The Irish Banking Crisis
Regulatory and Financial Stability Policy
2003-2008

A Report to the Minister for Finance by the Governor of the Central Bank

31 May 2010

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ABBREVIATIONS

AIB	Allied Irish Banks
ADG	Assistant Director General
BCP	Basel Core Principles
BNB	Banque Nationale de Belgique
BoI	Bank of Ireland
BSD	Banking Supervision Department
CAT	Capital Acquisitions Tax
C&AG	Comptroller & Auditor General
CB	Central Bank (of Ireland)
CFD	Contract for Difference
CGT	Capital Gains Tax
CIFS	Credit Institutions Financial Support Scheme
CRD	Capital Requirements Directive
CBFSAI	Central Bank & Financial Services Authority of Ireland
CSO	Central Statistics Office
DIRT	Deposit Interest Retention Tax
DSG	Domestic Standing Group
ECB	European Central Bank
ECOFIN	Economic & Financial Affairs Council
ELA	Emergency Lending Assistance
EMU	European Monetary Union
ERM	Exchange Rate Mechanism
ESCB	European System of Central Banks
ESRI	Economic & Social Research Institute
EU	European Union
FDIC	Federal Deposit Insurance Corporation
FR	Financial Regulator
FSA	Financial Services Authority
FSAP	Financial Services Action Plan
FSAP (IMF)	Financial Sector Assessment Programme
FSC	Financial Stability Committee
FSR	Financial Stability Report
GDP	Gross Domestic Product

GNP	Gross National Product
HBOS	Halifax Bank of Scotland
IAIS	International Association of Insurance Supervisors
ICAAP	Internal Capital Adequacy Assessment Process
ICTU	Irish Congress of Trade Unions
IFRS	International Financial Reporting Standards
IFSC	International Financial Services Centre
IFSRA	Irish Financial Services Regulatory Authority
IBF	Irish Banking Federation
IIF	Irish Insurance Federation
IMF	International Monetary Fund
INBS	Irish Nationwide Building Society
IT	Information Technology
LGD	Loss-given-default
LTV	Loan-to-Value
MoU	Memorandum of Understanding
NAMA	National Asset Management Agency
NPA	Non-Performing Assets
NTMA	National Treasury Management Agency
OECD	Organisation for Economic Cooperation and Development
PCAR	Prudential Capital Assessment Review
SLS	Secured Lending Scheme
VAT	Value Added Tax
WTO	World Trade Organisation

INTRODUCTION

Section 1: Terms of Reference

On 4 February 2010 the Minister for Finance, Brian Lenihan T.D., requested the Governor of the Central Bank to conduct a preliminary investigation of:

> "....the performance of the respective functions of the Central Bank and Financial Regulator over the period from the establishment of the Financial Regulator to the end of September 2008. In that context I should note that you may consider the inclusion of any matter you feel should be brought to my attention which might inform the preparation of the statutory inquiry."[1]

This preliminary investigation is part of a larger exercise by Government to:

> "....thoroughly examine the conduct of the banking sector in recent years in order to arrive at a fuller understanding of the root causes of the systemic failures that led to the need for extraordinary support from the State to the domestic banking system."

Parallel to this exercise, a second preliminary report is being prepared by Klaus Regling and Max Watson.[2] The two reports, which were requested to be completed by 31 May 2010, will provide "a basis for the Government and the Oireachtas to prepare the terms of reference for the second stage, which will involve the establishment of a Statutory Commission of Investigation."

The approach used in preparing this Report is presented in Section 2 of this Introduction, the structure of the Report in Section 3, the composition of the team in Section 4 and some abbreviations of entities in Section 5.

Section 2: Approach

In preparing the Report, an in-depth review of the powers, responsibilities, philosophy, mandate, resources, policies and actions of the Central Bank and Financial Regulator was first carried out on the basis of: (i) publicly available sources such as Annual Reports, Strategy Statements, Financial Stability Reports, proceedings of the Oireachtas, and speeches; and (ii) minutes and Board papers of the Central Bank and Financial Regulator as well as extensive internal files, principally of the Financial Regulator.

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[1] The letter setting out the Terms of Reference is included in Annex 1 below.

[2] There were a number of meetings between the two groups to exchange views and avoid unnecessary duplication.

Documentary material only takes one so far. In order to obtain additional background information as well as elicit views of key officials, an extensive series of interviews were undertaken running to about 120 hours; all persons requested to attend an interview did so. All of the directors of the CBFSAI and the Regulatory Authority as well as all senior management, managers and deputy managers in relevant units of the CBFSAI during 2003-2008 were interviewed (Table 1 shows only the more senior of these). In addition, several other officials of the CBFSAI provided invaluable assistance on a number of important issues.

Table 1: Central Bank & Financial Services Authority of Ireland: Relevant Senior Management and Function Heads; Board and Authority Members 2003-2008

Governor:	J. Hurley			
Chair – FR:	B. Patterson	To April 2008	J. Farrell	From May 2008
CEO – FR:	L. O'Reilly	To January 2006	P. Neary	From February 2006
Director General:	L. Barron	To August 2007	T. Grimes	From August 2007
Consumer Director:	M. O'Dea			
ADG Prudential:	P. Neary	To February 2006	C. Horan	From February 2006
ADG Economics:	M. Casey	To April 2005	T. O'Connell	From April 2005
Head, Banking Supervision:	C. Horan	To February 2006	M. Burke	From May 2006
Head, Financial Stability[a]:	F. Browne			
Board Members:	J. Hurley			
	B. Patterson	To April 2008	J. Farrell	From May 2008
	L. O'Reilly	To January 2006	P. Neary	From February 2006
	L. Barron	To August 2007	T. Grimes	From August 2007
	T. Considine	To June 2006	D. Doyle	From July 2006
	D. Begg			
	F. Danz	To October 2006	A. Gray	From December 2006
	G. Danaher			
	R. Donovan	To April 2008	B. Hillery	From May 2008
	J. Dunne			
	M. O'Donoghue	To April 2008	D. O'Brien	From May 2008
	D. Purcell			
Authority Members:	B. Patterson	To April 2008	T. Grimes	From April 2008
	J. Farrell			
	L. O'Reilly	To January 2006	P. Neary	From February 2006
	M. O'Dea			
	A. Ashe			
	G. Danaher			
	F. Danz	To October 2006	A. Gray	From December 2006
	J. Dunne			
	D. Purcell			
	D. Quigley			

[a] Up to January 2008, Head, Monetary Policy & Financial Stability; from January 2008, Head, Financial Stability & Payments Oversight Department.

Note: The same person may appear under several headings (e.g., as a member of a board as well as a senior official).

Source: Central Bank and Financial Regulator.

To obtain a fuller picture, interviews were also conducted with a number of senior officials of other agencies including: Kevin Cardiff, Secretary General and William Beausang, Assistant Secretary, Department of Finance; John Corrigan, CEO, and Michael Somers, former CEO, National Treasury Management Agency (NTMA); Joe Meade, former Financial Services Ombudsman; as well as three former bankers: Brian Goggin, former CEO of the Bank of Ireland; Eugene Sheehy, former CEO of Allied Irish Banks; and Michael Walsh, former Chair, Irish Nationwide Building Society (INBS). A special debt of gratitude is owed to all of these individuals for spending extensive time to assist the work.

There are legal constraints on the detail which can be published on individual credit institutions. The Report is bound by overriding constraints under EU law, and general central banking and regulatory practice, as reflected in Irish Law in Section 33AK of the Central Bank Act, 1942 (as amended) which prohibit, subject to certain exceptions (in relation to criminal law, for instance), the disclosure of confidential information in relation to identifiable individual credit institutions.

Section 3: Outline of Report

The Report is divided into eight chapters. A summary and conclusions are presented in Chapter 1. Chapter 2 deals with the macroeconomic background during the period reviewed, while Chapter 3 describes the structure of the Central Bank and Financial Services Authority of Ireland (CBFSAI) and the respective powers and functions of its two constituent institutions, the Central Bank and the Financial Regulator, as well as the relationships between them.

The next two chapters are concerned with micro-prudential regulation – the supervision of individual credit institutions by the Financial Regulator. Chapter 4 sets out the goals and philosophy of micro-prudential regulation – often characterised as principles-based regulation, while Chapter 5 assesses the record of the Financial Regulator in micro-prudential supervision.

The following two chapters address macro-prudential regulation, i.e., the monitoring and assessment of the overall financial system and efforts to help ensure financial stability. Chapter 6 reviews the assessments made by the CBFSAI in its annually published Financial Stability Reports, while Chapter 7 deals with the issue of follow up

actions by the CBFSAI to address emerging concerns regarding financial stability. Chapter 8 discusses the events leading up to and including the crisis at the end of September 2008 and the provision of the State Guarantee on 30 September.

Section 4: Investigation Team

This Report is the result of intensive work undertaken during the past four months by many individuals. The team was led by the Governor, Patrick Honohan, and comprised Paul K. Gorecki, seconded from the Economic and Social Research Institute, Donal Donovan, formerly of the International Monetary Fund and Rafique Mottiar, formerly concerned with monetary policy and implementation at the Central Bank. Nodhlag Cadden, Internal Audit, Central Bank, Sean Kinsella, at present on secondment to the Central Bank from the Department of Finance, Kevin Kirby, Currency Issue Department, Central Bank, and Suzanne Pepper, General Secretariat, Central Bank, reviewed FR files and were responsible for keeping a record of the interviews. Margaret Murray arranged the interviews while Irene McKenna was responsible for administrative support. The investigation was also able to draw on the services of a number of officials of the Central Bank and Financial Regulator to provide data and other quantitative information.

Section 5: Some Conventions

To ensure consistency the following conventions are used in this Report. The Central Bank and Financial Regulator[3] as institutions will generally be referred to either by these names or CB or FR, respectively. The combined CB and FR will be referred to as the Central Bank and Financial Services Authority of Ireland or CBFSAI. The Board of the FR will be referred to as the Authority while the CBFSAI Board will be referred to as such.

The term bank is sometimes loosely used to include all types of credit institution.

As noted above, legal constraints limit the information that can be discussed with respect to identifiable credit institutions. However, in order to maximise the amount of information that can be provided, and for clarity of exposition, credit institutions may be referred to as Bank A, Bank B and so on. In order to further guard the confidentiality

[3] When the Financial Regulator first started it was called the Irish Financial Services Regulatory Authority and it subsequently rebranded itself as the Financial Regulator. However, in this Report Financial Regulator (FR) is generally used regardless of the date.

of individual credit institutions, these codes are scrambled. Thus Bank A in one context is not necessarily be the same bank as Bank A referred to in another context. Customer identities are protected in the same way.

Unless otherwise indicated, the source of all statistical material provided is the CBFSAI.

CHAPTER 1: SUMMARY AND CONCLUSIONS

Section 1: Introduction

1.1 This Report covers the period from the establishment of the FR in 2003 to the end of September 2008 when the provision of exceptional Government support, in the form of the comprehensive State Guarantee for the liabilities of the Irish domestic banking system was announced. It deals with two distinct aspects: crisis prevention (in the years before 2008); and crisis containment (starting with the onset of the global liquidity crisis in August 2007).

1.2 The Report seeks to answer two questions. First, why was the danger from the emerging imbalances in the financial system that led to the crisis not identified more clearly and earlier and headed-off through decisive measures? Second, when the crisis began to break, were the best containment measures adopted? The Report has addressed both aspects with a particular focus on the performance of the Central Bank and the Financial Regulator throughout the period.

Section 2: Crisis Prevention

1.3 The weaknesses of Irish banks that were exposed by the near-collapse of global debt markets in late 2008 need to be viewed against the background of the overall domestic macroeconomic imbalances that had built up during most of the decade (Chapter 2). The Government's procyclical fiscal policy stance, budgetary measures aimed at boosting the construction sector, and a relaxed approach to the growing reliance on construction-related and other insecure sources of tax revenue were significant factors contributing to the unsustainable structure of spending in the Irish economy.

1.4 The growing construction boom was fuelled by the increasing reliance of Irish banks on wholesale external borrowing at a time when international financial markets were awash with cheap investable funds. This greatly increased banks' vulnerability to changing market sentiment and ultimately triggered their downfall.

1.5 But the weaknesses of Irish banks were not caused by the interruption in the flow of cheap money from abroad. Even before the failure of Lehman Brothers in September 2008, Irish residential property prices had been falling for more than 18 months and few

observers expected their fall to end soon. Heavy loan-losses on the development property portfolio acquired at the peak of the market were becoming inevitable. It is conceivable that, had international financial markets remained calm, the two main banks (AIB and Bank of Ireland) might have been able to manage their emerging loan-loss problems without Government assistance by drawing on (and/or augmenting via new issues) their capital, assisted by a few more years of profits on other lines of business. But, given what has now been revealed about the quality of their loan portfolio (by the National Asset Management Agency NAMA and through the Prudential Capital Assessment Review PCAR process), it seems clear that at that point Anglo Irish Bank and Irish Nationwide Building Society (INBS) were well on the road towards insolvency.

1.6 How was this situation allowed to emerge? Before considering the role of the CBFSAI, it must be stressed that other actors were heavily involved. In an important sense, the major responsibility lies with the directors and senior managements of the banks that got into trouble. They are the first line of defence to protect those who have entrusted them with their funds. Mortgage brokers and similar intermediaries, incentivised to generate mortgage business, probably played a part at the retail level. It may also be the case that auditors and accountants should have been more alert to weaknesses in the banks' lending and financial position. While these aspects have not been independently researched for this Report, they merit further investigation.

1.7 Nevertheless, apart from the above elements, the key protection in any national system against the emergence of a banking crisis should be the central bank and regulatory function – the main focus of this Report. It is clear that a major failure in terms of bank regulation and the maintenance of financial stability failure occurred. Indeed the same can be said to a greater or lesser extent with respect to several other advanced economies. However, the task in this Report is to characterise the ways in which the failures occurred in the Irish context and to identify the underlying reasons. Three broad areas have been identified (dealt with more comprehensively in Chapters 3 to 7): (i) the design of and approach to micro-prudential aspects, especially the supervision of individual institutions; (ii) the approach to macro-prudential or overall financial stability policy; and (iii) the failure to undertake decisive and effective remedial measures.

- Micro-prudential policy (Chapters 4 and 5)

1.8 At no point throughout the period did the CBFSAI staff believe that any of the institutions were facing serious underlying difficulties, let alone potential insolvency problems – even at a late stage as the crisis neared. Explaining this is not easy considering that all the staff involved were specialists, working diligently on what was understood to be an important task. Thus, the failure was clearly of a systemic nature rather than related to any one individual. A variety of factors were at work.

1.9 First, the style of supervision adopted did not generate the most relevant or useful information to anything near the extent required. By relying excessively on a regulatory philosophy emphasising process over outcomes, supervisory practice focussed on verifying governance and risk management models rather than attempting an independent assessment of risk, whether on a line-by-line or whole-of-institution basis. This approach involved a degree of complacency about the likely performance of well-governed banks that proved unwarranted. It was not just a question of emphasising principles over rules, it was the degree of trust that well-governed banks could be relied upon to remain safe and sound.

1.10 True, the largest banks had established reasonable governance structures and acquired complex risk management software.[4] But in their anxiety to protect market share against the competitive inroads of Anglo Irish Bank and UK-based retail lenders, their management tolerated a gradual lowering of lending standards, including decisions to authorise a numerous exceptions to stated policies. Also, the implementation of policies, for example with respect to ensuring adequate documentation and perfectibility of security, turn out to have been defective. The result was a much greater accumulation of risk than the bankers had envisaged or indeed that they seemed to recognise.

1.11 By not challenging in detail such aspects as the security underlying large developer loans (including the extent to which development projects were co-financed by the developers' own funds) regulators did not realise just how vulnerable the lenders were

[4] The shortcomings of mechanical risk-management software in accurately measuring risk have been exposed by the US subprime crisis; they were neither needed nor effective for the much less complex portfolios of Irish banks. Nevertheless, much effort was devoted by both the banks and the Financial Regulator to implement the complex new Basel II/EU Capital Requirements Directive (CRD) framework which soaked up a significant fraction of the resources available for supervision.

to property price declines. More generally, in their reliance on assessments of systems, structures and models, they downplayed quantification of risks. Even when confronted with evidence that the banks themselves had insufficient information, the regulators failed to grasp the scale of the potential exposure.

1.12 Broadening the scope and intensifying supervision, especially its quantitative aspects, which could have addressed the above problems, would have required considerable additional staff resources and training to help offset the asymmetry in skills *vis-a-vis* the regulated institutions. It was already difficult to staff-up to intended levels given the high salaries and plentiful job opportunities available at the time in the private financial sector. Only a small number of staff within the FR were directly involved in prudential supervision of credit institutions – no more than two per major firm.

1.13 Second, even if armed with the necessary information, to be effective there would have had to be a greater degree of intrusiveness and assertiveness on the part of regulators in challenging the banks. Although management of the FR would not accept that their "principles-based" approach ever implied "light touch" regulation, the approach was characterised as being user-friendly in presentations aimed at expanding the export-oriented financial services sector. There are other indications of an unduly deferential approach to the banking industry which may have contributed to a reluctance to second-guess bankers in any aggressive manner. Together, these might have partly constituted what is described in the literature as "regulatory capture".[5] Thus, it would have been known within the FR that intrusive demands from line staff could be and were set aside after direct representations were made to senior regulators. Also, attempts to formalise some of the principles (through Director' Compliance Statements and a Corporate Governance Code) both came to naught following industry lobbying (and, for the first of these, in the face of concerns expressed by the Department of Finance).

1.14 Consistent with this regulatory climate, there was a pattern of inconclusive engagement on the part of supervisors with regulated entities and lack of decisive follow-through. In one key case, where the Financial Regulator had identified serious weaknesses requiring corrective action, despite a protracted correspondence extending over many years, the problems had still not been solved prior to the crisis. By not

[5] For a critical discussion, based on extensive worldwide evidence, of how the performance of bank supervision and regulators can become subject to capture, see Barth et al., (2006).

adhering to time-bound deadlines for escalation, the FR allowed some important matters to drift. At the same time the appetite for legal challenge was limited which meant that in practice entities were given the benefit of the doubt; no penalties for breach of prudential regulations were ever imposed on a bank before 2008. If unsuccessful, test legal cases could have helped garner support for additional legislative powers.

- Overall financial stability policy (Chapter 6)

1.15 The major tool of overall financial stability policy was envisaged to be the Financial Stability Report (FSR). The language of successive FSRs was too reassuring throughout, even as late as November 2007, and did little to induce the banks – or the public and policy makers – to adjust their behaviour to avoid the threats that lay ahead. The FSR drafting overemphasised the central forecast whereas it is the downside scenarios and the condition of the weakest institutions that are the most relevant for a financial stability assessment. Admittedly, the views of outside bodies such as the IMF and OECD – especially in later years – were not sharply different and must have provided reassurance to any internal doubters. In particular, the relatively glowing 2006 update of the IMF's specialised Financial Sector Assessment Program (FSAP) mission – an exercise designed precisely to identify any weaknesses in prudential regulation and financial stability policy – would have been enough to set any doubts that may have existed at rest. The FSAP Report's misinterpretation – for whatever reasons – of the prevailing Irish situation must be considered unfortunate.

1.16 Although the FSRs included significant analytical material analysing the underpinnings of the property boom, the relatively sanguine conclusions tended to be reached on a selective reading of the evidence. This was particularly true in the case of the 2007 FSR when, despite internal evidence available to the contrary, the central conclusion regarding a "soft landing" was not based on any quantitative calculations or analysis. This appears to have been a "triumph of hope over reality". More generally, a rather defensive approach was adopted to external critics or contrarians. For years many observers had raised some concerns publicly or privately, albeit sometimes in coded form, about the sustainability of the property boom, which was indeed dramatic by international standards. For example, even though they appeared after most of the damage had already been done, the two 2007 articles by Morgan Kelly, while not backed up by in-depth quantitative research on the Irish situation, should nevertheless

have raised more warning flags than they did and prompted a rethink of the reassuring message of the FSR published in November of that year.

1.17 Such quantification of risks as was attempted was carried out in the context of the stress test exercises reported annually in the FSRs. Although many caveats were noted, too much confidence was placed in the reliability of the tests which were overseen by desk-based analysts without sufficient engagement by hands-on regulators. Not being sufficiently close to practical banking, those relying on the stress tests may have had an unrealistic appreciation of what the bankers could and could not know. Thus, for the "bottom up" tests, banks were asked to calculate possible loan losses in the event of a given (unfavourable) macroeconomic scenario. Apart from the fact that the scenario was insufficiently severe, the capacity of the banks to undertake the exercise differed greatly; indeed none of them had reliable models, tested and calibrated on Irish data, which could credibly predict loan losses under varying scenarios. Furthermore, the banks were naturally prone to over-optimism and even (later) denial – the stress tests conducted in the summer of 2008 still provide a reassuring picture. "Top down" tests did not put the banks' positions under sufficient stress either. In any event, all took too much comfort from both sets of tests' relatively benign conclusions.

1.18 A closer interaction between the staff involved in financial stability and regulatory staff could have had the effect of alerting both sides to the limitations of the stress test methodology and reduced the sense of complacency. If regulators had realised how risky the macroeconomic picture was for the banks they might have concluded that forceful action was needed; conversely, if the analysts dealing with financial stability had had a fuller understanding of how dependent banks' solvency was on the property market holding up, they might have looked at the stress tests with a more sceptical eye. However, the inadequacy of the dialogue between economists and regulators was a long standing concern (and one which is mirrored in other parts of the world) that would have required a greater senior management effort to bridge the methodological divide present.

1.19 More generally, it may be that the institutional separation of the Regulator from the rest of the organisation (reviewed in Chapter 3) contributed to an insufficient appreciation of the micro-macro interlinkages involved in financial stability analysis. It could also have led to some perceived ambiguity as to which part of the house should

take the lead in undertaking follow-up action. However, the division of labour was set out clearly in legislation – the Financial Regulator was responsible for micro-prudential supervision and the Governor for overall stability with the power to take micro-prudential steps if necessary. In practice, senior Financial Regulator staff were full members of the Financial Stability Committee that steered the stress test process and the FSR Report itself. Thus, whatever the other difficulties that may have arisen from the organisational structure, it cannot be held responsible for the failure of the CBFSAI to identify weaknesses sufficiently and take remedial measures as needed.[6,7]

- The failure to take sufficient macro-prudential corrective action (Chapter 7)

1.20 Effective financial stability policy in a potential bubble also required intrusive macro-prudential policy measures such as additional capital buffer requirements for risky property lending. Although some initiatives were taken, deference and diffidence on the part of the CBFSAI led to insufficient decisive action or even clear and pointed warnings. There was an unresolved anxiety that an aggressive stance would lead to (i) a loss of market share by Irish-controlled institutions and/or (ii) the triggering of a collapse in confidence, at first in the property market, and later for depositors. Thus, the belated and relatively modest tightening in 2006 of capital requirements for high loan-to-value (LTV) mortgages, designed mainly as a warning signal, was adopted only after prolonged and agonised debate.[8]

1.21 It is not clear how much merit the first concern ever had, inasmuch as almost all of the foreign-controlled banks operated through locally established subsidiaries which would have been equally subject to restrictive regulatory measures. In any event the legislation was straightforward – promotion of the Irish financial services sector was to be encouraged but subject explicitly to the CBFSAI's mandate to promote financial stability. Far too much weight was also given to the second consideration, especially in

[6] Issues of institutional rivalry may have contributed to inadequate communication between the two staffs on occasion. There clearly was some friction at board and senior management level between the FR and the Central Bank on matters relating to human resources and the quality and cost of services (particularly of IT resources) provided to the FR. In addition, while relations between the Governor and successive Chairs of the Authority were cordial, the Authority was always anxious to establish its operational independence from the Central Bank.

