POLICY PAPER

Resolving Ireland's Banking Crisis

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Abstract: The Irish banking system has been, in effect, on a life-support system since September 2008. Complacency resulted in the banks fuelling the late stage of an obvious construction bubble with massive foreign borrowing, leaving them exposed to solvency and liquidity risks which in past times would have been inconceivable. The Government's steps to put the system back on a sound basis must have regard both to protecting taxpayers' interests and to ensuring that credit flows to the economy are not hampered by inadequate capital or liquidity.

I INTRODUCTION AND SUMMARY

The Irish banking system is on a life-support system since the Government startled the financial world by announcing, on September 30, 2008, a two-year blanket guarantee of the liabilities of Irish-controlled banks, apparently triggered by the inability of one bank to roll-over its foreign borrowings.

The guarantee and subsequent events did little for the shareholders of Irish banks: by end-year (December 2008) the share price of three of the four listed banks was between 5 and 7 per cent of their peak value reached in early

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2007;¹ the other one was trading at less than 1 per cent, and was nationalised within days. According to their published accounts, the book value of equity in the main banks was then a multiple of almost eight times the market price. Indeed, the market was capitalising the banks at less – in two cases much less – than their last reported full year's profit. The share prices of the two main banks subsequently dipped even lower – falling in early March 2009 to 1 per cent of their peak value before subsequently recovering somewhat. By end-April it was generally expected that the State would soon take a large majority equity stake in both.

Although international pressures contributed to the timing, intensity and depth of the Irish banking crisis, the underlying cause of the problem was domestic and classic: too much mortgage lending (financed by heavy foreign borrowing by the banks) into an unsustainable housing price and construction boom. The boom seemed credible to enough borrowers given sharply lower interest rates with adoption of the euro on top of the protracted expansion in output, employment and population especially from the mid-1990s.

Although most economists had foreseen – and many publicly forecast – a severe correction in the price of housing, few confidently predicted bank solvency problems. Nor could they have given that public information about loan-to-value ratios and additional securities taken by lenders was sketchy: published results of official stress tests were also relatively uninformative.

Besides, there was good reason to have confidence in the ability of banks to insulate themselves, even if they were making loans to finance property purchases based on implausible projections. How could traditionally conservative banks – some of them with a 200-year history – have been so careless as to leave themselves exposed in such a conspicuous and obvious property bubble?

The banks, frightened by what has happened, have belatedly tightened lending conditions, though it is not obvious that they are all taking sufficiently decisive action to prevent big debtors with property-related difficulties from either running away from their obligations or alternatively gambling for resurrection.

The Government recognised that recapitalisation was going to be needed for each of the banks if it was to continue in operation. The injection of €3.5 billion into each of the two largest banks is most unlikely to be the end of the story here, as the proposed purchase by the new state asset management company National Asset Management Agency (NAMA) of a large block of property-related loans at discounted prices is likely to expose further capital deficiencies. The Government intends to take an equity stake in return: this is

¹ And down between two-thirds and three-quarters on their pre-guarantee levels.

an essential minimum to protect the taxpayer's interest. Indeed, the stake is likely to be a large one, possibly full ownership. Some additional financial restructuring ideas that could provide better risk-sharing should also be explored.

Thorough recapitalisation should help rebuild bank lending confidence, recovery here will be slow. While regulation has self-evidently failed, imposition of arbitrary new restrictions, for example aimed at reducing banks' loan-to-deposit ratios, should be avoided to ensure that availability of loanable funds does not become an additional constraint.

In order to avoid unfair and regressive bailouts for disappointed speculators, and to protect the public finances, any government relief for distressed and uncreditworthy borrowers should be mainly through social welfare-type policies rather than by directing banks either to lend or to forbear.

II DOMESTIC AND GLOBAL ORIGINS OF THE PROBLEM

The banks got into trouble because they got caught up in the mass psychology of an unprecedented property bubble – the steepest and longest of the several national property bubbles of the late 1990s and early 2000s around the world.² Banks had not been central to the financing of the export-led Celtic Tiger period of the Irish economy which ended about 2000 (Honohan, 2006). However, they began to increase the share of their assets in property-related lending from less than 40 per cent before 2002 to over 60 per cent by 2006.

In contrast to the United States, where much of the growth in property-related lending was driven by the technology of automated credit appraisal for subprime borrowers and the securitisation of mortgages, Irish property lending technology was traditional. Only the scale was new. From 2003 the banks leveraged their local resources with enormous borrowings from abroad (easily available due to the global savings glut, and also to the lack of exchange rate risk for euro borrowing). At the end of 2003, net indebtedness of Irish banks to the rest of the world was just 10 per cent of GDP. By early 2008 that had jumped to over 60 per cent (Figure 1 – which covers all credit institutions and not just mortgage lenders).

The preconditions for growing housing demand gradually emerged with the sustained export-led real economic expansion from 1988 and especially from 1994 (Celtic Tiger period). Jobs were plentiful, net immigration sizeable and there was a growing sense of economic security. But it was Economic and

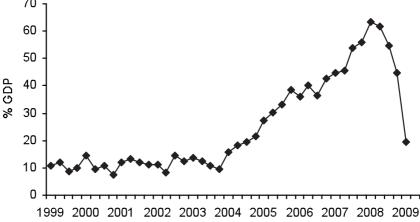
² Between 1994 and 2007 average real house prices tripled.

