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Overcoming the Banking Crisis in Ireland

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By Muge Adalet McGowan

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ABSTRACT/RÉSUMÉ

Overcoming the banking crisis in Ireland

Ireland is recovering from an extremely large banking crisis born of over-exuberant property lending. The government has taken a wide range of measures to tackle the crisis over the past 3 years. Larger bad property loans have been transferred to a government controlled "bad bank", NAMA, and the associated heavy losses fully recognised by the banks. NAMA needs to focus on maximising tax payer returns from disposing of this asset portfolio. The banking system was recapitalised in mid 2011 following stringent bank "stress tests", which proved to be a crucial turning point in the crisis by helping to draw a line under losses. Restructuring of the domestic banking system around two core pillar banks is underway but the domestic banking system is still too large. Selling down the banks' large portfolio of foreign assets will help to downsize the banks. It will assist in reducing reliance on Eurosystem liquidity while minimising the squeeze on domestic credit. As confidence in the financial system is regained, the authorities should further restrict the government guarantee of bank liabilities. Revamped bank regulation and supervision should utilise a wider set of indicators and rules beyond standard capital ratios and pay greater attention to macro-financial linkages.

This Working Paper relates to the 2011 OECD Economic Survey of Ireland (www.oecd.org/eco/surveys/ireland).

JEL Classification: G01, G21, G28, H81.
Keywords: : Ireland; financial crises; financial stability; banking supervision; government guarantee; stress tests

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Surmonter la crise bancaire en Irlande

L'Irlande se remet d'une crise bancaire d'une ampleur extrême née de l'exubérance excessive du crédit immobilier. Ces trois dernières années, le gouvernement a pris toute une série de mesures pour remédier à cette crise. Des créances immobilières irrécouvrables, d'un volume considérable, ont été transférées à une « structure de cantonnement » sous contrôle public, la NAMA, et les lourdes pertes correspondantes ont été intégralement passées en charge par les banques. La NAMA doit se concentrer sur la maximisation de la rentabilité pour les contribuables lors de la cession de ce portefeuille d'actifs. Le système bancaire a été recapitalisé à la mi-2011 après l'application aux banques de « simulations de crise » rigoureuses qui auront marqué un tournant essentiel en contribuant à mettre un terme aux pertes. La restructuration du système bancaire national autour de deux banques piliers est en cours mais la taille de ce système demeure trop importante. La revente de l'important portefeuille d'actifs étrangers des banques contribuera à la réduire. Elle permettra de diminuer la dépendance du secteur à l'égard de la liquidité du système européen de banques centrales tout en minimisant la pénurie de crédit d'origine interne. Avec le retour de la confiance dans le système financier, les autorités devraient restreindre davantage la garantie publique des engagements bancaires. La refonte de la réglementation et du contrôle bancaires devrait s'appuyer sur un ensemble plus large d'indicateurs et de règles allant au-delà des ratios classiques de fonds propres et devrait accorder plus d'attention aux interactions macrofinancières.

Ce Document de travail se rapporte à l'Étude économique de l'OCDE de l'Irlande 2011 (www.oecd.org/eco/etudes/irlande).

Classification JEL: G01, G21, G28, H81.
Mots-clés : Irlande; crises financière; stabilité financière; supervision bancaire; garantie publique; simulations de crise

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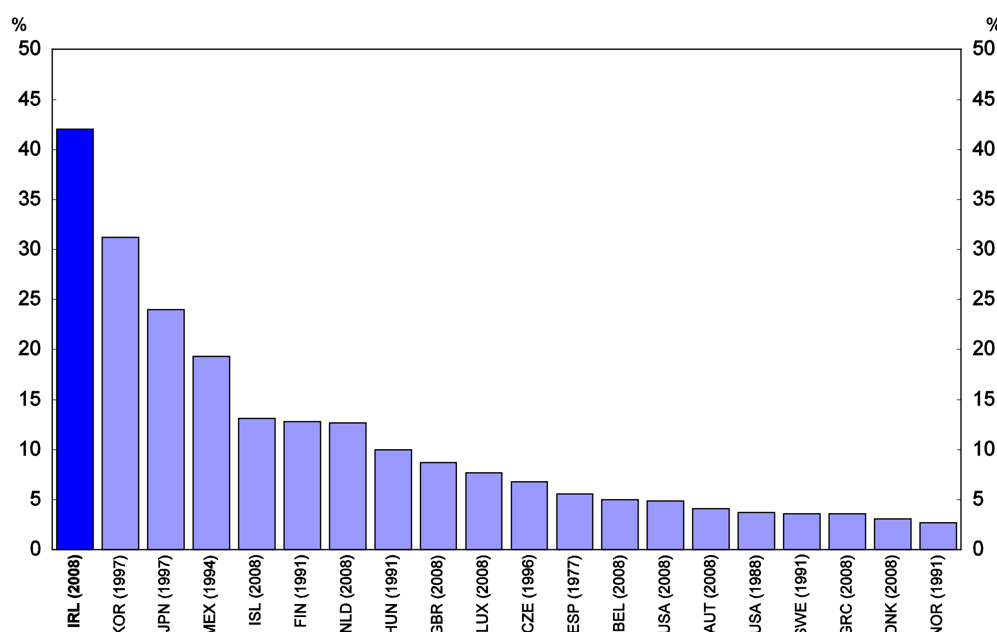
OVERCOMING THE BANKING CRISIS IN IRELAND

By Muge Adalet McGowan[1]

Ireland is recovering from one of the largest banking crises ever to hit a developed economy (Figure 1). The banking system played a leading role in the accumulation of macroeconomic imbalances in the past decade, with rapid bank credit expansion contributing to an ebullient housing sector and strong increase in domestic demand. The unprecedented expansion of bank assets, in the context of lax prudential supervision and easy access to foreign wholesale funding, led the banking system to grow to several times the size of the Irish economy. When housing and financial markets collapsed in 2007, the Irish economy found itself exposed to extraordinarily large bank losses. This triggered a crisis of confidence and a loss of access to private market funding. Faced with an illiquid and insolvent banking sector, the government has implemented a series of measures over the past three years. Having achieved some progress to recapitalise the banks with public funds and deleveraging their balance sheets, the government now seeks to restructure the sector with the goal of bringing down its size and refocusing its operations on the domestic recovery. Although still highly reliant on central bank funding, these efforts should allow a gradual resumption of market access. This chapter discusses the evolution of the crisis, assesses the policy failures that led to the current crisis and finally recommends further measures to restore the sector to health.

Figure 1. Direct fiscal costs of banking crisis[1]

As a percentage of GDP



1. Gross value. Dates refer to year in which the banking crisis started. Gross fiscal costs excluding recovery proceeds computed over the first five years following the start of the crisis.

Source: Laeven and Valencia (2008, 2010) and OECD (2011).

1. Muge Adalet McGowan is an Economist in the Economics Department of the OECD. This paper was originally produced for the 2011 OECD Economic Survey of Ireland and published in October 2011 under the authority of the Economic and Development Review Committee (EDRC) of the OECD. The author would like to thank Andrew Dean, Bob Ford, Patrick Lenain, David Haugh, Sebastian Schich and members of the EDRC for valuable comments and discussions. She would also like to thank Josette Rabesona for statistical assistance and Heloise Wickramanayake and Olivier Besson for secretarial assistance.

Ireland's banking crisis

The banking crisis had its roots in a classical over-extension of standard loans. With the adoption of the euro and increased financial integration to global markets, Irish banks obtained access to greater wholesale funding. In an environment of lax prudential supervision, fierce competition for market share emerged amongst Irish banks as well as with local affiliates of UK based banks, such as Ulster Bank. In 2004, with 15% of residential mortgages, Ulster Bank became a prominent lender in this market (Nyberg, 2011) (Box 1). Banks allowed their credit standards to deteriorate and expanded their loan portfolio at an unprecedented rate. This fuelled a housing market bubble, with a feedback effect of increasing property prices providing collateral for more loans. High profits generated by this line of business for banks led to further expansion of the banking system. Rapid expansion of credit left the domestic banks highly exposed to a sharp turn-around in property prices, which began in early 2007 and resulted in massive losses at all three major domestic banks. The property-related losses were compounded by a general change in risk aversion in international financial markets as well as towards the Irish banking system, which saw wholesale funding flows dry up.

