even be a necessary component of a developing country's growth experience. It would be a brave commentator who came to the same conclusion for Ireland.

<sup>(36)</sup> See Honohan (2006).

<sup>(37)</sup> See Everett, McNeill and Phelan (2013) for an interesting discussion of conceptual and statistical issues in measuring the financial sector's contribution to value-added in Ireland.

had been more prudent in risk management during the bubble and if supervision had been better? <sup>(38)</sup> The academic debate about the appropriate size of the financial sector is perfectly valid, but should not blind us to the problems created by the inappropriate risk-management practices of individual institutions. Thankfully, there is an emerging academic literature which can help us to understand what makes individual banks more risky.<sup>(39)</sup>

Thirdly, how do we properly distinguish between Ireland's domestic financial sector and its international financial services sector (the IFSC)? While increased access to cross-border funding by Irish banks was certainly a factor in the bank lending boom, it would be a mistake to ascribe a key role to the IFSC in this respect, since the latter was mainly focused on the export of international financial services to other countries.

*The importance of the financial sector in the recovery/the direction of future credit growth*

Thorsten's chapter makes some important points about the role of rapid credit expansion and aggressive risk-taking by Irish banks in explaining the crisis. I would strongly agree with him that the Irish experience indeed confirms the risks that can arise when countries move beyond the threshold when the finance-growth nexus turns negative. Thorsten then goes on to make two additional points:

- That most recoveries from financial crises are not driven by an expansion of bank credit.
- That credit to enterprises is more important for long-term growth than credit to households.

Again, I broadly agree with these conclusions. On the other hand, the approach adopted under the programme did place significant emphasis on repairing the financial sector in order both to minimize further financial stability risks (which might have fiscal implications) but also to ensure that it can play its role in supporting the recovery. It would have been interesting to have seen some discussion in the chapter about the approach that was taken.

Notwithstanding my agreement with Thorsten's overall conclusions, I would also argue that the health of financial institutions in Ireland is critically interlinked with the situation of Irish households and enterprises, and that Ireland still faces challenges with respect to both of these. Given the high degree of indebtedness of *Irish households*, the issue of unsustainable mortgage debt has been the focus of particular attention under the programme but also, in general, for Irish policy makers. The aim of the various initiatives in this area has been to ensure that banks offer and conclude sustainable restructuring solutions for households with unsustainable arrears, while restoring debt service payments in other arrears cases and not undermining payment discipline among borrowers who are meeting their obligations. Frustration with banks' slowness in dealing with the high level of mortgage arrears cases has been a frequent complaint of commentators, even if the reasons behind this may be quite complicated (e.g. inefficiencies in the legal system and uncertainties created by the change in the personal insolvency framework may also have contributed, along with other factors). However, the process does now seem to be gaining traction due to introduction of a target regime for mortgage restructures. I think most commentators in Ireland would agree that restoring sustainability to household finances is critically important, and the role of banks is obviously central in this process. Thus, it would have been interesting to see some discussion of this issue in the chapter.

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<sup>(38)</sup> One could argue that a more conservative approach to risk by Irish banks during the boom would have constrained the size of the financial sector, since eventually banks would have run out of creditworthy borrowers to lend to. However, once that point had been reached, Irish banks could have expanded to other markets in search of new lending opportunities but still based on a prudent approach to risk.

<sup>(39)</sup> See, for example, Beltratti and Stulz (2009) and Köhler (2012). The latter study identifies lending activities and bank business models as key drivers of risk at the individual institution level. Interestingly, it also finds that banks become more risky when aggregate credit growth is excessive, even if their own individual loan growth is not excessive compared to competitors.

Secondly, in relation to *Irish enterprises*, the chapter makes the valid point that Ireland is highly reliant on international sources of finance. However, while that is certainly true for the multinational sector, the SME sector is still very dependent on bank credit. Also, it should be remembered that during the bubble years there was significant property-related lending to the enterprise sector. A large part of this was commercial real estate (CRE), but many Irish SMEs also branched out of their core business areas by taking on significant buy-to-let property exposure. Thus, the conclusion for the future is that it is not sufficient to say that enterprises should be the main beneficiaries of future lending growth. It is also important to ask what this lending is being used to finance: productive investment or property? Again, the chapter could have included some discussion of these themes.

Overall, it is probably correct to say that Ireland's immediate recovery is not be fully dependent on the health of its banks. Still, it could have been interesting to explore in more detail whether the above factors mean that Ireland could be a (partial) exception to the rule that recoveries from banking crises are not driven by an expansion of bank credit.

#### *What could be explored further?*

In this section, I highlight a few areas that I feel could be explored further in future assessments of the impact of the EU/IMF programme on the future of Ireland's financial sector. Perhaps an obvious one to begin with is an *assessment of the design of the programme* – for example, was the approach taken to recapitalisation, deleveraging, and NPL resolution the right one? In terms of more forward-looking themes, it would be good to know whether bank risk management has improved sufficiently since the crisis, and also to explore how bank supervision in Ireland has changed. It should be recognised that the Irish authorities made significant changes to their approach to supervision in the aftermath of the crisis, and that these changes began before the EU/IMF programme.

A second topic that future studies could look at is to explore the reasons behind *weak loan growth in a post-bubble economy*. One of the challenges that confronted both the authorities and the programme partners was to know whether this weak level of lending to businesses was mainly explained by low demand for credit, or whether some creditworthy borrowers faced potential obstacles to accessing finance. This is a classic example of what economists call the "identification problem", and while there is a great deal of survey-based evidence, it is not conclusive. Weak demand for credit, as households and consumers deleverage, is no doubt a large part of the explanation for these trends. Still, even in a weak economy, enterprises need credit for working capital. Thus, evidence that Irish SMEs may be more credit constrained than comparable SMEs in other euro area countries is potentially disconcerting, and trends in SME credit need to be closely monitored as the recovery continues.<sup>(40)</sup>

With all the positive news about the recovery of Ireland's economy and its banking sector, it is easy to forget that Irish banks remain substantially state-owned. Thus, a third topic that could usefully be explored in future studies is *how to exit from state ownership*. Specifically, how quickly and under what circumstances should the state seek to divest its share in the banks? At least for developing economies, there is some evidence that state-owned banks face different lending incentives, operate less profitably and have greater exposure to credit risk.<sup>(41)</sup> Do similar considerations apply in advanced economies, and, if so, how should they be balanced against the understandable desire to maximise the return to the state from selling its ownership share?

Finally, future studies could also look at *remaining challenges* facing Ireland's financial sector. One such challenge is weak bank profitability, which stems in part from the high proportion of structurally loss-

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<sup>(40)</sup> Lawless and McCann (2011) find that Irish SMEs are more likely to be rejected for credit than comparable euro area SMEs. However, it is important to control for creditworthiness, especially since many Irish SMEs branched out into property during the bubble, implying that the value of their collateral has since declined. This behaviour was not so prevalent among SMEs from other euro area countries.

<sup>(41)</sup> See, for example, Sapienza (2002) and Cornett, Guo, Khaksari and Tehranian (2010).

making tracker mortgages on banks' books. The interest rate charged to the borrower on an Irish tracker mortgage is typically a small margin above the ECB policy rate. As the crisis saw a divergence between policy rates and bank funding costs, many of these assets now have a negative carry, meaning that they can be loss-making even when they are performing. There are complex public policy issues involved with trackers, and no doubt future studies can help to shed some light on them.

### *Conclusion*

To conclude, I welcome Thorsten's contribution to the debate about the future of Ireland's financial sector. I broadly agree that Ireland's immediate recovery is not critically dependent on the health of its financial sector, although I note the inter-linkages between the health of the banks and the balance sheets of consumers and enterprises. One can also make the argument that the process of financial sector repair in Ireland is not yet fully complete, despite the significant progress achieved under the programme. It is probably only when loan demand has returned to 'normal' levels that we will be able to assess the extent to which Irish financial institutions are correctly intermediating credit in line with sound risk management principles. As Ireland's recovery gains traction, the day when this proper assessment can be made is hopefully getting closer.

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## LARS FRISELL, SECOND DISCUSSANT

The paper provides a useful summary of the structural challenges facing the Irish financial sector going forward. In particular, the author makes extensive use of research on past financial crisis and the role of the financial sector in promoting economic growth. The paper makes three contributions in particular.

First, the finance-growth literature has documented that the impact of financial development on growth is strongest among middle-income countries, and that its importance declines as countries grow richer. In addition, credit growth has rarely proved essential to economic recovery after a crisis. The literature has even identified a negative relationship between credit and growth, starting at levels of around 150 per cent of private credit to GDP, as the financial sector drain talent from the (at this stage more productive) real sector. When the sustained increase in credit took hold in Ireland in 2003 overall economic growth was already slowing, an indication that this mechanism was at work.

My reflection on this is that policymakers in Ireland probably should have acted to dampen credit growth in the mid-2000s even if there had been no risks of deteriorating asset quality whatsoever. However, regarding post-crisis policies, past evidence may not be a good guide in a situation as extreme as Ireland's, with a high debt overhang and demanding conditions facing new borrowers.