[7] An additional "structural" issue is whether the Authority gave too high a priority to consumer, rather than prudential issues. While there was a fairly widespread perception that this was indeed the case, there are no solid indications that in practice this impeded the Authority carrying out its prudential responsibilities.

[8] Alternative tough measures, such as banning (or disapproving of publicly) 100 per cent LTV mortgages, or setting and enforcing sectoral lending limits were not considered seriously as they were felt to be out of tune with the principles-based approach and with current international regulatory fashion.

the earlier period when decisive intervention could have made a major difference to the length and extent of the property boom. Regulatory measures will inevitably have some disturbing effects on markets; indeed this is their main purpose. The luxury of waiting until more clear-cut evidence becomes available must be set against the costs of inaction, especially when market participants are comforted and implicitly encouraged – or not sufficiently discouraged – to continue with risky borrowing and lending behaviour.

Section 3: Crisis Containment (Chapter 8)

1.22 The provision of the State Guarantee on 29 September 2008 greatly diminished the immediate liquidity pressures and represented the overarching context within which further containment actions were taken in subsequent months.[9] From late summer 2007, the CBFSAI had been in increasingly crisis mode as it sought to prepare for the consequences of a possible looming liquidity squeeze for some or all of the Irish-controlled banks. How well was this phase managed in terms of minimising the damage caused by the crisis which eventually crested with the unprecedented guarantee decision at end-September 2008? Partly with the benefit of hindsight, a number of elements are relevant to consider.

1.23 First, almost all of the efforts of the CBFSAI from August 2007 onwards were focussed on the important task of improving the contingent access of the banks to liquidity. However, as stressed earlier, if the authorities during this period had had better information about the underlying condition of the banks and a more alert appreciation of the scale of the macroeconomic imbalances present, a focus on building capital buffers could have put the banks in a more robust position entering the last weeks of September 2008.

1.24 While the final guarantee decision was taken under pressure of events, the meetings on the night of 29/30 September 2008 were the culmination of an intensive series of interagency meetings that had been taking place, and had greatly intensified since early

[9] These included the nationalisation of Anglo Irish Bank, the replacement of some directors and senior management of financial institutions and the injection of capital resources. Over the course of 2009 and into 2010, the focus shifted from containment to resolution with the enactment of legislation creating NAMA; the regulatory assessment of each bank's recapitalisation needs (PCAR); and further injections of capital funds, including into the two building societies in which the Government took controlling shares. This process provided a good indication of the overall net fiscal cost of the crisis. Much of this cost is attributable to Anglo Irish Bank, whose new management are in the process of completing a restructuring plan.

that month under the de facto leadership of the Department of Finance, also involving the NTMA and the CBFSAI (with the CBFSAI playing a less central role than might have been expected). Despite the relative absence of detailed written records, it is clear that the meetings during this period, which involved substantial legal work, made the authorities increasingly better prepared to act as the weeks unfolded.

1.25 As regards the substance of the guarantee itself, it is hard to argue with the view that an extensive guarantee needed to be put in place, since all participants (rightly) felt that they faced the likely collapse of the Irish banking system within days in the absence of decisive immediate action. Given the hysterical state of global financial markets in those weeks, failure to avoid this outcome would have resulted in immediate and lasting damage to the economy and society. There would have been additional lost income and employment surely amounting, if it could be quantified, to tens of billions of euros. Nevertheless, the extent of the cover provided (including to outstanding long-term bonds) can – even without the benefit of hindsight – be criticised inasmuch as it complicated and narrowed the eventual resolution options for the failing institutions and increased the State's potential share of the losses.

1.26 While there was eventually a broad consensus, including among CBFSAI officials, that the guarantee scheme for all institutions was the best approach[10], the idea of nationalising Anglo Irish Bank (implying an associated change in management) as an accompanying measure was also on the table. As a contingency (and highly confidential) precautionary measure, legislation to nationalise a troubled bank and/or building society had been in preparation for some time.[11] It was felt by some that nationalising Anglo Irish Bank – which was facing by far the most serious liquidity crisis – would reduce the reputational damage that it was causing to the Irish banking system. This bank's business model was also thought by many to be irrecoverably broken; although few participants were even beginning to think it might have actual solvency issues. Among the arguments against an overnight nationalisation was the fear that it could present undue operational risks and that it might have a destabilising

[10] Other options mooted included extensive use of Emergency Lending Assistance (ELA) from the Central Bank and/or the creation and use of a domestic fund drawing in addition on resources from the NTMA. The possibility of temporary support from the two largest banks was also envisaged. None of these options could be expected to do more than buy a few days – say until the following weekend.

[11] This planning was first inspired by the experience of the UK Government in relation to the failure of Northern Rock one year earlier.

effect on markets. In the event, by the end of the week, the inflow of liquidity took the matter off the agenda.

1.27 Two other aspects are worthy of comment. First, the reaction of some authorities abroad – who were having their own difficulties – suggest that there should have been more advance consultation with them. Second, the wisdom of leaving senior management in place while providing an open-ended guarantee to two institutions which – it should have been clear – were on the road to insolvency does not seem to have been considered.

1.28 Despite the above criticisms, while overall better preparation during the previous year up to and including the guarantee decision could have reduced the extent of the downturn and the consequent rise in unemployment and other costs to the State and society, the bulk of it was already unavoidable. In particular, the friction *vis-a-vis* some partner authorities has since dissipated and an effective resolution policy is well on track. Above all, the lending decisions that generated this huge cost were made long before the point was reached of the guarantee. The damage had already been done.

Section 4: Overall Conclusions

1.29 In requesting this Report, the Minister for Finance noted that the Government considers it essential "to thoroughly examine the conduct of the banking sector in recent years in order to arrive at a fuller understanding of the root causes of the systemic failures that led to the need for extraordinary support from the State to the domestic banking system". The specific terms of reference ask that the Report have regard to "the respective statutory powers, roles and responsibilities of the Central Bank and the Financial Regulator as well as consider the international social and macroeconomic policy environment which provided the context for the recent crisis in the banking sector."

1.30 Apart from the role of the CBFSAI, banking practice and Government policy both clearly played a central role in contributing to the crisis:

i) there is prima facie evidence of a comprehensive failure of bank management and direction to maintain safe and sound banking practices, instead incurring huge external liabilities in order to support a credit-fuelled property market and construction frenzy, and

ii) macroeconomic and budgetary policies contributed significantly to the economic overheating, relying to a clearly unsustainable extent on the

construction sector and other transient sources for Government revenue (and encouraging the property boom via various incentives geared at the construction sector). This helped create a climate of public opinion which was led to believe that the party could last forever. A less accommodating and procyclical policy would have greatly reduced the need for preventive action from the CBFSAI.

1.31 As regards the CBFSAI, the root causes appear to have been threefold:

i) a regulatory approach which was and was perceived to be excessively deferential and accommodating; insufficiently challenging and not persistent enough. This meant not moving decisively and effectively enough against banks with governance issues. It also meant that corrective regulatory intervention for the system as a whole was delayed and timid. This was in an environment which placed undue emphasis on fears of upsetting the competitive position of domestic banks and on encouraging the Irish financial services industry even at the expense of prudential considerations.

ii) an under-resourced approach to bank supervision that, by relying on good governance and risk-management procedures, neglected quantitative assessment and the need to ensure sufficient capital to absorb the growing property-related risks.

iii) an unwillingness by the CBFSAI to take on board sufficiently the real risk of a looming problem and act with sufficient decision and force to head it off in time. "Rocking the boat" and swimming against the tide of public opinion would have required a particularly strong sense of the independent role of a central bank in being prepared to "spoil the party" and withstand possible strong adverse public reaction.

1.32 There are undoubtedly many other factors which may have militated against the effectiveness of the CBFSAI during this period. These include: aspects relating to the quantity and skill mix of the staffing of the bank regulation function; an unduly hierarchical CBFSAI culture discouraging challenge; management process problems; difficulties, related to the rather unwieldy organisational structure, in ensuring coordination between economist and regulator sides of the house; and weaknesses in preparing for a crisis. These factors may have contributed to the crisis but were not fundamental. Nor was the failure of Lehman Brothers decisive.

1.33 One additional element deserving of consideration is the suggestion by some commentators that the fact that some banking personages were politically well connected might have been a key factor in discouraging aggressive supervisory intervention. None of the persons interviewed during the investigation agreed with this proposition, with several noting (rightly) that it was quite predictable that senior

banking figures would have political contacts. While it is easy to imagine that senior management or CBFSAI Board or Authority Members might have instinctively and almost unconsciously shied away from aggressive action to restrain politically connected bankers and developers during a runaway property boom, no evidence has been presented suggesting that this was the case.[12] Furthermore, although the climate of regulatory deference might have been unconsciously reinforced by social interaction – modest though it might have been[13] – organised by regulated institutions, there is no evidence or hint of corrupt regulatory forbearance.

1.34 The question can legitimately be asked as to how much difference more resolute action by the CBFSAI would have made. At the micro-prudential level, a cap on property-related lending would have curbed the worst excesses, as would have increased, accompanied by a more aggressive stance on governance in the case of one or more specific institutions. At the systemic level, a far greater increase in capital requirements on risky loans, if implemented several years earlier, would have made a major difference. A ceiling or penalty on very high loan-to-deposit ratios for banks would also have been effective. To buttress these measures, the CBFSAI should have contained a much stronger message in FSRs and in accompanying public statements in order to lay out clearly the very serious risks posed to financial stability by an unsustainable housing boom and a vastly overheated economy.

1.35 The terms of reference for this Report request that it highlight key specific areas that it considers appropriate for subsequent examination by the statutory Commission of Investigation. Without ranging too widely, let us mention that as far as the organisation and conduct of the financial sector is concerned, the management and operations of the credit institutions themselves have not been studied in full detail for this Report.

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[12] In the case of Anglo Irish Bank, management was seen by at least FR staff as perhaps "slick and buccaneering" but not as presenting a large or imminent risk. Although it became quite clear to top FR decision-makers that senior Anglo figures were well-liked in political circles, and it cannot be excluded that this played a part in their subsequent continuation in office for some months after September, there was, until very late in the day, no perceived need to take regulatory action against them. The central management figure in INBS was seen as an overly dominating figure that needed to be surrounded by a stronger governance structure. While it was understood by all that he was politically well-connected, the failure to resolve the issue is not attributed by anyone involved to his having a privileged status. While unconscious factors may have been at work, FR management and directors agree that there is no evidence of political representations being made on his behalf aimed at influencing regulatory decisions.

[13] Receipt of gifts or entertainment by CBFSAI staff has long been subject to a detailed Code of Ethics and Behaviour, including reporting requirements. Inspection of the register recording benefits received indicates that these have been of modest value.

Furthermore, the operations of mortgage intermediaries and audit and accounting bodies in the period prior to the crisis might also be worthy of examination.

1.36 This Report does not attempt to discuss certain matters that came to public attention after the guarantee was announced and which are the subject of separate inquiries, namely the director loans issue, the so-called Quinn-Anglo CFD affair and its ramifications, and the question of a back-to-back deposit arrangement. Awareness of these matters (all of them relating to Anglo Irish Bank) has, however, coloured the conclusions of the Report.

1.37 Although the Directors and officials of the CBFSAI differed in many detailed respects in their knowledge and understanding of the emerging situation, they do not appear to have realised – or at least could not bring themselves to acknowledge – before mid-2007 at the very earliest, not only how close the system was to the edge, but also the extent to which the task of pulling it back from the edge fell to the CBFSAI. Some also still feel that, without the external shocks of September 2008, the system would have survived without imposing a cost to the Government. The Report does not share this view.

1.38 Steps have been taken since the onset of the crisis to correct the main issues identified relating to the Central Bank and the Financial Regulator. New legislation has been prepared, and the organisation will shortly publish its strategic plan defining how it is strengthening and reforming its operations, procedures and overall approach.

CHAPTER 2: THE MACROECONOMIC BACKGROUND

Section 1: Introduction

2.1 The international financial crisis of the past three years has seen extensive government interventions to stabilise banks and prevent disorderly failures. The far-reaching measures taken by the Irish Government at end-September 2008 reflected the fact that the drain of liquidity which had been affecting all Irish banks had brought one important bank to the point of failure. To forestall the risk that such a failure would drastically affect all the other banks, the Government introduced an extensive guarantee of deposits and other liabilities. The gross amount of liabilities guaranteed came to €365 billion, or almost 2½ times GNP.

2.2 The initial expectation of officials at the time of the guarantee was that none of the institutions involved was insolvent, and that their problems stemmed mainly from a freezing of short-term liquidity in the wake of the bankruptcy of Lehman Brothers. However, subsequent developments have revealed a more serious and costly situation.

2.3 In sum, after the banks have sold their largest property-related exposures to the State's asset purchase vehicle, NAMA, at a price based on their estimated "long-term economic value", and after they have made provision for all of their other prospective loan-losses the State will have taken sizeable equity stakes in most of the banks, and issued some €40 billion or more in Government-guaranteed NAMA bonds (in exchange for which NAMA will hold loans of a similar value). The State will also have had to write-off in the order of €25 billion in unrecoverable capital injections into two institutions – Anglo Irish Bank and INBS – whose prospective loan losses greatly exceed their initial accounting capital.[14]

2.4 Apart from the experience of Iceland, this has turned out to have been the poorest performance of any banking system during the current global downturn. Yet Irish banks had not indulged in the financing of US securitised mortgages, nor were they involved in aggressive international acquisitions – flaws that characterised weakened banks elsewhere. Instead, they had been fatally weakened by a deep involvement in a world-beating property bubble which took off on the eve of Euro area membership and

[14] Heavy loan losses were also recorded by several of the foreign-controlled banks operating in Ireland.

swelled, based on huge capital inflows – more than 50 per cent of GDP in the 4 years after 2003.

2.5 As Shiller (2005) has argued, boom-and-bust cycles are normally based on the propagation of a misplaced optimism built on a half-truth which seems to foretell an unprecedented stream of prosperity. A plausible explanation of the global financial meltdown is that an exaggerated belief in risk management systems underpinned misplaced confidence in risky investments, triggered the extravagant expansion in capital and liquidity worldwide shrank risk premia and generated unsupportable degrees of leverage (cf. Honohan, 2008).[15]

2.6 In Ireland's case the scene was set by the seeming effortlessness of the "Celtic Tiger" boom which started in the late 1980s and brought sustained growth in employment, income and household formation. Subsequently Ireland's becoming a founder member of the eurozone brought a dramatic and sustained fall in nominal and real interest rates (and removed exchange risk from most foreign borrowing) which in turn justified substantially higher equilibrium asset valuations. These elements helped sustain a belief that equilibrium house prices would soar and that housing demand would continue to grow for the foreseeable future.

2.7 Domestic policies did not act as a sufficient counterweight to the forces driving this unsustainable property bubble. Bank regulation and financial stability policy clearly failed to achieve their goals. Neither did fiscal policy constrain the boom. Indeed, the increased reliance on taxes that could only generate sufficient revenue in a boom, made public finances highly vulnerable to a downturn. Specific tax incentives also boosted rather than restrained the overheated construction sector. And, with surging labour demand, wage rates in both the public and private sectors moved well ahead of what could protect international competitiveness.

2.8 The economic consequences of the crash have been severe. The collapse in construction, the fall in property prices and the severe knock-on effects on the banking system have all undermined employment and the public finances, and left the economy in a weakened condition to face the global recession. It is thus hardly surprising that

[15] As other examples, Shiller points to the belief that internet technology would generate sustained growth and profits as the cause of the dot.com bubble, the role of electric inventions resulting in the stock market bubble in 1901, and the role of the motor car and related technologies driving the 1920s US bubble.

Ireland has experienced one of the most severe downturns of any industrial country, with peak-to-trough fall in quarterly GNP estimated as about 17 per cent.[16]

2.9 The remainder of this Chapter describes the overall macroeconomic background to the crisis in more detail. Section 2 briefly reviews the Celtic Tiger period, Section 3 describes the emergence of the property bubble and Section 4 examines the evolution of the banking crisis. Section 5 discusses some key specific aspects of fiscal policy and competitiveness during the boom period, while Section 6 attempts, as a first round approximation, to distinguish the effects of the world-wide crisis on the Irish economy from those created by underlying domestic imbalances.

Section 2: The Celtic Tiger

2.10 During the 1990s, Ireland emerged from a lengthy period of economic stagnation marked by high unemployment, emigration, and crippling public debt despite high tax levels (Ó Gráda and O'Rourke, 1996, Honohan and Walsh, 2002). From 1988 to 2007, real GDP expanded by 6 per cent per annum on average (reaching double digit growth during 1995-2000). Unemployment plummeted from 16 per cent (on the ILO basis) in 1994 to 4 per cent in 2000 – essentially full employment for the first time in modern history. Non-agricultural employment jumped from 33 per cent of the population in 1993 to 41 per cent in 2000 and 46 per cent by 2007. With Ireland at the frontier of economic prosperity, this economic miracle was widely admired and emulated.

2.11 To understand what went wrong, two different growth phases need to be distinguished. Up to 2000 the true "Celtic Tiger" period involved exceptional export-led growth with moderate wage and price inflation maintaining cost competitiveness and healthy public finances. This period began in the late 1980s when the Government finally tackled the public debt problem with tough spending restraint and managed to negotiate a series of social partnership agreements which seems to have brought wage rate moderation (and industrial peace) in return for income tax concessions. EU structural funds amounting to as much as 3 per cent of GDP per annum also helped fund an expanded public infrastructural program. These policies, with competitiveness boosted by the successful devaluation of 1986, saw living standards converge belatedly towards the highest in Europe. The historic pattern of net emigration was reversed.

[16] The fall in GDP is much smaller at about 12 per cent, because of the sizeable role of the multinational corporations, whose export-oriented activity has held up well during the recession.

2.12 By about 2000, as the economy approached full employment, and technological constraints began to bite, the potential for continued per capita growth at rates experienced earlier no longer existed. Further national growth above the industrial country average could only be achieved with continued large scale immigration and capital investment.

Section 3: The Emergence of a Property Bubble

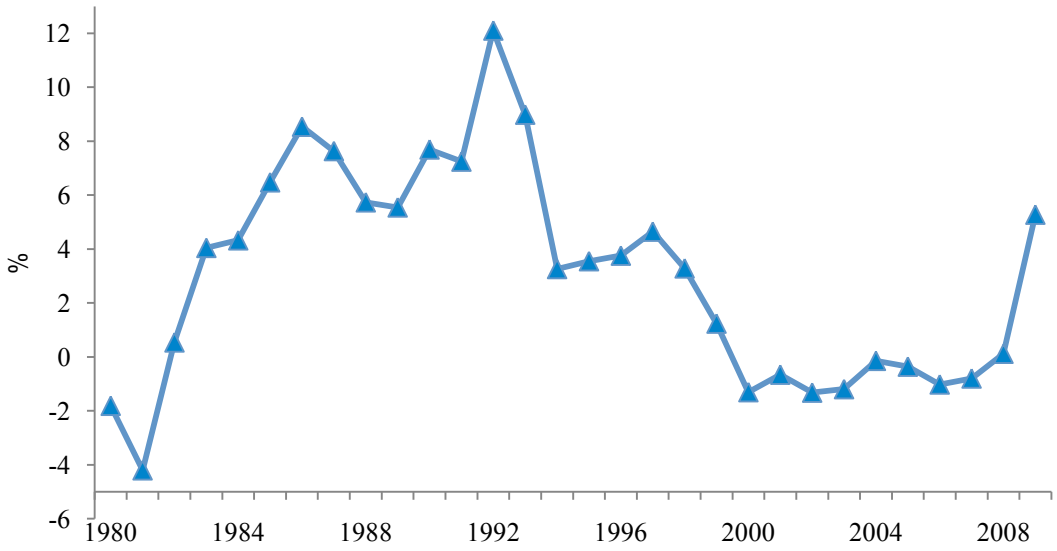
2.13 The current difficulties of the Irish banks – whether in terms of liquidity or solvency – are directly attributable to their over-lending for land and property investment, much of it through heavy short-term wholesale foreign borrowing. Without the latter, the banks would not have been as vulnerable to the world-wide liquidity crisis which intensified throughout 2008. Had they been less heavily exposed to an overheated property market, the prospective loan-losses that began to spook investors would have been manageable. In short, although international pressures contributed to the timing, intensity and depth of the Irish banking crisis, the essential characteristic of the problem was domestic and classic.

2.14 The preconditions for increasing housing demand emerged gradually with the sustained export-led real economic expansion from 1988 and especially from 1994 onwards. But the sharp fall in nominal and real interest rates in the months running-up[17] to EMU entry really triggered the housing price surge. Average realised short-term wholesale real interest rates fell from about 7 per cent in the decade after 1983 (and about 3 per cent in the 1990s after the collapse of the narrow-band ERM) to negative territory as EMU began (Chart 2.1). Rates on bank loans followed suit.

2.15 This combination of higher population, higher income and lower actual and especially prospective mortgage interest rates provided a straightforward upward shift in the willingness and ability to pay for housing. But property prices developed their own momentum and overshot equilibrium levels. In effect, purchasers increasingly built in an expected continuation in the increase of the relative price of housing.

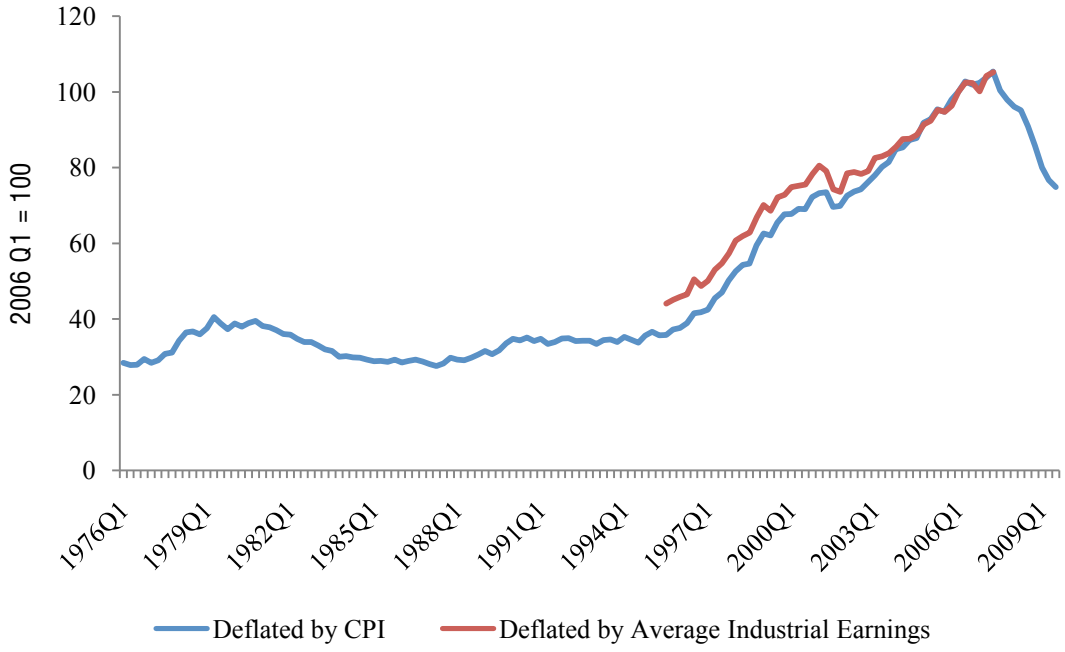
[17] Fearing excessively rapid economic growth, the Central Bank worked to maintain interest rates high for as long as possible before the euro came in; but from September 1998 Irish short-term rates began to converge quickly towards DM levels.