	Book Value	Market	$All\ Time$	Share	Share
	of $Equity$	Value of	High Share	Price,	Price,
	$Capital\ Last$	Equity, End-	Price	End-	Lowest
	Annual,	December	€	December	(March,
	Report	2008,		2008,	2009),
	$\in bn$	$\in bn$		€	€
Allied Irish Banks AIB	8.4	1.5	23.95 (Feb 07)	1.73	0.28
Bank of Ireland	6.5	0.9	18.65 (Feb 07)	0.83	0.12
Irish Life and Permaner	nt 2.6	0.4	22.63 (Feb 07)	1.57	0.69
Anglo Irish Bank	4.1	0.1	17.53 (Jun 07)	0.17	0.12

Table 1: Book and Market Value of Irish Listed Banks

Source: Bank Annual Reports and daily listing of Irish Stock Exchange www.ise.ie

Figure 1: Net Borrowing Of Irish Banks From Abroad (Stock)
1999Q1-2009Q1
70



Source: Central Bank Quarterly Bulletin, Table C3.

Monetary Union (EMU) entry that really started the housing price surge by sharply lowering nominal and real interest rates, thereby lifting equilibrium asset prices (Figure 2). The combination of higher population, higher income and lower actual and prospective mortgage interest rates clearly provided a straightforward upward shift in demand, i.e. in the willingness and ability to pay for housing.³

The problem is that property prices developed their own momentum and overshot equilibrium levels as calculated by all models. In effect, purchasers

 $^{^3}$ Supply response should, of course, in time fully offset this capitalisation effect for standard houses built on marginal land – e.g. far from a city centre.

Figure 2: Real Interest Rates 1983-2007

Real interest rates 1983-2007

deflated by 4-quarter future inflation

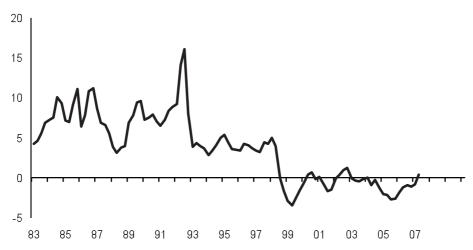
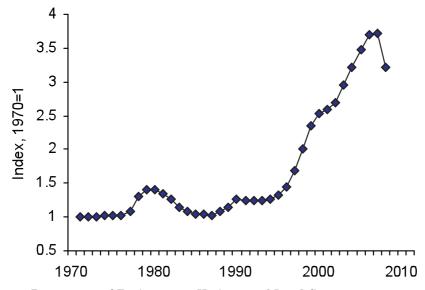


Figure 3: *Irish House Prices (deflated by CPI), 1970-2008*Irish Real New House Prices 1970-2008



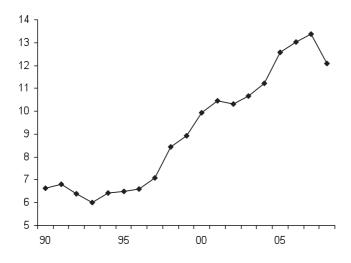
Source: Department of Environment, Heritage and Local Government.

increasingly built in an expected continuation in the increase of the relative price of housing.

This was not just a price bubble (Figure 3). Importantly, it also involved a sharp increase in construction. House completions soared and, overall, the share of the growing workforce engaged in construction jumped from about 7 per cent in the early and mid-1990s to over 13 per cent by 2007 (Figures 4,5). And residential construction soared well beyond population. According to the 2006 census of population, some 15 per cent of the housing stock was vacant⁴ at census date, mostly reflecting speculative purchasing of additional housing by prosperous households (less than 3 percentage points of that being holiday homes). Of course this speculative element quickly vanished as a positive contribution to demand as soon as prices started to drop and revealed to investors – or confirmed them in their suspicions – that relying on continued house-price inflation was unwise.

Figure 4: Employment in Construction 1990-2008

Employment in construction as % of total employment, 1990-2008 (April)



Without large-scale foreign borrowing by the banks, the property boom could not have grown as it did. And the banks were certainly not tightening credit conditions as the prices rose (Figure 6). However, it is less clear that credit was the main driver before 2002. Timing relationships between credit expansion and house price increases suggest that bank behaviour may have

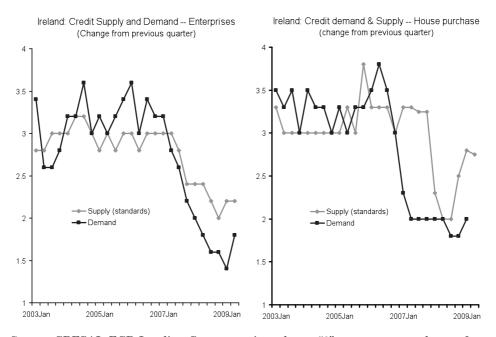
 $^{^4}$ Or 216,000 housing units. This contrasts with the figure of 40,000 sometimes mentioned by bankers in recent months.

100,000 90,000 000,08 70,000 60,000 50.000 40.000 30,000 20,000 10,000 1970 1975 1980 1985 1990 1995 2000 2005

Figure 5: Housing Completions 1970-2008

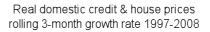
Source: Department of Environment Heritage and Local Government.

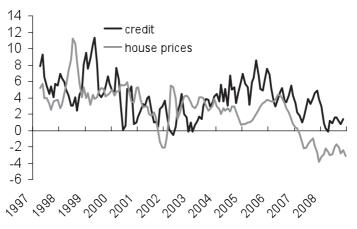
Figure 6: Credit Supply and Demand Conditions as Reported by Banks 2003-2009



Source: CBFSAI: ECB Lending Survey, various dates. "3" represents no change from previous survey. Higher numbers imply easing supply conditions and greater demand; lower numbers imply the opposite.

Figure 7: Credit and House Prices – Rolling 3-Month Growth Rate





Source: CBFSAI for credit; ILP-ESRI for House Prices.

begun to drive the inflation from about 2003 on (Figure 7). But demand for credit was certainly strong throughout. Indeed, a renewed acceleration of house prices from 2003 was also fuelled by a reversal of earlier tax tightening, reinforcing Ireland's tax bias towards construction (cf. Barham, 2004; Rae and Van den Noord, 2006).