Second, also based on a vast literature, the author warns against state-designed solutions to improve the supply of credit. Such schemes tend to misallocate credit and have often proved costly to the state. As the author puts it: "Attempts to jump-start new types or segments of the financial system through regulatory or direct government subsidies or even implicit political suasion and support are to be treated with a high degree of caution."

I think the author is right - also recent initiatives such as Bank of England's funding-for-lending scheme have been criticized for subsidising the wrong kind of lending. Yet again, the challenges facing Ireland today are of a systemic nature, and the state already owns two of the four largest banks. The question is whether the current arm's-length approach is necessarily optimal to alleviate Ireland's "banking trilemma" - a very high stock of loan arrears, low levels of new lending at high (real) interest rates, yet still low (pre-provision) profitability in the domestic banks.

Thirdly, the paper concludes that Ireland's banking strategy is highly dependent on the evolution of European banking union. The author warns that a "half-baked banking union, as it currently seems more likely", will impose larger potential resolution costs on member states and should prompt Ireland to impose stricter regulations on banks, e.g. higher capital requirements, and to take a cautious approach to both foreign banks' entering the republic, and to domestic banks' expansion abroad.

It is easy to agree with the author's premise, but one might add that the creation of credible resolution framework, where unsecured claims can be expected to be bailed-in, should be the preferred way of reducing future resolution costs.

# Part 3

## IRELAND'S FISCAL FRAMEWORK: OPTIONS FOR THE FUTURE

George Kopits, Woodrow Wilson International Center for Scholars

### **Abstract**

The Fiscal Responsibility Act of 2012 established fiscal policy rules and an independent fiscal watchdog, the Irish Fiscal Advisory Council (IFAC)—patterned after the new EU template for fiscal rules and the Swedish fiscal council, respectively. These elements, along with budgetary procedural rules, comprise the core of Ireland's fiscal framework. Although the present framework meets most criteria of international good practice, there is considerable scope for improvement to meet Ireland's future needs, especially for restoring public debt sustainability—as it is no longer under the direct tutelage and protection of the EU and IMF. To this end, the paper outlines a set of options to strengthen the fiscal framework consisting, among others, of (a) a binding public debt rule; (b) an indicative structural budget balance rule; (c) a pay-go rule, and (d) steps to broaden the mandate and amplify the resources of IFAC. It is argued that these options should help pave the way to further gains in credibility in financial markets, and ultimately, to higher economic growth and stability.

Useful comments from Sebastian Barnes, Ronald Downes, Antonio Garcia Pascual, Philip Lane and John McHale are gratefully acknowledged. The author alone is responsible for all views expressed.

## *Introduction*

The financial crisis that hit Ireland in 2010 has left a heavy legacy of public sector indebtedness that poses a formidable challenge for policymakers in the years ahead. As part of the ongoing adjustment program and in accordance with the strengthened EU fiscal governance, the Fiscal Responsibility Act, supported by existing budgetary practices and norms, currently serves as the core of the framework for fiscal policymaking. This paper evaluates the usefulness of the framework for Ireland and explores options for improvement, with a view to contributing to the country's future economic stability and growth. It is not intended to provide an exhaustive treatment, but rather to highlight key areas with scope for improvement.

The paper is organized as follows. The first section is a brief review of past fiscal developments in the broader macroeconomic and financial landscape. The second evaluates the current fiscal framework from the perspective of international good practice and of the country's future needs. The third seeks to identify a set of options to strengthen the framework in the light of Ireland's present circumstances and future prospects. The final section concludes.

## *Background*

Following two decades of almost uninterrupted high growth, beginning in 2008 the Irish economy suffered an extraordinary setback. Benefitting from major structural reforms launched since the late 1980s—reversing ill-fated measures adopted earlier in that decade—real per capita income peaked at nearly 150 percent of the EU average, while public debt declined to 25 percent of GDP on the eve of the financial crisis. Prominent among fiscal reform steps were the rationalization of budget expenditures, as well as reduction and simplification of the regulatory and tax burden. These steps contributed to improved fiscal performance, reflected in headline indicators. With fiscal accounts recorded to being close to balance, Ireland was one of a handful of euro area members that had remained outside the EU's excess deficit procedure until the onset of the financial crisis.

However, by the turn of the century, the favorable fiscal indicators masked a worsening structural budget imbalance. The economic boom led to complacency in policymaking and to the adoption of an expansionary fiscal stance, despite both internal and external warnings against the risks of procyclical action.<sup>(42)</sup> Thus the mistakes in policymaking were committed in the context of a relatively sound fiscal structure, as compared to other EU members facing a financial crisis where policy mistakes took place within a failed structure.

Underneath the surge in the real economy lay the seeds of its unraveling in the vulnerability of the financial system. Lax banking regulation and supervision, and absence of a macroprudential framework, paved the way to an unchecked financial and real estate asset bubble, fueled in large part by loose monetary policy<sup>(43)</sup> and speculative capital inflows. The bubble was accompanied by a widening external imbalance that reflected loss in competitiveness and depressed private domestic savings. The upshot was a banking crisis and a sudden stop in access to international capital markets. The resulting collapse of major commercial banks was remedied almost entirely with recapitalization from public funds. Thus, the brunt of the adjustment was shifted to the public sector.

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<sup>(42)</sup> For a critical review of the conduct of fiscal policy in the decade leading up to the crisis, see Wright (2010).

<sup>(43)</sup> For Ireland and other peripheral euro area members, until the onset of the crisis, the ECB base interest rate was negative in real terms and significantly below the rate suggested by the Taylor rule; see Mayer (2012).

In several respects, Ireland's financial crisis resembles similar episodes that had taken place for example in Chile in the early 1980s and in East Asia in the late 1990s.<sup>(44)</sup> In these countries, unbridled credit expansion that had fueled financial and real estate bubbles, mostly from short-term capital inflows, which, coupled with an appreciated exchange rate, precipitated a major banking and currency crisis. To contain the crisis, besides floating the exchange rate, governments extended *ex post* guarantees on bank liabilities and recapitalized impaired balance sheets. However, the dramatic scale of the ensuing buildup of public debt in Ireland (quintupling as a ratio to GDP since 2008) surpassed by far the jump in the debt ratio experienced in the other crisis countries.<sup>(45)</sup>

In addition to the large debt service obligation assumed by the public sector, Ireland's adjustment burden was exacerbated by the hard exchange rate peg<sup>(46)</sup> and stagnation in export demand from trading partners that were also beset by the great recession. The situation was further aggravated by a procyclical fiscal contraction adopted under the adjustment program (as in several other EU countries), which degenerated into a vicious race to the bottom.

These conditions stand in stark contrast with those prevailing under other adjustment programs supported by the IMF in the past, which included exchange rate flexibility in the face of a benign external environment characterized by growth and stability in major trading partners. Although those programs called for a procyclical stance *ex ante*, as soon as specific adjustment measures were implemented and even before formal completion of the program, they elicited a favorable response from abroad in terms of a favorable turnaround in trade flows and in market financing, resulting in a broadly neutral or countercyclical stance *ex post*. Today such conditions are missing within the euro area.

A positive difference from other adjustment programs in the euro area is that the Irish adjustment consisted mostly of frontloaded measures, two thirds in expenditure cuts and only one third in tax hikes—phased even before the start of the arrangement under the extended Fund facility.<sup>(47)</sup> In addition, the authorities did not attempt to compensate for missed deficit targets attributable to a lower than projected growth rate.<sup>(48)</sup> Other adjustment programs in the area were implemented at a much slower pace—often following a wasted period of denial by government leaders—and relying excessively on stop-gap tax increases, public sector wage freeze, and other one-off measures, including in some cases privatization of state assets or nationalization of some private pension funds, all endorsed by the EU and the IMF.

As it regains access to international markets, following completion of the three-year extended arrangement, Ireland must seize the opportunity to consolidate the progress attained so far and enter a steady path of public debt reduction relative to economic activity, while breaking away from the vicious circle of serial procyclical adjustment programs. The task ahead is to anchor expectations of economic agents and investors at home and abroad through the pursuit of a predictable fiscal policy geared to restoring debt sustainability. In the event, enhanced policy credibility will allow sufficient latitude for a cyclically neutral (or perhaps even countercyclical) fiscal stance. This is indeed the principal argument for

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<sup>(44)</sup> See Diaz Alejandro (1985) for a documentation of the Chilean crisis and Ghosh and others (2002) for an overview of capital account crises, including in East Asia, in the 1990s.

<sup>(45)</sup> In comparison, the increase in the public debt ratio between the pre-crisis and post-crisis period, though significant, was much smaller in Indonesia (78 percent), the Philippines (55 percent), Thailand (53 percent) or Korea (45 percent); see Kopits (2004). The rise in the debt ratio cannot be entirely attributed to bank recapitalization, as a significant portion of the increase—more than one half in the case of Ireland—stems from the decline in economic activity. Also, cross-country comparability may be impaired by lack of reliable information on public assets and reserves, which prevents derivation of uniform estimates of net government liabilities.

<sup>(46)</sup> This is not meant as a criticism of membership in the euro area. Indeed, the latter, if accompanied by fiscal discipline and sound banking regulation and supervision, confers major benefits to the member country in terms of stability and welfare; otherwise, it can lead to financial crisis and economic contraction.