Chart 2.1: Interbank Interest Rate Adjusted for Inflation, 1980-2008



Source: CBFSAI

Chart 2.2: Real House Prices, Q1 1976-Q3 2009

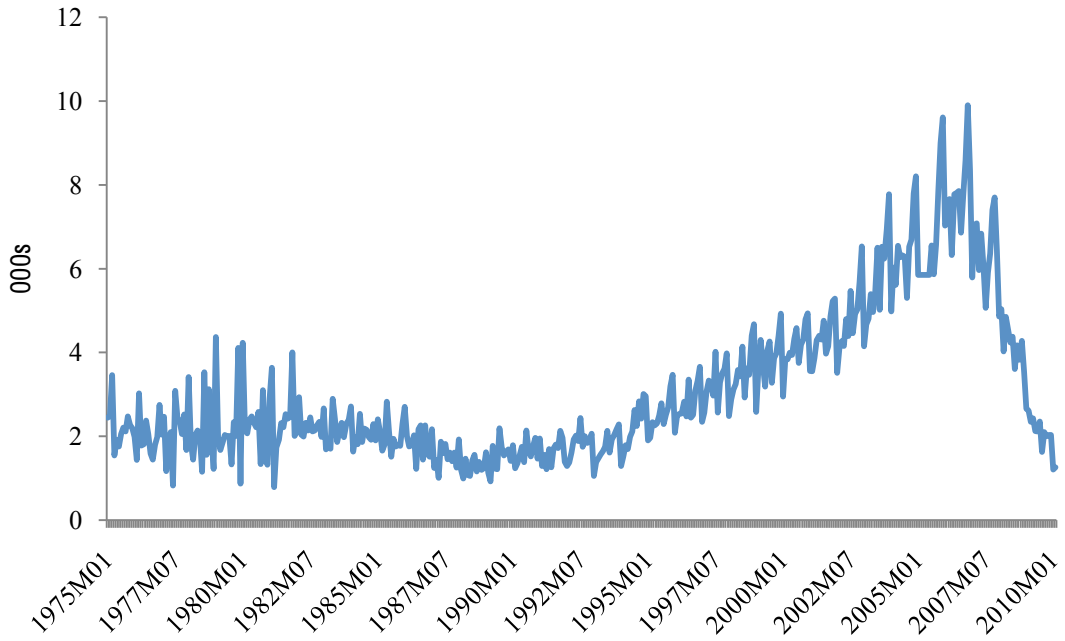


Source: Department of Environment, CSO and CBFSAI calculations.

2.16 Real residential property prices jumped to almost four times their historic norm (Chart 2.2), and the bubble also involved a sharp increase in construction and housing well beyond population needs.[18] The share of the (growing) workforce engaged in construction rose from about 7 per cent in the early and mid-1990s to over 13 per cent by 2007, before falling back to about 6 to 7 per cent by 2010 (Charts 2.3 and 2.4).

2.17 Even if lower interest rates from 1998 meant a major increase in housing affordability, the three-fold increase in average real property prices 1994 to 2006 was the highest in any advanced economy in recent times and, long before it peaked, looked unsustainable to most commentators (Honohan, 2009). Still, many hoped for a "soft landing". A significant downward property price adjustment could have been manageable for the banks if they had taken adequate precautionary measures. Whether the economy could make the necessary adjustment away from construction, without a significant rise in unemployment, was a key question.

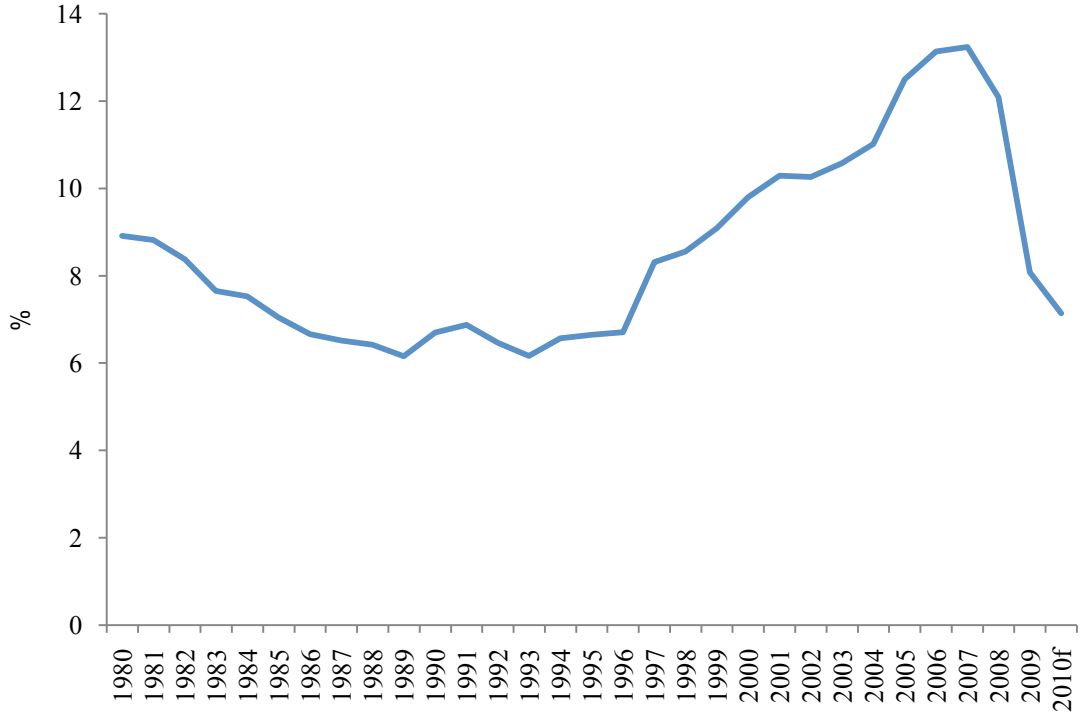
Chart 2.3: House Completions (Monthly), 1975-2010



Source: Department of Environment

[18] According to the 2006 census, some 15 per cent of the housing stock stood vacant, mostly reflecting speculative purchases (less than 3 per cent was accounted for by holiday homes)

Chart 2.4: Construction Share of Total Employment, 1980-2010



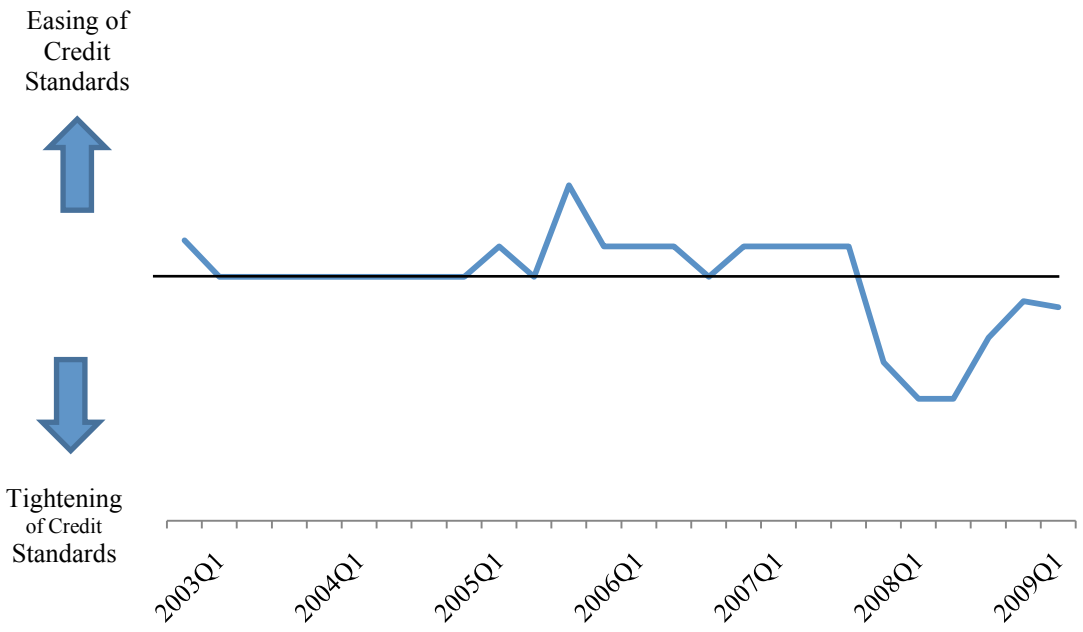
Source: ESRI Databank, CSO.

Section 4: The Role of the Banks

2.18 Banks had not been central to the financing of the export-led Celtic Tiger period and do not appear to have played a leading role in the early phase of the property bubble[19]. However, the four last years of the boom, from late 2003 onwards, were clearly bank-led, as new entrants and incumbents competed aggressively, stimulating demand with innovations such as 100 per cent LTV mortgages, increasingly offered to middle-income borrowers, including first-time buyers; mortgage brokers, some of whom reportedly paid too little regard to the real creditworthiness of the borrower, started to play a more prominent role. Banks were certainly not tightening credit conditions as the average LTV ratio loan rose. Overall, despite the traditional nature of lending during the period while prices rose, there was a distinct decline in loan appraisal quality for residential mortgages.

[19] As the ECB survey of bank lending conditions (Chart 2.5) starts only in 2003, disentangling supply and demand for credit in prior years is not straightforward

Chart 2.5: Credit Supply Conditions for House Purchase Loans
(Change from Previous Quarter)

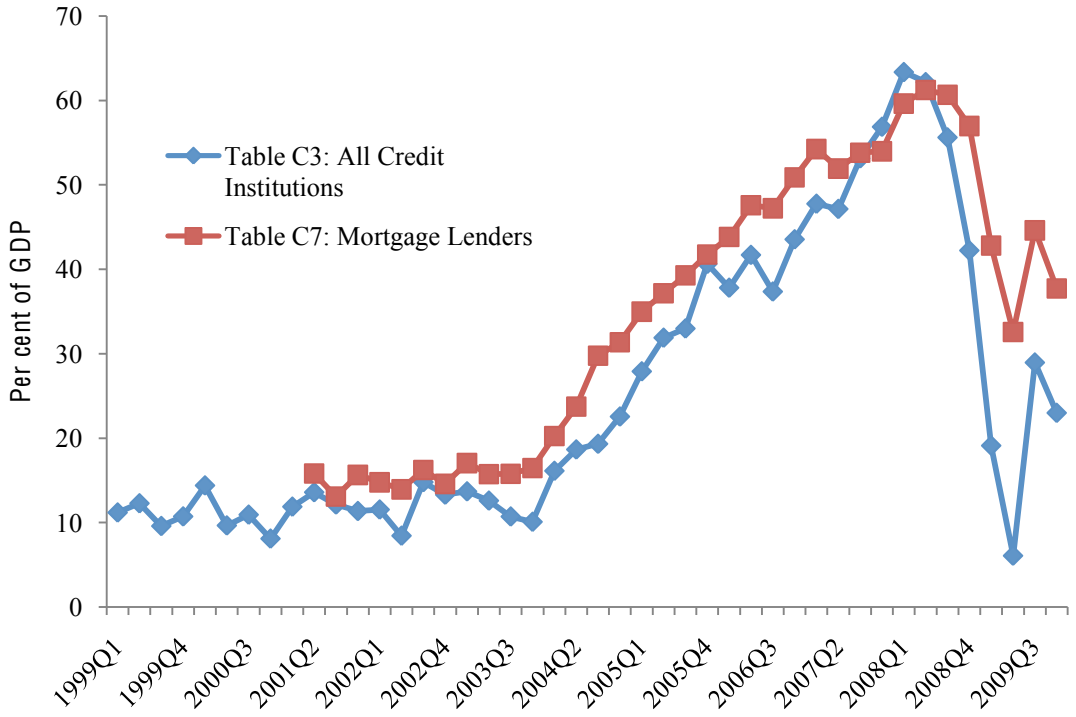


Source: CBFSAI

2.19 Lending to property developers also soared and much of it turned out to be unrecoverable thus proving to be the major weakness of the banks. Complicated cross-collateralisation meant that banks were much more exposed than they seem to have realised. And although some of the property collaterals were located in several foreign locations vulnerability to a correlated downturn in the different markets meant that banks would have needed a greater capital buffer to protect against a possible property crash.

2.20 At end-2003, net indebtedness of Irish banks to the rest of the world was just 10 per cent of GDP; by early 2008 borrowing, mainly for property, had jumped to over 60 per cent of GDP (Chart 2.6). Moreover, the share of bank assets in property-related lending grew from less than 40 per cent before 2002 to over 60 per cent by 2006.

Chart 2.6: Stock of Net Borrowing of Irish Resident Credit Institutions from Abroad, 1999Q1 to 2009Q4



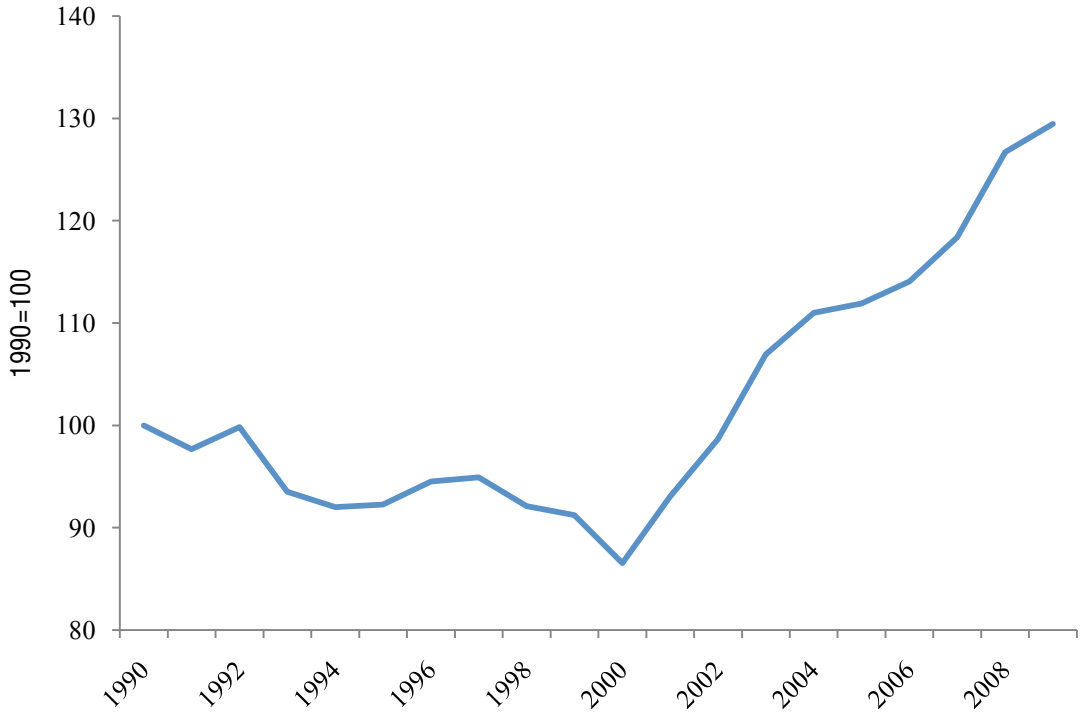
Source: Table C3, 7 of the Central Bank Monthly Statistics, and the CSO's Quarterly National Accounts.
Note: GDP are annualised from quarterly data.

2.21 Competitive pressure on the leading banks to protect their market share was driven especially by the unprecedentedly rapid expansion of one bank, Anglo Irish (whose market share soared from 3 per cent to 18 per cent in a decade, growing its loan portfolio at an annual average rate of 36 per cent). Foreign controlled banks, especially the local subsidiary of HBOS, also contributed to increased competition.

Section 5: Fiscal Policy and Competitiveness

2.22 The emergence of macroeconomic vulnerabilities during the bubble period was reflected in a deterioration of wage competitiveness and underlying fiscal revenue and expenditure policies (ESRI, 2005). From 1986 to 2000, wage restraint, attributable to the centralised pay negotiations, as well as the high initial level of unemployment and the dampening impact of immigration, had helped generate and sustain full employment. But after 2000, influenced by the strong boom-fuelled labour market, wage competitiveness deteriorated (Chart 2.7). By 2008, hourly wage rates had raced ahead of those of main

Chart 2.7: Relative Hourly Earnings (Manufacturing) Ireland -v- Main Trading Partners, 1990-2010



Source: CBFSAI

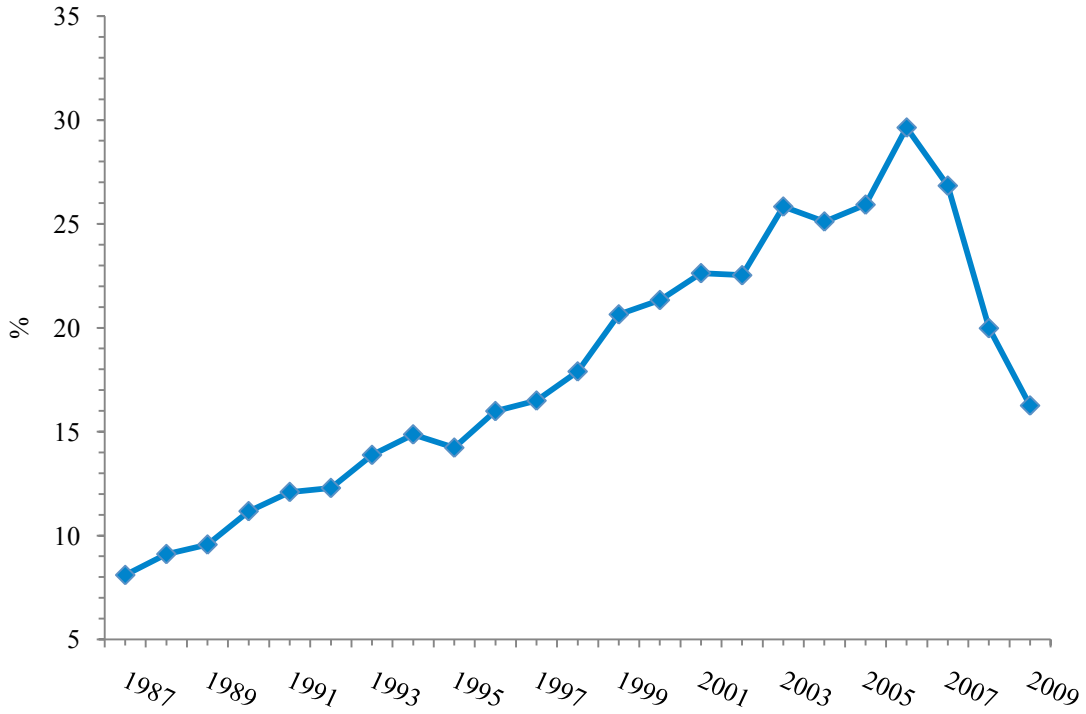
trading partner countries. Masked by the construction boom, this loss of wage competitiveness was certain to affect employment expansion sooner or later.[20]

2.23 Although Ireland's public debt level immediately prior to the crisis was low, the fiscal deficit and public sector borrowing surged quickly with the onset of the crisis. This was partly attributable to a rise in Government spending in GDP (after 2004) which became embedded in the system. The expenditure boost came at a period when elements such as the cost of unemployment payments was driving other cyclically-related spending down. However, in light of soaring tax revenues at the time, Government decided to increase autonomous spending particularly on public sector pay. But the main cause of the borrowing surge was the collapse in tax revenues in 2008-09 which appears to have been the most pronounced of virtually any country during the current downturn.

[20] Public sector workers, who had on average maintained a significant average wage premium relative to private sector workers during the Celtic Tiger period, seem to have stretched that premium in the years after 2003 (cf. Boyle et al., 2004; Kelly et al., 2008).

2.24 Much of the reason for the revenue collapse lies in the systematic shift over the previous two decades away from stable and reliable sources such as personal income tax, VAT and excises towards cyclically sensitive taxes. Revenue became increasingly dependent on corporation tax, stamp duties and capital gains tax (in that order); the contribution of these taxes to total tax revenues rose steadily from about 8 per cent in 1987 to 30 per cent in 2006 before falling to 27 per cent in 2007 and just 20 per cent in 2008 (Chart 2.8).

Chart 2.8: Cyclical Taxes as % of Total 1987 to 2009
(Corporation Tax, Capital Gains Tax and Stamp Duties)

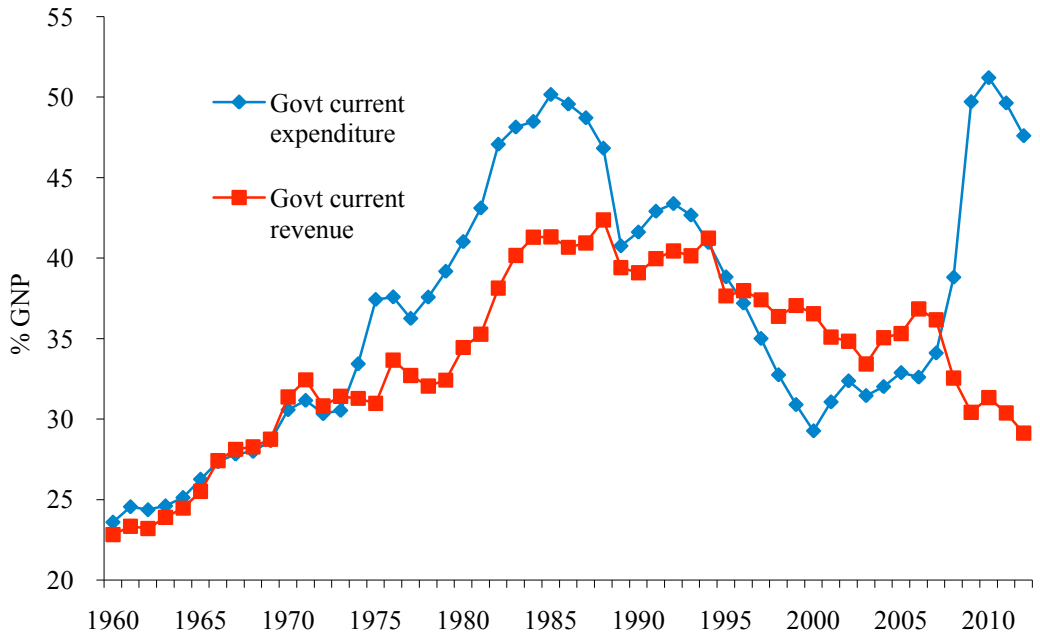


Source: Department of Finance, CBFSAI Calculations.