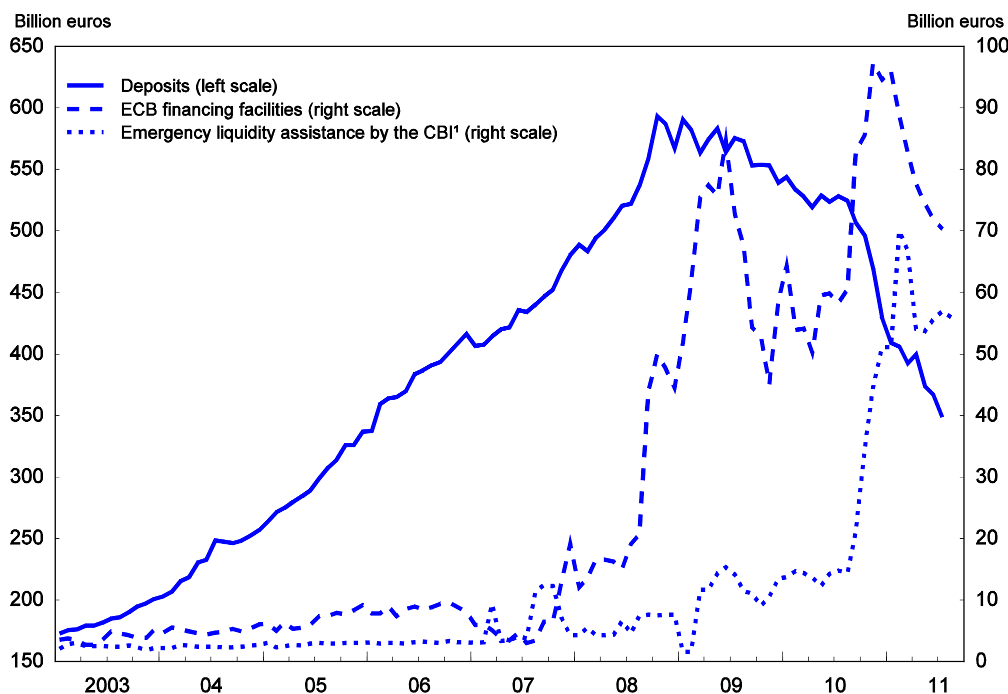
Box 1. The effects of the crisis on the financial system and financial supervision

The Irish financial system is made up of both domestic and IFSC (International Financial Services Centre) banks. The IFSC banks have a completely different business model and essentially do offshore business (OECD, 2009). Prior to the crisis, there were three major domestic banking institutions, Bank of Ireland (BoI), Anglo Irish Bank (Anglo) and Allied Irish Bank (AIB) and three minor players, Education Building Society (EBS), Irish Nationwide Building Society (INBS) and Irish Life and Permanent (ILP). They also faced competition from local affiliates of foreign banks, most prominently Ulster Bank. With the crisis, the six main banks have received extensive government support, ending up with total or majority state ownership. Given the extent of their losses, Anglo and INBS have been merged and will eventually be wound up. In the restructuring of the banking system, the government plans to have two universal banks as its core pillars (BoI and AIB-EBS) as well as a restructured ILP.

In 2003, the Central Bank and the Financial Services Authority of Ireland (CBFSAI) were separated, with the financial regulation duties allocated to the Financial Services Authority (FSA). There was a lack of communication and coordination between the FSA and the Central Bank, which led to insufficient monitoring of macro-financial linkages. The style of supervision was non-intrusive and the lack of proper enforcement mechanisms in the face of the building up of risks and regulatory forbearance aggravated the crisis. After the crisis, the financial supervision authorities were brought back into the Central Bank of Ireland (CBI) under the leadership of the Governor. In addition, both the structure and the style of supervision have been modified to address the identified weaknesses (Honohan, 2010; Nyberg, 2011; CBI, 2011d).

In response to the crisis, the Irish government took extensive policy actions to stabilize the banking system. Insufficient information initially led the government to interpret the crisis as a problem of liquidity, rather than solvency. The authorities thus issued an extensive guarantee of bank liabilities under the now expired Credit Institutions Financial Support Scheme (CIFS) of EUR 375 billion (240% of GDP) , which was more comprehensive than the approaches adopted in many other countries (Schich, 2009). The guarantee covered all deposits (including corporate and interbank), bonds, senior debt and certain subordinated debt. The authorities recapitalised AIB and BoI and took control of Anglo in January 2009. They also established a state-owned bank restructuring agency, the National Asset Management Agency (NAMA), to take over the property development loans of banks. However, these actions were not enough to restore confidence, which deteriorated once again following the disclosure of larger-than-anticipated financial losses. The lack of access to funding markets and the rapid withdrawal of deposits made the Irish banking system dependent on European Central Bank (ECB) financing facilities and on Central Bank of Ireland Emergency Liquidity Assistance (Figure 2).

Figure 2. Dependence on Eurosystem



1. Emergency liquidity assistance by the Central Bank of Ireland is an approximate measure proxied by its 'other assets' series.

Source: Central Bank of Ireland (CBI).

By mid-2010, it had become clear that Ireland's banking system was suffering from an insolvency crisis that these central bank facilities were not designed for, and that further large capital injections would be required. A lack of market confidence that the government could fund the growing costs of the banking crisis pushed government borrowing costs sharply higher, effectively prohibiting a domestically-financed solution. This prompted the EU-IMF programme, with financial assistance of EUR 85 billion, of which EUR 35 billion for the banking system (EUR 10 billion for immediate recapitalisation and EUR 25 billion to be provided on a contingency basis). The banks were required to raise a total of EUR 24 billion in capital following stress tests and to undertake capital and liquidity assessments by the CBI as a condition of this programme. With hindsight, it appears that the initial policy response misjudged the nature and scale of the problem confronted by the banking system, leading the government to take steps that raised the fiscal cost of the crisis, resulting in the sovereign losing access to financial markets. At the same time, global financial market tensions had reached fever pitch during this period and it is difficult to judge what would have happened had the government not extended its guarantees. In analysing these policies, it is useful to think of three phases in dealing with a systemic financial crisis: initial containment; resolution and deleveraging; and management of impaired assets.

Initial containment: The government guarantee in international comparison

In the environment of extreme risk aversion that prevailed globally in the latter half of 2008 banks in Ireland, as elsewhere, experienced significant problems in raising and rolling over funding. When Anglo was unable to roll-over its foreign borrowings and ran out of collateral to refinance at the ECB, the government issued an extensive guarantee before any international cooperation effort, preceding all other guarantees in Europe, and before suggestive guidelines were announced by the ECB. In October 2008, the ECB recommended that government guarantees on bank debt should aim to address funding problems of

liquidity-constrained, but solvent banks. It recommended, however, that guarantees on interbank deposits should not be provided and gave guidelines for the pricing of debt guarantees depending on their maturity, using CDS and credit ratings. The Irish guarantee, as in many countries, was much more extensive than the recommendations implied.

Generally, the benefit of a guarantee is to stop the loss of confidence in the financial system and buy breathing space to resolve underlying problems. Since deposits and bank bonds made up a significant proportion of total funding in Ireland, guaranteeing them did succeed in bringing some calm to the markets. However, extensive guarantees have their dangers. They bail out investors who should have done a better job at managing risks and at disciplining financial institutions. They introduce potential distortions to competition, create contingent fiscal liabilities that can lead to widening of sovereign bond spreads and transform banking sector risk into sovereign risk. They also cause moral hazard, so should be accompanied both by a credible exit strategy and by measures to avoid the perception that such extensive guarantees will be available in the future.

The Irish decision to extend a comprehensive guarantee of bank liabilities had benefits and costs. An argument favouring extensive guarantees of all institutions, solvent and insolvent, is the need to prevent a massive run from anxious depositors and to avoid the loss of interbank funding (Baer and Klingebiel, 1995). This was the case in Ireland where the blanket guarantee was extended to all the main financial institutions at once. Given the suddenness of the crisis and the unpreparedness of the authorities, it was almost impossible to distinguish viable and non-viable banks, hence unlimited deposit guarantee helped preserve the payment system and create the breathing space necessary to plan a restructuring strategy (Lindgren *et al,* 1999). However, this breathing space was not utilized efficiently and the benefits of confidence were not fully captured due to the slow progress on bank restructuring and the uncertainty regarding the total cost of the crisis. Crucially, as elsewhere, the guarantee was not accompanied by a resolution mechanism to deal with the situation where an initial liquidity problem turned out to be one of solvency. In an empirical study of 40 crises, Honohan and Klingebiel (2000) show that, when open-ended liquidity support and blanket deposit guarantees are used, fiscal costs are higher and economic recovery is not faster. Ongoing liquidity support may actually lead to a slower recovery and larger output losses (Bordo *et al,* 2001) and to date the crisis in Ireland has been drawn out and the fiscal cost high (Box 2).

Box 2. A tale of two banking crises: Ireland and Iceland

Ireland and Iceland both experienced large credit booms that financed speculative asset purchases that eventually resulted in a severe financial crisis, but the fiscal consequences have been very different. In Iceland, the banking system at 11 times GDP was far larger than the domestic banking system in Ireland at 3.6 times GDP. Despite this, as of early 2011, the direct fiscal cost of the financial crisis in Ireland was 42% of GDP, around double what Iceland's crisis cost in fiscal terms (OECD, 2011). In addition, Ireland has seen a larger increase in public debt. Gross debt is estimated to have increased by 90% of GDP in Ireland over 2007-11 compared with 70% of GDP in Iceland. Net debt increased by 70% of GDP in Ireland over the same period, compared with 45% of GDP in Iceland.

These contrasting results substantially reflect very different initial policy choices, sharply highlighting how crucial initial decisions in dealing with a crisis are. In Iceland, the government suspended operations at the failing banks and created new banks by transferring domestic deposits and assets booked through domestic branches from the old banks. Shareholders of the old banks were wiped out and creditors suffered large losses. By contrast, Ireland, guaranteed most of the liabilities of its private banks and the resulting support to the banking system contributed to a sharp deterioration in the fiscal position, leading to an EU-IMF programme.