Given how comfortably the Irish banks had survived severe recessions in the mid-1950s, the 1970s and the 1980s – the last of which especially involving a sharp fall in real house prices – it is surprising that these traditionally conservative institutions succumbed to financing such an extravagant price and construction bubble.

One factor that might have encouraged bank and regulator complacency is that the previous house price bubble of the 1970s took place in an environment of rapid general inflation. Real repayment of mortgage loans was in such circumstances front-loaded so that, by the time that bubble burst and house prices were falling in real terms, the real value of the remaining debt for most borrowers was low.

There is also the fact that banks had not been the main players in the residential mortgage market until the late 1980s: before then, fiscal privileges⁵ ensured that building societies held the lion's share of that

⁵ The income tax treatment of deposit interest at building societies, whereby an all-in composite rate of tax was applied at source, had allowed building societies to out-compete banks for the deposits of high-rate individual taxpayers.

business. Thus the banks were not steeped in the deeply ingrained suspicion of the mortgage market as a source of systemic difficulties that now prevails in, for example, Japanese banks.

III EARLY WARNING?

The freezing of interbank markets was a global event, whose severity, duration and extent were foreseen by few. But to what extent were the solvency difficulties of the Irish banks foreseen by analysts, by the Irish Financial Regulator, or even by academic economists and commentators?

Calling the Housing Market Excesses

The housing market excesses were commented upon by numerous economists from the late 1990s. External reviews by the IMF and the OECD regularly focused on this issue (cf. IMF, 2004; Rae and Van den Noord, 2006). Most of the debate centred upon the sustainability of the jump in house prices. By no later than 2003-04 a large majority view (though not universally held) was that prices had overshot the equilibrium and would inevitably fall. The scale of construction activity also began to cause concern, as did the worsening wage competitiveness situation (Fitz Gerald, 2005, Duffy, Fitz Gerald and Kearney, 2005; Honohan and Leddin, 2006). Honohan (2006) highlighted the extent of foreign borrowing being used to finance the boom. Most, though not all, studies foresaw a downturn in property prices triggering recessionary pressures likely to be led by a contraction in housing construction.

Drawing the Implications for Banks – A Lack of Information

Writing in September 2007, Kelly (2007b) was the first academic economist to question openly whether the Irish banks could survive the expected fall in house prices and associated recession. At that stage, neither he nor other commentators outside of the banking and regulatory community had the kind of detailed information which would allow verification of the banks' assertions that they had protected themselves sufficiently with independent guarantees and prudent underwriting.

⁶ This is not the place for a full account of econometric studies of house prices. Early contributions were Murphy (1998) and Roche (1999). Probably the most satisfactory treatment is by Murphy (2005); the most trenchant by Kelly (2006, 2007a), all of which contain further references, including to stockbroker economists – not all of whom were incorrigible boosters, contrary to popular opinion. As reported in Honohan (2006), even the relatively optimistic calculations of Murphy (2005) implied that, by mid-2004, equilibrium prices were at least 26 per cent below actual.

True, the Department of Environment, Heritage and Local Government does report the distribution of loan-to-value (LTV) ratios for the *number* of new loans, and these numbers were far from reassuring. They show a sharp jump in high LTVs in 2005 and 2006: by 2006, fully two-thirds of loans to first time buyers had LTV in excess of 90 per cent; one-third were getting 100 per cent LTV loans (Figure 8).8

If the banks had been conservative before, this certainly seems to have changed by 2006. To be sure, LTV is only one indicator of the security of a loan. But, given the evidently fragile state of the market by 2005 and the exceptional prices at which houses were selling, it is hard to avoid the conclusion that bank lending decisions had begun to lose touch with reality.⁹

LTV rates - all loans LTV rates - first time buyers 100% 100% 90% 90% 80% 80% □100% LTV 70% □ 100% LTV 70% ■ 95-99% LTV 60% ■ 95-99% LTV 60% n 91-95% LTV 50% □ 91-95% LTV 50% ■ 81-90% LTV ■ 81-90% LTV 40% 40% □ 71-80% LTV □ 71-80% LTV 30% 30% <70% LT∨ ■<70% LTV 20% 20% 10% 10% 0% 2007 2007

Figure 8: Distribution of Mortgage Loans by Initial Loan-To-Value Ratio 2004-7

Source: Department of Environment, Heritage and Local Government.

Negligible Regulatory Response

It was around this point that the Regulator tightened capital requirements, requiring "banks to set aside much more capital" in relation to high loan-to-value ratio loans (Neary, 2008). But how much more capital? The regulation of 31 March 2006 increased total capital required to back a 100 per cent loan-to-value ratio mortgage from 4 per cent of the loan to just 4.8 per cent − a negligible increase of just €4,000 on a loan of €500,000. I don't see

⁷ There is some question over whether the data adequately capture the real situation.

⁸ The maturity of new loans also lengthened dramatically. By 2007 more than three-fifths of first time borrowers were getting loans of more than 30 years' maturity, compared with less than a quarter in 2004.

⁹ Kearns (2004) looked at the other side of the coin: affordability of debt from the household's point of view, using data from the Central Statistics Office Household Budget Survey.

how anyone could have regarded that as "much more capital" or as a significant deterrent to high loan-to-value ratios. Some other measures were also taken by the Regulator, but the proof of the pudding is in the eating – LTVs continued to grow in 2006.