2.25 The steady growth in revenue from the above "fair weather" taxes during the two decades from 1988 – with only two brief hesitations in 1993 and 2001-02 – created a false sense of security as to their sustainability and induced policy makers to take advantage by narrowing the base of the personal income tax and lowering rates. The latter did help buy wage restraint but left the budget seriously exposed to a downturn. Had the tax structure been less cyclically sensitive, the fall in revenue in 2008 would have been much lower.

2.26 Government spending doubled in real terms between 1995 and 2007, rising at an annual average rate of 6 per cent. With the economy growing at an even faster rate, this implied a generally falling or stable expenditure ratio of expenditure to GNP until 2003. But thereafter the ratio rose, especially after output growth began to slow in 2007. And, in a final twist, real expenditure rose by over 11 per cent in both 2007 and 2008, an unfortunate late burst of spending which boosted the underlying deficit at almost the worst possible time.

Chart 2.9: Current Government Expenditure and Revenue, 1960-2010



Source: Department of Finance, CBFSAI calculations.

2.27 Throughout this period, the Government made extensive use of taxation incentives aimed at the construction sector.[21] The rates of stamp duties, which were high, were lowered several times in recent years (in 2001, 2002, 2003, 2005, and 2007), sometimes with the aim of improving the affordability of housing to first time buyers (as was the case with the Bacon initiatives 1998-2000). In addition, different classes of construction investment have attracted sizeable income tax concessions extending over long periods. At the height of the boom, in 2004-06, schemes existed for urban renewal, multi-storey car parks, student accommodation, buildings used for third level

[21] The effect of taxation on investment in construction is a complex subject [see studies by Barham (2004) Indecon (2006), Goodbody (2005), Van den Noord (2005) and Rae and van den Noord (2006)].

educational purposes, hotels and holiday camps, holiday cottages, rural and urban renewal, park and ride facilities, "living over the shop", nursing homes, private hospitals and convalescent facilities, sports injury clinics and childcare facilities. After some transitional arrangements, most of these incentives were abolished by 31 July 2008, after the expiration date of the schemes had earlier been extended on several occasions during 2000-08.[22,23]

2.28 The ceiling on the income tax deductibility of mortgage interest for owner-occupiers was increased in 2000, 2003, 2007 and 2008. By 2006 Ireland was one of only four OECD countries which allowed income tax deductibility while not taxing imputed rental income or capital gains for owner-occupiers. Furthermore, no residential property tax existed. Still, the estimated tax bias in favour of owner-occupation was only the fifth highest in the EU15 countries (Rae and Van den Noord, 2006). For investors, after 2001 deductibility was limited only by the investor's rental income.

2.29 The above tax policy elements of the tax code certainly influenced the extent of construction activity and the level of land and property prices. In theory they might just have shifted the composition of Irish wealth in favour of construction and not necessarily have caused in themselves unsound borrowing or lending and defaults. However, studies of some of the schemes suggest that they became associated with over-building and high vacancy rates – phenomenon which are very evident today.

Section 6: Disentangling the Effect of Lehman Brothers

2.30 It would be a significant mistake to suppose that the steep economic downturn that has been experienced since 2007 is wholly due to the working out and correction of underlying domestic imbalances that have been described. After all, there has been a severe world-wide recession, the causes of which involve the correction of imbalances in the US, UK and elsewhere – excesses which have their own complexities not shared in the Irish case.

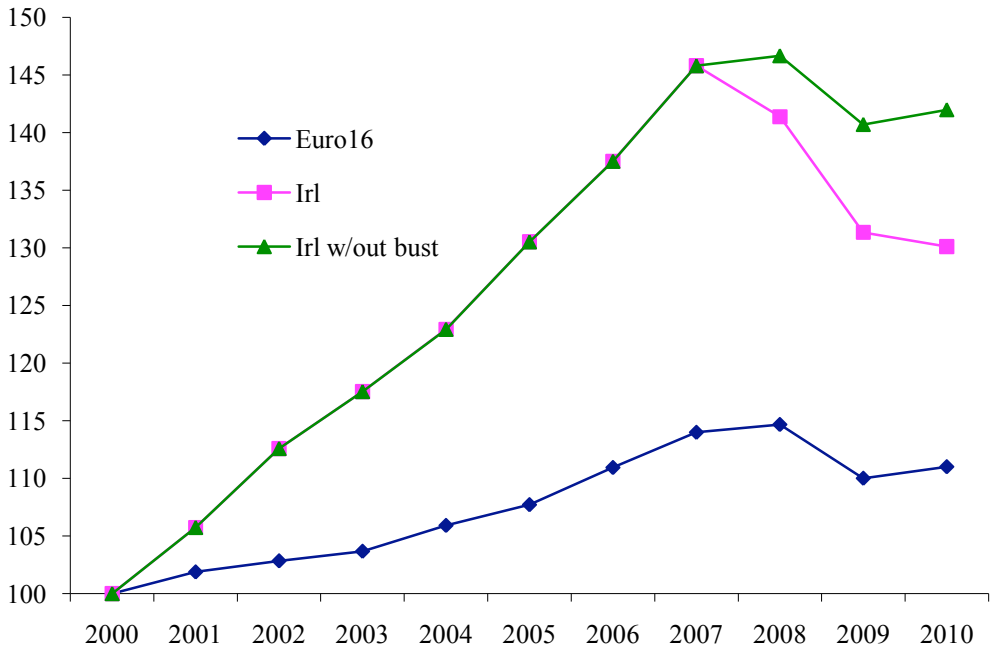
2.31 It is useful to consider more specifically what might have been the relative contribution of local factors to the Irish output loss. As a first approximation, Chart 2.10 compares

[22] Tax incentive schemes in the health sector were not abolished in 2008. However, these were later abolished in the Supplementary Budget 2009.

[23] For example, in the case of the Urban and Town Renewal Schemes, end-dates of 31 December 2002, 31 December 2004 and 31 July 2006, had previously been specified.

the output path of the euro area countries as a whole to that of Ireland during the 2000s. As a very crude exercise the Chart also shows what the path of GDP in Ireland might have been had it followed the actual euro-wide trend which includes the impact of the global downturn – from 2007 onwards. The difference between this projected path and the actual path – which over a three year period is equivalent to almost a fifth of 2007 GDP – can be viewed as a not unrealistic approximation of the output loss incurred by Ireland due to the need to correct Irish-specific imbalances. Assuming GDP in Ireland in 2010 turns out to about 12 per cent below that of 2007, about three quarters of this could be seen as attributable to local factors.

Chart 2.10: GDP Ireland and Euro Area (Actual and Simulated), 2000-2010



2.32 If it is further assumed that this part of the output adjustment was inevitable – i.e., even without the world-wide downturn triggered by Lehman Brothers – property prices would have had to fall disproportionately in any event, given how far they had been running ahead of GDP during the boom years. Moreover, prices had already started to fall well before Lehman Brothers – more than 18 months in the case of residential property and perhaps nine months in the case of commercial property. From this perspective, property prices were most likely to continue to fall in any case. Lehman Brothers was just the trigger for a more sudden and deeper fall as the economy had to adjust not only to the inevitable rebalancing of demand away from construction but also

to the decline in world demand. In sum, the argument that property prices would have remained much higher and for much longer had it not been for Lehman Brothers is not convincing.

CHAPTER 3: INSTITUTIONAL BACKGROUND

Section 1: Introduction

3.1 This Chapter describes the establishment in 2003 of the CBFSAI with its novel institutional arrangement, in which responsibilities were divided between the newly created Irish Financial Services Regulatory Authority (IFSRA, also known as the Financial Regulator, or FR) – operating under the overall umbrella of the CBFSAI – and what was thought of as the Central Bank (CB) proper.

3.2 Section 2 contains a brief review of the origin of the existing organisational structure of the CBFSAI.[24] Section 3 discusses the formal structure and assignment of responsibilities and powers between the components of the CBFSAI. Section 4 describes the working methods of the CBFSAI Board and the Authority of its constituent but autonomous part, the Irish Financial Services Regulatory Authority. Section 5 concludes.

Section 2: Origin of the CBFSAI

3.3 Against the background of public concern over a number of tax evasion and overcharging issues related to banking[25] and the then recent creation in the UK of an unitary financial regulator, the Financial Services Authority (FSA),[26] the Government decided in principle in October 1998 to consolidate prudential and consumer protection regulation of almost all types of financial firms in a single regulatory authority. The report of an Advisory Group chaired by Michael McDowell, SC, on how to implement this decision, was published in June, 1999. It envisaged, *inter alia*, not only the centralisation of building society, credit union and insurance regulation with that of banking, but also assigned, in addition to prudential regulation, consumer protection to

[24] On 19 June 2009 the Minister announced that a restructured Central Bank of Ireland would replace the CBFSAI. On 30 March 2010, the Minister for Finance published the Central Bank Reform Bill 2010 as the first stage in a three-stage legislative process. A second Bill to be published later in 2010 will enhance the Bank's supervisory, financial stability and consumer protection powers and a third Bill, scheduled for the autumn of 2010, will consolidate all central bank and financial services legislation.

[25] The Inquiry into the Operation of Deposit Interest Retention Tax (the DIRT Inquiry), conducted by the Dáil Committee of Public Accounts, found that certain bank customers were allowed, if not encouraged, to deposit funds in accounts held in concealed accounts for the express purpose of avoiding taxes due. There were also concerns in the late 1990s that certain banks had adopted a policy of breaching trust with their customers by increasing or loading rates of interest on overdrafts or loans, without informing customers of the change in terms.

[26] The move to a single regulator in the UK reflected the blurring of boundaries between different financial service providers following substantial deregulation of their lines of business.

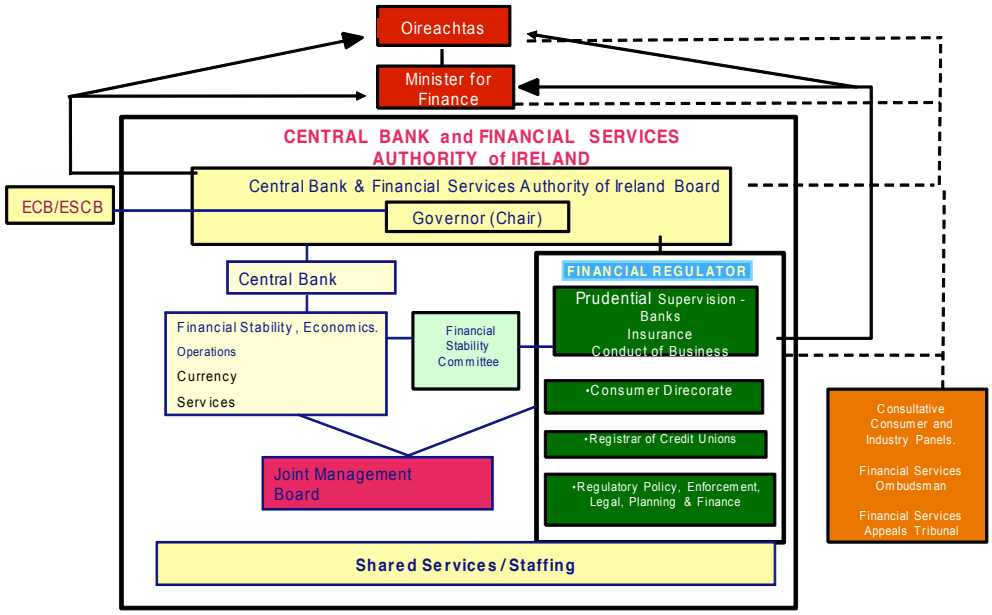
one agency. The newly-assigned importance of the consumer protection function was underlined by the proposed creation of the statutory position of Consumer Director within the Authority, whereas no corresponding position was proposed for prudential regulation.

3.4 While the McDowell Group recommended that the Single Regulatory Authority be a completely new, independent, organisation, the preferred choice of a minority of the Group (an Assistant Secretary in the Department of Finance and the then Deputy Director General of the Central Bank of Ireland) was to locate the Single Regulatory Authority as a new division within a restructured Central Bank, and with specified statutory functions for the head of division, who would report to the Governor only in respect of organisational (e.g., staffing, finance, etc.) issues. The minority argued *inter alia* that their model would provide for better continuity and accountability, while preserving what was already working well.

3.5 In the event, the Government adopted a compromise between the majority and minority positions. Under legislation enacted in 2003, the Irish Financial Services Regulatory Authority was established within the overall new structure of what was to be called the Central Bank and Financial Services Authority of Ireland. But IFSRA was not just a division of the CBFSAI. It had its own governing Authority, a majority of whose members would sit on the CBFSAI Board.

3.6 According to the 2003 Act the CBFSAI was an entity with one legal personality, but with three decision-making bodies (Box 3.1). IFSRA was a statutory body within the legal personality of the CBFSAI, and had powers vested in it to deal with prudential supervision and consumer protection. Under the legal framework, IFSRA was autonomous but not independent of the CBFSAI – it took all its decisions and actions legally in the name of the CBFSAI. IFSRA did not have a balance sheet or funds of its own which it would have required in order to have had the status of a separate legal identity. The arrangement was that resources and services were provided to the Financial Regulator by the CB and its relevant departments.

Box 3.1: Decision-Making Bodies of CBFSAI



The 2003 legislation produced quite a complex structure, as is conveyed by the above organisation chart from early 2009. However, the CBFSAI had just three main decision-making bodies:

- the Governor would be the decision-making body for European System of Central Banks (ESCB) related tasks – including financial stability issues;
- subject to the above provision, IFSRA, an autonomous but constituent part of the CBFSAI with its own Board (the Authority), Chairperson, Chief Executive and Consumer Director, would be responsible for licensing and prudential regulation of all financial service providers and for consumer protection across the sectors; and,
- the CBFSAI Board (chaired by the Governor) would be the decision-making body for remaining tasks, including the efficient and effective co-ordination of the constituent parts of the organisation as a whole and the exchange of information between them.

Section 3: Formal Structure

3.7 The division of responsibilities between the Governor, the CBFSAI and IFSRA was novel and contained the hazard of ambiguous lines of responsibility especially in the event of a systemic crisis.[27] However, a number of provisions helped guard against any conflict.

[27] This observation was made by Honohan (2002) at the time in comments on the legislation when it was introduced (cf. http://tech.groups.yahoo.com/group/financial_stability/message/161)

3.8 Licensing and prudential legislation was clearly to be the responsibility of IFSRA. However, in performing its functions, IFSRA had a duty to act in a manner consistent with the performance by the Governor and the Board of their CBFSAI functions (including the Governor's role in contributing to financial stability). If a matter relating to financial stability arose in connection with the performance and exercise by IFSRA of its functions or powers, it was required to consult the Governor on the matter and could only act in relation to the issue with the Governor's agreement. Thus, as outlined in Chapter 7, in December 2006, the Governor's approval for changes in required capital ratios was sought (and given). One of the statutory objectives of the CBFSAI was to promote the development of the financial services industry in Ireland (but in such a way as not to affect its objective of contributing to the stability of the financial system). These two aspects, as described in Chapter 7, did give rise to some conflict.

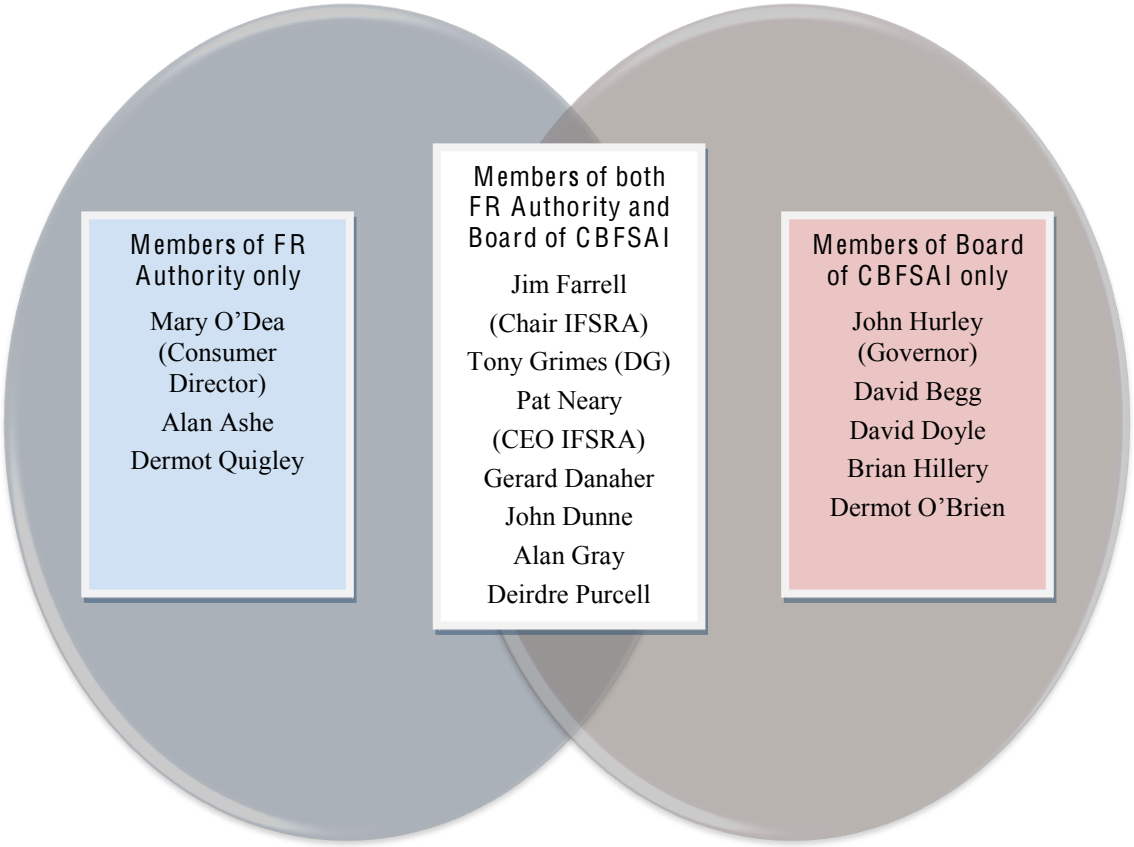
3.9 The Governor was also given powers to authorise a CBFSAI employee to investigate the business, and carry out on-site inspections, of licensed credit institutions, building societies, trustee savings banks, approved stock exchanges, authorised investment businesses and authorised collective investment schemes. In addition, the Governor and the CBFSAI Board, with respect to their respective functions, could issue guidelines to IFSRA – which would have to be published officially – as to the policies and principles that the Financial Regulator (FR) was required to implement in its performance of CBFSAI functions. These powers were not, however, used in the period under consideration.

3.10 These provisions for close involvement of the central banking functions in supervision matters – described by the Minister for Finance in his Second Stage speech as intended to ensure that financial stability issues and European System of Central Banks (ESCB) tasks were dealt with in a coordinated fashion – were included at the suggestion of the European Central Bank (ECB) which regarded them as fundamental and encouraged that they "should be made the most of in practice." (Doherty and Lenihan, 2008).

3.11 Overall cooperation between the CBFSAI and the FR in practice was underpinned by a 2003 Memorandum of Understanding (MoU) agreed between the two entities. The MoU (reproduced as Annex 2) delineated the respective roles of the two entities in the area of financial stability, as well as aspects regarding data and information exchange, crisis management, and consultation on policy changes regarding financial stability

matters. The MoU sets out the shared understanding that the CBFSAI's responsibilities included "overview of the domestic financial system as a whole" and "analysis of the micro-prudential – where appropriate – as well as macro-prudential health of the financial sector"; while the responsibilities of IFSRA included the "prudential supervision of banks" and "providing advice, information and assistance in relation to the Bank's functions to the Bank's Board and the Governor" (CBFSAI, 2003).

Chart 3.1: CBFSAI Board and FR Authority, September 2008



Section 4: The Work of the CBFSAI Board and Authority

3.12 This section considers the linkages in practice between the Board of the CBFSAI and the Regulatory Authority. The structure of CBFSAI Board and Authority membership had some noteworthy features (Chart 3.1) which shows the composition at September 2008.[28] Thus the Governor was not a member of the Authority, even though he did

[28] Note that Tony Grimes' predecessor as Director General, Liam Barron, had not been a member of the FR Authority.

retain certain regulatory functions intended to ensure that financial stability issues and ESCB tasks were dealt with in a coordinated fashion.

3.13 Specifically, responsibility for the management of the Central Bank was vested in the Board comprising the Governor, the Director General of the Central Bank, the Chairperson and the Chief Executive of IFSRA, the Secretary General of the Department of Finance *ex-officio*, and seven non-executive Directors appointed by the Minister for Finance. Of these seven Directors, four had to be members of the Authority. The Authority comprised the Chair, the Chief Executive, the Consumer Director and seven non-executive Directors (Chart 3.1). Non-executive Board and Authority members were appointed by the Minister for Finance.

3.14 The turnover of non-executive Directors has been relatively low, a feature which helped consolidate expertise and build experience. The independent status of Board members was described by the first Governor, J.J. Brennan, as follows:

> "It should be remembered on this connection that members of the board of the Central Bank however selected should not consider themselves as acting at that Board in any representative capacity but should place their knowledge and qualifications at the disposal of the Board with a view to reaching the best conclusions from a currency standpoint in the public interest without any regard to any particular interests, official or otherwise, with which they may have outside association." [29]

3.15 With no specific qualifications required by legislation, the background of non-executive CBFSAI Board and Authority members reflected a variety of experiences including, in many cases, prior involvement with financial, economic and related fields[30]. Although it did therefore include specialists and experts in relevant fields, it would be fair to say that, in practice, the composition of the CBFSAI Board and Authority is closer to the generalist model of a central bank board than to the expert model. (Both models are found across Europe.) It may not be out of place to observe that this type of board, whose members are drawn from a cross-section of professional and public sector groups, may be less likely to detect and head off a macroeconomic bubble which is

[29] Cited in Moynihan (1975).

[30] The question of criteria relating to Board membership has been dealt with differently in other central banks. For example, in the case of the ECB, Article 11.2 of the Statute specifies that individuals selected for membership of the Executive Board must be "persons of recognised standing and professional experience in monetary or banking matters". In the Central Bank Reform Bill (Section 24) currently before the Oireachtas, there is also a provision that the Minister for Finance "may appoint a person as a member of the Commission if and only if the Minister is of the opinion that that person has relevant knowledge of accountancy, banking, consumer interests, corporate governance, economics, financial regulation, financial services, law or social policy".

believed in by peers and which is generating very considerable prosperity throughout society. If an effective challenge against such a consensus were to emerge, it might well have to come from persons with more specialised skills in a better position to identify micro and macro imbalances and urge a contrarian stance that remedial measures were needed.[31] That, however, is not to prejudge the relative merits in general of the generalist and expert models – a group of experts that are out of touch with the broader society are prone to other types of error.