Iceland's approach appears to have paid off relatively quickly. The budget deficit is expected to fall to 1.4% of GDP by 2012 and Iceland has regained access to international capital markets at reasonable rates. In June 2011, it issued USD 1 billion sovereign bonds with a premium of 320 basis points over mid-swaps. However, Iceland may face new challenges as capital controls are removed. By contrast, Ireland remains totally dependent on official sources and market sentiment towards Ireland, albeit severely affected by contagion from elsewhere in the eurozone and having improved in the summer, remains negative. However, it is not clear whether Ireland could have pulled off the Icelandic approach. Institutional arrangements and constraints are different and the carve-up of Icelandic banks and default on liabilities was aided by having a much larger proportion of bank assets and liabilities offshore than in the Irish case.

The contribution to be made by current bond holders to bank losses in Ireland remains a controversial issue (Table 1). However, the main concern for Ireland is whether the fiscal gains from such a bond holder contribution outweigh the costs in terms of greater wholesale funding costs for the banks in future as well as the cost (monetary and reputational) of ongoing legal disputes as even the compromise of bailing in subordinated bondholders achieved by the government is facing legal disputes.

Table 1. Outstanding Bond Liabilities of the Guaranteed Institutions

April 2011

EUR m	Senior Bonds Guaranteed	Senior Bonds Unguaranteed Secured	Senior Bonds Unguaranteed Unsecured	Subordinated Bonds	Total
AIB	6 063	2 765	5 872	2 601	17 301
BOI	6 178	12 284	5 164	2 751	26 377
EBS	1 025	1 991	472	65	3 553
ILP	4 704	2 999	1 156	1 203	10 062
Anglo	2 963	0	3 147	145	6 255
INBS	0	0	601	175	776
Total	20 933	20 039	16 412	6 940	64 324

Source: Central Bank of Ireland.

Bank resolution and deleveraging

After the initial phase of containment through guarantees, the second phase of a crisis is resolution and deleveraging. Part of this process in Ireland was to set up a bad bank, NAMA, to acquire assets in the form of property-development related bank loans in order to bring stability to the banking system and reduce the size of banks` balance sheets. NAMA completed the acquisition of 115 000 loans from 850 debtors with a nominal value of EUR 72.3 billion (46% of GDP) by December 2010 at an average haircut of 58% (Table 2). Among debtors, 180 account for EUR 62 billion of the portfolio, showing that the banks not only suffered from high exposure to property development, but also from high exposure to a small number of borrowers. In retrospect, such exposures could have been contained by limits to sectoral lending or the use of instruments such as loan to value ratios or a credit register to which financial institutions are obliged to report their lending in detail to strengthen credit appraisal by lenders and supervision.

Table 2. Transfers to NAMA

(EUR billion)

	AIB	Anglo	BOI	EBS	INBS	Total
Nominal Loan Value	19.6	34.0	9.3	0.8	8.5	72.3
Discount	54%	62%	42%	60%	64%	58%
Consideration	8.9	12.9	5.4	0.3	3.0	30.5
Realized Loss	10.7	21.1	3.9	0.5	5.5	41.8

Source: NAMA, Department of Finance.

An asset management agency such as NAMA can help restore the banking system to health, as it forces banks to recognise their losses and transfers bad assets off their balance sheets, allowing them to

concentrate on new lending. Such a scheme can also improve banks' portfolios by providing assets that can be used as collateral to increase liquidity, in exchange for problem loans. However, the benefits of increased transparency were not fully captured in Ireland, in large part because loan-by-loan valuations (required by the European Commission) slowed the process of transfer. Experience suggests that the advantages of this loan-by-loan valuation approach are often outweighed by the time lost in cleaning up the banking system. However, in this case it may have been necessary because aggregate information provided by the banks to the government prior to the guarantee proved to be inaccurate and misleading. The urgency of the situation and the lack of a well established banking division in the Department of Finance at the time made it harder to judge the information provided by the banks, so the subsequent increase in the banking expertise at the Department of Finance is very appropriate.

Crystallising losses upfront through NAMA led to the need for immediate recapitalisations of banks. Speedy recognition of the extent of the problems and complete recapitalisation at an early stage are key to the start of the recovery (Honohan and Klingebiel, 2000). Incomplete information, however, led to the piecemeal capitalisation of Irish banks in 2009-10. The pace of reforms picked up subsequently under the EU-IMF programme, which required recapitalisation of banks in line with prudential capital assessment reviews, among other financial sector reforms. The publication of the Financial Measures Programme ("stress tests") by the CBI in March 2011 proved to be an important turning point in the bank restructuring process (CBI, 2011b). The aim of these exercises was to remove market uncertainty about the magnitude of losses suffered by the banks which had been a major factor in negative financial market sentiment towards lending to not only the banks but also the Irish government. They were also designed to give financial markets confidence that the banks will have a strong capital base and buffer to withstand expected losses as well as additional losses that might materialize in adverse stress conditions. Similar exercises will be carried out once a year until at least 2013.

The stress tests included a Prudential Capital Assessment Review (PCAR) to determine the additional capital needed by Irish banks over a three year horizon to cover expected losses. They were based on conservative assumptions on loan losses and strict parameters (high capital ratio thresholds, three year periods of stress). The release had an immediate effect on market confidence as evidenced by the sharp, though temporary drop in the sovereign spread. The stress tests have been perceived by financial markets as a credible step on the road to achieving a banking system that is smaller, focused on core operations, well capitalized, has a stable market-based funding and is able to meet the credit needs of the Irish economy. Reflecting test results, the banks had to raise EUR 18.7 billion in order to meet new capital ratio targets (10.5% and 6% core Tier 1 in the base and adverse scenarios respectively). In addition, the Central Bank added a further capital buffer of EUR 5.3 billion for the unlikely event of further losses after 2013 (Table 3). The 2011 stress tests conducted by the European Banking Authority (EBA) show that the participating Irish banks meet the stress requirements and do not require additional capital beyond the requirement set by PCAR. The EBA tests were designed to gauge the resilience of European banks against a set of adverse circumstances, whereas PCAR was tailored to the Irish banks' need to reduce their reliance on external funding (CBI, 2011e).

Table 3. Capital requirements from PCAR

March 2011

	AIB	BOI	EBS	ILP	Total
Impact of additional buffer on capital requirements (EUR billion)					
Capital required 2011-13 pre-buffer	10.5	3.7	1.2	3.3	18.7
Additional capital buffer (equity) imposed by the Central Bank	1.4	0.5	0.1	0.3	2.3
Additional capital buffer (contingent capital) imposed by the Central Bank	1.4	1.0	0.2	0.4	3.0
Total capital required 2011-13	13.3	5.2	1.5	4.0	24.0
Central Bank estimate of the impact of proposed capitalisation on current capital ratios					
CT1 ratio (December 2010)	3.7%	9.0%	8.0%	10.6%	
Pro forma CT1 ratio (assuming immediate capital injection)	21.9%	16.1%	22.6%	32.4%	

Source: Central Bank of Ireland.

Once recapitalized, the government plans to restructure the sector to leave only two universal banks as its core pillars (BoI and AIB-EBS), which will return eventually to full private ownership, as well as a restructured ILP. This is being complemented by competition from domestic and the existing foreign-owned banks and possible entry of other institutions. Anglo and INBS have been assessed by the government as unviable and have been merged with a view to winding them up. Their deposits have been transferred to AIB and ILP. In line with the Prudential Liquidity Assessment Review (PLAR), in terms of deleveraging, which is already underway, the target is to achieve a 122.5% loan-to-deposit ratio by the end of 2013, which involves the disposal of EUR 73 billion in non-core assets, of which around 70% are outside Ireland, lowering the risk of credit crunch effects on the Irish economy (Box 3). This will reduce the use of wholesale funding, which is generally less stable than deposits, and decrease reliance on Euro-system financing. However, the pace of asset reduction needs to be one that avoids fire sales and allows the banks to still issue new credit which is important for the recovery.

Box 3. Foreign assets and liabilities of covered credit institutions

Foreign assets are amounts owed to Irish banks by non-Irish residents and cover all on-balance sheet items, including loans, deposits, equities and debt securities. The aggregate foreign assets of domestic Irish banks at EUR 200 billion (130% of GDP) are among the highest in the euro area. Foreign assets held by banks in Austria and France are at around 135% of GDP, and between 80% and 100% of GDP in Germany, Spain and Belgium. The largest Irish exposures are to the UK at around EUR 119 billion (60% of total claims), reflecting the close economic links between the two countries and the US at 12%.

High foreign exposure has advantages as foreign assets provide an important source of diversification for the Irish domestic banking system away from a relatively weak domestic economy; they provide a potential avenue to deleverage the banking system and repay foreign creditors without unduly affecting domestic credit. The balance sheets of the six covered domestic institutions show that their foreign assets and liabilities roughly match. The foreign assets can be potentially disposed of as market conditions improve and be used to decrease the foreign liabilities, most notably reduce borrowing from the Eurosystem.