<sup>(47)</sup> In this regard, the Irish program is comparable to the composition and time path of other relatively successful fiscal adjustment episodes in high-debt countries. For a recent survey and cross-country evidence, see Baldacci and others (2012).

<sup>(48)</sup> For a review of macro-fiscal performance during 2008–12, see FitzGerald (2012b). Notably, instead of focusing on the headline deficit target, as in other programs, in the Irish case the Fund accepted cyclically induced shortfalls.

setting up a rules-based fiscal framework, particularly for a highly-indebted government, as a signaling device to regain policy credibility.<sup>(49)</sup>

A rules-based fiscal framework is a composite of *policy rules*, *procedural rules*, *transparency norms*, and a *surveillance mechanism*. Contrary to popular misconception, such a framework need not be a rigid toolkit that pre-empts the conventional functions of fiscal policy, namely, stabilization, income distribution, and allocative efficiency. On the contrary, a well-designed framework—in essence, a framework of *constrained discretion*—facilitates such functions in the path to a sustainable level of indebtedness. Furthermore, it should be stressed that a fiscal framework is in essence *commitment technology* that provides the context for policymaking; not to be mistaken for actual fiscal policy. Over time, ironically, steady observance of such a framework can confer a high degree of fiscal sovereignty to Ireland.<sup>(50)</sup>

### *Present framework*

Although encompassing a wide diversity of practices, the four key components of a rules-based framework can be found to a greater or lesser degree in an increasing number of countries. In the European Union, the basic policy rules envisaged in the Economic and Monetary Union, and specified in the Stability and Growth Pact, have evolved recently into a comprehensive framework under the so-called six-pack and two-pack innovations. The latter are intended to serve broadly as the template for each member's own framework.

Specifically, in an attempt to strengthen and fine-tune the Pact into an effective vehicle of fiscal governance across the Union, and particularly, in the euro area—drawing on the lessons from the debt and financial crises of the past few years—the two packs have been enshrined respectively in the Treaty on Stability, Coordination and Governance of 2012, and Regulation No. 473/2013 on monitoring draft budgetary plans, adopted by the European Council and ratified by the European Parliament. In essence, the new statutes call for restrictions on the general government structural budget balance and on public indebtedness (fiscal policy rules), a medium-term stability program (procedural rule), adherence to ESA95, and its successor ESA2010, accounting conventions, and independent fiscal forecasting (transparency), and establishment of an independent fiscal council or its equivalent (surveillance).

Ireland's Fiscal Responsibility Act of 2012, along with the Medium-Term Budgetary Framework of 2013, is closely aligned to the new EU fiscal governance.<sup>(51)</sup> It remains to be seen whether it is appropriate to tackle future challenges beyond the current adjustment program, when the Irish government is no longer under the direct tutelage and protection of the EU and IMF. This section conducts such an assessment primarily from the perspective of the country's future needs, while drawing on internationally accepted standards of good practice.

### **Policy rules**

For starters, let us examine to what extent the Irish fiscal policy rules meet criteria of good practice: definition, transparency, adequacy, consistency, simplicity, flexibility, enforceability, and efficiency.<sup>(52)</sup> However, as no existing policy rule can meet fully all criteria, every country has to make a strategic choice, taking into account its own circumstances and long-run policy goals. At best, any design under consideration can only approximate these criteria of good practice.

<sup>(49)</sup> See Kopits (2004) on lessons for rules-based fiscal frameworks from adjustment programs implemented in the 1990s under conditions of high capital mobility. See also Leeper (2010) on the need for anchoring fiscal expectations with such frameworks.

<sup>(50)</sup> For a discussion and evidence, see Kopits (2012).

<sup>(51)</sup> See Lane (2010) and Department of Finance (2011).

<sup>(52)</sup> Kopits and Symansky (1998) formulated these criteria, discussed and endorsed by the IMF Executive Board. For an early application to the EU Stability and Growth Pact, see Buti and Giudice (2002).

Ireland's two basic rules track closely the template prescribed for EU member countries. The structural balance rule, a copy of the Swiss "debt brake", has been adopted with minor differences by several countries (including Germany, France, Austria and Spain). The debt rule calls for a steady reduction to the 60 % of GDP reference value.

The Irish policy rules are *well defined* in terms of performance indicators (structural balance, debt ceiling), time frame (annual), basic operational scope (with margins), and institutional coverage (including local governments and most quasi-fiscal activities).

The rules are as *transparent* as similar rules introduced in other EU member countries. However, experience with these rules has been mixed—given some latitude for creative accounting and forecasting. Although in the past the structural balanced-budget rule has been prone to manipulation,<sup>(53)</sup> there are a few successful applications as well.<sup>(54)</sup> Compliance with the debt rule in its present form has likewise been subject to misreporting and inefficient application.<sup>(55)</sup>

Given Ireland's enormous public debt burden, the rules are *less than adequate* in addressing the goal of restoring debt sustainability over a realistic time horizon. To correct this shortcoming, the Fiscal Responsibility Act should have assigned priority to the debt rule over the structural balance rule.

The rules are broadly *consistent* with each other as well as with other policy instruments. In fact, for a low-debt country, the structural balance is the binding rule. For a high-debt country, like Ireland, the relevant binding rule should be the debt ceiling.

At a very superficial level, the rules are *simple* enough to be understood by legislators, educated citizens and market participants. However, deeper comprehension of the structural balance concept and its implementation requires a grasp of the technical aspects, such as output gap estimates, their interplay with automatic stabilizers, and the distinction between temporary and permanent fiscal measures. This is a reason why governments (as well as European Commission officials) still tend to communicate mostly in terms of the much simpler, albeit misleading, headline budget balance target.<sup>(56)</sup>

By design, the structural budget balance is *flexible* to absorb cyclical and other shocks, as it allows the operation of automatic stabilizers. On the other hand, the debt rule tends to be procyclical, as it is tied to fluctuations in GDP.

The rules *do not seem sufficiently enforceable*, absent an operational target under the control of the authorities. In particular, it is doubtful that estimates of potential output, necessary to measure the output gap underlying the structural balance, can be applied with confidence in real time<sup>(57)</sup>—a shortcoming that can be especially pronounced in the case of small open economies exposed to significant macroeconomic volatility. Hence, the main task at hand is to select a rule, or set of rules, that meets both the adequacy and enforceability criteria, while maintaining sufficient flexibility.

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<sup>(53)</sup> The Netherlands (the first country to apply such a rule) in the 1970s and the United Kingdom in the past decade offer examples of periodically overestimated output gap. See Wellink (1996).

<sup>(54)</sup> The structural budget surplus rule established in Sweden and Chile in 1998 and 2000, respectively, and the Swiss debt brake, launched in 2002, stand out as successful cases. See Geier (2011) on Switzerland and Marcel (2013) on Chile.

<sup>(55)</sup> Misreporting in coverage and valuation has taken place in Poland in the early years of implementation, beginning in 1999. More recently, the government introduced a return from defined-contribution private pensions to the pay-as-you-go defined-benefit public pension largely in order to help reduce the public debt ratio in the short run, at the cost of worsening debt sustainability in the long run.

<sup>(56)</sup> Perhaps as an exception, in Switzerland, members of the parliamentary budget committee display familiarity with technical issues in discussions of the debt brake. Interestingly, in Chile, the finance minister communicates almost solely in terms of the structural budget balance.

<sup>(57)</sup> Barrell, Horst and Mitchell (2007) report considerable errors in real-time estimates of cyclically adjusted budget balance in advanced economies. Similarly, Ley and Misch (2013) found that output and output gap revisions, on a large country data set, may have substantial effects on the ability of governments to correctly estimate the structural balance in real time.

The *efficiency* of rules hinges on the government's ability and willingness to anticipate the need to introduce structural measures on time to ensure compliance with the rules. However, given the sharp adjustment necessary to halve the debt ratio to the target reference value, Ireland may inevitably have to resort to improvised *ad hoc* measures to abide by the annual debt ceiling.

### Procedural rules

In recent years, the Irish authorities have embarked on a significant effort at identifying and implementing budgetary procedures in line with international best practice—discussed in detail in various official reports, including in a comprehensive expenditure review.<sup>(58)</sup> Major innovations have been launched on several interrelated fronts. First, the traditional bottom-up approach to expenditure allocation is being replaced by a top-down approach, in principle, subject to government-wide hard budget constraint. Second, a regular in-depth expenditure review has been introduced, applying the value-for-money principle. Third, a shift has been under way from input-driven budgeting to performance-based budgeting. And fourth, the annual budget has been cast into a rolling multi-year budget plan, very recently formalized under the Medium-Term Budgetary Framework,<sup>(59)</sup> recognized as key to the successful enforcement of policy rules. All told, while budgetary procedures in Ireland conform for the most part to good practice, full and routine implementation of those procedures has yet to be realized.

### Transparency

Ireland compares favourably with most other EU member countries in the transparency of institutional arrangements, accounting practices, and forecasting in the public sector, broadly according to international standards of good practice.<sup>(60)</sup> There is timely and frequent public disclosure of information on budgetary and financial cash flows, as well as selected balance sheet information. Also, the government provides some estimates of the budgetary impact of new measures.