A very simple warning sign used by most regulators to identify a bank exposed to increased risk is rapid balance sheet growth. An annual real growth rate of 20 per cent is often taken as the trigger. Each of the locally-controlled banks had at least one year in which this threshold was triggered. One of them, Anglo Irish Bank, crossed it in eight of nine years, and indeed its average annual rate of growth 1998-2007 was 36 per cent. Another, Irish Nationwide, crossed the line six out of the nine years, for an average rate of growth over the nine years of just above 20 per cent (Figure 9). So this was a very obvious and public danger sign not only for these two banks, but because of the potentially destabilising effect of reckless competition on the entire sector (Honohan, 1997). The rapid growth in the market share of Anglo Irish (from 3 to 18 per cent of the total assets of the six locally-controlled institutions that subsequently received the Government guarantee) was certainly an important influence inducing the other banks to relax lending terms to avoid losing even more market share. 10

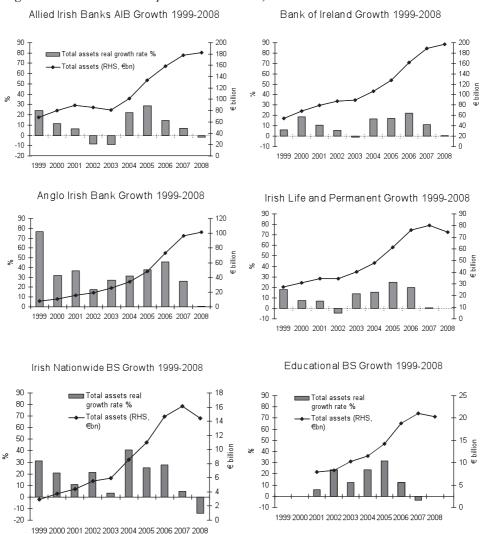
Still, neither balance sheet and other published data for the individual institutions, LTV data, nor the aggregate information about house prices and loan volumes really tells us what we need to know about the net exposure of the banks to risks from this lending, nor about whether they were being adequately compensated for the risks. Even the voluminous information reported to the stock exchanges by the listed banks (for example in their 20-F reports prepared for the US Securities and Exchange Commission) focused on loans where delinquencies had already occurred or were anticipated, and had little to say about other parts of the portfolio which might come under pressure if there was a major downturn in house prices, combined with a rise in unemployment. Furthermore, although isolated pieces of information about the bank funding of developers were made public, no-one had information on the extent to which the developers' own money was at risk in the seemingly ever-larger land deals that were part bank-financed.

Stress-Tests Relied on Banks' Own Projections, or Assumed Stresses that were Too Small

The Regulator started stress-testing exercises in the context of the IMF-World Bank Financial Sector Assessment Program (FSAP), and published the

¹⁰ Some of the foreign-owned banks, notably new entrant HBOS, which had acquired the privatised ICC bank, also pursued a particularly aggressive growth strategy.

Figure 9: Growth Rates of Six Irish Banks, 1999-2008



Line: Total assets at end of each accounting year € billion (RHS).

Bar: Percentage real growth rate (LHS).

Source: Bank Annual Reports.

findings against the background of the IMF's FSAP update in 2006 (IMF, 2006; CBFSAI, 2006). This stress-testing exercise could have been based on all of the relevant information, as banks may be required to provide very detailed information to the Regulator. The published account of the exercise did reveal some interesting, not very reassuring, pieces of information. For instance, it

was stated that, although between 26-33 per cent of the *stock* of banks' residential mortgage loans had LTV ratios above 75 per cent, only 1.6-6.1 per cent had LTV ratios over 92 per cent.

Stress tests purport to model the condition of banks in an "extreme but plausible" scenario. While stress tests can be useful to identify the outlier institutions particularly at risk, they are rarely in my experience very informative about systemic risks. The problem is that the future configuration of stresses is unlikely to be the same as in the past. The stress tests performed by the Central Bank and Financial Services Regulatory Authority of Ireland (CBFSAI) (2006) were predicated on a rather modest 20 per cent fall in house prices, and certain other adverse developments. This scenario was presented to the banks, who were apparently asked to compute the consequences for their balance sheet and operating income. Presumably there was some further iteration between the banks and the Regulator. One hopes that the Regulator did not take the very favourable results of this "bottom-up" self-test too seriously. In addition, the Regulator computed a "top-down" stress test. This was done by assuming that a percentage of residential mortgages would default and that the loss-given-default ratio would be 75 per cent of the loan (i.e. only 25 per cent of each defaulted loan assumed to be recoverable). The assumed percentage of defaults ranged up to six times the existing share of non-performing loans. While this might seem a high multiple, it corresponds to an average default rate of just over 5 per cent; anyway, it seems almost entirely arbitrary. It is not clear whether there was any explicit analysis of developer loans in this stress test. If not, this would have been a serious omission given the apparent extent and vulnerability of these loans. The published findings do not state if all banks would have remained solvent under this stress test, but even it they would have, such a calculation could not have justified a complacent approach.

Solvency of the Banks

The prospective house price falls, combined with the global recession, now presents a much worse scenario now than envisaged in the Regulator's 2006 stress tests. Still, we lack firm and detailed data. As is well known to students of similar banking crises, bank accounting data is very slow to recognise a deterioration in the true recoverable value of loans, mainly because of banker over-optimism in the face of an objective deterioration, and also because of constraints relating to accounting conventions (including the new International Financial Reporting Standards (IFRS)). As a result, bank accounts at this stage in the crisis are almost sure to overstate the true underlying value of bank capital.

Since the mortgage-related loan losses are sure to crystallise over an extended period, could an accumulation of retained earnings from other lines

of business still prevent the banks from ever having to report negative capital? The decisive reason for questioning this sunny hope lies in the fact that, despite having every incentive to do so, and despite having provided much more information than heretofore about their exposure to loan-losses, the banks and the Regulator¹¹ have so far failed to provide the market with information that could convince it that this optimistic scenario will play out.

IV CONTAINMENT

The government's intervention came on September 30, 2008, during the most stressful weeks of the global financial crisis, when one of the Irish banks (reputedly Anglo Irish) apparently proved unable to roll-over its foreign borrowings and had effectively run out of collateral to refinance at the European Central Bank (ECB).¹² Although the other banks had not faced anything comparable, there was a fear of contagion.¹³ Since the issue was one of rolling-over wholesale funds, a further increase in the coverage ceiling in the deposit protection scheme¹⁴ would have been ineffective in such a context.