Table 4 Foreign assets and liabilities in covered domestic credit institutions, December 2010

EUR billion

ASSETS		LIABILITIES	
Loans to non-residents	139	Deposits from non-residents	30
Holdings of securities issued by non-residents	54	Debt securities issued (non-residents)	104
Remaining assets (non-residents)	7	Remaining liabilities (non-residents)	12
		Borrowing from the Eurosystem	91
Total	**200**	Total	**237**

Source: Central Bank of Ireland.

Managing impaired assets

Management of impaired assets transferred to NAMA from failing institutions is the third phase in resolving the crisis. According to BIS (2002), "asset recovery should aim to be economic, fair and expeditious, with a view to maximizing the recoveries on a net present value basis". At this stage, a strategy should be discussed based on the quality of assets, economic and financial market conditions, the availability of interested investors and resources as well as the capability and skills available for active asset management.

Although asset management companies (AMCs) are widely used to expedite restructuring or to dispose of assets rapidly, the empirical evidence on their success is mixed (Klingebiel, 2000). They are successful in resolving insolvent and unviable financial institutions and selling their assets, given certain conditions such as having less complex assets (*e.g.* real estate), good management, political independence, appropriate funding, adequate bankruptcy laws and transparency. NAMA fulfils most of these criteria, but should be supported by reformed bankruptcy laws.

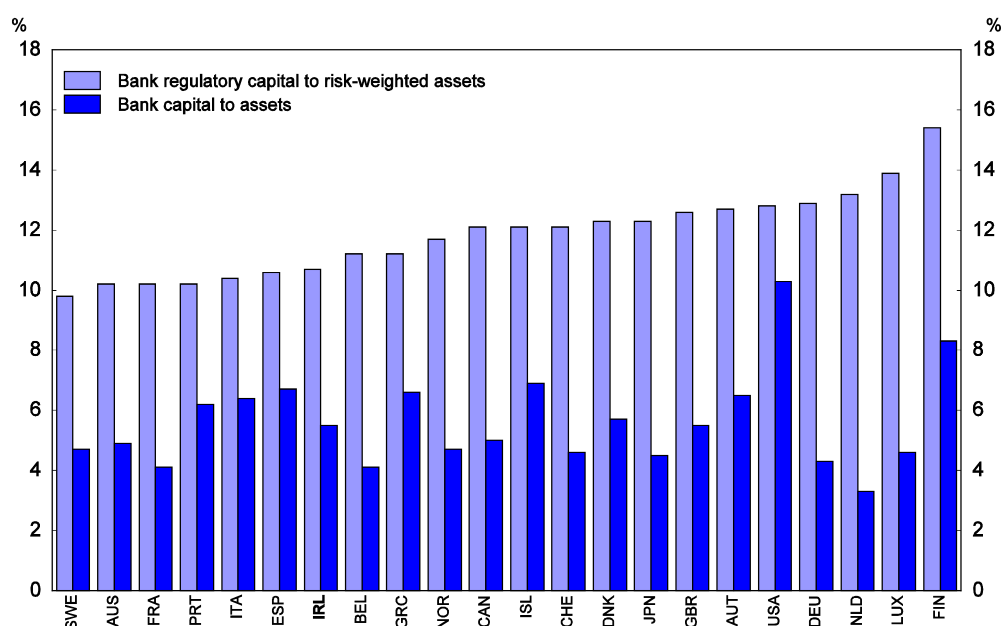
NAMA aims to manage its assets in a way that results in the best possible return for the taxpayer over a timeframe of 7-10 years. However, in response to low activity in the residential housing market, NAMA has proposed a small-scale pilot programme to stimulate interest in the purchase of residential property by providing some protection against possible additional price declines. In implementing this programme, care must be taken to avoid directly exposing the government to further house price risk. If not, this would distort the property market and expose the government to asset price risk that should rest with the house buyer. In order to prevent this, it is important that this NAMA pilot programme remains transparent and of a small size.

Understanding the origins of Ireland's bank supervisory and regulatory failures

Like in many other countries, Irish financial supervisors relied heavily on financial soundness indicators (FSIs) and stress tests. Identifying why these tools did not deliver the right signals is important for understanding why policy failed and how to keep the Irish financial system on a more sustainable path in the future. FSIs assess the adequacy of capital, the quality of assets, the level of earnings, the amount of liquidity and the sensitivity to market risk. They also assess the health of the non-financial sector and the overall macro economy and aim to measure risk. However, many of these indicators failed to warn of the impending crisis in Ireland. In particular, traditional financial stability indicators such as capital and solvency ratios, non-performing loans, profitability, stress tests and the analysis of the rating agencies failed to detect the problems in the Irish banking system. Aggregate capital ratios for the whole banking

system and main individual banks showed adequate capital buffers in 2007 (Figure 3). Even the EU stress tests carried out in mid-2010, well into the crisis, suggested that the major financial institutions had adequate capital buffers. Irish banks were considered to be well capitalised with solvency ratios in excess of the regulatory minimum. The average value of the Tier One capital ratio between 1997 and 2003 was 8.4%, so even the subsequent decline was not enough to raise warning signals.

Figure 3. Capital adequacy indicators, 2007

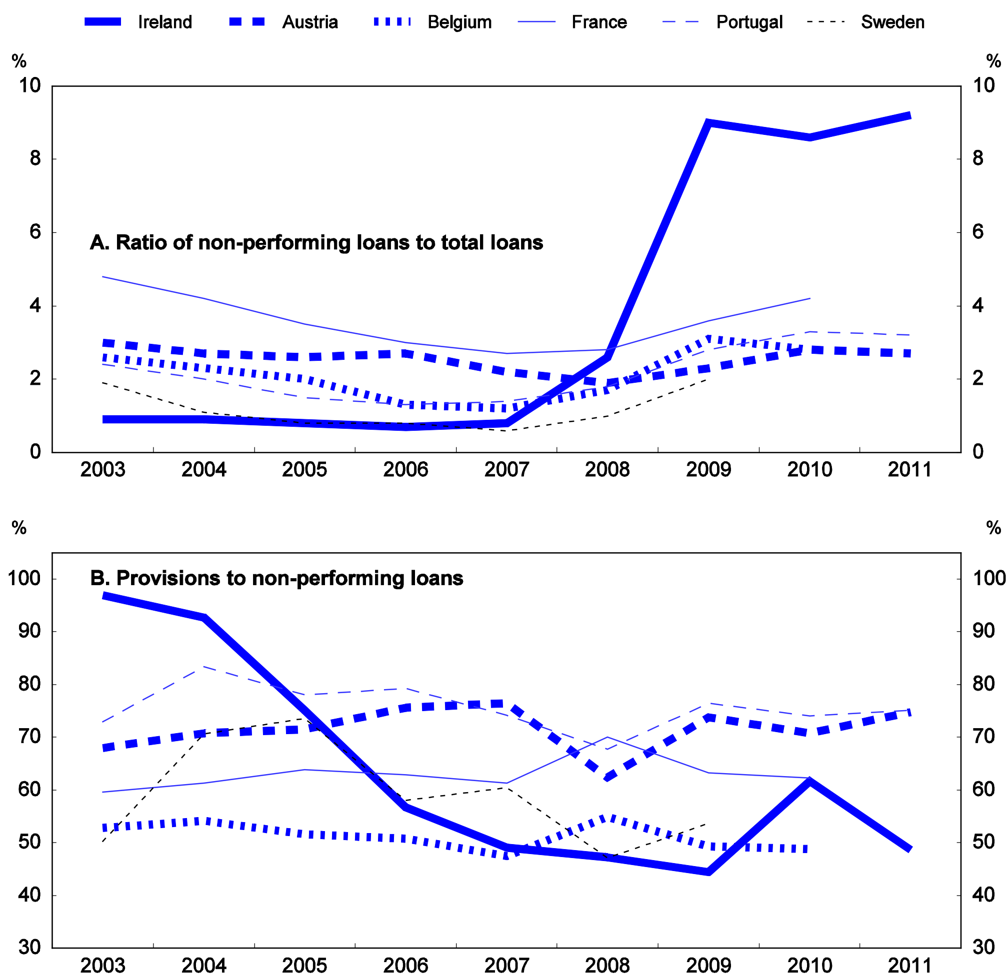


Source: International Monetary Fund (IMF), Financial Soundness Indicators.

Aggregate data on non-performing assets prior to the crisis also suggested that the Irish banking system was healthy. Low interest rates and high employment were key factors keeping these numbers low. As a result of this, the ratio of provisions to non-performing assets fell as well. The decrease in provisions was particularly strong in Ireland. One explanation offered by the Central Bank for this trend is the rise in the share of mortgage lending in the loan books of banks. Due to the collateralized nature of mortgage lending, the ratio of provisions to non-performing loans (NPL) declined in the period leading to the crisis (Figure 4).