However, as in most other euro area member countries, official macro-fiscal forecasts reflect an optimistic bias.<sup>(61)</sup> In addition, there is still adherence to the tradition of conducting budget debates and decision-making on the basis of cash accounts for the central government, instead of accrual-based general government accounts.<sup>(62)</sup>

In a recent IMF report, it was noted that initiatives are under way to correct deficiencies in fiscal transparency.<sup>(63)</sup> Four of these deficiencies are worth highlighting. Fragmentation of the nonfinancial public sector, into a large number of government and quasi-governmental activities, results in some uneven and incomplete reporting of financial accounts. The quality of forecasts of medium-term projections is less than satisfactory and the underlying methodology is rather opaque and subject to frequent modification. Long-term policy scenario calculations are less than suitable to conduct

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<sup>(58)</sup> During the last change in government, in early 2011, the Department of Finance (2011) published a white paper containing proposals for far-reaching reform in budget procedures, in addition to fiscal policy rules and an independent fiscal council. This was followed by a government-mandated set of reform measures described in Department of Public Expenditure and Reform (2011). Partly in response to the white paper, the Irish Fiscal Advisory Council (2012a) provided an overview of the main issues within a broad fiscal policy context.

<sup>(59)</sup> The Framework and related procedural rules were promulgated December 19, 2013, under ministerial Statutory Instrument No. 508; see Department of Finance (2013).

<sup>(60)</sup> The IMF Code on Fiscal Transparency enumerates good practices, developed on the basis of Kopits and Craig (1998).

<sup>(61)</sup> Frankel and Schreger (2013) find that, over the past decade, Ireland's actual budget balance on average exceeded one-year-ahead forecasts by more than 2 percent and two-year-ahead forecasts by more than 3 percent of GDP; a larger excess was observed only in Greece. For contrary evidence on absence of optimistic bias, see IFAC (2012b).

<sup>(62)</sup> See FitzGerald (2012a).

<sup>(63)</sup> See International Monetary Fund (2013), and more recently, Department of Finance (2013), including Statutory Instrument No. 508 of 2013.

satisfactory assessment of public debt sustainability.<sup>(64)</sup> Despite the availability of data on off-budget and contingent liabilities, a comprehensive analysis of fiscal risk is lacking.

## Surveillance

Ireland has taken an important step by creating an independent fiscal watchdog, ratified under the Fiscal Responsibility Act. The Irish Advisory Fiscal Council (IFAC) has already gained a reputation of professional competence and independence since it was launched in 2011. Its structure and advisory role seem to have been inspired by the Swedish Fiscal Policy Council. More generally, its remit, focused on assessing the transparency, adequacy and sustainability of fiscal policy, as well as compliance with fiscal policy rules, conforms to a considerable extent with the recently unveiled international guidelines of good practice.<sup>(65)</sup> The OECD Principles for Independent Fiscal Institutions are grouped under nine headings: local ownership, independence and non-partisanship, mandate, resources, relationship with the legislature, access to information, transparency, communication, and external evaluation.

The Council is *locally owned* since it was established on the basis of a broad cross-party consensus, and not merely at the behest of the Commission or the Fund. Also, its modus operandi seems to take into the existing legal and cultural setting. It remains, however, open to question whether IFAC's staff size and its role fully meet local needs. By contrast, in Sweden, where detailed real-time evaluation of the budget bill, including through fiscal forecasts, is performed by already existing specialized independent institutions, the Fiscal Council can devote itself entirely to providing analysis and advice on broad macro-fiscal issues. In this respect, the Irish case differs markedly from the Swedish framework.<sup>(66)</sup>

IFAC's *independence and non-partisanship* are guaranteed by statute and observed in practice. The head and members of the Council, as well as staff, are selected on the basis of professional expertise, without regard to political affiliation. But the fact that the Chair is a non-remunerated part-time position, as in Sweden, poses a potential distraction and conflict of interest (especially in the case of a non-academic appointment) that may undermine the institution's independence.

The Council's *mandate* is clearly defined and monitoring tasks include compliance with fiscal rules, but exclude actual preparation of macro-fiscal projections. The latter omission can hardly be compensated by the recent extension of the remit to provide "endorsement" of the government's macroeconomic forecasts—<sup>(67)</sup> adopted to conform to the EU regulation on requiring independent forecasts. Most recently, IFAC has made an effort at underpinning the endorsement role with some quantitative work, reflected in fan charts for the macroeconomic outlook, and then discussing their implications for the budgetary outcome.<sup>(68)</sup> However, the endorsement function—subject to a very narrow interpretation and excluding fiscal variables—and the limited resources at its disposal, inhibit IFAC's capacity to generate its own comprehensive macro-fiscal projections, possibly including feedbacks from the fiscal components to macroeconomic aggregates.<sup>(69)</sup>

A major deficiency of the IFAC is the lack of sufficient *resources* to monitor in a timely manner for informed legislative debate and action on the budget and the medium-term budgetary plan. By any standard, the annual funding of € 800,000 is inadequate for this purpose. (Again, the apparent attempt to

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<sup>(64)</sup> Long-term baseline simulations in IFAC (2012a) have yet to incorporate explicitly the effect of demographic changes on actual old-age and health-care benefits.

<sup>(65)</sup> See OECD (2012).

<sup>(66)</sup> The Economic and Social Research Institute does not prepare detailed and regular medium-term fiscal projections.

<sup>(67)</sup> The endorsement function, formalized effective July 2013 in an amendment of the Fiscal Responsibility Act and a Memorandum of Understanding between the Department of Finance and the Council, specifies five macroeconomic variables for this purpose.

<sup>(68)</sup> See IFAC (2013).

<sup>(69)</sup> An added limitation of the endorsement function is that failure to endorse the government's forecasts would be tantamount to a no-confidence indictment, a very serious step that IFAC would probably take only in a most extreme case.



emulate the Swedish fiscal council is predicated on the questionable assumption that budgetary surveillance is shared with other independent public institutions.)

The Council's *relationship with the legislature* is characterized by both independence and accountability. IFAC submits its reports to parliament and its budget is subject to close legislative scrutiny. The Chair appears at legislative committee hearings as requested. Nonetheless, it is doubtful that the Council can satisfy—including through sufficiently detailed quantitative estimates of each proposal—the needs of the legislature for in-depth consideration of the budget bill and of other specialized bills with potential budgetary implications, and thus contribute effectively to effective legislative oversight.

Thus far, *access to information* by the Council seems to have been timely and unrestricted. However, cooperation by government agencies in providing detailed data and estimates for in-depth and detailed surveillance remains to be tested. In the foreseeable future, the Council may encounter, as some independent fiscal institutions elsewhere, stumbling blocks in the availability of information from certain agencies.

From the very beginning, the Council has exercised a high degree of *transparency*, as evidenced by the detailed information, analyses and reports issued on its website, over its relatively brief life span.

IFAC has had a good start in relations with the media, as demonstrated by relatively favourable press coverage overall. Although it has overcome the usual difficulties faced by such institutions in gaining immediate name recognition and sufficient attention in parliament and with the general public, it is too early to assess the effectiveness of the Council's *communication* skills.

There is neither an explicit statutory requirement for some form of *external evaluation* of the Council's activities, nor an impediment to establish eventually a periodic evaluation by a competent outside entity. At this stage, anyway, such an evaluation might be premature.

#### *Scope for improvement*

The present section explores various options for debate and consideration to strengthen the existing fiscal policy framework, so as to enhance its relevance and usefulness for Ireland as it faces major challenges, and foremost, the need to restore public debt sustainability over a realistic time horizon. It should be noted that all the options outlined herein are compatible, at least in spirit, with the existing statutes promulgated under the new EU fiscal governance. In fact, in several respects, they go beyond in securing fiscal discipline without dampening economic growth.

#### **Binding public debt rule**

As discussed above, Ireland needs an *enforceable* policy rule, *adequate* above all to reduce a staggering public debt burden most *efficiently*, that is, at the least possible sacrifice in terms of output foregone. For this purpose, it would be necessary to specify a policy rule that sets a constraint on the gross debt of the general government with the overarching objective of reducing it over a predetermined time path.<sup>(70)</sup> Let us examine three basic options, introduced in other countries, which may be considered for possible adoption in the future.

The first option is a simple debt rule, enshrined in Poland's constitution since 1998, which imposes a *ceiling on the stock of government liabilities* at 60 percent of GDP. As a preventive measure, the government must take action when the debt ratio surpasses 55 percent. Local governments are subject to

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<sup>(70)</sup> Several alternative policy rules (balanced-budget and expenditure rules) proposed by the Department of Finance (2011) are critically assessed in Hagemann (2012) and IFAC (2012). Despite their merits, those proposals fail to address the need to reduce Ireland's public debt ratio at an adequate pace.

comparable limits. The rule offers no guidance to the government at what pace to reduce the debt ratio if it exceeds the prescribed limit. In all, the main advantage of the rule is simplicity, but at the cost of excessive rigidity plus enforcement difficulties.

Upon approaching the limit, the rule tends to be procyclical as the government is compelled to match an apparent economic downturn with a fiscal contraction. Conversely, it is tempted to accompany a surge in activity with an expansionary stance. In any event, as noted, it is difficult to observe fluctuations in GDP in real time. While the debt ratio is not immune to manipulation—especially in terms of valuation and coverage of the debt statistics—perhaps the weakest feature of this rule is that it cannot be linked to an operational target under the direct control of policymakers.