3.16 The practice of the CBFSAI Board has generally been to delegate powers to the Governor to exercise and perform all functions, powers and duties of the Central Bank with the exception of those powers which would either not be possible or appropriate to delegate. As with the CBFSAI Board, the Authority delegated most powers to the Chief Executive and, in her area of competence, to the Consumer Director.

3.17 The minutes of both CBFSAI Board and Authority meetings typically record only the broad consensus on the issues discussed and any decisions taken. They do not describe in any detail the frequent debates and often significant differences of opinion that, according to Board and Authority members interviewed for this Report, existed on some issues, especially the possible risks to financial stability.

3.18 A reading of the minutes confirms that discussions at CBFSAI Board meetings often covered broad themes such as recent international monetary and financial developments, and macroeconomic developments in Ireland and the euro area. The CBFSAI Board also discussed such matters as the Central Bank's own investment policy as well as general management and budgetary issues. In addition, the CBFSAI Board received regulatory updates from the Authority providing the latest information on the main issues they faced.

3.19 The Authority's minutes reveal a wide range of specific issues on its agenda. Initially, issues related to the establishment of IFSRA tended to predominate. Subsequently the agenda assumed a degree of stability with particular prominence given to the regular Chief Executive's Report which included both prudential and consumer protection issues. A prudential pack containing detailed tables on a range of (historical and current) prudential indicators was provided to the Authority on a quarterly basis. This

[31] However, even an "expert model" board could mis-diagnose events, for example, as occurred with the FSA in the UK.

pack contained data on the aggregate banking system as well as on selected individual institutions. It appears, however, that these data were not discussed extensively, apart from occasional specific questions relating to individual institutions. Several members of the Authority have suggested that discussion of a range of relatively minor issues may have been at the cost of more system-wide issues.

3.20 Unsurprisingly, the Authority paid particular attention in the early years to issues relating to consumer matters[32] which were considered by many as being of the highest priority. However, it would be wrong to suppose that over the period as a whole the Authority devoted most of its time to consumer protection issues; this is not borne out by an examination of the agendas of the Authority. Furthermore, although the senior staff member in charge of prudential regulation – who had equal rank in the organisation with the Consumer Director – was not a statutory member of the Authority (unlike the Consumer Director), this seemingly anomalous position was addressed by the arrangement (which was formally notified by the Chair to the Minister for Finance) that he attend all Authority meetings as a matter of practice.

3.21 Since there was some overlap between Authority and CBFSAI Board membership but in one direction only (Authority to CBFSAI Board), issues within the remit of the Authority that fell to be considered also at CBFSAI Board meetings would normally have been discussed by the overlapping members beforehand; this facilitated these members voting as a block on matters of importance to the Authority. The most contentious of these related to the cost and quality of available resources and, in particular, the provision of information technology.

3.22 Documents were shared smoothly between the Authority and CBFSAI Board, and there has been no suggestion of any reluctance to share information. Relevant Authority papers including the Chief Executive's Report and the prudential pack were provided to the CBFSAI Board. Thus, while it was the Authority that took the lead in deciding on issues relating to financial regulation, under these arrangements, any of the issues, especially if they might have implications for financial stability, could have been raised at the CBFSAI Board. However, this did not happen a great deal before 2008, apart

[32] With the exception of the 2008 Annual Report, all the previous reports and the strategy documents submitted to the Dáil emphasised the primary role of the Financial Regulator in the consumer protection area.

from the joint meetings of the CBFSAI Board and the Authority that were held to consider the draft Financial Stability Reports (discussed in Chapter 6).

Section 5: Conclusions

3.23 The Act of 2003 created a complex structure for the Central Bank and the Financial Regulator which could have exposed the system to the risk of some ambiguity in the assignment of responsibilities. This risk was mitigated by the requirements for consultation and communication and by assigning clearly overriding powers in the case of a policy conflict between the different constituent decision-making bodies – though no such conflict arose in practice. The newly established Financial Regulator, was by all accounts, determined to make its mark, notably in the consumer protection field. It was also determined to achieve a degree of operational autonomy which did result in friction over the cost and quality of resources provided to the FR. Such friction may have had the knock-on effect of imperceptibly reducing the quality of operational interaction and dialogue between FR staff and the rest of the CBFSAI, although complaints have not been raised about obstacles to the flow of information. Though few would now defend the institutional structure invented for the organisation in 2003, it would be hard to show that its complexity materially contributed to the major failures that occurred.

CHAPTER 4: GOALS AND PHILOSOPY OF REGULATION

Section 1: Introduction

4.1 This Chapter reviews the goals and philosophy of regulation of credit institutions (banks and building societies) employed by the FR since its inception in 2003, including the extent to which the implementation of the FR's philosophy may have tended to accommodate industry interests. The general approach of the FR did not mark a change from that of the CB which, prior to the creation of the FR, had had statutory responsibility for the supervision of banks. Rather, the approach of the FR was, in essence, a continuation of the custom and practice of the CB. This is not altogether surprising since the Banking Supervision Department (BSD) of the CB was transferred to the FR more or less fully intact. Furthermore, the decision to create the FR was not based on any perceived deficiencies in micro-prudential supervision of banks, though it did reflect a perceived need to strengthen consumer protection.[33]

4.2 The articulation of existing micro-prudential regulatory practice inherited from the Central Bank by the Financial Regulator was summarised as "principles-based" regulation. The term is not very clearly defined nor unambiguous in international discussion of prudential regulation, and the dichotomy frequently drawn with a "rules-based" approach is often overstated. Of course, the regulatory regime was more than just a statement of principles. There were also regulations, rules and codes which were intended to govern the behaviour of banks and building societies. But the underlying idea was that the prudential regulator would not be prescriptive in terms of product design, pricing and the specific risk decisions adopted by a firm, as long as that firm had a robust governance structure, together with reliable oversight and control systems, especially systems for managing risks. Under this approach, the principles and associated regulations, rules and codes set out what is expected from a regulated firm, breaches of which may lead to enforcement action by the FR. However, the FR's preferred approach to enforcement was to seek voluntary compliance with legislation, codes and rules.

[33] This is reflected in the fact that the mission statement of the FR puts consumer issues first – 'To help consumers make informed financial decisions in a safe and fair market and to foster sound dynamic financial institutions in Ireland, thereby contributing to financial stability.'

4.3 Section 2 presents the objectives, rationale and content of the FR's approach to regulation. As understood by the FR, "principles-based" regulation relied very heavily on making sure that appropriate governance structures and systems were in place in banks and building societies[34]. The presumption was that this was the key to sound prudential decisions.[35] To this extent, the underlying philosophy was oriented towards trusting a properly governed firm; it was potentially only a short step from that trust to the emergence of a somewhat diffident attitude on the part of the regulators so far as challenging the decisions of firms was concerned. Given also that, as mentioned above, legislation set as a statutory objective of CBFSAI the promotion of the financial services industry in Ireland, the situation was ripe for the emergence of a rather accommodating stance *vis-a-vis* credit institutions. Indeed, early indications of such an approach can be seen from the experience with respect to efforts to codify principles and establish appropriate enforcement procedures.

4.4 Section 3 reviews the FR's efforts to implement/codify three significant components of governance:

- Directors' Compliance Statements;
- Fit and Proper Requirements; and,
- Corporate Governance Code.

Success was not achieved with respect to Directors' Compliance Statements or the Corporate Governance Code.

4.5 Section 4 reviews the enforcement policy of the FR. A successful regulatory regime needs not only to specify what is and what is not expected from credit institutions in terms of behaviour, structures and procedures but also to create and employ mechanisms to ensure that breaches are dealt with appropriately. A range of mechanisms may be employed from moral suasion to court action to amending the licence of a bank or building society. Section 5 concludes.

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[34] To that extent, the alternative term "process-based" might be coined to capture the approach more accurately.

[35] This presumption parallels the credulous belief (critiqued by Turner, 2009) that financial markets have an effective self-regulating tendency.

Section 2: Objectives, Content and Rationale

- *Objectives*

4.6 The overall mission or objective of the Financial Regulator as consistently stated since 2003 was:

> "To help consumers make informed financial decisions in a safe and fair market and to foster sound dynamic institutions in Ireland, thereby contributing to financial stability."[36]

Within this overall objective are a series of high-level goals one of which (number two in fact) related to micro-prudential supervision:

> "Having a regulatory system that fosters safe and sound financial institutions while operating in a competitive and expanding market of high reputation."[37]

4.7 Consistent with this goal, six strategies are to be followed:

- Adopting a principles-based approach to regulation;
- Requiring financial service providers to assume their responsibilities;
- Making the best use of supervisory resources;
- Putting a comprehensive on-site review process in place;
- Implementing sector-specific initiatives; and
- Working in partnership with the Central Bank.[38]

Although principles-based regulation and supervision continues to be stressed in subsequent strategic plans and annual reports, there is some slight rewording of high-level goal two.[39]

- *Content*

4.8 There are many statements and restatements by the Chair of the Authority, the CEO of the FR and others defining principles-based regulation. A typical statement would be the following from the CEO:

> "We are committed to a principles-based approach to regulation. This is achieved by the boards and top management of financial institutions committing fully to a culture of integrity, competence and best practice. In turn, we will expect them to ensure that this culture flows throughout all levels of their organisations. It is also achieved by financial service

[36] See, for example, IFSRA (2004a, inside cover).
[37] See, for example, IFSRA (2004a, p. 13) where high level goal two is "We will set and monitor standards for the running of sound financial service providers and fair markets."
[38] IFSRA (2004a, p. 13).
[39] For example, FR (2007b, pp. 31-36)

> providers having compliance systems, controls and internal audit departments that have the standing and the powers to meet the standards of behaviour that we now expect of those we regulate. We set out those standards; they must invest in the system and staff to ensure those standards are met."[40]

The Chair of the Authority also pointed out that for the "principles based approach to work there must be mutual trust, between ourselves and industry and a shared aspiration to do our best together."[41]

4.9 The Financial Regulator eventually set out nine principles to reflect what the FR expected from the financial institutions (Box 4.1). They first appeared in the FR's Annual Report for 2006[42]. However, it appears that the nine principles were not the focus of any systematic checks, either desktop or on inspection; and, unlike the FR's principles for the protection of consumers, they were never incorporated into a unitary Code.[43] Hence breaches of the general principles for financial institutions were not subject to the Administrative Sanctions Procedure discussed below.

Box 4.1: The Authority's Principles for Financial Service Providers

1. Conduct their functions in a transparent and accountable manner.
2. Act with prudence and integrity and in the best interests of their customers at all times.
3. To maintain at all times sufficient financial resources to meet their commitments.
4. Have in place sound corporate governance structures.
5. Have oversight and reporting systems that allow board and management to monitor and control all operations.
6. Have in place internal controls that are adequate for the nature, scale and complexity of their operations.
7. Have risk management policies systems appropriate to the nature, scale and complexity of their operations.
8. Comply with any regulatory rules set down by the Financial Regulator in relation to, for example, solvency and capital adequacy, segregation of client funds, consumer protection codes.
9. When required, to produce accurate, complete and timely information.

Source: FR (2007a, p. 33).

[40] IFRSA (2004b, p. 4)
[41] Patterson (2007).
[42] They were subsequently repeated in the FR's Strategic Plan for 2008-2010 (FR, 2007b, p.19). In both the Annual Report and the Strategic Plan the nine principles were introduced as guiding the FR's approach to regulation.
[43] See FR (2006i) for the consumer principles embodied in the Consumer Protection Code. If the nine principles had been formally imposed on all firms in a general code, then the FR would have been committed to take responsibility for their supervision and enforcement. At the same time the code itself would send a strong signal to credit institutions concerning the importance that the FR attached to them in terms of prudential supervision.

4.10 The FR also noted that to assist financial "providers to become aware of their legal obligations and to clarify what we mean by 'principles led' we issued a number of regulatory rules and guidance notes ..." (FR, 2007a, p. 33).

4.11 Reference was made on occasion to the existence of rules in defining and discussing principles-based regulation. For example, the Authority's second strategic plan states:

> "We believe that a mainly principles-based supervisory system will deliver a good balance between having a competitive industry and requiring high entry standards for doing business. A principles-based approach, with technical rules applied as appropriate, encourages adherence to the spirit of sound regulatory standards, without being overly bureaucratic. This continues to represent the appropriate supervisory model for Ireland."[44]

Hence principles-based regulation referred not just to the principles but also to the various rules, codes and regulations that underpin financial regulation.

- Rationale

4.12 There was relatively little discussion of the merits of principles-based regulation compared to alternatives such as a rules-based approach. However, in 2005 the CEO of the FR stated that:

> "... the present Irish principles-based system mandates the broad regulatory framework within which we expect institutions to be in compliance. It sets out basic principles ... It is relatively flexible. ... It is also I would suggest, easier and cheaper to comply with. It is a model that has worked well in the Irish context.
>
> "An alternative is a rules-based system. Here detailed rules across the whole range of regulatory powers are set out. The rules set out clearly what must be done and, importantly, what will happen in the event that something is not done. This method implies a very legalistic approach. It suggests doing things right rather than doing the right thing. It allows no scope for interpretation. It is slow to react to change. It punishes the compliant equally with the non-compliant. It suggests a system that is more costly to comply with because of detailed reporting requirements. Is it better?"[45]

4.13 In the light of this rather one-sided characterisation of the two regulatory approaches, it is hardly surprising that the CEO answers in the negative. In support of that conclusion reference is made to the differing approaches to capital gains taxation in Canada and Hong Kong. In Canada much human ingenuity is spent in finding ways around the complex Canadian tax code, while in contrast, although it has no capital gains taxation,

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[44] FR (2006a, p. 12).
[45] O'Reilly (2005, pp. 4-5).

Hong Kong "prevents very effectively income shifting through the use of principles-based regulation, which quite simply states that current income and profits must not be converted deliberately into capital gains to avoid the payment of taxes."[46] In terms of enforcement a Hong Kong government agency watches over tax returns for violations. There are few violations because "business fully understands the principles and knows it does not pay to violate them."[47]

4.14 To a considerable extent, the rules-versus-principles debate presents a false dichotomy. As the tax examples offered by the FR suggest, relying solely on rules is a recipe for an arms race between any regulated entities determined to find ways through the rule book, and the Regulator's continual redrafting of the rules. Some aspects of safe and sound banking simply cannot be codified. There must be principles to back up the rule book. Any sensible model has both rules and principles. The more distinctive characteristic of the Irish FR's regulatory philosophy is rather the degree to which it deferred without much challenge to managerial decision-making in the regulated firms and relied on governance structures, and on verifying the status of formal or informal risk control procedures.

Section 3: Creating the Governance Architecture for Principles-Based Regulation: **Directors' Compliance Statements, Fit and Proper Requirements & a Corporate** Governance Code

4.15 A key element in principles-based regulation consists of putting in place a governance architecture to ensure that banks and building societies meet specific obligations required of them. This section reviews and assesses efforts by the FR to introduce three elements of this architecture: Directors' Compliance Statements; Fit and Proper Requirements; and Corporate Governance Code.

- Directors' Compliance Statements

4.16 One of the motivations for Directors' Compliance Statements was the Parliamentary Inquiry into DIRT (the DIRT Inquiry), which found serious, longstanding – occurring from 1986 to 1998 – misbehaviour by banks in facilitating tax evasion.[48] A number of recommendations were made by the DIRT Inquiry concerning the governance of

[46] *Ibid,* p. 5.
[47] *Ibid*, p. 5.
[48] All the material in this paragraph is taken from Dáil Eireann, Committee of Public Accounts (1999, Chapter 17).

financial institutions, in general, and Directors' Compliance Statements, in particular, as follows:[49]

- that the Single Regulator address ethics, professional standards and corporate governance in the provision of financial services in Ireland; and
- that detailed rules and requirements in relation to the duties of directors of financial institutions to be proposed for the Single Regulator.

More specifically, the Review Group on Auditing in July 2000[50] recommended that auditors make an annual positive statement to the Central Bank (Recommendation 15.2) and that "[T]he Central Bank should have the power to obtain reports from external auditors or other reporting accountants on financial institutions' accounting and other records, their internal control systems and other issues that, in the opinion of the Central Bank, are appropriate or necessary for regulatory purposes" (Recommendation 15.4). This was in addition to a general recommendation that directors of all companies should be required to report to shareholders on the company's compliance with its legal obligations (Recommendation 14.1).

4.17 The recommendations of the DIRT Inquiry and the Review Group on Auditing were reflected in Section 26 of the CBFSAI Act, 2004 that inserted a new Part IV into the Central Bank Act, 1997 concerning compliance statements and auditors' obligations to report matters to the Financial Regulator. This insertion allowed the FR to require a compliance statement from a regulated financial services provider whenever it considered it appropriate. It is important to note that this provision was commenced and is in force. However, it was not a requirement on a financial services provider to make an annual compliance statement; rather, it provided the FR with a discretionary power to seek such a statement.

4.18 The provision itself was viewed by some within the FR as more onerous than the corresponding Directors' Compliance Statements provided for in section 45 of the Companies (Auditing and Accounting) Act, 2003.[51] However, it did allow for

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[49] These recommendations were written prior to the establishment of the FR within the CB and not as a separate institution.

[50] The Review Group on Auditing was created on the foot of the DIRT Inquiry to examine the issues relating to self-regulation and auditor independence.

[51] One of the Review Group on Auditing's recommendations was that, "[D]irectors of a company be required to report on an annual basis to the shareholders on the company's compliance with its obligations under company law, taxation law and other relevant statutory or regulatory requirements" (Review Group on Auditing, 2000, p. 25). This was the basis for Section 45.

flexibility in its application and also permitted the FR to issue Guidelines on the nature of the compliance statement itself and on how managers of financial service providers are expected to exercise control in order to ensure compliance.

4.19 The Authority took a decision at its meeting on 26 November 2004 to prepare a consultation paper on the issue of Directors' Compliance Statements with the assumption that the new requirements would become operational from 1 January 2006. This decision was affirmed at the Authority meeting on 26 January 2005 when it was decided that a public consultation paper should be issued. This did not happen. Instead the FR conducted an informal pre-consultation process during October–November 2006 among selected participants.[52]

4.20 The draft consultation paper noted the importance of Directors' Compliance Statements in fostering,

> "... a culture of compliance by developing a greater sense of accountability and responsibility among company directors and by developing good systems of internal controls within companies so that directors could commit themselves to compliance in good faith. The Financial Regulator attaches great importance to the promotion of a good compliance culture within regulated entities and would wish that this good culture be set at Board of Directors level."[53]

The paper envisaged Directors' Compliance Statements playing a particularly important role as part of theme reviews, follow-up investigations into non-compliance and as a routine, generic periodic requirement to check the compliance culture.

4.21 The informal pre-consultation process involved the Industry and Consumer Panels of the FR as well as five industry representative bodies plus the Chair of AIB.[54] In briefing the Authority, the CEO noted that the resistance to this proposal from industry was very strong. There was a particular concern with the lack of a materiality threshold and it was also suggested that the relevant provisions were unconstitutional.

4.22 The CEO of the FR also reported to the Authority in November 2006 that the Department of Finance, following contacts with industry bodies regarding their concerns, requested that the Financial Regulator not proceed with the consultation

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[52] For details see FR (2007a, pp. 76-77). The Directors' Compliance Statements were part of the FR's Strategic Plan for 2007-2009 (FR, 2006b, p. 19), but was missing from the comparable table in the Strategic Plan for 2008-2010 (FR, 2007b, pp. 32-33).

[53] FR (2006e, paragraph 3.1).

[54] Financial Services Ireland, Irish Insurance Federation, Professional Insurance Brokers Association, Irish Brokers Association, and the Irish Association of Investment Managers.

process on the implementation of this requirement without engaging in further discussion with the Department. The Authority was also informed in December 2006 that the Minister for Finance felt that it was important to assess the competitiveness issue.

4.23 Following a discussion with the Department of Finance it was agreed by the FR not to implement the provision as set out in the Central Bank Act, 1997 and to examine the requirement for compliance statements from financial service providers in the context of the project to consolidate and modernise financial services legislation. The FR noted publicly that informal feedback had raised a number of concerns including:

a) the provision contained in the Central Bank Act, 1997 was inconsistent with the Company Law Review Group recommendations;

b) the implementation of the provision would damage competitiveness; and,

c) the application of the provision was not consistent with a principles-based approach.

4.24 However, the Authority could have considered adopting or adapting the revised proposals for Directors' Compliance Statements put forward in the *Report* of the Company Law Review Group.[55] These proposals were designed to "avoid excessive and costly over-regulation" that might damage competitiveness. Thus, the FR declined to make use of the discretion provided to it by legislation to enhance its principles-based approach to regulation in a way that might have achieved a better balance between the regulator and the firm.

4.25 More broadly, the point here is not really about whether Directors' Compliance Statements should have been introduced and if so what their content should have been. These are matters on which there can be reasonable disagreement. Rather it is to illustrate how an important FR initiative to codify its principles in one respect ran into the sand as the organisation deferred to industry pressure.

- Fit and Proper requirements

4.26 In the 2005 Joint Committee on Finance and the Public Service's ("Joint Committee") *Interim Report on the Policy of Commercial Banks concerning Customer Charges and*

[55] Following representations by businesses questioning the appropriateness, efficacy and proportionality of Section 45 of the Companies (Auditing and Accounting) Act, 2003, the Company Law Review Group was created, which included a representative of the FR. See Company Law Review Group (2005, p. 5, pp. 139-144) for details.

Interest Rates concern is expressed "at the number of incidents in recent years in which banks have failed to comply with acceptable standards of behaviour with respect to prudential consumer and fiscal obligations."[56] One of the recommendations of the Joint Committee was that the Financial Regulator's proposals with respect to fitness and propriety be adopted.

4.27 The fitness requirement meant that the "person appointed as a Director or Manager has the necessary qualifications and experience to perform the duties of that position;" propriety "requires that a person is honest, fair and ethical."[57] While fit and proper requirements already existed these varied by type of financial institution and in any event needed updating and modernising. Thus the Financial Regulator undertook to modernise the fit and proper requirements for Directors and Managers. Two consultation papers were issued (IFSRA, 2005a; FR, 2006c) before the new fit and proper requirements were issued effective 1 January 2007.[58]

4.28 The updating and modernisation of the fit and proper requirements were related to various inquiries that had been conducted earlier:

> "There has been a renewed emphasis on firms' good corporate governance and risk management both domestically and internationally in response to developments in recent years, including the outcome of domestic inquiries and tribunals and international financial scandals. Regulators have been reviewing and updating requirements in relation to corporate governance. Given the importance of the directors and managers of firms in that endeavour, it is timely to review and update fit and proper standards and procedures."[59]

It should be noted, however, that these fit and proper requirements do not apply to existing Directors and Managers, except when persons change their position.[60]

4.29 The FR did succeed in implementing a standardised approach to fitness and probity applications. This initiative did not, however, extend to placing the fitness and probity

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[56] Dáil Eireann, Joint Committee on Finance and the Public Service (2005, p. 9).
[57] FR (2008a, p. 1).
[58] See, FR (2007a, pp. 73-74) and FR (2008a; 2008b) for details of the questionnaire that has to be completed by those persons wishing to become a Director or Manager and an elaboration of the requirements, respectively.
[59] IFSRA (2005a, paragraph 3.3.2).
[60] Provisions in the Building Societies Act, 1989, as amended, give the power to the FR to remove a Director of a building society for not being a fit and proper person. See, for example, Section 17 of the Building Societies Act, 1989, as amended. This discussion is based on an internal FR memo dated 22 January 2004 prepared by the Regulatory Enforcement Department to the Prudential Director, titled, "Powers under the Building Societies Act, 1989 (as amended) ('the Act')." There was no similar explicit power with respect to banks.

reviews conducted by the FR on a statutory basis for all firms. This has now been proposed in the Central Bank Reform Bill, 2010.