Another explanation for the low level of provisioning was accounting standards and Basel II rules, which encouraged pro-cyclicality in provisions. The adoption of International Financial Reporting Standards (IFRS) accounting rules in 2005 eliminated the use of general provisions or expected loss provisions and replaced them with an incurred-loss model. This allowed the banks, prior to 2007, to reduce loss provisions, raise profits and increase their lending capacity. The provisioning level for the 6 main banks decreased from 1.2% of loans in 2000 to around 0.4% in 2007. The resulting improvement in accounting profits increased their lending capacity by over EUR 30 billion (Nyberg, 2011). The failure of banks to make more prudent provisions based on anticipated future losses, especially with regards to secured property lending, left them with inadequate provisioning buffers when the crisis hit. Dynamic provision for losses and countercyclical limitations on lending compared to deposits could have been used to address these vulnerabilities.

Figure 4. Non-performing loans[1]



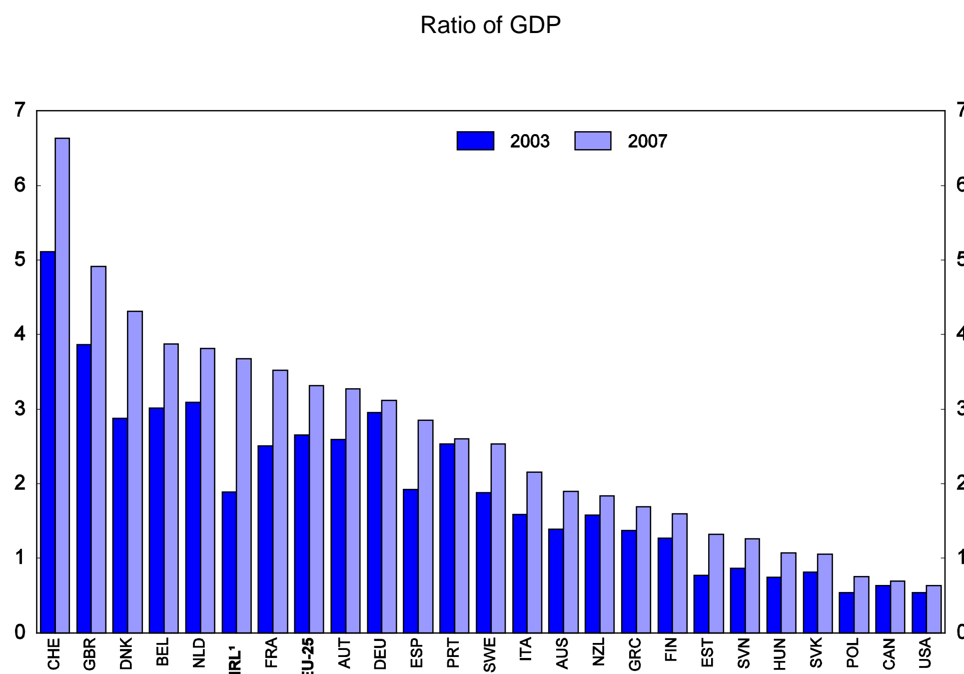
1. For 2011, various quarters.

Source: International Monetary Fund (IMF), Global Financial Stability Report Financial Soundness Indicators Tables September 2011.

However, some indicators gave warnings of a deterioriating situation: growth of assets and lending, concentration of lending in property-related loans; high LTV mortgages; household indebtedness; and dependence on wholesale funding. In particular, indicators of the underlying quality and diversification of the banks' assets and their funding model proved to be far more revealing than measures such as capital adequacy. Ratios to GDP of loans to nonfinancial corporations, real estate loans and private sector credit also signaled vulnerability. This was however overlooked by the regulators, reflecting the light-touch/non-intrusive approach to banking regulation and supervision, intensified due to competition with other financial centres (Honohan, 2010). Expecting a soft landing, the financial regulators did not take concrete actions. Studies at the macroeconomic level show that extreme asset and credit growth can lead to banking crises. The decade prior to the global crisis saw an expansion of assets in magnitude and as a per cent of GDP in many countries but it was especially pronounced in Ireland (Figure 5).

Figure 5. Size of the financial system: bank assets

Ratio of GDP



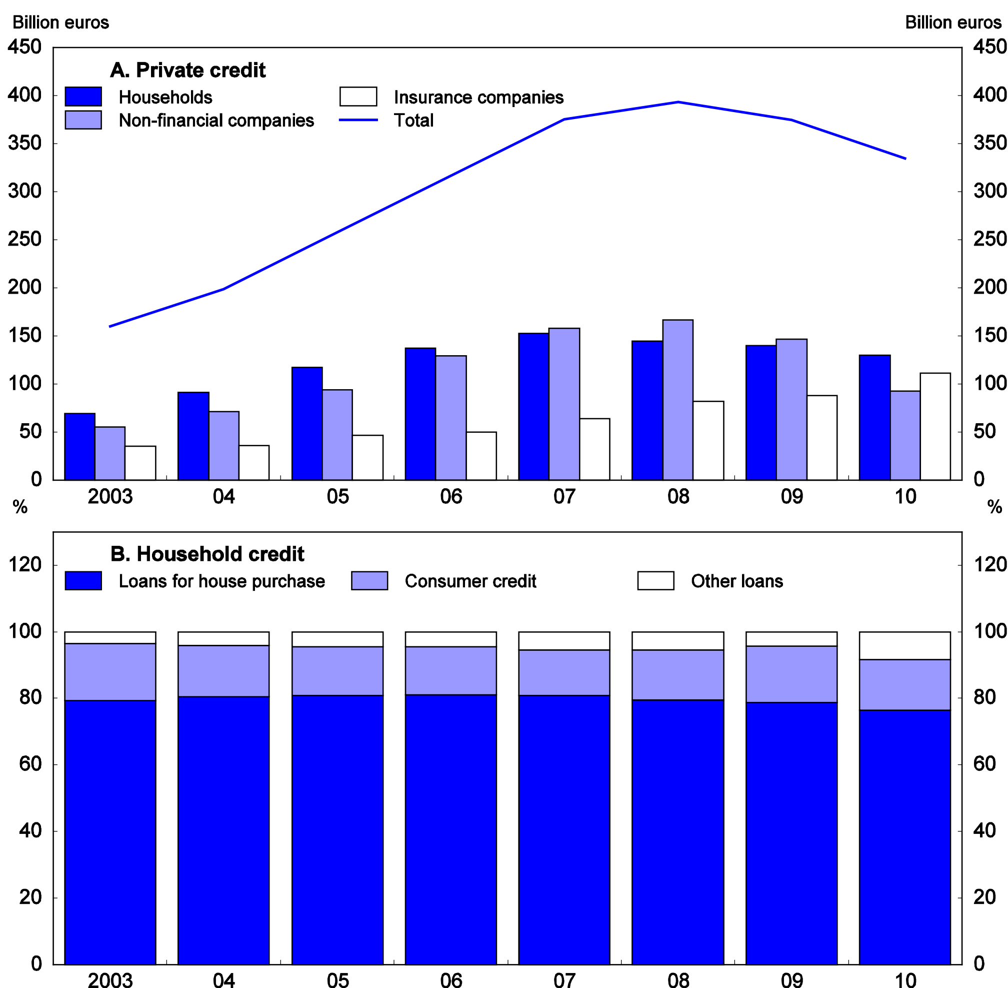
1. For Ireland, domestic banks only.

Source: Central Bank of Ireland (CBI); European Central Bank (ECB) Structural Indicators; United States Federal Reserve; Reserve Bank of Australia; Reserve Bank of New Zealand; Bank of Canada and Swiss National Bank.

Overall asset growth was very undiversified. The main driver behind the expansion of Irish banks was mortgage lending (Figure 6). Loans to non-financial corporations, mainly property developers, also increased rapidly, overtaking loans to households in 2007. A breakdown of lending data shows that overall lending, and particularly lending to households, was heavily skewed towards property-related lending, which accounted for 80% of outstanding loans to Irish households and around 50% of loans to Irish residents in 2006. The percentage of household loans that were mortgage related in 2006 was at similar levels in Belgium, Denmark, Estonia, Portugal and the United Kingdom, 71% for the euro area, 53% in Austria and Hungary and as low as 45% in Poland.

The rapid expansion of loans for residential and commercial property made the banking sector vulnerable to a downturn in the housing market. This was exacerbated by the use of high loan-to-value (LTV) ratios (Figure 7). Aware of the risk of a housing bubble, the Central Bank encouraged banks to be more prudent with respect to their LTV ratios to guard against the consequences of a fall in house prices. There was a slight increase of capital cover for high LTV loans in 2006, but this was too little and too late. Given the steep increases in house values, it might have been better to use loan to income (LTI) ratios to decrease vulnerability to a reversal in house prices, as income levels are better known than fundamental housing values. In retrospect, it appears the dangers associated with a housing market collapse were underplayed and expectations of a soft landing dominated, despite the warnings that housing market indicators provided.