The second option is a more sophisticated debt rule, introduced in Brazil in 2000,<sup>(71)</sup> which provides for a derivation from a target debt ratio to a *minimum primary surplus ratio* as an operational target. Specifically, the primary surplus target is determined by the differential of the average interest rate on government debt and the medium-term growth rate, augmented by the yearly reduction in the debt ratio necessary to reach the policy target debt ratio over a predetermined convergence period. This step toward enforceability, including a lesser susceptibility to manipulation, is an important advantage over the simple debt rule. An added advantage is that, in principle, the inherent procyclicality of this rule could be partially corrected by specifying the primary surplus target in structural terms, much like in the case of the structural balanced budget rule. However, this would entail having reliable estimates of the output gap and of transitory budgetary components.

A third option, adopted in Hungary in 2008, is the real debt rule that obviates altogether reliance on estimates of the output gap or of fiscal elasticities, and specifies an operational target entirely under real-time control by the authorities. Derived from the target debt level, the operational target is essentially a ceiling on *discretionary budget deficit*. Thus, the decision-maker is bound only by this ceiling and can be held fully accountable for compliance. It is understood that the actual level of tax revenue, mandatory outlays and macroeconomic developments are beyond his control.<sup>(72)</sup>

The rule is anchored on the target stock of government liabilities set three years in advance of the test year, adjusted for the expected rate of inflation. Given the targeted change in the value of the debt and the projected net interest payments, the required primary balance obtains also in advance. The latter, reduced by the projection of mandatory components of the primary balance yields the binding limit on the discretionary deficit (comprised almost entirely of discretionary expenditures, net of nontax revenue) for the third subsequent year—all stated in nominal terms, instead of percentage of GDP. The exercise is repeated every fiscal year in preparation of the budget. <sup>(73)</sup> Key elements are the projection of interest payments, tax revenue and mandatory spending—mainly on social entitlements plus other government programs—subject to the pay-go rule, discussed below.

The real debt rule has several advantages over the other two options. First, it is much easier to enforce since the locus of decision-making responsibility is identified with the operational target, instead of the policy target. Second, since compliance is measured *ex post* in terms of a flow variable (discretionary deficit) rather than a stock variable (gross liabilities), it is far less amenable to statistical manipulation. Third, the rule is neutral with respect to the cycle since it allows for the operation of automatic stabilizers—without attempting to measure a neutral stance—in the face of economic shocks or stagnation of unknown duration. Fourth, the actual decline in the debt ratio is not only determined by compliance

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<sup>(71)</sup> For a detailed discussion, see Goldfajn and Guardia (2004).

<sup>(72)</sup> The design of the real debt rule under Hungary's Fiscal Responsibility Act of 2008 can be traced to two sources. One is the approach suggested by Coricelli and Ercolani (2004) of assigning responsibility for compliance with the *ex ante* target rather than fulfillment of *ex post* performance influenced by unanticipated macroeconomic developments beyond the control of the decision-maker. The other source is the U.S. Budget Enforcement Act of 2009 which places compliance on the discretionary component of the budget and the pay-go rule on the mandatory component—see below.

<sup>(73)</sup> See the Appendix

with the rule, but is also influenced by fluctuations in the growth rate, which in part depends on the debt level. Lastly, the rule is versatile in accommodating any predetermined pace of debt reduction, set by the authorities.

### **Indicative structural balanced budget rule**

As indicated above, in Ireland, the structural balanced budget rule seems to be neither adequate nor enforceable without difficulty, notwithstanding its well-known conceptual virtues. It is not likely to help reduce the public debt ratio as rapidly as a debt rule. In addition, it is exposed to real-time measurement problems as regards the underlying macroeconomic developments. For these reasons, the structural budget balance should be applied as an indicative rule, rather than as a binding commitment.<sup>(74)</sup> The structural balance would be calculated on a periodic basis to serve as a metric to gauge the extent of the ongoing adjustment under the debt rule. Over time, having built a track record of satisfactory estimation of the structural balance and of a significant debt reduction, consideration could be given to shifting implementation from a debt rule to a binding structural balance rule.

### **Pay-go rule**

An effective procedural rule to enforce fiscal discipline at the legislative stage is based on the pay-go rule, developed and implemented successfully in the United States by consecutive administrations during the 1990s. Under this rule, any deficit-enhancing proposal of a mandatory nature must provide for its own financing. Thus, a legislative proposal (whether in the budget bill or a specialized bill) involving an expenditure increase or tax revenue loss must contain an offset of the budgetary cost, by means of an equivalent tax increase or expenditure reduction, so as to leave the overall budget balance unchanged over a specified period—of, say, up to five years. It was in the context of the pay-go rule that the distinction between mandatory and discretionary budget components gains traction. Consequently, it serves as a useful complement to the ceiling on the discretionary spending, which is the operational target of the real debt rule.<sup>(75)</sup> But the rule can be a valuable disciplining tool in any event, and especially as political leaders may be tempted to launch tax cuts or raise social benefits following the conclusion of an adjustment program.<sup>(76)</sup>

### **Multi-year budgetary planning**

The need to extend the budgetary horizon beyond the current or the forthcoming fiscal year is, by now, well known in Ireland. Multiyear macro-budgetary planning is an essential ingredient of a rules-based fiscal framework. It alerts the authorities and financial markets as regards future policy adjustments or reform measures—instead of relying on *ad hoc* improvised decision-making, as has been the case in the recent past—that may be necessary for efficient compliance with policy rules. Equally, it provides information about the fiscal space available to the government over time for the pursuit of various policy objectives, while adhering to policy rules. However, for the Medium-Budgetary Framework to serve as a useful policymaking tool, the government must commit to its implementation and ready to explain or correct deviations from the initially formulated plan. Such medium-term planning involves a more rigorous exercise than the medium-term stability program required from each government within the euro area for review and approval by the European Council.

### **Independent fiscal forecasting and risk analysis**

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<sup>(74)</sup> For Australia, McDonald and others (2010) caution against committing to estimates of a structural budget balance.

<sup>(75)</sup> According to Reischauer (1993), the success of the Budget Enforcement Act of 1990 as a tool of fiscal discipline can be attributed to the combination of discretionary spending caps with the pay-go rule.

<sup>(76)</sup> Such a legally binding pay-go rule is compatible with the EU template that in principle calls for matching any new expenditure by a corresponding revenue increase,

Unbiased fiscal forecasting has long been recognized as a critical element of fiscal transparency.<sup>(77)</sup> In Europe, a number of countries have suffered an optimistic bias in official forecasts, under Goodhart's law, as fiscal rules become binding and governments increasingly feel the pressure of compliance in order to meet (or preferably avoid altogether) the excess deficit procedure. Typically, medium-term stability programs have been based on official projections underpinned by biased growth and interest rate assumptions and opaque methodology. This provides the backdrop for the prescription, under the new EU governance for each member country, of preparing independent macro-fiscal forecasts.

Although in Ireland fiscal projections have been relatively immune from an optimistic bias—despite the opacity of official fiscal forecasts, subject to considerable error—there is no guarantee that in the future, under continued adjustment pressure, governments might not succumb to such bias. More important is the potential usefulness for policymakers, the general public and financial markets to have access to independent, competent and transparent medium-term macro-fiscal projections, so they may gauge the true extent and pace of adjustment needed to comply with the rules and meet the targeted debt reduction. Indeed, the quality of the projections influences the credibility of the multi-year budgetary program. Specifically, baseline projections—assuming no policy change—can provide a useful reality test for the medium-term budgetary plan, insofar as it can flag changes in fiscal space for discretionary spending against the constraint of the debt rule over the projection horizon. Hence the need to extend IFAC's terms of reference beyond merely the endorsement function as regards official projections.

In addition to independent short- and medium-term fiscal projections, Ireland's high public indebtedness warrants continuous monitoring through long-term quantitative no-policy change scenarios on the basis of realistic macroeconomic and demographic assumptions. Such scenario calculations permit periodic assessments of debt sustainability and of the need to anticipate measures over time in order to comply with the debt rule.

As Ireland's public sector has accumulated significant contingent liabilities in the face of a high degree of potential macroeconomic and financial volatility, sound fiscal planning requires a thorough analysis of the exposure to fiscal risk. Thus, instead of relying on various arbitrary stress tests (depicted in fan charts), with limited useful information, it would be preferable to select and develop a comprehensive and analytically sound methodology<sup>(78)</sup> that permits quantification of major sources of risk and the computation of the probability of sovereign default.

### **Strengthening the fiscal council**

Thus far, over its short lifespan, IFAC has displayed independence, professional excellence, solid communication skills, and responsiveness to the needs of the executive as well as the legislative branches of government. But above all, it has made a valiant effort in meeting its remit with meagre resources. Given the fiscal challenges in the period ahead and lacking any other independent institution that might perform the real-time surveillance functions that IFAC should perform, there is considerable scope for *broadening the remit* as well as *amplifying the resources* commensurate with the expanded responsibilities. IFAC's statutes could be amended so that it may rise to the forthcoming challenges, when Ireland is no longer under direct IMF or EU tutelage. More generally, it is widely recognized that an effective independent fiscal council can make a major contribution to restoring public debt sustainability.<sup>(79)</sup>

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<sup>(77)</sup> See Kopits and Craig (1998).

