POLICY PAPER

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.

I 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

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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 programme, which Ireland just exited. While seen as sole success story so far among the Eurozone programme countries, doubts remain about sovereign debt sustainability, given uncertain growth perspectives of the export-oriented Irish economy and possible additional recapitalisation needs of Irish banks after the European asset quality review and stress test results to be published later in 2014. High household over-indebtedness 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 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 III uses a global benchmarking exercise to gauge the development of the Irish financial system over time. Section IV discusses recent regulatory reforms on the national, European and global level, while Section V focuses on the importance for Ireland of the current discussions on the Eurozone banking union. Section VI concludes.

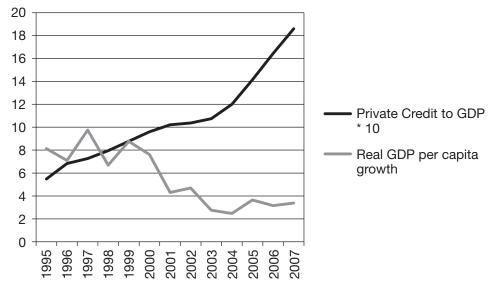
II FINANCE AND GROWTH IN IRELAND

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 (Figure 1).

Figure 1: Real GDP Per Capita Growth and Private Credit to GDP Over Time



Source: World Bank (2013) and World Development Indicators.

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. 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 per cent private credit to GDP as approximate turning point, with the negative relationship between finance and growth turning significant at around 150 per cent 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.

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

¹ Rioja and Valev (2004a, 2004b) and Aghion, Howitt, and Mayer-Foulkes (2005).

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 (Demirgüc-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 US in the 1970s and 1980s and France in the 1990s shows significant growth benefits from financial liberalisation, even though these countries could be considered being at the productivity frontier (Jayaratne and Strahan, 1996; 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 (2013a, b) provides empirical evidence for this hypothesis, both for the US 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 centre view focusing on comparative advantages of the financial system in providing and possibly exporting financial services, implicitly aiming at an as 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. This increase in household credit was even more pronounced than in the average EU country, which also saw an increase over the same period (Figure 2). 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 Figure 3 show that both value added and employment share of the financial sector were higher in Ireland than both UK and the 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

² 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.

90% 80% 70% 60% 50% Ireland 40% ■ EU-27 30% 20% 10% 0% 1996 1998 2000 2002 2004 2006 2008

Figure 2: Household Credit to GDP in Ireland and EU-27

Source: Beck et al. (2012).

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 per cent of financial sector employment in Ireland at the end of 2005, it still amounted to less than 2 per cent of overall employment (Figure 3 Panel B).

Finally, the lack of a positive growth impact of the large Irish financial system can be explained with an over-extension 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, 2013a, 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

Panel A: Value added share 35 30 25 IRL 20 LUX 15 - NLD 10 • UK 5 0 Panel B: Employment share 14 12 10 **IRL** 8 • LUX 6 - NLD • UK 2

Figure 3: Financial Sector's Contribution to Irish Economy

Source: Beck, Degryse and Kneer (2014).

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Panizza (2012) and illustrated in Figure 4, 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, 1998). 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.

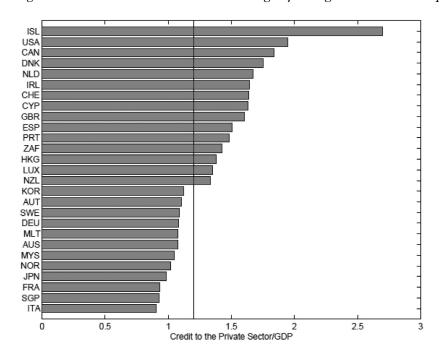


Figure 4: Finance and Growth - the Range of a Negative Relationship

Source: Arcand, Berkes and Panizza (2012). This graph plots the 2006 level of Private Credit to GDP for all countries, for which the value was above 90 per cent. The vertical line is at 110 per cent. For more details see Arcand *et al.* (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.