- Corporate Governance Code

4.30 At the core of principles-based regulation is sound corporate governance, defined by the OECD as:

> "... a set of relationships between a company's management, its board, its shareholders, and other stakeholders. Corporate governance also provides the structure through which the objectives of the company are set, and the means of attaining these objectives and monitoring performance are determined, good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and shareholders and should facilitate effective monitoring, thereby encouraging firms to use resources more efficiently."[61]

Drawing on international best practice the FR prepared in 2005, a *Corporate Governance Guidelines for Credit Institutions and Insurance Undertakings* consultation paper.

4.31 This paper was intended to update and modernise the approach of the CB's 1995 *Licensing and Supervision Requirements and Standards for Credit Institutions* (CB, 1995), in relation to corporate governance and to apply that approach both to banks and insurance companies. The importance of the governance paper was set out in the relevant Board Paper considered by the Authority on 25 May 2005:

> "This paper is being issued at this time because of the significant developments in the area of corporate governance in recent years and to provide a required standard of corporate governance that is consistently applied to all credit institutions. It is also a key milestone in achieving the Financial Regulator's second high-level goal, as outlined in the Strategic Plan 2004-2006. It states, '*it is our task to ensure that at board and senior management level in each financial service provider, high-level requirements are in place which clearly outline the way business should be conducted and managed.*'"[62]

The recommendation was to proceed to consultation for a period of six months.

4.32 Before issuing the consultation paper for general comment, the FR decided to conduct a pre-consultation exercise. Twelve credit institutions were asked for their views. The results of this informal consultation exercise were presented to the Authority on 15 September 2005. The relevant Board Paper noted that International Financial Services

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[61] As quoted in FR (2006d, pp. 5-6).
[62] IFRSA (2005b, p. 2). Emphasis in the original.

Centre (IFSC) based credit institutions had a more favourable view than domestic credit institutions. It recommended that the consultation paper be revised to take into account comments received and that a "final amended document ... will be submitted to the Board in advance of formal consultation."[63]

4.33 The Authority decided on 15 September 2005 to "delay the formal issuing of the consultation paper." There was further pre-consultation with representative bodies for insurance and banking in late 2006.[64] There is no paper presented to the Authority concerning the final disposition of the Corporate Governance Code. However, an executive decision was taken in early 2007 to delay the corporate governance code for credit institutions due to the development of organisational requirements arising from recent EU-wide discussions that might have needed to have been incorporated into any guidelines. In contrast a consultation paper was released on corporate governance for reinsurance,[65] also following a period of pre-consultation, and a final paper issued dated December 2007 set out "how Corporate Governance will be dealt with in practice between individual reinsurance undertakings and the Financial Regulator" (FR, 2007c, p. 2).[66]

- Limited success

4.34 Two important elements of the architecture of principles-based regulation were not implemented despite strong initial support from both the Authority and the senior staff of the FR. One of the reasons why one of the three initiatives was abandoned related to competiveness concerns. While such concerns were part of the mandate of the Authority, they were given too much weight in the decision not to proceed with the introduction of these key features.

Section 4: Enforcement

4.35 An essential part of any regulatory regime is an enforcement strategy to ensure compliance with the principles rules, regulations and codes. There would appear to be no *a priori* universally applicable enforcement strategy consistent with principles-based

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[63] IFSRA (2005c, Section 3).

[64] The Authority was informed of this in the Chief Executive's Report. In a letter dated 22 December 2006 one of these representative bodies called for a "fundamental rethink in the approach taken in the paper."

[65] FR (2006f).

[66] The structure of the Corporate Governance Code for reinsurance and that for credit institutions were similar, apart from some obvious differences, reflecting the scope of the institutions covered by the respective Code.

regulation. The UK Financial Services Authority, for example, in considering enforcement envisaged that breaches of principles would lead to it aggressively pursuing cases.[67] Two broad approaches to enforcement are considered: a continuation of the strategy inherited by the FR from the CB; and an alternative more hard-headed aggressive approach. The underlying assumptions implicit in each of these models are reviewed before assessing the enforcement model that was actually selected by the FR.

- The status quo: Walk softly and carry no stick

4.36 The option inherited by the FR saw enforcement largely as a problem solving exercise between the FR and the bank or building society. Concerns would be identified in relation to a credit institution via a variety of channels such as an inspection report, a request by the Financial Regulator that institution commission an external review to examine specific issues, or as a result of an auditor's annual management letter. An action plan would be drawn up to address the breaches of the principles, codes, regulations and/or rules. Typically at some point the credit institution would assure the FR that the action plan had been implemented in full. Given the mutual trust that underpins principles-based regulation these assurances would normally be accepted. If concerns of a similar or identical nature re-emerged, a similar approach would be followed.

4.37 The above process would normally involve many meetings, exchange of letters and discussions to resolve issues and arrive at a mutually acceptable outcome. Banks and building societies were seen as important institutions deserving appropriate respect and threats of action by the FR in the absence of compliance were not typically part of the process. It was felt that there was a danger that court cases might be lost, while attaching conditions to licenses and similar measures might attract unseemly adverse publicity and discourage promotion of the Irish financial sector. It was considered much better to resolve regulatory issues through voluntary compliance and discussion.

4.38 Underlying this model of enforcement was the view that those running the banks and building societies were honourable persons striving to do their best to comply with the principles set out in Box 4.1 above as well as the various rules, codes and regulations. The latter were extensive and technical in nature and often quite difficult to understand. Thus almost of necessity breaches would occur, perhaps on more than one occasion.

[67] See FSA (2007, p. 14).

Nevertheless, it was assumed that those in charge of institutions would, after careful consideration, do their best to comply.

- An alternative model: Walk softly but carry a big stick

4.39 In contrast, the second option would have been much more robust, intrusive and hard headed. Specifically, it would have entailed clear procedures for escalation, including a greater willingness to use sanctions available to the Financial Regulator in order to ensure prompt responses leading to compliance. These elements would have been made publicly known to all institutions from the outset. There would be a preparedness to take court cases and test the limitations of the law so as to identify areas where legislative change might have been required.

4.40 This model assumes that rational actors will carefully consider the consequences of their actions in terms of likely regulatory actions and sanctions by the FR as well as the probability of their occurrence. If the perceived probability of sanctions – especially escalating sanctions – is considered low, regulated credit institutions may not pay a great deal of attention to ensuring compliance.

4.41 Supporters of a more aggressive approach can point to considerable evidence to support the view that lax enforcement of financial regulation leads to adverse consequences. Instances of unethical behaviour by banks and building societies prior to 2003 was referred to above, while other examples can be cited.[68] In addition there was evidence on the files of BSD that suggested instances of persistent breaches of codes, regulations and principles occurred.[69] Although in some instances the unethical behaviour is concerned with consumer (e.g., overcharging) rather than micro-prudential issues, the behaviour nevertheless reflects a willingness to evade appropriate procedures.

- Which enforcement strategy?

4.42 When a new agency is created it is important that it quickly establishes its credibility and reputation as an enforcer. This creates expectations as to how the rules, codes, regulations and principles will be enforced which will, in turn, influence behaviour. If

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[68] The leading banks in Ireland were investigated by the European Commission over concerns that a cartel existed in relation to cash exchange charges for euro-zone currencies. Proceedings were ended against Ulster Bank after it changed its tariffs for exchanging euro-zone currencies in May 2001. Under Irish competition law such behaviour constitutes a criminal offence. For further details see European commission (2000, 2001).

[69] See Chapter 5 below.

the regulated firm anticipates prompt regulatory action if it infringes a principle, code, rule or regulation and also that the action will increase in severity if it is repeated, the regulated firms will strive to minimise such infractions.

4.43 There are numerous examples of new institutions creating a reputation and thus influencing expectations and behaviour. When the European Central Bank was created it rapidly established its credibility and reputation for fighting inflation in setting interest rates. When the Financial Service Ombudsman office was created in 2004 it took a number of court cases to determine the limits of the legislation. Finally, the Competition Authority, enforcing a consolidated modernised competition legislation passed in 2002, recruited two leading US antitrust experts as board members and introduced innovations such as the Cartel Immunity Programme, under which cartelists were granted immunity from prosecution in return for providing evidence against fellow cartelists.

4.44 Although the enforcement strategy of the Authority was inherited from the CB, the FR took some largely unsuccessful steps towards developing a more robust approach and thus change the model of enforcement. After consideration, the FR issued statutory guidelines on Administrative Sanctions, in October 2005.[70] For legal reasons this power to sanction could only be applied to events that took place subsequent to August 2004 and included: monetary penalties not exceeding €5,000,000 for a corporate and an unincorporated body and €500,000 for an individual; and a direction disqualifying a person from being concerned in the management of a regulated financial service provider.[71]

4.45 The FR described the significance of the new tool of administrative sanctions as follows:

> "It is important to note that ... they [the Administrative Sanctions] are additional and more finely tuned than earlier 'nuclear' options which were previously available to us. These ranged from the ability to refuse an application for authorisation from a prospective financial service provider or revoke/suspend its authorisation to the power to direct it to undertake or to refrain from particular tasks." (FR, 2006b, p. 12).

4.46 The frequency of use of administrative sanctions powers, once the powers, guidelines, training and procedures had been put in place in 2004-05 was as follows: 2006: 2;

[70] For details see FR (2005a; 2005b). The issuance of the Administrative Sanctions Guidelines followed an earlier consultation exercise (FR, 2006g).
[71] The list of sanctions is set out in FR (2005b, p. 15).

2007: 5; 2008: 10; and 2009: 9. This pattern indicates a very slow build-up of administrative sanctions cases.[72] Furthermore, training programmes which had been run in 2005-06 were not run again or further developed. Also, the kind of cases brought through the administrative sanctions process predominantly involved intermediaries and related to failures of internal controls in small firms and breaches of the Consumer Code. Prior to the financial crisis in 2008, there were no sanctions imposed on credit institutions and none that might be said to have reflected significant prudential concerns. Overall, while the Financial Regulator had the capacity to make use of its administrative sanctions powers, the experience also suggests a reluctance to apply those powers in relation to its key micro-prudential functions.

Box 4.2: Moral Suasion, Principles-Based Regulation of a Persistent Problem

The FR's approach to principles-based regulation relied on the integrity and competence of the Boards and senior management of regulated entities. It also relied on ensuring that these entities have the appropriate compliance systems and controls in place as well as a robust internal audit function.

In the case of one persistently problematic firm – call it Bank A – significant concerns existed within the CB and subsequently the FR about the effectiveness and strength of the Board and governance structures within the organisation. Moreover, serious deficiencies in systems and controls, and failings in the bank's internal audit unit function, were routinely identified from at least the year 2000 onwards.

The model of supervision applied placed considerable reliance on the Board of Bank A's fiduciary duties to its shareholders. The FR relied on the assurances provided by the Board and senior management of Bank A and in a general sense it can be said that these assurances proved to be insufficient to ensure sound governance. Nevertheless, the FR persisted with a principles-based approach to the regulation of this institution and the soft moral suasion means of enforcement (although at one point a condition was imposed on its license relating to a governance issue), when it was clear for a number of years that it did not meet the basic requirements of a firm appropriate to this form of regulation.

It should be noted that attempts were made to move beyond moral suasion in relation to dealing with Bank A. In one instance prosecution of Bank A was given detailed consideration but other less intrusive prudential measures were taken. Ultimately, however, these proved to be ineffective.

Source: FR files

4.47 There is other evidence that the FR was reluctant to use its regulatory powers to address serial governance failures by one credit institution (Box 4.2). Furthermore, in internal communications between the Chair and CEO of the FR in mid-2006 the question of what could be done to address the general problem of an acceleration in the growth of

[72] There were, in addition two settlements under the separate market abuse administrative sanctions scheme.

mortgage lending and credit growth was raised. There were doubts that the principles-based approach combined with moral suasion would be able to solve these problems. Nevertheless, the FR and the Authority did not appear willing to consider employing more effective forms of intervention to resolve the problem.

4.48 Nevertheless, in a number of instances, action was taken by the FR in relation to some banks. An instructive example, illustrating how such instances tended to follow representations and/or publicity falls just outside the review period. Thus, an agreed sanction of €50,000 was imposed on INBS with effect from 7 October 2008 after the circulation of an inappropriate email (FR, 2008c). The public announcement by the FR was quite opaque as to the facts. However, these were in the public domain, including extracts from the email. The offending email had been sent by a person in INBS shortly after the State Guarantee was announced in late September 2008 canvassing business on the basis of the guarantee. The email was referred to the FR by the Minister for Finance who said such behaviour would not be tolerated. The Taoiseach stated that the behaviour was unacceptable and that he expected the FR to take whatever action would be necessary to prevent a repetition of the behaviour.

Section 5: Conclusions

4.49 The philosophy of regulation employed by the Financial Regulator was inherited from the past practice at the Central Bank. It relied on the deferential view that, as long as there was a good governance structure, decisions of the people actually running the banks could normally be trusted to keep the banks safe and sound, and their decisions did not need to be second-guessed. Voluntary compliance was the preferred enforcement strategy. Several attempts were made by the FR to strengthen this regulatory approach so that it became more robust and intrusive, but these had little impact. Two of what the FR regarded as key elements of the governance architecture of principles-based regulation – Directors' Compliance Statements and the Corporate Governance Code – were not put in place.[73] An Administrative Sanctions Procedure was instituted but there was a reluctance to apply these powers in relation to micro-prudential functions. The Principles for Financial Service Providers – presented in Box

[73] A Corporate Governance Code consultation paper was released in April 2010. For details see CBFSAI (2010). In the opening paragraph the following is stated: "It is now widely recognised that one of the causes of the international financial crisis was inadequate oversight of credit institutions and insurance companies. ... Enhanced corporate governance requirements will improve the long-term sustainability of financial firms."

4.1 – were never incorporated into a Code which would have facilitated enforcement of these Principles via application of the Administrative Sanctions Procedure. These shortcomings might have been compensated for to a significant extent if the FR's enforcement strategy had not relied mainly on moral suasion, which given some earlier experiences, was in turn based on unduly positive assumptions concerning the behaviour of financial service providers.

4.50 While consistent with the espoused regulatory philosophy, the reluctance to take decisive action can also be characterised as displaying both deference and diffidence to the regulated entities. These characteristics are brought out clearly also when it comes to looking at the way in which individual institutions were dealt with, which is the topic of the next Chapter.

CHAPTER 5: MICRO-PRUDENTIAL SUPERVISION

Section 1: Introduction

5.1 The previous Chapter discussed the regulatory philosophy and its implementation at the level of the system as a whole, in terms of codification and enforcement. This chapter looks at some of the practical implementation aspects. Section 2 discusses the availability and deployment of staff resources involved in supervision. Section 3 describes the main elements of regulatory and supervisory processes and procedures in relation to credit institutions. The sources of information to identify risks are described and the methods of investigation presented. Section 4 reviews supervision in practice, drawing upon the detailed supervision files of credit institutions. In particular, this section documents how the characteristics noted in Chapter 4 were reflected in the actual engagement with the regulated entities: the inconclusive nature of this engagement; the reluctance to take steps that would "rock the boat"; and the failure to recognise in time that the quantitative scale of the risks being assumed by credit institutions placed their survival in jeopardy and that when the feared property price collapse was starting to become a reality two of them were inexorably on the road to insolvency. Some conclusions are presented in Section 5.

Section 2: Staff Resources

5.2 This section considers first, the resources devoted to micro-prudential supervision and the growth in the number and asset base of regulated credit institutions and second, how these resources were allocated among institutions.

- Resources devoted to micro-prudential supervision

5.3 There was a gradual increase in the number of positions approved for the Banking Supervision Department (BSD), from 38.5 posts in 2000 to 56.5 in 2008, with a parallel increase in the number of persons actually employed over the same period (Table 5.1). The vacancy rate, although it fluctuated, rarely fell below 9 per cent; in only one year (2002) were there no vacancies.

Table 5.1 Banking Supervision Department, Resources, Number of Persons, Approved, Actual and Vacancy Rates, 2000-2008

Year	Approved (Number of Persons)	Actual (Number of persons)	Vacancy (Number of persons)	Vacancy Rate[a] (%)
2000	38.5	32.5	6.0	15.6
2001	39.5	35.5	4.0	10.1
2002	42.5	42.5	0.0	0.0
2003	49.5	44.5	5.0	10.1
2004	51.5	46.0	5.5	10.7
2005	51.5	45.5	6.0	11.6
2006	53.5	50.5	3.0	5.6
2007	53.5	48.5	5.0	9.3
2008	56.5	48.0	8.5	15.0

Source: Based on annual BSD organisational charts
[a] Defined as Vacancy/Approved

5.4 While Prudential Supervision accounts for an increasing share of overall resource allocation within the FR over the period 2004-08, the proportion allocated to Banking Supervision declines somewhat from 15 per cent to 13 per cent (Table 5.2); this reflects the stronger growth of prudential resources applied to other responsibilities such as insurance (which had just been transferred from the Department of Enterprise Trade & Employment) and reinsurance (as it was made subject to regulation for the first time). Moreover, within BSD, key staff were diverted into activities such as the implementation in Ireland of the many new and technically demanding international requirements introduced over the period and participation in various EU and ECB groups. For example, from 2005 five persons, or 11 per cent of BSD resources, needed to be reallocated to deal with the implementation of Basel II and EU affairs.[74,75] In addition there was a significant retraining burden on all BSD staff arising from the introduction of the CRD and work on the development of "Pillar I" approaches in relation to each credit institution. This had an impact on all of the department's work.

[74] This factor was also cited in the FSA (2008, pp. 2-3) examination of the failure of regulatory supervision in Northern Rock.
[75] Based on the BSD organisational chart for 2005. There were two vacancies.

Table 5.2: Financial Regulator, Prudential Supervision and Banking Supervision Department Resources, Number of Persons, Actual, 2004-2008

Year	Financial Regulator (Number of Persons)	Prudential Supervision (Number of persons and % of Financial Regulator)	Banking Supervision (Number of persons and % of Financial Regulator)
2004	298.5	167.5 (56%)	46 (15%)
2005	318	182.5 (57%)	45.5 (14%)
2006	329	197 (60%)	50.5 (15%)
2007	343.5	210 (61%)	48.5 (14%)
2008	369	228.5 (62%)	48 (13%)

Source: Based on annual BSD organisational charts

5.5 Apart from volume issues, there were concerns about the skill mix of BSD resources. The supervision teams were led by middle management and lacked some of the specialised expertise needed. Indeed a diversity of different technical skills and disciplines is involved. Where it existed, this skills gap will have reinforced the tendency to diffidence in engaging with the regulated entities. Inspections generally involved substantial contact with senior management of the regulated entity, who had access to a wide range of specialist experts. There were difficulties recruiting and retaining persons with the required expertise, mainly reflecting salary competition in the market and the constraints on what the FR could offer in terms of salary.

- The scale of the credit institutions sector

5.6 The total number of credit institutions subject to regulation by BSD remained largely unchanged, from 80 in 2003 to 82 in 2008 (Table 5.3). In contrast, total assets rose threefold between 2003 and 2008 suggesting some increase in the need for regulation.

Table 5.3: Regulated Credit Institutions, Number and Total Assets, 2000-2008

Year	Total number[a]	Total assets[b] (€ million)
2000	81	355,340
2001	88	422,107
2002	85	474,629
2003	80	575,168
2004	80	722,545
2005	78	941,907
2006	78	1,178,127
2007	81	1,337,356
2008	82	1,412,197

Source: Statistics Department, Central Bank.
[a] The number of credit institutions refers to end-year.
[b] Assets refer to end-year aggregate balance sheet data, covering resident offices of credit institutions operating in Ireland. Resident offices refer to offices or branches in Ireland. This excludes, for instance, branches or subsidiaries (e.g., AIB branches or subsidiaries outside of the Republic of Ireland). Total assets are presented in nominal terms.

- Allocation of supervision resources

5.7 BSD had to make choices as to how to assign responsibility for the 80 or so institutions within its remit, especially in view of the increasing need in the face of relatively static resources. BSD resources were concentrated on the domestic Irish institutions. For example, in 2005:

- a three person team was responsible for Bank of Ireland and Anglo Irish Bank;
- a two person team[76] was responsible for the AIB group and Irish Life and Permanent (IL&P);
- a three person team[77] was responsible for eight credit institutions and a branch, including INBS and EBS; and,
- a three person team was responsible for nine credit institutions and two branches, which included Ulster Bank.

To these resources need to be added those made available by a team of four persons that conducted prudential inspections across several institutions.[78]

5.8 In May 2005 the FR adopted a formal risk-based framework whereby "a single cohesive approach across all sectors of activity is applied"[79]. The system evaluated risk using such factors as supervisory complexity, corporate governance, business and reputational risk and so on, based on regular statistical reports provided by credit institutions on their activities and financial condition.[80] The risk-based framework was used to draw up a schedule of on-site inspections. It concluded that a small number of rather large institutions should be inspected on-site once a year, with a one-every-two-years schedule for the next tier of institutions and the remainder to be inspected on a longer rotation depending on available resources.

5.9 It is generally felt now that the total number of supervisory staff allocated to the supervision of the 80-odd credit institutions was inadequate. To be sure, the regulatory approach being adopted was not an intrusive one, and as such need not call for a lot of resources.

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[76] It should have been three but there was a vacancy.
[77] It should have been four but there was a vacancy.
[78] Prior to 2005 these inspections were conducted by the team assigned to a particular credit institution, but from 2005 this function was performed by a separate team, but relying, of course, on the instructions of the team responsible for the day-to-day supervision of the credit institution.
[79] FR (2006g, p. 67).
[80] For details see *ibid.*, p. 67. Successive reports of the C&AG (1999, 2007, 2009) have urged improvements in this methodology. Mazars (2009, p. 67) noted that the risk model was in place for the purposes of prudential supervision.

5.10 It should be noted that bank supervisors are required to carry out numerous detailed approval functions, for example, vetting proposed subordinate debt issues to ensure that they comply with the criteria to qualify them as capital instruments. This is an important prudential function, but it doesn't help identify ongoing risks in the operations of the banks.[81]

5.11 Indeed, a simple international comparison presented by the UK FSA in their 2006 Annual Report and reproduced by the C&AG in their 2007 report suggested that the resources devoted to regulation in Ireland may have been, if anything, above some larger EU countries albeit below some non-EU jurisdictions.[82,83] However, there are significant economies of scale involved in regulation, bearing in mind the considerable amount of policy development and regulatory design work that was under way, much of it related to introduction and application of the highly complex CRD procedure for determining the minimum required capital for a bank (this work is needed no matter how few banks there are). So a small economy will tend to have a disproportionately high regulatory cost, especially if the regulatory task includes (as it does in Ireland) a large financial services export business entailing the regulation of some 15,000 entities of all types.