<sup>(78)</sup> The Value-at-Risk approach, applied to the public sector balance sheet, seems potentially useful for Ireland; see Barnhill and Kopits (2004). For a start in this endeavor, see Barnes and Smyth (2013).

<sup>(79)</sup> See the analysis and country studies in Kopits (2013).

In other words, IFAC's remit warrants a broader interpretation to encompass the tasks associated with the above options to strengthen the fiscal framework.<sup>(80)</sup> Specifically, the Council should prepare its own (preferably model-based) short- and medium-term macro-fiscal projections to assess the realism of the official projections.<sup>(81)</sup> No-policy-change baseline projections should precede the budget bill and the draft medium-term stability program so as to facilitate evaluation of these documents—along with quantitative estimates of the budgetary impact of major policy proposals—as a timely input in the legislative debate and decision-making. Ideally, as an alternative, the official forecasting function should be transferred from the government to IFAC, as done in a number of countries (including Canada, Netherlands and the United Kingdom), thereby buttressing the government's credibility.

IFAC should also prepare and periodically update a long-term baseline fiscal scenario, reflecting explicitly the effect of major entitlement programs, along with future demographic trends and key macroeconomic assumptions. This would provide the basis of an ongoing analysis of debt sustainability and fiscal risk, as outlined above.

The importance of medium-term projections and long-term scenarios is underscored by IFAC's surveillance function which encompasses monitoring not merely of compliance with policy rules in the current fiscal year, but also of ability to comply with rules over a long time horizon. In addition, at the micro level, the need for estimates of the impact of proposed changes in mandatory expenditures and taxation is necessary in order to verify compliance with a pay-go rule.

It seems unreasonable to expect IFAC to fulfil the present remit unless it remains narrowly interpreted, at the risk of eroding its effectiveness. Moreover, a broader interpretation of the remit—to include preparation of semi-annual medium-term projections, periodic debt sustainability scenarios, fiscal risk assessments, and budgetary and economic impact estimates for major legislative proposals—would entail significant capacity expansion and attendant increase in funding. Experience of similar fiscal watchdogs suggests that, at a minimum, staff size should be raised to 20-30 professionals (consisting mainly of economists, budget specialists, lawyers, administrative support). The Council Chair should be a full-time position and remunerated accordingly (for example, at a level equivalent to the salary of the Central Bank of Ireland Governor or the Comptroller and Auditor General), while the members, though appointed on a part-time basis, should be remunerated as well (say, at half of that salary).

There is ample evidence worldwide to confirm that an independent fiscal institution, charged with the tasks to be assigned to IFAC, can make a major contribution to sound fiscal management, and over time, toward regaining public debt sustainability. In the first instance, the resulting gain in policy credibility will be felt in a decline in the sovereign risk premium. In the case of Ireland, the benefit of a mere one basis point tightening of the average spread on government bonds (equivalent to about € 20 million in annual budgetary saving) would exceed almost tenfold the annual cost of funding IFAC at a realistic level (at least € 2 million) and fully justify the suggested remuneration and increase in staffing.

### *Summary and conclusion*

An evaluation of the current fiscal framework suggests that Ireland has made considerable progress in establishing the basis for securing public debt sustainability. The Fiscal Responsibility Act represents a major step in this regard, as it enshrines fiscal policy rules and an independent fiscal council into a formal statute. Equally important are a number of ongoing innovations in budget procedures. However, following conclusion of the adjustment program supported by the EU and IMF, Ireland needs to build on this progress to enhance and preserve the confidence of financial markets—already rather favourable as

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<sup>(80)</sup> Instead of merely broadening the interpretation of the existing mandate, for legal reasons it may be necessary to amend the Fiscal Responsibility Act.

<sup>(81)</sup> For example, in Hungary, detailed macro-fiscal projections were prepared on the basis of a DSGE model, developed by Benk and Jakab (2012), supplemented with expert opinion in specific areas.

reflected in the investment grade awarded by all major credit rating agencies—and eventually to achieve sustained growth and welfare, by strengthening the existing framework.

Laudable as its positive attributes may be, a necessary condition for durable success of any fiscal framework is that it be *home-grown* and *home-owned*. Although Ireland was the only EU member country to hold a referendum to approve the Treaty underlying the adopted fiscal rules, the present framework does not appear to fully meet this condition. Political leaders and the citizenry, acting under some duress, may have been too eager to please the official creditors. Key features have been imported from abroad, apparently without sufficient attention to Ireland's foremost challenge of reducing the ratio of public debt to GDP. To be sure, it is not too late for the Irish political leadership to revisit the design of the framework and forge an informed and broad-based consensus around an option that would serve better the future needs of the country.

A sufficient condition for success is that the framework be *technically well designed* to serve the goal of debt reduction, and that public finances be *subject to effective surveillance*. While the structural balance and debt rules in place are conceptually appealing, in practice, their adequacy, enforceability and efficiency for Ireland are open to question. During its brief track record, IFAC has demonstrated independence and competence in carrying out a narrowly interpreted mandate. But the very meagre resources at its disposal can impair its effectiveness.

Consistent with the paramount goal of regaining debt sustainability, Ireland would benefit from a fiscal policy rule aimed primarily at reducing the public debt ratio. Three options for a binding debt rule are examined to this end: a *limit on the debt ratio*; a *minimum primary budget surplus ratio*, derived from the debt ratio; and a *discretionary deficit ceiling*, derived from a real debt limit. While the debt ratio is simply a policy target, the latter two options provide operational targets, without procyclicality. But only the real debt rule, translated for operational purposes into a discretionary deficit ceiling, is directly amenable to enforcement. Such a *binding debt rule* may be accompanied by an *indicative structural balanced budget rule*. Over time, the latter could become binding—and replace the debt rule—after having accumulated sufficient experience and having reached the debt ratio threshold prescribed under EU treaty obligation.

Two procedural rules are suggested for consideration, to complement and support the policy rules: a *strengthened multi-year budgeting plan* and a *pay-go requirement*. Observance of these procedural rules and of the policy rules depend, in turn, on unbiased and *realistic independent medium-term macro-fiscal projections*. In addition, especially for a high-debt country, periodically updated long-term baseline scenarios are necessary for the analysis of debt sustainability and fiscal risk.

In order for IFAC to exercise effective oversight of fiscal policymaking, including of compliance with policy and procedural rules, it is necessary to *broaden its remit*. Notably, the Council should be entrusted with preparation of independent macro-fiscal projections, long-term baseline scenarios, sustainability and risk analysis, in time for the legislative debate and decision-making. This would entail beefing up significantly IFAC's *human and material resources*, with adequate funding, while ensuring full and timely access to information.

In view of IFAC's pivotal role in reducing Ireland's debt burden and in contributing to policy credibility in the financial markets, there is strong case for elevating its status to a level comparable to other well-established independent institutions, such the Central Bank of Ireland and the Office of the Comptroller and Auditor General. A direct implication is that the Council, headed by a full-time Chair, should be appropriately remunerated.

Implementation of a rules-based fiscal framework which is home-owned, home-grown, and well-designed, with a view primarily to reducing public indebtedness, would catalyse a virtuous circle in Ireland. Compliance with the framework, supported with reforms of age-driven entitlements—especially public pensions and health-care programs—should help regain policy credibility, anchor expectations,

reduce the sovereign risk premium, induce investment and work effort, and enable Ireland to resume a path of high and sustained growth. Failure to abide by such a framework would, under the present debt burden, continue to inhibit growth—as documented in an increasing body of empirical literature.<sup>(82)</sup> Overall, the process of debt reduction should be supported with full-fledged macroprudential oversight and sound banking regulation and supervision.

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<sup>(82)</sup> Notwithstanding the recent controversy over the quality of empirical estimates, the depressing effect of public debt on output growth in high-debt countries found by Reinhart and Rogoff (2010) has been corroborated by Cecchetti and others (2011) with robust estimates on a homogeneous sample of OECD countries over a recent period and encompassing a broader institutional coverage of the public sector.

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#### Annex: Mechanics of the real debt rule

In the initial year of application of the debt rule—according to Hungary’s Fiscal Responsibility Act of 2008—the government is under obligation to set the target debt limit two years in advance of the test year ( $t$ ), as shown in the timeline below. Given the pre-set debt target, the government is required to set benchmarks for the primary balance two years in advance of the test year and the discretionary component one year prior to the actual test year. In the test year, the government is obliged to meet the pre-set limit on the discretionary balance of the central budget.

A major advantage in monitoring of compliance with the debt rule is that the decision-makers at the finance ministry become aware two years in advance of the actual limit on the discretionary budget deficit, regardless of intervening macro-fiscal developments. Setting this deficit ceiling against the baseline projection, the independent fiscal council helps anticipate for the government and its institutions the latitude for discretionary action or the extent of the fiscal stress that is likely to emerge in the future. In this sense, the council plays an early warning role, whereby the government can engage in medium-term budget planning and in formulating the necessary fiscal reforms, consistent with the path of the debt target under the rule, and thus avert the need for relying on unanticipated stop-gap measures.