No public indication has been given that the authorities gave serious consideration to less systemically scene-shifting – and less costly¹⁵ – solutions. For example, they might have provided specific state guarantees for new borrowings or injections of preference or ordinary shares – approaches that were widely adopted across Europe and the US in the following weeks.

- ¹¹ The Regulator stated in late 2008 that "Speculative lending to construction and property development in Ireland amounts to €39.1bn, of which €24bn is supported by additional collateral or alternative sources of cash flow and realisable security. This leaves a balance of €15bn secured directly on the underlying property." (Neary, 2008)
- ¹² A further factor that has been mentioned as influential in the decision was the sharp fall in bank share prices on September 29, especially an almost halving of the share price of Anglo Irish Bank. Despite the impression given by some commentators who should know better, falling share prices have *per se* no effect on regulatory or economic capital. However, they do serve as a wake-up call to regulators as to possible overstatement of the likely recoverability of a bank's loan portfolio. Furthermore, they can have a knock-on effect on the willingness of depositors and debtholders to continue to finance the bank.
- ¹³ Foreigners were puzzled by the initial set of banks to be covered by the guarantee. Locals knew perfectly well which banks were regarded as "local" and which as "foreign". For example, it did not seem surprising to them that Depfa Bank, until recently with its headquarters in Ireland, but newly a subsidiary of Hypo RE Bank of Germany was not guaranteed, even though its own liquidity difficulties in October nearly brought down Hypo, and the parent was indeed subsequently nationalised by the German Federal authorities.
- ¹⁴ There had been relatively modest but politically conspicuous retail depositor withdrawals in previous weeks. For example about €½ billion more than usual moved into Government small savings in September before the guarantee was announced.
- ¹⁵ Blanket guarantees are among the "accommodating" approaches to crisis policy shown by Honohan and Klingebiel (2003) to have added considerably to the fiscal costs of banking crises around the world.

Textbook recommendations on crisis containment (cf. Honohan and Laeven, 2005) stress the importance of correctly identifying the source of the crisis, and this requires inter alia good information about the management, solvency and liquidity of each of the banks in the system. Judging from official statements made after the intervention, the Financial Regulator viewed the liquidity crunch as entirely a consequence of the global situation, and regarded all of the Irish banks as well capitalised. No question was publicly raised about quality of management either.

Of course with Irish-controlled banks operating also in the UK (including the Bank of Ireland's involvement in running the UK post office savings scheme) and with foreign-controlled banks active in Ireland, ¹⁶ the measure met with opposition from the British authorities as well as the EU on state-aid grounds. Major UK banks were, at the time, themselves facing stress in their treasury operations on a day-to-day basis. It was reported that the European Central Bank (ECB) was informed about the guarantee only minutes before it was announced. There may have been some flow of UK deposits into Irish banks in the immediate aftermath of the guarantee, though available data indicates that there was little (if any) beyond a return of the modest funds that had flowed out. ¹⁷

Some have suggested that the Irish scheme served as a demonstration effect for other national authorities who brought in guarantees, albeit more limited, in subsequent days and weeks. But these guarantees fall short of the comprehensive blanket guarantee provided by the Irish government which even extended to some explicitly subordinated debt (the dated kind was covered, but not the undated).

¹⁶ After some days, the Irish government agreed to extend the scheme to subsidiaries and branches of foreign-owned banks operating in the retail market in Ireland. In the event, all but one of these declined the offer when they saw the terms of the guarantee and the recovery of retail customer confidence following the adoption in other countries of bank-strengthening measures. (The exception, Postbank Ireland, a joint venture between the Irish postal service An Post and Fortis, a bank which also had to be rescued in October 2008).

 $^{^{17}}$ Interpretation of available data on aggregate deposit movements in the surrounding days and weeks is complicated by the revelation that there was window dressing around end-September involving back-to-back deposit transactions between Irish financial institutions (notably a €7 billion deposit placed for one day by a non-bank subsidiary of Irish Life and Permanent with Anglo Irish Bank) intended to give the impression of larger than actual nonbank deposits in the system. This is part of the reason why direct evidence of a cash crunch was very muted in the consolidated statistics for end-September, and little indication of a vigorous inflow of non-resident deposits in October.

V GOOD PRACTICE IN BANK RESTRUCTURING

The Guarantee Does Not Remove the Need for Capital

The existence of the government guarantee does not remove the need for banks to have a sizeable cushion of capital, because of the distorted incentives for risk-taking in an undercapitalised bank. The shareholders of a bank with little or no true capital have little or nothing to lose if the bank takes risks. A successful gamble will be good for the insiders; a failed gamble will leave them no worse off. This is a strong reason for requiring more capital, even if this is provided by the government or by a passive investor, especially if the mechanism for injecting it has the effect of leaving the insiders with a stake in that capital. As long as they share more symmetrically in the gains and losses, the incentive to gamble for resurrection is greatly reduced. ^{18,19}

While such risk-taking would characterise some banks, where the controlling insiders are substantial shareholders and are involved directly or indirectly in many of the projects being financed by the banks, there are other banks for which it is not a realistic picture. These other banks are operated in a more bureaucratic way by career bank managers who receive most of their benefits by virtue of staying in control (rather than from an equity share in the profits). Such managers have a strong incentive to avoid bankruptcy. Times such as the present induce such managers to become more risk averse for fear that their actions will lead to bankruptcy. If capital is low, this implies a highly conservative policy for lending and other activities. This seems closer to what we are observing in the larger Irish banks today.

Thus, whether bankers are gambling for resurrection, or running for cover for fear of losing their jobs, more capital is called for. The international evidence on this point is clear: capital is a prerequisite for recovery (e.g. Japan), but not a panacea (e.g. Mexico).

Besides, as the end of the guarantee period approaches – though the likelihood of an extension²⁰ must be recognised – banks will need to be able to convince their depositors and bondholders that there is a sufficient cushion in their balance sheet to provide an adequate security.