5.12 Overall in 2009, the ratio of employment in the FR to employment in the financial intermediation sector in Ireland was compared to several other EU countries and Australia with the conclusion that, "[O]verall, the Financial Regulator would appear to be broadly in line with the comparator countries in terms of resources at its disposal."[84]

5.13 The way in which resources were deployed may have led to an under-resourcing of the micro-prudential banking function. The FR was somewhat different from other financial regulators given its role in promoting the Irish financial services sector. Mazars (2009, p. 48) observes that the FR in Ireland devotes considerable resources to:

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[81] Another task is vetting banks' internal risk models with a view to having them approved for the purpose of calculating CRD minimum capital requirements. Such approval would entitle regulated firms to operate with less of a capital buffer and as such was prized by such firms.

[82] Thus, in 2005, the resource costs devoted to regulation (per € million of assets valuation) was €14 in Ireland compared with: France, €13; Germany, €7, and the UK, €10. This compares with much higher numbers for: Hong Kong, €26, Singapore, €28, and the US, €177. (Based on C&AG, 2007, Table 6.4, p. 65).

[83] In a subsequent study, that considers all financial service providers rather than just banks and building societies, for similar sized countries, Ireland is about average for the ratio of financial regulator employees to financial service sector employees. On another indicator – cost per billion of assets regulated as compared to the international average Ireland was below the average. The study used 16 peer regulators, but no data is revealed about individual regulators. For details see Mazars (2009, p. 45).

[84] EIU (2009, p. 86). Other comparative indicators were also used in coming to this conclusion.

- "Meet and greet" activities for new or prospective regulated entities[85,86];
- Advice to accountants, legal firms and other professional advisors;
- Participation in external committees/groups; and,
- Responding to requests for information from third parties.

Mazars also draws attention in this context to "the specific mandate of the Financial Regulator under High Level Goal 4 'We will facilitate innovation and competitiveness' which is not as apparent elsewhere", which was introduced in the Strategic Plan for 2007-2009 (FR, 2006b, p. 26). Qualitatively, therefore, there was a drain – impossible to quantify – in the direction of ancillary activities which was more marked than in other comparable institutions reflecting the broader mandate of the CB and FR.[87]

5.14 The financial crisis has made it clear, though, both in Ireland and elsewhere, that effective bank supervision simply cannot be performed with the thin staffing that was applied to frontline operations of the FR.[88]

Section 3: Supervision and Regulatory Processes and Procedures

5.15 As set forth in various Annual Reports the FR's approach to micro-prudential supervision had flow and stock elements.[89] The flow aspect involves the authorisation of new entrants. Under this process "[O]nly those financial service providers and persons who can demonstrate that they will be in a position to meet our regulatory standards will receive authorisation to provide financial services."[90] This included, for example, the Fit and Proper Requirements discussed in Chapter 4.

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[85] Although there were few new authorisations for credit institutions, there were substantial increases in other categories of regulated financial institutions. For example, the number of collective investment funds approved in 2004 was 525; in 2007, 1,082. For further details, see the FR Annual Reports.

[86] It appears that the meet and greet approach predates the creation of the FR.

[87] To the extent that prudential regulators in other countries had a more robust enforcement policy such as that described in Chapter 4 and had Directors' Compliance Statements and Governance Codes in place, they would have made more effective use of whatever resources were available. In other words, resources have to be seen as part of a wider set of parameters that are likely to determine a prudential regulator's performance. It is not clear that more resources combined with the moral suasion approach of the FR would necessarily have led to much more effective prudential supervision.

[88] In the post-financial crisis world, combined with the failure of prudential regulation in Ireland, there is an emerging consensus for more intrusive prudential regulation and a greater readiness to impose regulatory sanctions. Such a regulatory regime requires more resources than the system in Ireland during the period reviewed by this Report.

[89] See also C&AG (1999, 2007, 2009) reports on the CB and FR.

[90] FR (2005c, p. 57).

5.16 The stock element consisted of an "active monitoring process" of authorised entities aimed at ensuring that they "do not create unacceptable risks to the financial system or to the safety of deposits."[91] The fact that the number of credit institutions remained fairly constant combined with the small number of new entrants, meant that most resources were devoted to ongoing supervision, although this included development work on the CRD and other legislative changes. Management resources within the department were also quite regularly diverted from day-to-day supervisory tasks to deal with policy development work and work related to the Committee of European Bank Supervisors (CEBS).

5.17 Problems – both governance and financial – were identified via several mechanisms:

- Returns from banks and building societies. These could be weekly, monthly, quarterly or annual returns where these refer to audited accounts. The higher the perceived risk the higher the frequency of returns. In 2005, there were 598 monthly returns for banks and building societies, 495 quarterly, 49 annual and 198 weekly.[92]
- On-site inspections/reviews sought to "assess whether financial service providers are in compliance with our ongoing supervisory standards and requirements."[93] These on-site inspections were of four types: general in nature with respect to a bank or building society; specific in nature relating to a particular area in a given credit institution; themed inspections covering a particular issue – e.g., mortgage credit – across a sample of the credit institution sector; and unscheduled inspections of a particular institution. The number of on-site inspections increased from 8 in 2005 to 25 in 2008.
- Review meetings conducted with banks and building societies. These meetings which increased from 39 in 2005 to 113 in 2008, were of "a more general nature and cover broad compliance issues and any matters outstanding from the most recent inspection." (FR, 2007a, p. 71)

5.18 Information also came to BSD via the annual audit report and management letters. The latter, which by law must be sent to the FR, are issued by the external auditors "when they identify issues giving rise to concerns about the effectiveness of internal controls or other governance issues" (C&AG, 2007, p. 40). In some instances the FR would ask the institution to commission (and pay for) an external audit on a particular issue.

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[91] *Ibid,* p. 57.
[92] FR (2006g, Table 3.5, p. 66).
[93] FR (2005c, p. 64).

Section 4: Supervision and Regulation in Practice

5.19 Two aspects of supervision and regulation in practice are considered. First, what were the governance and prudential issues and problems revealed by the on-site inspections and other supervisory interventions. Second, given the FR's suite of regulatory tools in terms of sanctions and discretionary prudential action, what were the options selected by the FR.

- What were the governance and prudential issues?

5.20 Based on a reading of the inspection reports and the follow-up correspondence for a sample of inspections over the period a number of conclusions can be drawn:

- consistent with the underlying regulatory philosophy, most of the focus of the inspections was on procedural aspects, namely, compliance with governance rules and procedures; and,
- the inspections did qualitatively identify a wide range of risks including those related to concentrations of lending on property, and the difficulty of evaluating the long-term recoverability of property-related loans;

Irrespective of the relevant aspects of provisioning of loans, the potentially very large loan-losses that would threaten insolvency in several institutions were not foreseen in the supervision documentation even as far as late 2008. Even the detection of serious deficiencies in loan appraisal and approval procedures of the major banks did not seem to trigger alarm.

5.21 Supervisors also saw that although banks may have had good written internal lending policies, in some cases exceptions were very frequent. At one bank in the mid 2000s fully 35 per cent of development property credits approved represented exceptions to policy. Two-thirds of these exceeded an 80 per cent LTV ceiling – some exceeding 100 per cent LTV; six of this bank's top 20 exposures had LTV in excess of 80 per cent at that date.

5.22 Box 5.1 draws on the record of inspection reports on three credit institutions in the period 2005-07 and which focused on the theme of credit or commercial lending. It illustrates some of the types of issues that were identified as of High, Medium and Low priority. Read in retrospect, it seems that the inspectors were looking for patterns of management practice and operational performance that might have presented a risk to the institution, but were not attempting to form an impression of whether the reported accounts including, for example, the provisioning of loans, was sufficient. Overall,

supervision was focused on procedural aspects of how the bankers did their job, and did not seek to second-guess the business models[94] of the banks, by, for example, requesting additional provisioning or capital buffers against increasingly risky loans.

Box 5.1: Credit Inspections of Selected Credit Institutions, 2005 to 2007

Credit or commercial lending-focused inspections of three large banks in 2005-07 throw light on the kinds of issues identified in relevant inspections and give a flavour of the interaction between inspectors and the banks being inspected. All three of the banks subsequently encountered difficulties.

An inspection in May-June 2007 on Commercial Property Lending at Bank A found that exceptions to the credit policy accounted for 28 per cent of approved credits. Nevertheless the inspectors reported no High Priority findings (they did, however, report 15 Medium Priority findings). Responding to inspectors' questions about exposure to development property in light of the downturn in Irish property market, Bank A management remarked: "The number of customers that this bank backs for unzoned land is very small and they are very high Net Worth Individuals, e.g., [Messrs X and Y] who have years of development experience. [Bank A] have full recourse to the borrowers." Unfortunately, concentration risk "was not reviewed as part of this inspection" – though this would, in a sense, prove to be the Achilles Heel of the banking system's loan portfolio. Still, discussing the rapid growth of credit, the inspectors rightly noted that "while such growth has not had an adverse effect on the overall credit quality of the loan book, as evidenced by the impaired element of the loan book as at March 2007 which stood at 0.49 per cent (June 2006 0.56 per cent), the robustness of the loan book may not become evident until such time as there is an economic downturn." This regulatory awareness that current impairment percentages were not a reliable indication of loan book quality does not always seem to have translated, though, into the necessary alertness to the need for precautionary action at the top of the organisation.

Not all inspections led to agreed conclusions. Bank B management rejected the three High Priority findings which were reported in the Commercial Property Lending inspection of April-May 2006. These related to: some exceptions to the credit policy just being noted on file and not sufficiently reported up the line to more senior decision makers; the formal credit policy not being sufficiently prescriptive; and limitations on the ability of the bank's management information system to report certain categories of summary information such as the total number of interest-only loans in effect. The management sought to refute each point at the concluding meeting of the inspection.

An inspection of credit risk management at Bank C took place in July 2005 (following concerns expressed in a previous inspection in November 2004). It made four High Priority findings relating to: (i) the lack of an overall defined credit policy; (ii) the large and imprecise risk appetite; (iii) reliance on implicit indirect guarantees for public sector entities or utilities; and (iv) insufficient Board oversight (no follow up on Board requests for presentations). There were also 13 Medium Priority findings, such as: the lack of a provisioning policy; no procedures for identifying and dealing with problem credits; the credit committee being pro-forma (approvals mainly happen between the weekly meetings and the chair had attended only 5 of 26 meetings); lack of independence of the credit risk unit review; and unclear credit appraisal/approval procedures. To a degree, this report would seem to show the principles-based approach at its best, identifying inadequate structures and procedures with some degree of forensic precision.

Source: FR files

[94] These models can be characterised as: relying to a considerable extent on wholesale funding; a heavy emphasis on the property related sectors; and a reliance on a small number of large clients.

5.23 An even more revealing illustration comes from the multi-bank inspection carried out late in 2007, by which stage concern was growing about the large lending to property developers. Given that the portfolio being examined was eventually purchased by NAMA at a large discount, it is clear from the elements mentioned in Box 5.2 that the system was not set up in such a way as to detect even serious portfolio weakness, let alone quantify it.

Box 5.2: The 5 x 5 Big Developer Exposures Inspection, 2007

In December 2007, evidently reflecting a belated heightening of concern about large commercial property lending exposures, the FR embarked on a special multi-institution inspection to look at the handling by five banks of five large exposures. Complacently, "all institutions confirmed to the inspectors that they have no concerns with the current or future repayment capacity of any of the borrowers included in the inspection to which they are exposed." This optimism subsequently proved in all cases to have been mistaken.

The inspection nevertheless identified two "High Priority findings", both related only to a single institution. In line with the usual house supervisory style, these related to process rather than specific exposure issues. Thus, the inspectors noted (p. 11): "it appears that there is no comprehensive review of Group exposures conducted on an annual basis. Rather reviews concentrate on an ongoing high-level review of exposures and do not appear to involve a review of documentation such as Audited Financial Statements, Cash Flow Statements etc." And, "The inspectors were advised that certain valuation updates are based on 'management estimates'. However, such estimates (which may be performed by the [identified senior management officer]) do not appear to be recorded." It is clear that the inspectors have detected a deeply flawed process, which should have caused great alarm.

Turning to what the inspectors classed as "Medium Priority findings"(M), several show how much trust the banks were placing in the unverified assertions of their borrowers with regard to their personal wealth, and how inaccurate some of the information being used by the banks was. Thus, consider the following :

M1: "The inspectors noted that institutions have been unable to obtain a Net Worth Statement from [Mr. X], as he is unwilling to disclose such details in writing. In addition, the statements provided by [Mr. Y and Mr. Z] have not been certified by a third party".

M2: "The inspectors noted that some estimates provided to the inspectors as to the overall indebtedness of Group exposures appeared to differ significantly from data available to the inspectors, e.g., [Bank A] advised that they believed the [Z] connection indebtedness to [Bank B] to be circa [€P00m], whereas the data provided by [Bank B] advise that the debt is currently circa [€1 billion more]. While such differences may arise because assessments are based on information obtained at different times, nevertheless the inspectors would question the manner in which institutions appear to be assessing Group Indebtedness as evidenced by the following:

(a) [Bank A] reviews the overall indebtedness to all credit institutions of [Mr. X] through discussions with [Mr. X] and his senior management team. However, no record is maintained of such discussions and as a result the inspectors were unable to obtain evidence that indebtedness had been reviewed.
(b) [Bank A] does not review the overall indebtedness to all credit institutions of [Mr. X] and the [Z] Connection, as [Bank A] focuses only on its own

exposures and related security in these cases.

(c) The overall indebtedness of [Mr. Y] to all credit institutions is reviewed by [Bank A] through a review of his Net Worth Statement. On the basis that this statement is not certified by a third party, the inspectors would question whether this document should be the only source for assessing overall indebtedness used by the bank."

M10: Inspectors expressed concern about the adequacy of Bank D's understanding of its exposure to Z and W based on minutes of its credit committee:

> "Chair echoed the Committee Members views, stating that whilst he acknowledged that the team had an understanding of each of the individual projects we were engaged with, the group as a whole was a much more complex entity by its very nature. Consequently, chair said that the opaqueness in the Bank's understanding of the wider group and our limited executive contact with [Mr Z], was extremely disappointing and reiterated that there is a clear need to escalate the level of understanding". In addition, the minutes also noted that "the bank lacked a real understanding of the wider group liquidity, and we were unable to explain the inherent structural risk".
>
> The [Bank D] Credit Committee meeting on 26 September 2007 stated – "Chair noted that the bank was not in a position where it had a full understanding of [Exposure W]'s liquidity". "It was thus strongly emphasised that the bank needed information as to how [W] will generate cash and what its wider strategy is, as well as gaining further insight into its local strategy in relation to the build-up of assets around [identified UK location]". The minutes also noted that "the bank was now heavily exposed to this group and uncertain at this stage whether [an amount in excess of €500 million] was the right number to be basing our appetite".

M16: "The inspectors were advised that the calculation by [Bank E] of [Mr. X]'s net worth included [an amount in excess of €100 million] which represents working capital facilities provided by the bank. It was not clear to the inspectors how such debt increases [Mr. X]'s net equity."

Despite this catalogue of banking deficiencies, the full implications of the obvious lesson – that loan appraisal had been wholly inadequate and personal guarantees could not to be relied upon – does not appear to have been taken on board by the regulatory system. Certainly, the implication that the solvency of all of the banks could be at risk given the declining value of collateral that must have already have been clearly in prospect was not one that was understood by the Authority. An indication that the participants in the exercise seem to have remained fairly relaxed about the findings is given by the perfunctory – or at least brief – character of the post-inspection close-out meetings (20 to 30 minutes). At this rate, how much regard can the banks have had for the inspectors?

Source: FR files

5.24 Quantitative analysis needs to be at the heart of off-site supervision of financial firms, as it draws mainly on their financial accounts. In this regard a 2005 change in the International Financial Reporting Standards (IFRS) reduced the degree to which expected but not yet incurred loan losses could be provisioned. It had the effect of understating expected losses and potentially reducing the transparency of accounts as an indicator of future regulatory problems. For example, the gap between provisions and

expected losses would tend to grow at the beginning of an economic slowdown. There is little indication to be found in the FR files of supervisory awareness of the degree to which provisions could prove to be inadequate in the event of a significant downturn. Thus, still in 2008, satisfactory payment performance of loans was still being taken as a reassuring indicator, when falling property prices were already under way. The absence in the files of systematic quantitative analysis of loan migration patterns or other forward looking quantitative measures of likely problems seems to reflect a lack of awareness of this and other shortcomings in financial accounts as indicators of solvency risks.

- What enforcement and prudential action was taken?

5.25 In principle, the FR had a wide range of tools to address regulatory and prudential concerns, including: administrative sanctions; revocation or suspension or attaching conditions to the authorisation of a credit institution; removal of a director or chief executive officer; direction to a credit institution to undertake or to refrain from particular tasks and increased capital requirements. Prudential and regulatory actions that are more systematic in nature, such as raising capital charges across all banks in respect of certain risks are discussed in Chapter 7.

5.26 An examination of the record of enforcement and follow-up action suggests the following features:

(i) A pattern of engagement between the FR and a credit institution of identifying a problem, negotiations on an action plan to resolve the situation and then receiving assurance that the plan had been implemented;

(ii) In some credit institutions a persistent pattern of breaches of regulations and failure to implement in full action plans;

(iii) Little or no escalation in terms of the type of action in response to compliance failures. Indeed, there rarely seems to have been any consideration given to what options for action; and,

(iv) Accommodation of (ii) through the view that there would be some alternative strategy to deal with the situation – but not an escalation – such as a new action plan.

However, for most identified prudential concerns these powers, whether to require action by issuing an enforceable direction or the power to penalise inaction by administrative sanction, were not exercised for reasons set out in Chapter 4.

5.27 Three cases are instructive:

Case (i)

One firm did attract serious and persistent concern following repeated inspections over the years. Indeed, as early as August 2000, a CB official wrote of this firm (in a detailed report recommending tough action) that there were "failings at *every level*"[95] in the organisation from the Chief Executive and Board to staff on the ground," including "poor compliance culture and awareness in the organisation," and that "significant underwriting limits have been assigned to individuals with limited experience". Checking the concerns expressed in the memorandum against the nine principles that the FR later indicated that it expected financial firms to abide by (Box 4.1), suggests that the institution was even at that stage in breach of each of them.

For the following eight years, the CB and then the FR engaged in repeated correspondence with this bank, seeking to correct, in particular, what were seen as severe governance deficiencies. The pattern was consistent. A specific problem would be identified, some corrective action would be undertaken, and assurances would be given as to compliance. However, soon afterwards the same or a similar problem would come to light and the cycle would continue. On each occasion it was hoped that the promised action would fix the main problems, but the remedial measures, to the extent they were implemented at all, proved insufficient or abortive. Even where there is evidence of individuals within the FR[96] advocating formal enforcement actions, this did not turn out to be the course settled on. Although this was an egregious case, the protracted engagement approach to dealing with a series of serious issues was by no means atypical.

The regulatory measures taken and the hoped-for governance reform, reflected the Financial Regulator's long-standing concerns with the independence and effectiveness of the Board of that institution. As an alternative to taking direct regulatory action, for example by imposing a condition on the institution's license, limiting its growth unless the Board or senior management was strengthened, or the concentration of power and responsibility was addressed, the Financial Regulator relied on measures which had limited effect or were outside the control of the FR.

Case (ii)

Even the interaction with a better-regarded institution could display a similar pattern of engagement, though with respect to less serious issues. The file on another firm also shows a lack of urgency. Prudential matters raised – in some cases repeatedly – with this firm included: rapid growth in the loan portfolio, leading to large exposures to property, building, construction and residential mortgages; timeliness, completeness and accuracy of returns; problems with the IT infrastructure; some regulatory breaches in relation to liquidity and sectoral concentration.

On matters on which Bank A did not agree, correspondence was batted backwards and forwards in what appears to be a quite leisurely manner. It often took several months for a letter to be issued and at least as long for a response to arrive.

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[95] Emphasis in original.

[96] It would have been know within the FR that intrusive demands from line staff could be and were set aside after representations were made to senior regulators.

Correspondence could continue for over a year. In most cases the institution was asked to investigate issues themselves and to report back to the Financial Regulator; there is no evidence of any escalation or consideration of stronger actions, such as sanctions. Indeed, some matters raised by the inspections of this bank (growth of the loan book, breaches of sectoral limits) were let pass: there does not appear to have been any correspondence from the Financial Regulator formally requiring the institution to take corrective action.

Case (iii)

Nevertheless, the FR did take some noteworthy action in relation to one case, where a bank was required to increase its minimum capital adequacy ratio, from 9 to 11 per cent over a period of years. It is important to acknowledge this action, which could not, for legal reasons, be publicly revealed at the time.

5.28 Some promising courses of action failed to deliver:

- A key appointment at one credit institution, which responded to a regulatory call for management strengthening, lasted just a year before the appointee resigned, in the absence of the sought-for governance improvements.
- A hoped-for change in firm ownership, likewise envisaged as a means of improving governance in one instance, failed to materialise.

5.29 Given the disastrous state of its loan portfolio as subsequently revealed, it is natural to wonder what the on-site inspectors thought of Anglo Irish Bank. Without breaching confidentiality it can be said that the inspection teams did comment on governance issues, including instances of non-compliance with internally approved policies. They also commented on, among other matters, the extent of reliance on personal guarantees in the loan book, the high percentage of interest-only loans and some aspects of the loan approval process. However, the severity of these problems was not deemed to be such as to warrant being High Priority. Indeed, it was not until the last of the Anglo inspections within the timeframe of this Report (the one on stress-testing, dated April 2008) that High Priority issues were identified.

5.30 An overall impression, not strongly contradicted in interviews, is that the seeming lack of a credible threat of action by the Financial Regulator reduced the urgency of dealing with issues (by all parties). In addition to the small number of inspectors (at most, middle management), the limited banking experience and skills gap that also often characterises bank supervision in other countries may have been a factor at work in reducing the effectiveness of the engagement with a large team of experienced and specialised staff within the credit institutions.

Section 5: Conclusions

5.31 Only a small number of persons was allocated to supervise leading credit institutions. Given the considerable asymmetry in expertise and seniority between the staff of the FR and the regulated institutions, this is likely to have hampered effective supervision.

5.32 Examination of a sample of the inspection records and correspondence reveals a pattern of inconclusive engagement with regulated entities on prudential matters, and lack of decisive follow-through. In one key case where the regulator identified weaknesses requiring corrective action, a protracted and somewhat inconclusive correspondence extended over many years. In the end, the identified problems had not been corrected before the crisis. By not adhering to time-bound deadlines for escalation, the FR allowed some important matters to drift. Given this model of engagement, decisive corrective action that might have prevented the deterioration of the situation was unlikely ever to have been imposed. The Financial Regulator's appetite for legal risk was very limited; this meant in practice that the regulated entities got the benefit of the doubt – at least with regard to prudential issues; no Administrative Sanctions were ever imposed before 2008 on a credit institution in relation to a prudential matter. It also reduced the chance of obtaining through legislation any further powers necessary given that doubt about the adequacy of legal powers was not tested in court.