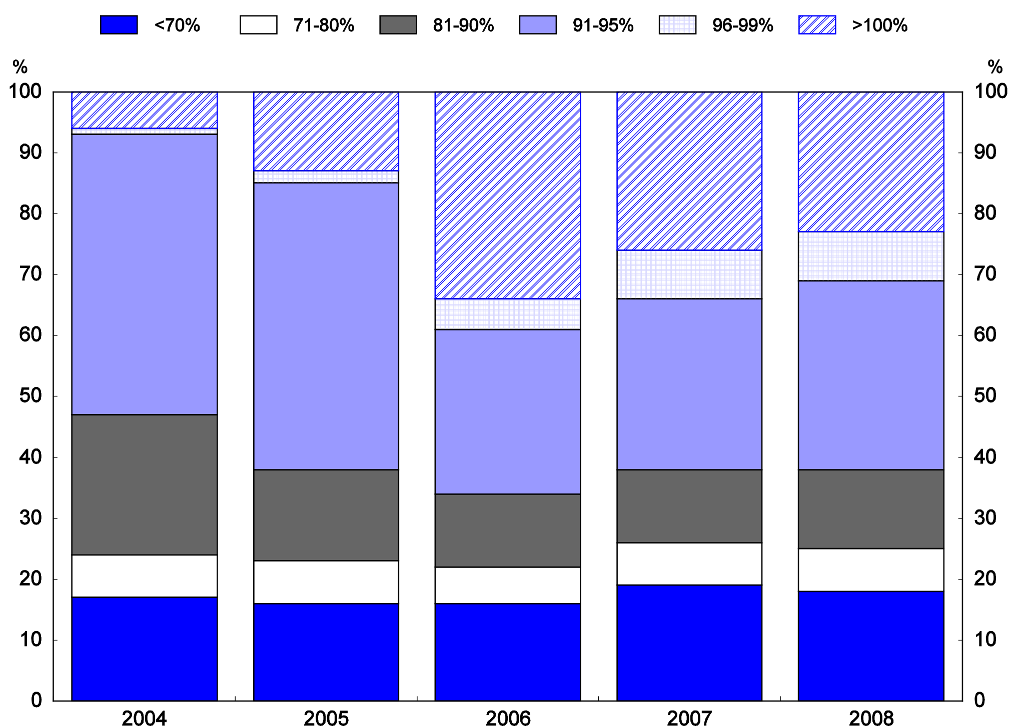
Figure 6. Developments in the private credit market



Source: Central Bank of Ireland.

As the demand for loans grew, Irish banks developed a funding gap that had to be financed from non-domestic sources. The ratio of banks' deposits to loans fell from 93% in 1997 to 70% in 2003 and as low as 43% in 2008. This gap forced banks to fund their loans through more volatile sources, notably capital markets or the interbank market. Although more expensive than deposits, this type of funding was historically cheap due to global economic conditions and the availability of credit, making it attractive. This increased the vulnerability of the financial system by driving the banks to more risky investments due to the deterioration in net interest margins, as well as by increasing dependence on cross-border wholesale funding, which dried up in the global financial crisis (Figure 8).

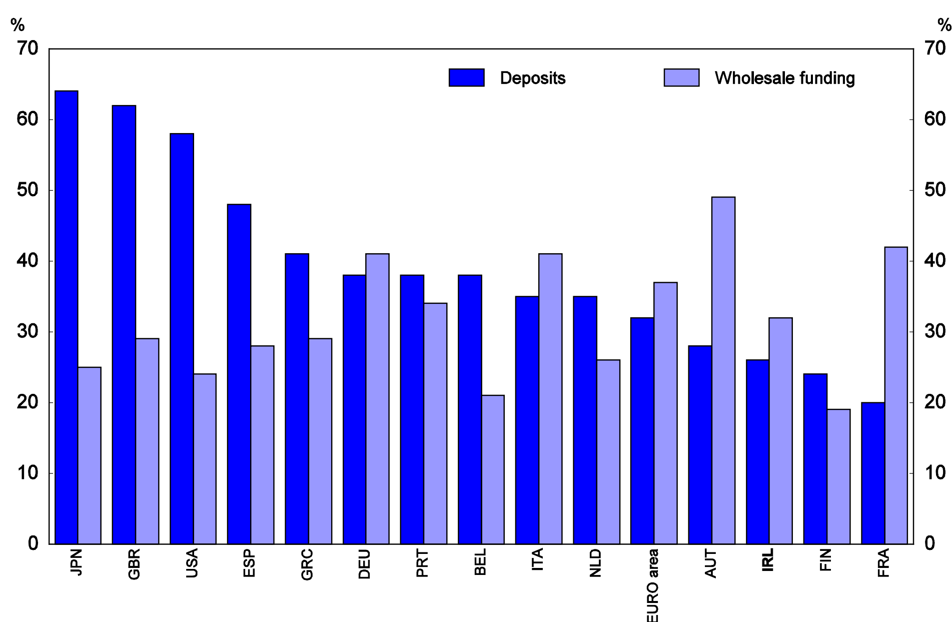
Figure 7. Loan to value ratios for housing of first time buyers



Source: Department of Environment, Heritage and Local Government.

Figure 8. Reliance on wholesale funding

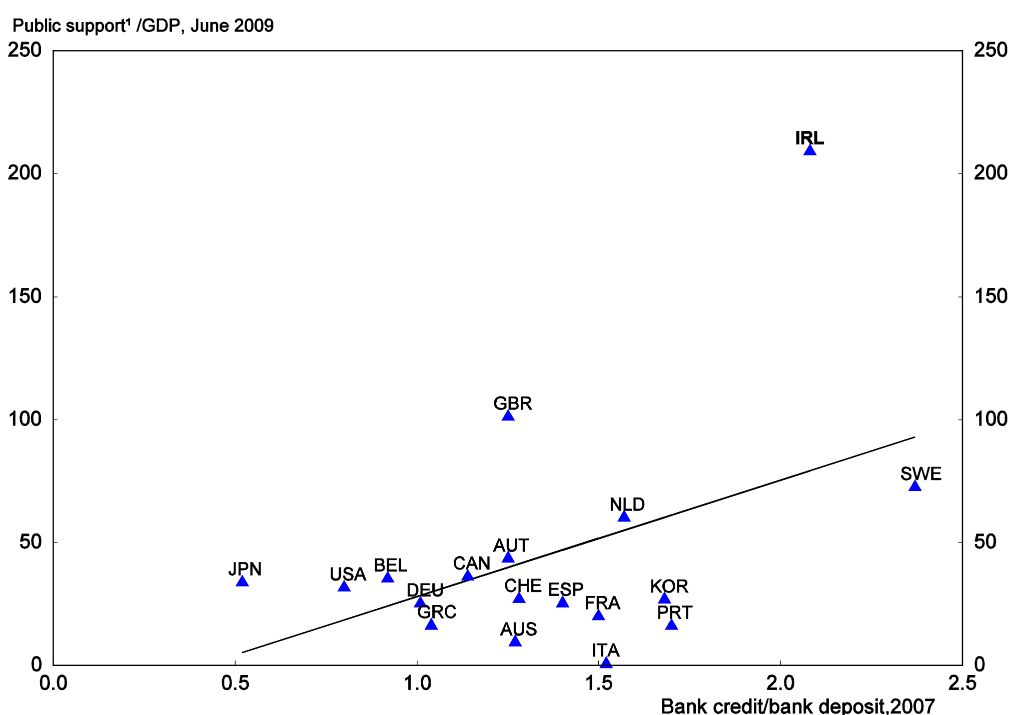
As percentage of total liabilities, end-June 2010



Source: International Monetary Fund (IMF) Global Financial Stability Report, October 2010.

Prior to the crisis, major actors (banks, regulators and policy makers) did not appear to fully appreciate the vulnerabilities associated with wholesale funding, including interest rate fluctuations, changes in market sentiment and rollover risk. The funding of bank lending by sources other than stable deposits was a vulnerability of many economies, but the resulting fiscal costs were considerably larger in Ireland. Short-term wholesale funding creates liquidity risk, but is preferred by banks as relatively cheap and all the costs of liquidity risks are not internalized by the banks. Cross-country analysis suggests that dependence on wholesale market funding is correlated to the size of bank rescue packages (Figure 9). An aggregation of capital injections, purchase of assets by the Treasury, guarantees, upfront government financing, liquidity provision and other support by central banks showed that Ireland's public assistance to its banking system, including contingent liabilities, was around 200% of GDP. Potential contingent liabilities arising from sovereign support for the banking sector have increased from 31.6% of GDP in 2008 to 81.7% of GDP in 2010 (Schich and Kim, 2011).

Figure 9. Public assistance to banks and wholesale funding



1. Public support is an aggregation of capital injections, purchase of assets by the Treasury, guarantees, upfront government financing, liquidity provision and other support by central banks.

Source: International Monetary Fund (IMF), 2009 FAD_MCB Database and World Bank Financial Development and Structure Database.

Some financial soundness indicators have been criticized as low frequency, static and backward-looking variables that fail to capture risks fully (Cihák and Shen 2009, Pohosyan and Cihák 2009), suggesting that they need to be complemented by other indicators, including market signals (equity volatility, credit and CDS spreads) and stress tests (IMF 2009). All of these supervisory tools have their shortcomings as demonstrated by the magnitude of the crisis. The crisis also showed that addressing the vulnerabilities highlighted by these supervisory tools can be challenging and depends on the attitude and powers of the financial regulator. Utilising a diverse set of sources can provide the financial regulator with more backing to intervene and escape the herding behaviour of different agents observed in Ireland

(Nyberg, 2011). This would also help the authorities to be more prepared with a comprehensive plan before the crisis. Collection and publishing of more data can yield information on signals of distress (IMF and FSB, 2010a). In Ireland, the authorities have started addressing data gaps and now publish new data series that will enable agents to have a deeper understanding of developments in the economy.