In essence, once the government submits the budget bill to parliament, the legislative debate is focused on the allocation of discretionary items within a pre-set overall limit. The overall limit on discretionary expenditure, in turn, has been already derived as a technical exercise from the projected mandatory primary outlays (which is subject to the pay-go rule) plus interest expenditures. The latter task can be outsourced to the fiscal council, thereby strengthening the government’s credibility, without any loss of decision-making power or responsibility.

Key variables for the mechanics of the debt rule are defined as follows:

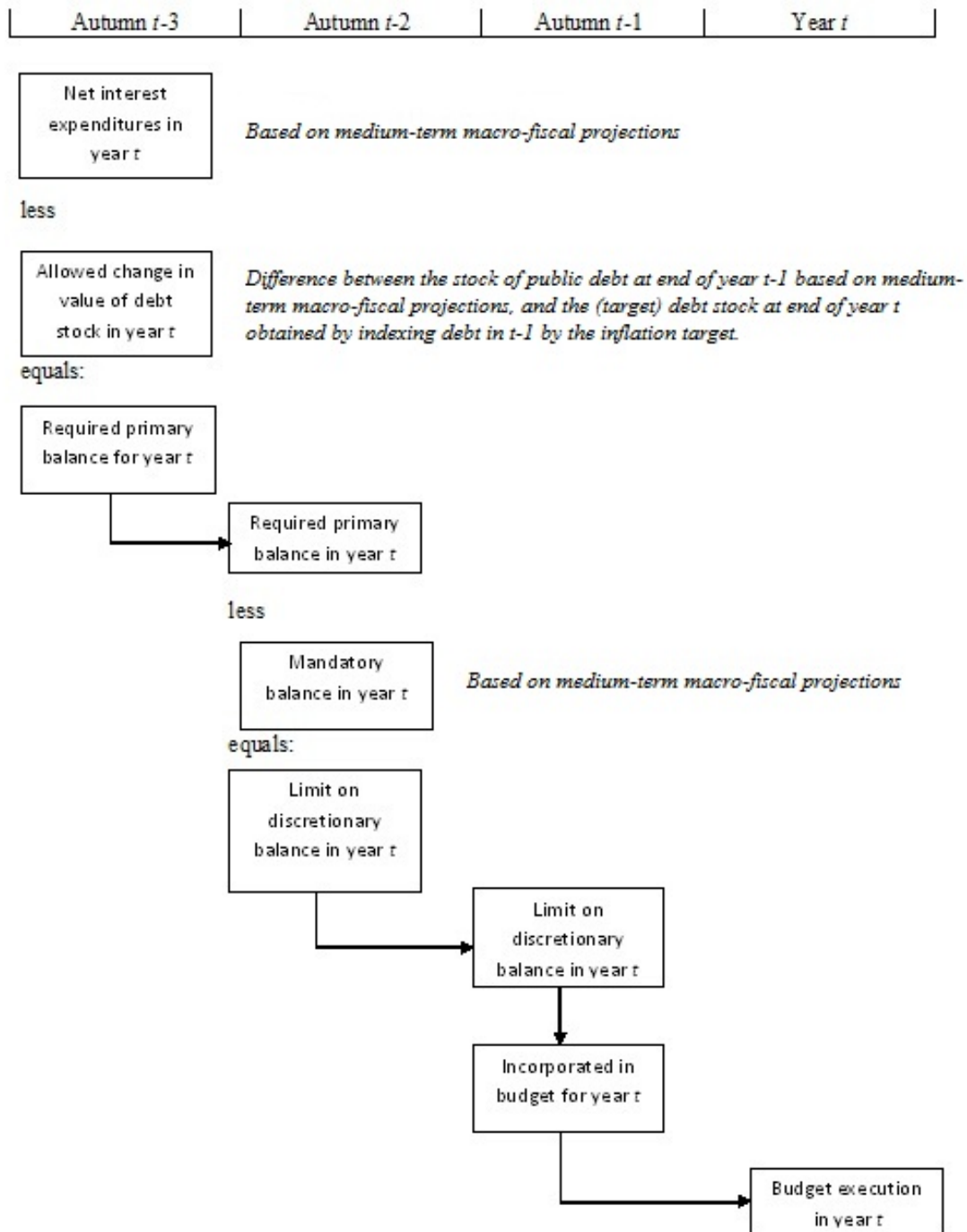
*Public debt* is the stock of gross liabilities of the general government. The change in the debt stock allowed for calculating the required primary balance is measured net of valuation changes and one-off windfall gains or losses (including privatization receipts).

*Mandatory primary expenditures and revenues* are determined by specialized statutes (e.g., public pensions, tax revenues) and by macroeconomic and demographic developments, beyond the scope of the annual budget legislation.

*Discretionary expenditures and revenues* are non-mandatory items (e.g., one-off investment projects, non-tax revenues), subject to appropriations under the annual budget legislation. After subtracting mandatory components (including net interest expenditures) from the overall balance, the remaining primary revenues and primary expenditures are discretionary.

Observance of the debt rule is to be supported by a number of procedural and disclosure rules: a pay-go rule, rolling three-year indicative budgetary planning, preparation of budgetary impact assessments, accounting rules for public-private partnership projects, and comprehensive profit/loss accounts for state-owned enterprises.

Graph 3.1.1: Timeline for implementing the real debt rule



Source:

## JOHN MCHALE, FIRST DISCUSSANT

As perhaps the leading international expert on fiscal rules and institutions, George Kopits has drawn on his extensive work on best practice in the design of fiscal frameworks to provide an insightful and challenging analysis for recent Irish developments and future options in this area. His critical review will be of great value to anyone interested in Irish fiscal policy making and the challenges facing new independent fiscal institutions (IFIs). Based on his own experience as head of the Hungarian fiscal council, George has been one of great supporters of IFIs. Given the relative newness of the Irish Fiscal Advisory Council (IFAC), the Council and its staff have benefited greatly from his encouragement and experience. As I agree with most of the analysis in the article – including the description of the particular crisis-related challenges faced by Ireland – in the spirit of debate, I will concentrate in these short comments on a few areas where I am not fully convinced.

### *Complementarity between national and European fiscal frameworks*

As a preliminary comment, it is worth emphasising that Ireland did not start with a clean slate in designing the national framework. As both an EU and Euro Area member, Ireland is already subject to a complex and demanding set of rules under the reformed Stability and Growth Pact (SGP). The Fiscal Treaty also sets down requirements on the design of national frameworks.

In designing the national framework, it was recognised that effectiveness could be diminished if a complex set of national rules was layered on top of an already complex European framework. Important elements of in the Fiscal Responsibility Act and other legislation therefore parallel the European requirements. For example, the national Budgetary Rule largely parallels the requirements of the preventive arm of the SGP. The Medium Term Expenditure Framework – which has legislative underpinning in the Ministers and Secretaries (Amendment) Act of 2013 – is designed to be consistent with the requirements of the EU’s new Expenditure Benchmark.

The national components of the fiscal framework are usually summarised in the Government’s Medium-Term Budgetary Framework (Department of Finance, 2013). Consistency between the national and EU frameworks allows the two sets of formal rules and enforcement procedures to reinforce each other: the monitoring, peer pressure and financial-sanction procedures of the SGP helps give credibility to the national rules; the monitoring and enforcement procedures of the national rules – including roles for both parliament and the Fiscal Advisory Council – provide a degree of domestic oversight and ownership of the overall rules framework.

A key feature of the FRA that helps encourage national ownership is that the Government is answerable to parliament for failures to meet the national Budgetary Rule. For example, Article 6(1) states:

*If the Commission addresses a warning to the State under Article 6(2) of the 1997 surveillance and coordination Regulation or if the Government consider that there is a failure to comply with the budgetary rule which constitutes a significant deviation for the purposes of Article 6(3) of that Regulation, the Government shall, within 2 months, prepare and lay before Dáil Éireann a plan specifying what is required to be done for securing compliance with the budgetary rule.*

Furthermore, if the Government does not accept the Fiscal Council’s assessment of compliance with the Budgetary Rule – including compliance with any correction plan put in place to meet the rule – the Minister shall, within 2 months of being given a copy of the Council’s assessment, provide a statement to parliament on the reasons for why it has not been accepted.

### *Superiority of a debt rule*

Drawing on a wealth of international experience, the article makes a case for the superiority of a debt rule as the core rule to guide the stance of fiscal policy over time. Concrete examples from Poland, Brazil and Hungary – some seen as better designed than others – are given to show the options for the design of a

debt rule. Starting from a clean slate, and recognising that the evolution of the debt path is the correct ultimate focus for fiscal policy, a relatively simple but flexible debt rule has much to commend it as the anchor for a well-designed fiscal framework.

Of course, under the post six-pack SGP, a debt rule – or more precisely a set of debt criteria – is part of the corrective arm of the pact. For Ireland’s national framework, this rule is exactly mirrored in the national debt rule. However, unlike national Budgetary Rule, there is no specific national enforcement mechanism (see IFAC, 2014). The new national/European frameworks therefore have both deficit and debt rule elements – a belt and braces approach.