¹⁸ A gamble could include making further loans to existing borrowers – possibly including associates of the insiders who control the bank's affairs – to enable them to continue to finance their development schemes, in the hope that their business would improve to the point where repayment was possible.

¹⁹ Insiders at a more deeply insolvent bank may give up on resurrection altogether, and then the temptation to loot the institutions becomes severe, cf. Akerlof and Romer (1993). An insolvent borrower may also have the incentive to abscond or to move assets out of reach if the lender is slow in protecting their interest.

²⁰ Laeven and Valenciana (2008) provide data on the duration of fourteen such guarantees. The mean duration was 53.1 months; the median 44.5 months.

Textbook Restructuring

Based on experience with crises around the world, the textbook prescription for dealing with an isolated critically undercapitalised bank which is unable or unwilling to inject new capital is for the regulator to act promptly to seize control of the bank, and to remove the management that has been responsible for the failure.

Next come the decisions on loss allocation. Best practice obviously avoids full socialisation of the costs, instead imposing these first onto shareholders, then onto subordinated claimholders, and finally onto uninsured depositors. If there are private shareholders prepared to come in to provide the needed capital at this stage, thereby obviating losses to other claimants, well and good. Even if no private sector equity is available, a systemically important bank may be deemed "too big to fail" and recapitalised with public funds without being put into liquidation (cf. Stern and Feldman, 2003).

Finally, a new financial structure for the remaining assets and liabilities has to be decided upon. In order to avoid contamination with the failed practices of the past, this will often involve separating the impaired assets into a separate vehicle²¹ and replacing them with sufficient government bonds before selling the restructured entity back into the market in whole or in part. The financial instruments used should give the taxpayer some upside potential where the injection of funds needed is uncertain (Honohan and Laeven, 2005).²²

The logic of this strategy is partly to ensure that the job is done on a least-cost basis. But it is also to avoid a recurrence of the problem by preventing continued operation of an undercapitalised, error-prone bank with a failed business model and administrative practices, a problematic customer base and a compromised management facing distorted incentives – in short a "zombie" bank (Kane, 1989).

In a systemic meltdown, this prescription can seem both impractical and unjust, given the degree to which some of the banks have been victims of circumstances or at least of assumptions that were shared by the Regulator and by large parts of society (Dewatripont and Tirole, 1994). Reflecting the wider systemic aspects, many banks in Europe and the US have received government financial support in recent months without these drastic steps. However, the classical intervention policy has nevertheless been deemed

²¹ Such as NAMA, discussed below.

²² An ECB recommendation dated 18 December 2008 specifies minimum rates of return on government funds injected.

appropriate for other banks in this crisis and has been put into effect for several banks in the US^{23} and elsewhere.²⁴

The Second Wave of Support: Recapitalisation

The Irish Government announced in late December, 2008 that it too would follow the course of action adopted in October by most European governments, ²⁵ with preference share injections into the three larger banks, and would be prepared to invest in common stock. (It was to be understood that the other, smaller, banks would be dealt with later). This second wave of support also warranted a triage. Clearly, the two largest banks, Bank of Ireland and Allied Irish Banks (AIB), are deeply embedded in the national economy and evidently too big to fail. As for the remainder, only the Regulator could have the full information on which to make a judgment on which banks are simply the victims of a systemic problem and have nothing of the "zombie" about them; most observers have formed their own opinion, however. ²⁶

Subsequently, citing funding difficulties at Anglo Irish Bank, and the reputational damage it had suffered following disclosure of the "unacceptable

²³ An excellent example here is the sixth largest US retail bank Washington Mutual, intervened in late September by the US deposit insurance agency FDIC, with the deposits and most of the assets bought by JP Morgan Chase for about \$2 billion. Shareholders will receive nothing and investors in WaMu's unsecured bonds were expected to recover as little as 10 per cent of their investment.

²⁴ Bradford and Bingley provides a UK example. Its deposits and branch network were bought by Santander, which received about \$1 billion less than the face value of the deposits from the UK deposit insurance entity FSCS and the UK government. In this case, the assets are being retained in government ownership. Subordinated debt holders of B&B were not guaranteed in this arrangement; no shareholder compensation was envisaged.

²⁵ Who have encouraged or insisted on additional capital in their main banks and have made funds available for injection in the form of ordinary or preference shares (the former giving the taxpayer a share in the future recovery of the bank's fortunes, the latter allowing the government to extract a high but fixed return on its investment.).

²⁶ Evidently, the third, Anglo Irish Bank, was always going to have a harder time surviving such a triage. The stock market obviously saw no embedded shareholder value in this entity, with the share price of just a few cents by late 2008 merely reflecting the potential of a favourable government bail-out. With only half a dozen branches in Ireland, it is not a retail bank, and although it claims 200,000 customers, it would not be seen by most independent observers as systemically important, though it has been declared so in official statements. As far as its managerial and organisational capacity is concerned, there have been a number of warning flags. Even more heavily involved than the other large banks in property-related finance, Anglo's very rapid growth rate in the past decade has already been noted. The information capital embodied in its much vaunted client relations with developers might, in the present circumstances, be regarded as a negative rather than a positive. The manipulation of director loan transactions which led to the resignation of the Chairman and Chief Executive Officer of the bank in December 2008, provides a further negative signal. (The other bank whose rapid growth was noted above, Irish Nationwide, was also involved in these manipulations.) The Finance Director and Chief Risk Officer of Anglo resigned in January 2009.

corporate governance practices" at the bank, the Government announced on 15 January, 2009 that it would be nationalised (with shareholder compensation to be determined later, based on the report of an assessor), and the necessary legislation was enacted within days. Injection of further capital into Anglo was deferred.