The main lesson from the 2008 crisis is that serious consequences can arise from supervisory failure, so it is important to focus on risks across countries and sectors, and to consider macro financial linkages. The G-20 tasked the IMF and the Financial Stability Board (FSB) with establishing a joint Early Warning Exercise (EWE), which aims to identify underlying vulnerabilities and imminent tail risks in financial systems such that corrective policies and contingency plans can be developed ahead of time (IMF and FSB, 2010b). The recent crisis has shown that leverage and liquidity are important propagators of business and financial cycles and that surveillance should take into account the role of asset prices in causing recessions. In Ireland, stress tests did not consider liquidity and housing market risks together and preparation for the realisation of stress scenarios was inadequate.

In the absence of an adequate supervisory framework, no concrete actions were taken to address the vulnerabilities in the financial sytem due to several governance and supervision failures (Honohan, 2010; Regling and Watson, 2010; Nyberg, 2011). Governance failures included a lack of adequate disclosure standards, poor loan evaluation procedures and risk assessment systems, and too few checks and balances on management, including on remuneration schemes that encouraged risk taking. Supervision failures were in the fields of: *i)* micro-prudential policy, such as the non-intrusive style of supervision that depended on the internal risk assessments of banks, and the inadequacy of staff resources to supervise an ever growing banking system; *ii)* macro-prudential policy, such as the failure to address the rapid increase in mortgage lending by imposing additional capital requirements, caps on sectoral lending, or loan-to-value ratios; and *iii)* financial stability policy, such as the dependence on expectations of a soft landing to the housing bubble in stress tests and external and internal evaluations.

The new approach to banking supervision and regulation

The Irish authorities have taken many measures to address these weaknesses. In many countries, the recent crisis has led to a merging of financial regulation duties at the central bank. An analysis of the performance of financial regulators in the recent crisis has indeed shown that credit growth based on wholesale funding was lower in countries where the central bank was the primary regulator (Merrouche and Nier, 2010). In Ireland, financial regulation and supervision have also been merged once again into the Central Bank, after having been carved off into a separate financial regulator in 2003. The Central Bank will be responsible for regulation of the banking system at micro and macro-prudential levels so that attention can be paid to macro-financial linkages. The main objectives set out in the Central Bank Reform Act 2010 are to create a new fully-integrated structure for financial regulation and the introduction of a fitness and probity regime for the financial sector. The goal of the promotion of the growth of the Irish financial sector, which had hindered the financial regulator from appropriate supervision of the growth in credit during the boom years, has been dropped.

The protection of consumer interests is fundamental to a fully functional financial system and the Irish measures taken to address this issue are very welcome. However, potential conflict of interest between protecting consumers and stabilising the financial system, especially at times of crisis, is best avoided. One way to achieve this is to assign the role of protecting consumer interest to a separate institution since the skills required to fulfil the duties of consumer protection are different to those required by a financial regulator and the regulatory culture might focus more resources on consumer protection. “A regulator charged with both enforcing rules and managing systemic risk will eventually devote too much of its attention to rule enforcement” (Squam Lake Working Group on Financial Regulation, 2009). There might also be cases when political pressure might arise on the financial regulator regarding its duties of consumer

protection, interfering with its independence. The forthcoming G20 principles on Financial Consumer Protection (FCP) will be beneficial in providing guidance in this area.

As recommended in the previous *OECD Economic Survey*, the government is also moving to introduce a special resolution regime for banks in the case of failure consistent with the EU framework. This should go hand in hand with the deposit insurance scheme. The lack of authority to intervene in the early stages to reduce the risk of bank failure or to resolve failed financial institutions was a problem shared by many countries during the crisis (Cihák and Nier, 2009). European guidelines are being prepared to address this vulnerability, recommending national resolution regimes with well-defined powers and processes on who should bear the costs, a balance of the property rights of creditors with efficiency and ways to deal with cross-border institutions. In Ireland, the government has introduced the Central Bank and Credit Institutions (Resolution) (No.2) Bill 2011 into parliament to provide a toolkit to facilitate the orderly resolution or winding up of a distressed institution.

According to the CBI, there have also been significant changes to introduce a more intensive style of supervision, including via more on-site surveillance of banks and attendance of the regulators at key meetings. Bank supervision now focuses on the governance and risk management, mortgage credit standards and funding risk, bank lending procedures (especially to SMEs) and remuneration practices of the financial institutions. Codes on corporate governance requirements, related-party lending and fitness and probity of board members have been put in place. The Central Bank (Supervision and Enforcement) Bill 2011 published in July 2011 strengthens the ability of the CBI to impose and supervise compliance with regulatory requirements and to undertake timely prudential interventions. The Bill also provides the CBI with greater access to information and analysis that will help it credibly enforce Irish financial services legislation in line with international best practice.

The CBI published a 3-year strategy (CBI, 2010b) in July 2010, and an update of its implementation of the reform agenda in May 2011 (CBI, 2011c). As a starting point, key alterations have been made in the structure of banking supervision. The financial regulator has been reorganized to address past weaknesses. In order to fulfill these extra duties as well as effectively supervise institutions, including more frequent onsite surveillance, the numbers and skills of the staff are being stepped up. The Financial Stability Committee, chaired by the Central Bank Governor, has been altered to include senior staff from both the regulatory and macroeconomic departments and meets more frequently.

The financial crisis also exposed weaknesses in the regulation of equity capital under Basel I and Basel II rules, which provided an insufficient buffer against losses and meant that a costly recapitalisation had to be made by the government. In order to help prevent this from recurring, the Central Bank should adopt a set of indicators covering the many dimensions of banks' risk taking. Ireland should adopt the Basel III standards as soon as feasible. In addition, using a simple overall leverage ratio (total un-risk-weighted assets over capital) should be considered as a backstop to the capital ratio. The large role of property loans in the financial crisis also suggests that more rule-based regulation, such as caps on the ratio of loans to values (LTV) or incomes (LTI), should be considered. Capital ratios that increase with bank size would help deal with the particular difficulties posed by systemically important financial institutions and a credit register to prevent excessive exposures to certain sectors and borrowers should be considered.

Another problem highlighted by the financial crisis has been the gap between financial stability assessments and effective policy action. The vagueness of enforcement mechanisms and the unclear mandates in terms of supervision led to inaction in the face of warnings and regulatory forbearance was observed in some cases (Nyberg, 2011). The financial regulator should consider setting up thresholds for a few indicators that can be used to gauge the riskiness of a financial institution. Departures from these benchmarks can prompt a series of actions, starting from more intense supervision of the institution to

imposition of higher capital requirements and asking the financial institution to scale down its business. For example, the bank-specific "Supervisory Diamond" introduced in Denmark in 2010 has identified large exposures, lending growth, funding ratio, concentration on commercial property exposures and liquidity ratios as potential risk areas to be monitored. The financial regulator in Ireland could use a similar tool. Starting a dialogue at an earlier stage can help avoid larger problems in the future. Making these thresholds transparent and giving the financial regulator power to make banks comply in the face of breaches can lead to better supervision and prevent regulatory forbearance.

In order to provide a transparent assessment of the financial sector, the publication of financial stability reports should be resumed. They should be improved to include more rigourous stress tests, provide more detailed information on the different sectors of the economy and a clearer evaluation of macroeconomic and financial risks faced by the financial sector. The financial regulator has also introduced risk governance panels to track the risks, performance and business models of the financial institutions, using a risk dashboard. The use of this type of surveillance is spreading in the post-crisis era in many countries. It would be useful to provide more information about what criteria and thresholds are being used in this risk assessment. Markets should be made aware of the vulnerabilities revealed by these criteria in a general sense without providing sensitive information to the public. This would provide an incentive to the financial institutions to monitor such risks themselves.

Future of the financial system

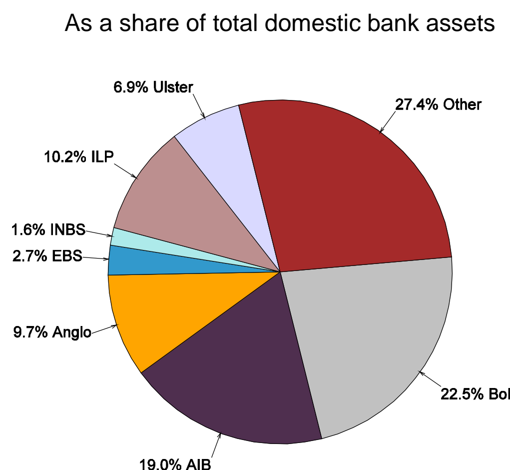
The Irish financial system faces several future challenges. The recapitalisation, deleveraging and restructuring of the main banks, the management of the assets that have been transferred to NAMA and the strengthening of banking supervision are all part of the crisis response. However, it is also important to create a financial system that fulfils its duties of providing credit to the Irish economy, laying the foundation for supervision under normal times and avoiding moral hazard.