However, if you had to choose between a deficit and debt rule as the operational guide for policy it is not obvious that a debt rule would be superior. It depends on the specifics of the design of each. In part, this reflects the fact that a deficit rule can be written as an implied debt rule. In this context, it is useful to compare a simplified 1/20<sup>th</sup> debt rule with a 3-percent deficit rule of the kind found in the corrective arm of the SGP. With a 1/20<sup>th</sup> debt rule, the required percentage point change in the debt ratio is equal to 1/20<sup>th</sup> of the gap between 60 percent (the debt ratio target) and the lagged debt to GDP ratio (expressed as a percentage):

$$(1) \quad \Delta d = 0.05(60 - d_{-1}) = 3 - 0.05d_{-1},$$

where  $d$  is the debt to GDP ratio.

Arithmetically, the change in the debt ratio can be approximated by a simple formula:

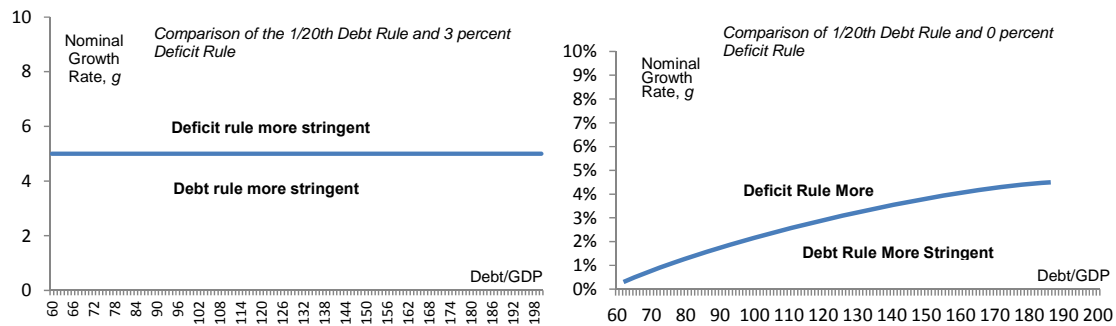
$$(2) \quad \Delta d = def - gd_{-1},$$

where  $def$  is the deficit as a percentage of GDP and  $g$  is the nominal GDP growth rate. Imposing a 3-percent deficit target, the deficit rule can then be written as an implied debt rule:

$$(3) \quad \Delta d = 3 - gd_{-1}.$$

Comparing (1) and (3), it can be seen that the difference between the rules in this specific example is that the deficit rule is sensitive to the nominal growth rate, becoming more demanding in terms of implied debt reduction when the nominal growth rate is higher. The left-hand graph in 3.2.1 shows the regions where each of the rules is the binding rule. The debt rule is binding when nominal growth is less than 5 percent. The right hand graph in 3.2.1 shows the same regions when the deficit target is zero. (Ireland’s Medium-Term Objective (MTO) for the structural balance has been set at zero.) Again, the debt rule tends to be the binding rule when growth is low. It is not obvious that this sensitivity to the growth rate is an unappealing feature of a deficit rule.

Graph 3.2.1: Comparisons of the Debt and Deficit rules



Source:

Of course, these are quite specific examples of debt and deficit rules. However, the examples do help highlight that the relative merits of the two types of rules will depend very much on the detail of their design, and in particular what they imply for the required tightness of the fiscal stance under different economic conditions.

#### *Multi-annual planning and a paygo rule*

The article raises questions about the weakness of multi-annual planning and the absence of a paygo rule to ensure that expenditure increases are properly funded. However, I think that the combination of the new national medium-term expenditure ceilings and the EU Expenditure Benchmark go a considerable way to meeting these objections. As explained in the Medium-Term Budgetary Framework document, the new expenditure framework does require multi-annual planning, including a periodic comprehensive expenditure review.

[T]he expenditure benchmark under the SGP is set in general government terms whereas the Exchequer expenditure is a cash-based system. . . . [The] cash-based Government Expenditure Ceiling is calculated so that it is fully consistent with the level of government expenditure permitted under the expenditure benchmark. Under this Act, each financial year the Government makes a decision on the Government Expenditure Ceiling for each of the 3 financial years following the current one, upon a proposal from the Minister of Finance. It is then apportioned into Ministerial Expenditure Ceilings by Government upon a proposal from the Minister of Public Expenditure and Reform. [Department of Finance, 2013, p. 24.]

Under the EU Expenditure Benchmark, the growth in expenditure is limited to the growth in potential GDP (or less along an adjustment path to the Medium-Term Objective) unless matched by discretionary revenue increases. In this way, expenditure is subject to multi-annual planning and, through the Expenditure Benchmark, subject to a form of paygo rule.

#### *IFAC's mandate and resources*

The article notes the limited nature of IFAC's mandate and resources. Unlike other IFIs, IFAC does not have a costing mandate for new budgetary proposals or measures. Neither is it responsible for official macro-fiscal forecasting. Under the Fiscal Responsibility Act, there are four elements to the mandate:

assessment of macroeconomic and budgetary projections;

endorsement of macroeconomic projections underlying the Stability Programme and the annual budget;

assessment of compliance with the national Budgetary Rule;

assessment of the fiscal stance, with reference to the requirements of the SGP.

It is certainly true that some other IFIs have much greater resources. IFAC's budget was set at €800,000, indexed to consumer prices. But as documented by IMF (2013), IFIs with significantly larger budgets typically have costing and/or official forecasting functions. These activities – and costings in particular – are resource intensive and would be impossible given IFAC's budget. At this point in time, however, the members of the Council believe that the budget is adequate given the mandate, although we keep the adequacy of both budget and mandate under constant review. Moreover, now that the Council has reached its full complement of staff, important activities noted in the article – and in particular the assessment of long-term fiscal projections – will become part of the Council's regular surveillance activities.

#### *Concluding comments*

George Kopits has given us a valuable case study on the challenges facing a new IFI and options for strengthening the fiscal framework. The comparative and best-practice focus of the article make it particularly useful for a new institution, which can become a bit blinkered by the specifics of national circumstances. While each country does face its own specific challenges, there is a great deal to be learned from the accumulated experience of what has worked and not worked elsewhere. George's work will continue to be a reservoir of wisdom for the growing number of IFIs worldwide.

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## ANTONIO GARCIA PASCUAL, SECOND DISCUSSANT

### *Introduction*

A safer banking system, a battery of structural reforms and a more robust fiscal framework have contributed to Ireland's improving macroeconomic outlook and its return to the markets. Since 2013 Ireland sovereign spreads have been tighter than any of the other periphery economies, including Italy and Spain. Evidently ECB's accommodative stance is also helping. The 10y Irish government bond has reached 2.4%, the lowest on record. At the same time, the banking and sovereign crises have also left some open wounds, most prominently, a large amount of mortgage arrears, high unemployment and a mountain of public debt. Even if all of these fragilities have begun (or are about) to turn, they are unlikely to revert back quickly to safe levels.

### *Outlook*

Indeed, public debt sustainability is likely to remain fragile in the foreseeable future. Gross public debt reached 124% of GDP in 2013, up from 25% in 2007. While it is expected that, starting this year, moderate funding costs and improving real GDP will tend to reduce debt-to-GDP, the persistently low inflation outlook -- below 1% this and next year -- will slow down the deleveraging process. Against this backdrop, the government has set ambitious debt-reduction targets for the next few years: achieving 118% of GDP by 2018.

### *Targeting public debt reduction*

In order to anchor investor confidence and maintain low market funding costs, reducing public debt should be the overriding fiscal target for the next few years, as markets are likely to focus on the government's capacity to reduce public debt to safer levels to restore solvency. This should help moving Ireland away from the unstable equilibrium associated with high public debt levels. In addition, achieving the debt targets becomes all the more important post EU-IMF program in order to safeguard hard-won credibility. Over the last three years under the troika program, Ireland has met and beat the deficit targets. Going forward, to set public debt on a convincing downward path it is important for the fiscal authorities to stick to the planned consolidation path: the government intends to deliver a 3pp of GDP improvement in the structural fiscal balance for 2014-15, which corresponds to a swing in the overall balance of 4.8% of GDP. This would reduce the overall deficit to just below 3% of GDP by 2015.

### *The deficit rule*

Does this mean that Ireland should only focus on debt reduction and dismiss the structural fiscal balance as a target? Clearly not. A balance structural budget should remain a fiscal goal, but over the long-term (eg, when Ireland was running an apparently-prudent, balanced budget in 2007, the structural balance reached a whopping -7.5% of GDP). But there are good reasons against the structural fiscal balance as the single (or the main) fiscal target for the next few years. First, large-scale errors in real-time estimates of the output gap have been well documented (see Ley and Misch, 2013). Second, Ireland output tends to be more volatile than in most EA countries, partly because lumpy exports represent well over 100% of GDP. Third, the Irish economy is currently undergoing significant structural changes which make the estimates of potential GDP highly uncertain. For these reasons, setting Ireland's debt-to-GDP firmly on a downward trajectory for the next few years as the main fiscal target will help avoiding some of the problems related to the structural balance. Reducing the large stock of public debt will also help reducing the risks ahead for the Irish sovereign.



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