A sum of $\leqslant 3.5$ billion was injected into Bank of Ireland at end-March 2009 in the form of 8 per cent non-cumulative preference shares, carrying warrants and voting rights. A similar sum was provided on the same basis to AIB in May, though in this case the recipient had to undertake independent steps to strengthen capital to the tune of an additional $\leqslant 1.5$ billion. The announcement of these injections had little effect on share prices, suggesting that the market regarded the two banks as still technically insolvent. Indeed, the share prices were arguably supported mainly by the expectation that further government support would indirectly favour the position of shareholders..

After all, despite the guarantee that is in place, it may not be costless for the Government or its agencies (ultimately the taxpayer) to inject further funds: sizeable unguaranteed subordinated debt — amounting to several billion euros — remains in the balance sheets of the banks. If loan losses are larger than are now being projected by the banks, unguaranteed subordinated debtholders would, under the present financial structure, be exposed to losses; but an injection of capital junior to these liabilities would transfer the burden of those losses to the taxpayer. This important point continues to receive insufficient attention.

VI SEGREGATING PROPERTY LOANS: NAMA

Continued share price weakness, and increasing reliance on bank borrowing from the ECB (Figure 10)²⁷ ensured that further steps to recapitalise the banks and remove the worst overhanging problem assets from their portfolio could not be indefinitely postponed. In early April 2009, the Government outlined its plans for a huge asset purchase scheme, designed to replace between \in 80 and \in 90 billion (book value) of loans from the banks' balance sheets with low risk and marketable Government-guaranteed bonds requiring less regulatory capital backing. The loans are to be written down to market value before being purchased and the Government has clearly stated that any necessary further recapitalisation by it would be made in the form of

 $^{^{27}}$ Aggregate deposits from the ECB at all credit institutions jumped from €44 billion at end-August 2008 to €113 billion at end-February 2009 – the latter figure approaching 70 per cent of GDP. In contrast, outstanding debt securities issued by the banks to non-residents (of Ireland) fell by over €40 billion in the same period.

new equity.²⁸ Such an equity injection would strongly – perhaps fully – dilute the current shareholders' interest, depending on the scale of the write-down that proves necessary.²⁹

The loans purchased in this operation are to include all of the development property related loans as well as "the largest property-backed exposures" of the participating banks. By centralising the development property portfolio of the banking system in a National Asset Management Agency (NAMA) — and removing problem loans from the lending teams that made them — it is hoped that a better job will be made of managing loan recovery.

Whatever price is paid for the assets purchased, the taxpayer is absorbing risks from shareholders and creditors of the banks.³⁰ This risk-shifting extends beyond the lifetime of the current bank guarantee, and extends to those who are not currently guaranteed, as well as to the shareholders.

Concerns that the taxpayer would end up paying too much because of deficient pricing could be allayed by refining the NAMA proposal in a way that also achieves a better risk-sharing. Instead of simply paying a fixed best-estimate price for the loans, a somewhat more sophisticated financial restructuring could be envisaged. Specifically, NAMA should make a two-part payment. One part is in bonds, but is pitched below the estimated value of the assets purchased. In addition, the bank shareholders – and possibly other risk capital providers – would be given some stake in the upside of NAMA's eventual returns (for example by giving them an equity stake or warrant in NAMA). This would protect the taxpayer while being fair to the shareholder, and still removing the risk from the bank. This plan would, of course, increase the likelihood that the shareholder's equity in the *banks* is wiped out following the asset sale, with the Government then holding a 100 per cent ownership stake, at least until new equity investment can be raised.

Achieving a good governance of NAMA is evidently crucial to ensure that it achieves its goals. But this is not easy to ensure. For example, transparency could run up against current banking secrecy laws: this issue cannot be brushed under the carpet if the integrity and credibility of NAMA is be assured. After all, many of the borrowers whose loans are being transferred are high-profile individuals who will vigorously contest efforts of the loan

²⁸ This distinguishes the Irish plan from the asset purchase schemes contemplated by successive US Treasury Secretaries Paulson and Geithner.

²⁹ It is in this context that recent calls for nationalisation of the banks should be considered. If the Government statements are taken at face value, they will in fact nationalise the banks (despite a stated reluctance to see this outcome) if the write-downs are sufficient to wipe-out shareholders' capital. Market expectations are that such an outcome seems increasingly likely.

³⁰ Admittedly, the plan also contemplates a levy (on whom?) to be imposed if the price paid should subsequently prove to be too high. However, this levy cannot be envisaged as applying to the bank from whom the loans were purchased without nullifying the key risk-reducing element of the plan.

recovery operation. It is hard to see how costly and protracted litigation, not only on the constitutionality of the proposed scheme, but subsequently on individual recovery action, can be avoided. Ensuring that NAMA can overcome these difficulties and achieve the hoped-for efficiencies in recovery will be a challenge. The mandate of NAMA will also have to be unambiguous: if its recovery actions threaten employment will it be asked to stay its hand? Like state-owned banks all over the world, it is very easy for an asset management company to morph into an off-budget grant agency incurring hidden additional costs to the taxpayer.

Some of the Asset Management Companies put in place to deal with bank insolvency in various countries over the past quarter century have been deemed successful. The Swedish case is often mentioned, though at less than 8 per cent of GDP, it was managing a much smaller portfolio than envisaged for NAMA (50 per cent of GDP). The US and Spanish schemes of the 1980s also did well, but they were even smaller. The jury is still out on others, including the massive scheme in China, now into its second decade of operation. Some did not fare so well, including those of Mexico, Indonesia, Philippines and Senegal, all of which were contaminated by politicisation. With Ireland's stronger societal institutions we should be able to avoid some of these pitfalls, but only if there is careful planning and if adequate legal and administrative structures are put in place. There is no obvious template which can be simply transplanted here.

After the write-downs, the banks too will likely be wholly or largely Stateowned. This will give rise to similar issues of governance and of the potential conflict between pursuit of shareholder value and some short-term politically sensitive consequences of prudent bank practice.