To this end, Ireland needs to develop a credible exit strategy and timetable for the withdrawal of its guarantees and measures to avoid the perception that such extensive guarantees will be available in the future. The Eligible Liabilities Guarantee (ELG) Scheme introduced in September 2009, became the sole guarantee after the expiry of the initial CIFS “blanket” guarantee in September 2010. The ELG is much more targeted and restricted, and charges higher fees. However, as financial market confidence returns, the guarantee scheme needs to be narrowed to an even more restricted range of liabilities, but the timing and speed is a fine balancing act. An early exit when the financial system is still fragile could revive concerns about the health of the sector, but too slow exit could increase the distortion to incentives and competition. In the design for normal times, a more restricted guarantee scheme should be implemented. It should continue to have a fee structure that takes account of risk and well-defined types of liabilities to be covered, in order to minimize moral hazard and the cost to the taxpayer. The early stages of the exit strategy should be designed to encourage banks to return to wholesale funding markets. Beyond deposits, guarantees should be designed to deal with an immediate liquidity crisis which would exclude guaranteeing existing long-term bonds which were included in the initial “blanket” guarantee.

Due to the envisioned restructuring and deleveraging process, the Irish banking system will become more in line with the size of the economy. However, these developments will result in a smaller number of banks and the financial regulator should be cautious about competition issues that might arise due to concentration of financial services in fewer institutions. It is important to ensure that there is a level playing field among financial institutions that have received large government support and those that did not (Figure 10).

Figure 10 Assets of individual banks, December 2008

As a share of total domestic bank assets

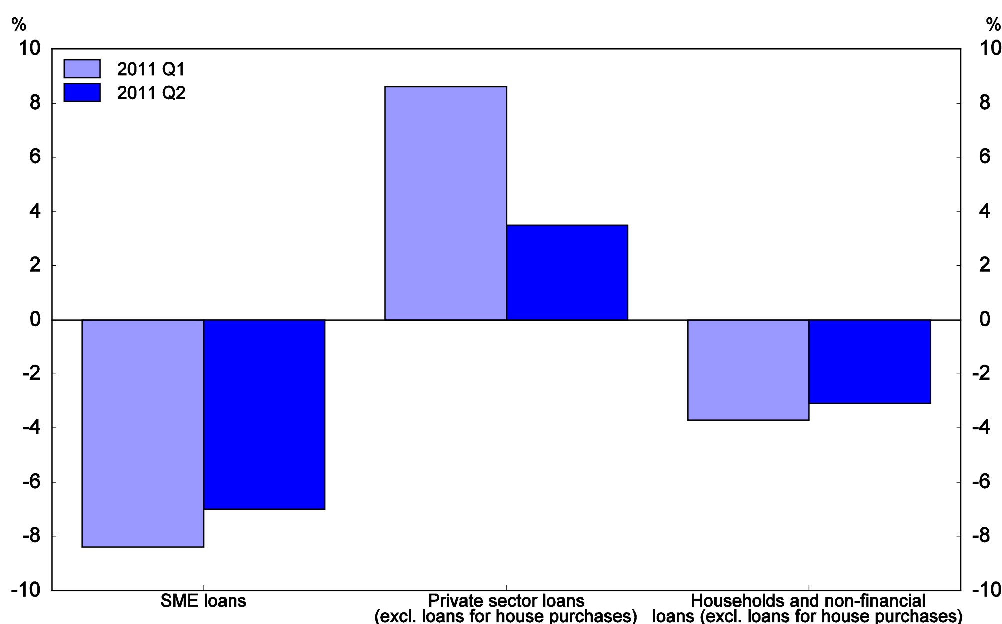


Source: Central Bank of Ireland (CBI); Bankscope database and Bank Annual Reports.

Most importantly, the domestic banking system should be in a position to supply the credit necessary for the recovery. With the disruptions to the lending ability of banks due to the crisis and the decline in demand for credit, private sector credit has been declining. However, the decline in lending to small and medium enterprises (SME) has been more pronounced than the decline in lending for non-housing related household and non-financial firm loans (Figure 11). Lending to SMEs will be important for the recovery, as they account for 90% of private sector employment in Ireland and are an important part of the recovery of the real economy. In the first half of 2010, the stock of SME lending declined by 5.1% to EUR 69.3 billion. When the banks were recapitalised in February 2009 and March 2010, the government imposed conditions on BoI and AIB to make available for targeted lending not less than EUR 3 billion each for new or increased credit facilities to SMEs. A Credit Review Office (CRO) was established in April 2010 to review the negative credit decisions of the institutions participating in the NAMA process and to provide advice to the government on what actions can be taken. The transfer of loans to NAMA was also designed with the aim of freeing the banks to engage in new lending.

Due to their size and diversity, SMEs provide banks with the opportunity to diversify their lending and risk, add revenue and acquire reliable sources of deposit funding. A review of the three main banking institutitions (AIB, BOI and Ulster Bank) showed that banks are building business plans to engage in SME lending, but so far these are short-term plans and need more fine tuning (CBI, 2011a). An early analysis by the Central Bank shows that credit standards have not been lowered to meet lending targets set by the government recapitalisation. The CRO Report in May 2011 (CRO, 2011) shows that these lending targets were exceeded by both AIB and BoI with combined new and restructured lending totaling around EUR 8 billion; however allocation of credit should not depend on quantitative targets set by government as they can lead to distortions in credit markets.

Figure 11 Quarterly change in private sector loans



Source: Central Bank of Ireland (CBI).

In the period before the crisis, SME lending was related to property, but as banks change their business model to refocus towards non-property sectors, credit assessment will depend on evaluating future cash flows rather than collateral. The lack of experience with this type of credit decision, combined with the fact that some SMEs are under financial stress and the lack of local market knowledge by banks, complicates this transition further. Banks need to resolve these issues quickly. Upgrading the banking sector's ability to perform cash-flow lending on a sound basis will be of particular value to SME exporters, as involvement in international trade increases both working capital needs (due, for instance, to the larger delay in getting products delivered to clients) and the required level of market expertise by credit institutions. The central bank can assist the transition to a new business model by helping to disseminate and give guidance in best practice in SME lending while remaining vigilant about vulnerabilities that may develop over time in this lending category.

Corporate and household bankruptcy and debt restructuring regimes

The legal regime for resolving bad debts is integral to the resolution of bad debts and restoring the Irish financial system to health. The size of household bad debt is large. According to a household survey conducted by the Central Statistics Office, a quarter of all households were in arrears with at least one bill or loan on at least one occasion in 2009, compared to 10% in 2008. In the period ended March 2011, 6.3% of private residential mortgage accounts were in arrears for more than 90 days. If current non-performing loan (NPL) problems are not resolved in an efficient and fair way for both creditors and debtors it would likely discourage both the future demand and supply for credit. The relevant legal regime will thus be integral to the resolution of bad debts and restoring the Irish financial system to health. In this light, current bankruptcy laws and debt resolution procedures could be improved. The government is preparing draft legislation to reform personal insolvency with the aim of balancing moral hazard concerns against efficient and effective proceedings. The government's plans to introduce a new structured non-judicial debt settlement and enforcement system as an alternative to court proceedings are welcome. This move can

potentially make a large contribution to fairly and efficiently resolving the large overhang of bad household debt. In the meantime, some emergency measures have been taken to address the urgent restructuring needs of the financial system. The CBI has published a Code of Conduct on Mortgage Arrears to prevent costly and unnecessary defaults and a similar Code of Conduct on Loans to SMEs.

Box 4. Main recommendations on overcoming the banking crisis

Exit from the crisis

- NAMA should remain focused on its long term mission of managing its assets to achieve the best possible return for the taxpayer and refrain from activities that increase the contingent liabilities of the government.
- As financial market confidence returns, the bank liability guarantee scheme should be narrowed to a more restricted range of liabilities, with fees that are commensurate with risk so as to minimize moral hazard and taxpayer costs.

New supervisory framework

- To help prevent future crises, adopt as soon as feasible, the standards envisaged by Basel III. Consider using a leverage ratio (total un-risk-weighted assets over capital) as a backstop to capital ratios. In addition to the loan to deposits (LD) ratio already in place, consider using further rule based regulation, such as caps on the ratio of loans to values (LTV) or incomes (LTI), capital requirements linked to the size of the bank to address systemic risks. Consider a credit register to prevent excessive exposures to certain sectors and borrowers.
- To prevent the recurrence of problems with regulatory forbearance, consideration should be given to having a well-defined process where the breach of identified benchmarks on a few indicators, such as excessive growth in overall lending, would accelerate a formal assessment of what, if any, corrective action may be required. For example, the financial regulator can be given the power to enforce higher capital requirements or scaling down of the bank business if certain thresholds of a number of indicators are breached.
- To ensure good coordination and monitoring of macro-financial linkages, improvements in communication between the various agencies in charge of the banking sector should be continued. The strengthening of the banking issues division of the Department of Finance should be permanent. The publication of financial stability reports that provide information on the financial system and macro-financial linkages should be resumed.

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