III 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 compare with Ireland, 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

$$FD_{i,t} = \beta X_{i,t} + \varepsilon_{i,t} \tag{1}$$

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 nonlinearities), (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 behaviour, and (v) other fundamental factors (an off-shore centre

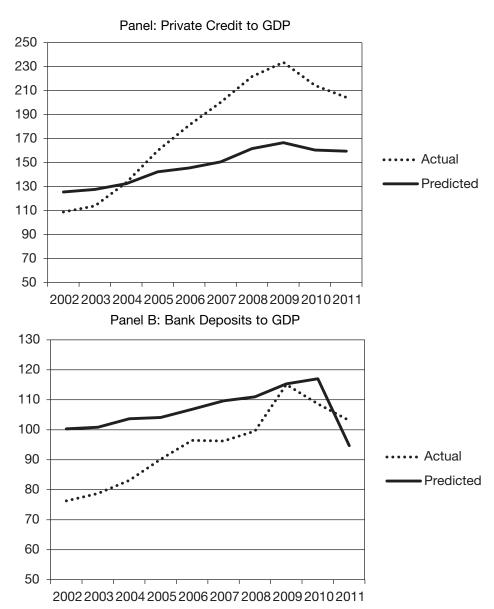
dummy, a transition country dummy and an oil-exporting country dummy) to control for specific country circumstances. The regression results are then used to predict the benchmark level of financial development $\mathrm{FD}_{\mathrm{i},t}{}^{\mathrm{B}}$ for each country in each year for which data are 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 an effective financial system. 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 over-extension, subsidised 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 (Figure 5). While the benchmark level of both credit and deposits to GDP also increased over time, reflecting both changes in socioeconomic 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 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.

Comparing actual and benchmark values for an array of financial system indicators for 2011 (Figure 6) 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

Figure 5: Benchmarking Irish Banking Development Over Time



Source: Beck and Feyen (2013) and authors' calculations.

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.

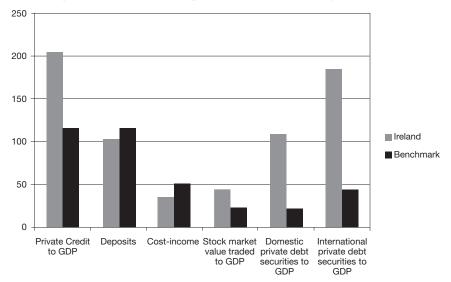


Figure 6: Benchmarking the Irish Financial System, 2011

Source: Beck and Feyen (2013) and authors' calculations.

The findings of Figures 5 and 6 suggests 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 Figure 7, 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.

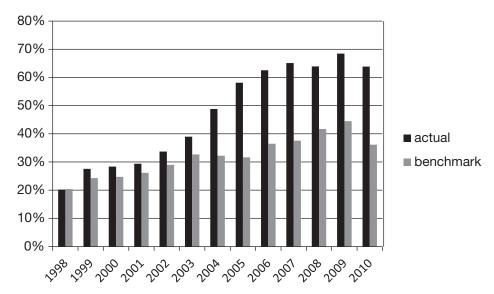


Figure 7: Benchmarking Mortgage Credit to GDP Over Time

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 five bank concentration ratio in 2010 stood at 86 per cent in Ireland, compared to 90 per cent in Denmark, 91 per cent in Portugal, 92 per cent in Belgium and 93 per cent 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).³ The Lerner index, on the other hand, shows a relatively high level of market power, with profit-costs margins of 27 per cent, 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.

³ It is important to note that the computation of the H Statistics relies on the strong assumption of the banking system being in equilibrium, an assumption that seems rather heroic for Ireland in 2010.

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 players, 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 persuasion and support are to be treated with a high degree of caution.

Given the retrenchment of the Irish banking system and the limited access financing by SMEs, calls for additional state-supported funding programmes 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.⁴ 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 nationalisation 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.

⁴ 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.

IV 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 minimising 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 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 Cypriotic 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 minimise its probability down to zero. The challenge is rather to minimise 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 internalise 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-minimising way for the rest of the financial system and the real economy, such as through good-bank-bad-bank structures or purchaseand-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 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 the 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.

V 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 benefited 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 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 US. 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 US banking union, there were also less strong additional negative effects of 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 US 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 other important differences between the US 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 US, where government bonds are held mostly by non-bank financial institutions. More critical, however, is the fact that banks in 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 internalised 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.

VI 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 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.⁵ This requires reforms of bank regulatory and insolvency frameworks as well as adjustments in banks' lending policies and risk management systems.

⁵ 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.

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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