VII GETTING LENDING GOING AGAIN AND AVOIDING UNWARRANTED FORECLOSURES

Evidence on Changing Loan Supply Conditions

Ireland is far from unique in experiencing a credit crunch. This is not attributable to an absolute shortage of loanable funds: Ireland's banks have access to adequate funding thanks to the blanket guarantee, even if the terms on which those funds can be obtained is less favourable than before, not least because the cost of funds to the Irish government has jumped.³¹

³¹ The secondary market spread for 10-year bonds over the German benchmark jumped from about 30 basis points in mid-September to reach about 150 basis points at end-December 2008 and exceeding 250 basis points in January after the nationalisation of Anglo Irish Bank, later drifting up to a peak of 284 basis points in March before recovering somewhat later.

Instead, as elsewhere, it is banks' reluctance to assume additional credit risk in these uncertain times that dictate tightening of lending conditions.

The ECB's survey of credit demand and standards suggest that credit tightening for enterprises started no earlier than the Summer of 2007 – and followed rather than preceded a fall in enterprise demand (Figure 6). The entry "3" in the chart indicates no change in standards from the previous quarter, the figure shows that lending standards continued to tighten quarter-by-quarter since then. Banks also reported shrinking demand from enterprises, as they themselves deferred expansion plans, and despite the likely need of enterprises to finance inventory and for distress borrowing.

For households, the pattern is similar but with an even longer lag between the fall in demand (started in early 2007 with the fall in house prices), and the tightening of lending conditions, which began only after October 2007.

This survey reports the opinions of bankers, and it provides a useful contrast to the clamour from unsatisfied borrowers. In any downturn, it is the non-creditworthy distressed would-be borrowers who naturally are most vocal in complaints about a credit crunch. At the same time, taxpayers are concerned about the fiscal costs of a further expansion in non-performing loans. This generates a delicate balancing act for the policymaker. As already discussed, additional capital can help restore lending confidence of the managerial banks, but there is no automatic multiplier, and experience elsewhere, both current and historic, suggests that this will be a slow process.

Avoid Drip Feed: Borrowing Corporations in Distress Need Restructuring Too
For non-financial corporates, a key lesson from crisis experience elsewhere
is that distressed firms need to be decisively restructured, and not kept alive
on a drip-feed. The dangers here apply especially to property-based
companies, but also to others (Ahearne and Shinada, 2005; Caprio and
Honohan, 2005). In other words, parallel to the financial restructuring of
banks, there needs to be work ensuring that surviving non-financial firms are
financially solid. This can be done largely by the market; the barriers to
prompt action here are likely to come from banks that are in denial about the
true financial condition of their biggest borrowers, and from political pressure.

Mortgage Relief for Households – Avoid Risky and Unfair Approaches

Discussions in the US, where actual mortgage defaults and delinquencies have been a prominent part of the problem, have centred around renegotiation of loans to enable willing but distressed borrowers to stay in their homes, thereby avoiding the deadweight losses of foreclosure. Some of these proposals involve tax-payer assistance, but others can be a win-win situation for both borrower and lender, though bankers are reasonably nervous about such

schemes encouraging wilful delinquency by those able to pay.³² Where predatory lenders mis-sold low income households mortgages which they never had a realistic chance of servicing, there is a strong ethical case for provision of public relief.

Avoiding wasteful foreclosure is also a standard goal in Irish mortgagelending. But the case for taxpayer-funded relief is less clear, not least in relation to mortgages on second homes taken out by relatively prosperous borrowers. Such a policy could be regressive overall as well as contributing to severe moral hazard. Any extensive loan-forgiveness programme would threaten fiscal stability directly or indirectly. Overall, in the Irish context, relief for distressed households who can no longer service their mortgages would seem to be better dealt with through social welfare policy rather than banking policy.

Government Control Over Bank Lending Decisions?

It might be thought that nationalising the banks on a semi-permanent basis and requiring them to pursue government objectives instead of profit would ensure an increased flow of lending enhancing the public good. But the evidence from around the world is that private for-profit banking systems have, in normal times, contributed more to growth (and poverty reduction) than government-controlled ones. The latter, responding to political pressures, tend to keep large but faltering borrowers afloat for much longer than is healthy for the economy as a whole (cf. World Bank, 2001, 2008, for reviews of the evidence). So, even for banks over which it acquires a controlling stake, I would not be advocating close administrative direction over lending policies. Government may wish to shape the overall strategy for its banks, but should remain at arms length from lending policy.

Regulation: Beware of Over-Regulation that Constrains Loan Availability

The Irish banks are heavily indebted to foreign lenders and operate with very high loan-to-deposit ratios. It would have been better if they had not got into this situation, but a rush to reduce this ratio could be disastrous for the economy's ability to ride out the global recession. Even if a government guarantee is needed for an extended period, this should be made available in order to ensure that a shortage of loanable funds does not take over from risk-aversion as the chief reason for the credit crunch in Ireland. Happily, early concerns that the Regulator might be putting the banks under pressure to reduce loan-to-deposit ratios seem to have been misplaced.

³² Such renegotiations can be greatly complicated because of legal constraints if the loans have been repackaged into securities and sold to numerous investors.

Nevertheless, the danger of regulatory over-reaction must be present, and there is insufficient evidence in the public domain as to the current stance of regulatory policy. Reforms to incentive structures for management would of course be good. But much of the current global rethinking of regulatory design will not necessarily be particularly relevant to the Irish scene: the Irish problems relate to a very old-fashioned credit boom and not to financial innovation. The failure was one of insufficient scepticism on the part of the Regulator. With hindsight, it seems evident that the Regulator should have insisted on much more pessimistic loan-loss provisioning on developer loans. The adjustment to capital requirements for high LTV residential mortgages should have been *much* higher. Beyond that, the danger to be avoided now is that the Regulator might be inclined to impose requirements that discourage exactly the lending that is needed to protect the economy through the downturn and position it for a recovery.

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