5.33 Although inspectors did identify many of the key governance and procedural weaknesses in a qualitative way, the process-based regulatory model they were adhering to was not designed to provide a quantitative or graduated indication of the magnitude of the risks to solvency and the likelihood that they would materialise. Thus the weakest bank was given a relatively favourable assessment until close to the edge of the cliff, thereby helping to shape the incorrect assessment by many key policy makers at the time that the liquidity problems the bank was experiencing in late 2008 reflected worldwide market failures and not an underlying lack of solvency.

CHAPTER 6: MACRO-PRUDENTIAL REGULATION AND THE FINANCIAL STABILITY REPORT PROCESS

Section 1: Introduction

6.1 Macro-prudential regulation during 2004-08 was carried out mainly within the framework of Financial Stability Reports (FSRs) published annually by the CBFSAI[97]. These reports derived from the CBFSAI's mandate to contribute to the overall stability of the Irish financial system as required by the CBFSAI Act, 2003 and also from the mandate of the European System of Central Banks which requires the European Central Bank and National Central Banks to contribute to financial stability in the euro area. Their central purpose was "to analyse and assess the overall health of the financial system" (CBFSAI, 2004, p. 5)

6.2 Following a summary of the key messages of the reports, various aspects of the FSR process are reviewed below, namely:

- the procedures followed in their preparation;
- the identification of issues;
- the analytical content of the reports; and
- the views of other external observers.

An overall assessment, which also addresses other factors influencing the process, concludes.

Section 2: The Key Messages

6.3 The Governor's Foreword to each FSR contained the overall conclusions followed by a Summary which reflected the more comprehensive discussion in the main body of the text. The key messages of each report are indicated below; overall, they provided a consistent signal throughout the period that the Irish banking system was in a good state of health and, despite the presence of various downside risks, was well placed to cope with possible adverse shocks.

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[97] Interim Financial Stability reports were prepared for internal CBFSAI usage on a six monthly basis. The review in this Chapter is based largely on the annual published version. Prior to 2004, financial stability reports had also been prepared and were contained in the Annual Reports of the Central Bank. However, from 2004 onwards, in line with procedures followed in other euro area Member States, this work was published as a separate document.

- 2004

"Our central expectation, based on our assessment of the risks facing both the household and non-financial corporate sectors, as well as the current shock absorption capacity of the banking system, is that it is unlikely that the current good health of the banking system will be compromised over the medium-term horizon. This central expectation does not preclude the possibility of adverse developments which, if they should materialise, would have serious adverse consequences for households, corporates, and banks ..... Nevertheless, the system could absorb a modest fall in house prices even if it were to coincide with a modest increase in defaults." (CBFSAI, 2004, p. 12).

- 2005

"The central expectation, based on an assessment of the risks facing both the household and corporate sectors, as well as the current shock absorption capacity of the banking system, is that the current health of the banking system leaves it reasonably well placed to withstand pressures from potential adverse developments in the short to medium term. However, there are a number of vulnerabilities, in the medium term, particularly from the very high rate of credit growth." (CBFSAI, 2005, p. 7).

- 2006

"The overall assessment ..... is that financial stability risks may be seen to have increased since the Financial Stability Report 2005....

The overall picture at present is that strong credit growth, high indebtedness levels, associated repayment burdens and house prices pose continuing issues for the banking system. While the central expectation remains that the current shock-absorption capacity of the banking system leaves it well placed to withstand pressures from possible adverse economic and sectoral developments, nevertheless, these signs of a further build up in vulnerabilities are a cause for concern." (CBFSAI, 2006, p. 7).

- 2007

"The overall assessment is that financial stability risks have on balance increased since the CBFSAI's Financial Stability Report 2006....

However, the central expectation, based on an assessment of the risks facing both the household and non-financial corporate sectors, the health of the banking sector and the results of recent in-house stress testing is that, notwithstanding the international financial market turbulence, the Irish banking system continues to be well placed to withstand adverse economic and sectoral developments in the short to medium term." (CBFSAI, 2007, p. 11).

Section 3: Procedures Followed

6.4 As noted in the Foreword to the 2004 FSR, from the outset, the FSRs were viewed as a joint product of the Central Bank and the Financial Regulator.

> "There is the closest cooperation between the Bank and the FSR [i.e., the Financial Regulator] on matters related to financial stability .... The Financial Stability Report is the fruit of this cooperation." (CBFSAI 2004, p. 5)

As described in Chapter 3, overall cooperation between the Central Bank and the Financial Regulator was underpinned by a 2003 Memorandum of Understanding (MoU) agreed between the two entities. In particular, the MoU delineated the respective roles of the Central Bank and the Financial Regulator in the area of financial stability, as well as aspects regarding data and information exchange, crisis management, and consultation on policy changes regarding financial stability matters. Of note in the context of the FSR process (and of prudential regulation more generally), the Central Bank's responsibilities included "overview of the domestic financial system as a whole" and "analysis of the micro-prudential – where appropriate – as well as macro-prudential health of the financial sector." Those of the Financial Regulator included the "prudential supervision of banks" and "providing advice, information and assistance in relation to the Bank's functions to the Bank's Board and the Governor" (CBFSAI, 2003).

6.5 An initial draft of the FSR was first circulated to the joint Financial Stability Committee (FSC – see Chapter 3) chaired by the Director General of the Bank and including senior staff of the Central Bank and the Financial Regulator.[98] Subsequently the draft was reviewed by a special joint meeting of the CBFSAI Board and the Authority before finalisation and publication.

6.6 In practical terms, prior to mid-2005, the initial preparatory work and drafting of the FSR was undertaken by a working group comprising staff from both the Central Bank and the Financial Regulator. However, at that point, reflecting resource constraints and growing work pressures (principally relating to Basel II implementation, discussed in Chapter 5), Financial Regulator staff hitherto involved were reassigned to other duties. From then on, while the FSC and joint CBFSAI Board/Authority discussions continued

[98] Most of the agenda of the FSC related to the FSR process, including preparatory and follow up work. The role of the FSC in addressing "crisis management" issues is dealt with in Chapter 8.

to reflect FR input, most of the preparatory work and essentially all of the report drafting were undertaken by Central Bank staff. Regulator-maintained data on individual financial entities continued to be accessible to Central Bank staff; however, the relatively "raw" nature of these data as well as the constrained availability of FR staff to assist in their interpretation, appear to have inhibited the extensive usage of the data in report preparation.

Section 4: Identification of Issues

6.7 Successive FSRs sought to present a reasonably comprehensive current assessment of and outlook for, the domestic banking system.[99] Against the background of the domestic and international situation and short term prospects, the reports discussed key financial indebtedness indicators for the household and non financial corporate sectors, including those relating to property. From the banking side, credit to these sectors was reviewed, together with an assessment of the current financial health of the banking sector, as reflected in indicators such as asset quality, profitability, solvency, liquidity and credit ratings; the funding structure of banks, in particular their growing reliance on sources other than retail deposits was also addressed, especially in later years. Considerable attention was paid to the evolution and prospects for residential house prices (discussed in more detail below) as well as (to a somewhat lesser extent) movements in commercial property prices.[100]

6.8 Overall, the coverage of issues identified in FSR reports seem broadly appropriate, with, however, two qualifications. First, indicators were presented in aggregate form using simple (or, in the case of stress tests (see below), weighted) averages. While, for confidentiality and/or market sensitivity reasons, it would not have been possible for the reports to refer explicitly to individual institutions, in the case of key indicators such as growth in balance sheets and outstanding credit, consideration could have been given to conveying a fuller sense of the corresponding distribution among entities. Even if, for example, average capital ratios for the banking system appeared satisfactory, merely presenting the average could have masked the presence of one or more firms that were seriously undercapitalised. Greater attention to this issue would have conveyed a heightened awareness of the possibility that emerging problems in potentially more

[99] The coverage included those banks whose business is primarily domestically oriented and excluded entities who tended to conduct their main business internationally.
[100] Reports also regularly included a set of "Financial Soundness Indicators" developed by the IMF.

"vulnerable than average" entities in the tail of the distribution (even if these were small in number) might, via "contagion effects", quickly spread to others, especially given the widespread reliance of the Irish banks on external wholesale funding. As a rule, financial stability issues arise from the tail of the distribution, not from the averages.[101]

6.9 Second, more could have been done to expand the analysis to discuss some harder to quantify risk factors. For instance, there are well known inherent risks associated with the exceptionally rapid balance sheet growth (e.g., difficulties in maintaining appropriate monitoring and control procedures) that was being experienced by certain institutions. A related risk was that in a lending environment characterised by unprecedented growth, competition among lenders – especially from newer/smaller players – would lead to an overall relaxation of lending standards. Although there were no warning signals coming from the institutions' accountants/auditors, anecdotal evidence suggests that some of these elements were starting to occur. These potentially very important aspects were scarcely addressed.

Section 5: Analytic Content

6.10 The benign "central scenarios" of successive FSRs were accompanied by concerns – expressed to different degrees over time – regarding variables such as property prices, private-sector indebtedness *vis-a-vis* the financial system and (especially in later periods) the institutions' funding structures. These concerns notwithstanding, the assessments remained sanguine and were underpinned by several elements, notably, contemporaneous indicators of the financial system, analytical work relating to the property sector per se and its possible impact on financial stability and the results of financial "stress tests".

- Current financial indicators of the financial system

6.11 The results reported for standard "health indicators" (such as liquidity, solvency, profitability) were, without exception, all positive and, where relevant, complied with the corresponding regulatory ratio, in some cases by a considerable margin. While this was a source of some comfort, their static nature could not have allowed significant conclusions to be drawn as regards vulnerability. Arguably, the observed behaviour of

[101] Neglect of distributional issues was far from total. For example, the distribution of housing affordability measures across households is shown in the 2007 Report (Box B, p.27) and the percentage of stressed households of different types is in Box F of the same report.

some variables (capital and profitability as yet unaffected by potential loan losses yet to come, plentiful liquidity prior to a sudden change in market sentiment due to increased information that may become available only with a lag) would not have been inconsistent with phenomena observed in the middle to late stages of a credit-fuelled asset bubble. While the FSRs were careful not to overemphasise the significance of these current indicators, an explicit disclaimer concerning their inherent shortcomings would have been appropriate.

- Background analytical work

6.12 During this period Central Bank economist staff undertook considerable research into property market and related financial stability issues, the results of which were reported in successive FSRs[102]. The main message of these studies was consistent from the 2004 FSR onwards which stated (CBFSAI 2004, p. 10) that

> "the risk of a substantial fall in residential property prices .... is the risk that poses the greatest potential threat to the health of the financial system...a sizeable correction in prices would be devastating for those households who would be unable to ride out any such fall in house prices.....The most significant losses for the banking system would arise from those borrowers who have only recently taken out mortgages.".

It noted that according to an IMF assessment "large house price increases which are sustained over a number of years tend to be followed by fairly steep falls in prices" and that "never has an increase in residential property prices occurred of a magnitude similar to that which has already occurred in Irish house prices over the past decade without a subsequent large correction in prices". However, reassuring qualifications followed – the banks had adequate capacity to absorb a modest fall in house prices and, the seemingly inevitable fall-back in prices related to evidence from 1980s and the 1990s and might no longer be true in the 2000s. Nevertheless, a disaster scenario had already been sketched out.

6.13 The 2004 FSR highlighted the fact that price-rental ratios were already suggesting overvaluation – of between 55 and 63 per cent. Most independent authors were also beginning to find it hard to explain house prices on the basis of the fundamentals of supply and demand. However, the FSR presented an econometric analysis based on McQuinn (2004), which suggested that there was no bubble – at least through end-2002.

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[102] These were included in "themed" sections of the main body of the reports, as well as in a series of signed papers to which the usual disclaimer applied.

The model is complex and does not readily allow identification of the fundamental equilibrium price of housing. In particular, the inclusion of the average size of mortgage loan as one of the explanatory variables implies that a price boom driven by credit expansion is being treated as a "fundamental" phenomenon and not a bubble. Nevertheless the 2004 FSR reported this model as indicating a "failure to uncover conclusive evidence of overvaluation". The model was re-estimated for subsequent FSRs with similar conclusions. However, average loan size is not a fundamental factor, and indeed could be the driver of overvaluation.[103,104]

6.14 The range of house price overvaluation indicated by various analytic models is summarised in Table 6.1. As the years progressed, the weight of econometric evidence that house prices were overvalued grew, although the supply and demand model mentioned in the previous paragraph continued to indicate that actual house prices had not diverged significantly from their fundamental values. However, the price-rental ratio (P/e) continued to show increasing indications of overvaluation. Between 2003Q4 and 2006Q2 the extent of possible misalignment varied between 55 per cent (for new houses) and 73 per cent (second hand houses), using the average of the historical price-rental ratios experienced during 1980-1995. Recognising that this fairly crude method did not take into account the sensitivity of the price rental ratio to assumptions as to the rate of interest, a second method ("PV-adjusted") was employed based on an estimation of the *equilibrium* price-rental ratio and assumptions regarding the equilibrium rate of interest. The results of this approach suggested possible overvaluations in the range of 6 per cent (2003Q4) to 45 per cent (2006Q2). Finally, the results of a staff model (McQuinn and O'Reilly, 2006), which related house prices to income and (nonlinearly) to the real interest rate, pointed to increasing overvaluation emerging from late-2004 onwards, reaching about 15 per cent by end-2005.

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[103] It is not clear to what extent this potential problem may have affected the results presented in subsequent reports; furthermore, in later years, other variables such as income and immigration may have also become endogenous to a significant extent, given that economic growth – and the increase in the immigrant labour force – was increasingly being driven by the construction sector and domestic consumption, the latter fuelled by Government expenditure stemming from property sector-related fiscal receipts.

[104] Actually, simpler models, exploiting the relatively close correlation between house prices and nominal GDP would also have displayed a reasonably good fit to the data to end-2002.

Table 6.1: Financial Stability Reports: Indicators of House Price Overvaluation from Various Models, 2003-2007 (in per cent)

Time period	P/e[a]	PV (adjusted)[b]		Fundamentals model[c]	McQuinn/O'Reilly[d]
			(Assumed interest rate)		
2003 Q4/2004Q1	55 (N) – 63 (S)	6 – 29	4.0	-	..
2004 Q1	..	11 – 35	6.0		
2005 Q2	64 (N) – 70 (S)	11 – 35	3.1	-	..
2005 Q4	..	..			15
2006 Q2	67 (N) – 73 (S)	14 – 39	4.1	-	..
		20 – 45	6.0		
2007 Q2	..	..			33

Source: CBFSAI, Financial Stability Reports, 2003 to 2006.

[a] A long-run average P/e (price-earnings) ratio for housing was calculated using 1980 to 1995 data and applied to actual rental income to yield an estimate of "sustainable" house prices. The divergence between the latter series and actual prices indicates the degree of possible misalignment for new (N) and second hand (S) houses, respectively.

[b] A regression relationship using historical data was derived between the P/e ratio and the rate of interest. The difference between the actual P/e ratio and this average estimated relationship is indicative of overvaluation for various assumed levels of the interest rate. The upper bound of the range is the maximum indicated misalignment; the lower bound is the estimated misalignment that is statistically significant.

[c] Based on the model of McQuinn (2004) described in detail in Section III of the 2004 FSR. The model was estimated using 1980Q1 to 2002Q4 data. The results indicate essentially zero misalignment throughout the period.

[d] Based on McQuinn and O'Reilly (2006). The result shown for 2005Q4 was reported in FSR 2006; however, the calculation for 2007Q2 is taken from an unpublished internal CBFSAI staff note dated April 2008.

6.15 It should be noted that the different estimates provided are the central estimates from alternative models and do not reflect the full range of uncertainty involved. In other words, depending on the exact values of the parameters of the model the worst outcome could be considerably worse than the central estimate.

6.16 The above results were presented in successive FSRs up to and including that for 2006. By contrast, the 2007 FSR is notable for the absence of any updating of the calculations reported earlier. In particular, there was no update of the McQuinn-O'Reilly (2006) model. However, an internal staff updating of this model undertaken in April 2008 (after publication of the 2007 FSR) indicated that house price overvaluation was estimated to have reached almost 35 per cent by mid-2007.

6.17 By this stage, the FSR was including commentary casting a doubt on the warnings of outside commentators[105]. In an article published in the ESRI *Quarterly Commentary* in the summer of 2007, and which had been circulated in draft in February of that year, Morgan Kelly argued that, based on the OECD experience that saw most real house price surges being followed by a sharp fall back, real house prices in Ireland could be expected to fall by 50 per cent. He also noted that while for most economies house building accounted for only five per cent of GDP the figure for Ireland was currently 15 per cent (Kelly 2007a). Although it was not all that far from the scenario painted in the 2004 FSR, Kelly's presentation was couched in what was considered by many to be alarmist language and admittedly did not contain an in depth econometric analysis of the Irish situation.[106] But, rather than acknowledging the red flag raised, his paper elicited what now appears as a somewhat defensive response. The 2007 FSR questioned the relevance of the Kelly analysis (Box C, p. 30) as well as the conclusions of somewhat similar studies by the IMF (2003) and OECD (2006a). It was observed correctly that replicating these analyses in terms of nominal (as opposed to real) house prices would not show the same "reversal to the mean" tendency. However, this conclusion stems from the inclusion in the sample of countries which have typically experienced high general inflation rates; since this is clearly not the case in the euro area the distinction provides little comfort.[107]

6.18 Overall, while the FSR noted the recent fall that had occurred in house prices, quantitative analytical evidence was not provided in support of the key conclusion, namely, that so far as residential property was concerned "the central scenario is, therefore, for a soft landing" (CBFSAI 2007, p. 17). The likelihood that the drop that had started to take place might be the precursor of a considerably larger fall to come – given the possible extent of overvaluation – was not mentioned.

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[105] Earlier (in 2005), the Economic and Social Research Institute had included in its Medium Term Review, a scenario under which Irish house prices would fall by one-third in 2007 (ESRI, 2005).

[106] In a later newspaper article that appeared a week *before* the run on Northern Rock in September 2007, Kelly observed that "If a crash occurs, or even if already nervous overseas bond holders cut off liquidity to Irish banks … it will be very costly to fix, dwarfing the bail-out of AIB in the 1980s." (Kelly, 2007b)

[107] Apart from looking at nominal prices, the box also noted the important additional fundamental factors typically determining house prices (but did not cite the thorough work of Murphy (2005), which had looked closely at demand and supply factors and found a considerable over-valuation even as of 2004). The box also observes, that "past international experience may not be an accurate guide to future developments in house prices because the international macroeconomic environment is now somewhat different", i.e., the "Great Moderation" of reduced international macroeconomic volatility could be expected to continue.

6.19 Prior to 2006-07, the commercial property market did not attract a great deal of attention and does not appear to have been a source of major concern.[108] However, work undertaken by Woods (2007) – and summarised in the 2007 FSR – noted the worrying growth in price/earnings (rent) ratios; this phenomenon could not be explained by readily identifiable underlying factors, thus implying a possible significant overvaluation.[109] A related earlier paper (Kearns and Woods, 2006) concluded that there was evidence of a strong positive correlation (in Ireland and abroad) between prices in different segments of the property market and that less weight should be placed on the mitigating factor of collateral in assessing the risks to the banking sector from the property market. This important finding, which raised the probability that a crash in some segments of the market might become quickly associated with a fall elsewhere, irrespective of the geographical location and type of property concerned, was noted in CBFSAI (2006, p. 50). In this context, the continued rise in commercial property prices into the third quarter of 2007, even though residential house prices had turned sharply down at least six months before, became an even more worrying exposure.

6.20 Despite the overall resource constraints present, it would have clearly been desirable for more intensive efforts to have been devoted earlier to analysing the possible evolution of commercial property prices. This is especially the case since evidence from elsewhere suggests that the bursting of a property bubble in this sector can have a considerably more severe adverse financial impact than in the case of the residential market.[110] Also, in this context, priority would probably need to have been given to obtaining – via the Financial Regulator – more comprehensive information from the financial institutions regarding property related lending, including cross exposures as well as exposures associated with speculative equity investments; problems in this area appear to have continued unresolved throughout the period reviewed[111].

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[108] FSR 2005 (p. 12), after noting that commercial property lending is the largest component [of credit to the corporate sector] concludes that "there appears to be no substantial short to medium term risks to financial stability arising from the corporate sector". While FSR 2006 (p.12) states that "the commercial property market performed strongly across all sectors" it notes low and falling yields for new housing investors and as well as a growing shortfall between associated rental income and mortgage payments which had increased fourfold, to 29 per cent, by 2006.

[109] Indeed the reported ratios might well have understated the cause for concern to the extent that rents themselves were probably significantly excessive at the time.

[110] See Woods (2007) for an extensive discussion of this phenomenon, including a description of property sector price movements in Sweden and the UK.

[111] Commercial property price data were, however, available as noted in Woods (2007, p. 82), although their reliability at times was called into question.

- Stress tests

6.21 The above analysis was devoted mainly to attempts to forecast the most likely outcome. Of course, market participants and regulators need to conduct risk management by mitigating, hedging and holding buffers so that even relatively unlikely events can be absorbed. The purpose of the financial stress tests was to explore explicitly such adverse scenarios. Beginning in 1999, the CBFSAI undertook two types of stress tests: (i) "bottom up" tests whereby banks were asked to analyse the effects of a more "pessimistic" macroeconomic scenario on their standard financial indicators; and (ii) "top down" tests not involving the banks, whereby staff calculated the effects of imposed macroeconomic or other parameter changes on banks' positions.

Table 6.2: Financial Stability Reports: "Bottom-Up" Stress Testing, 2004 - 2006
Macroeconomic Scenarios 2003 - 2008, B – Baseline; S – Shock Scenario

	2004 stress test[ab]						2006 stress test[ac]					
	2003		2004		2005		2006		2007		2008	
	B	S	B	S	B	S	B	S	B	S	B	S
Economic activity (% change)												
• Real GDP	1.75	1.23	3.5	-2.51	5.3	-2.75	4.8	3.2	5.2	-0.3	4.7	-4.8
• Export volume	-2.25	-3.22	5.75	-6.20	7.5	-6.74	4.8	3.2	5.7	-3.9	5.6	-7.5
Unemployment (% of labour force)	4.75	5.04	5.25	7.82	5.25	9.77	4.3	4.5	4.3	6.6	4.3	9.7
House price inflation	14.0	12.0	5.0	-2.0	4.7	-8.00	7.0	-13.0	6.3	-8.7	6.1	1.1

Source: CBFSAI, Financial Stability Reports, 2004 and 2006

[a] Refers to "Shock Scenario I" in both sets of stress tests. The exercise also included analysis of alternative shock scenarios, the assumptions and associated results of which, however, did not differ greatly from those of the first scenario reported here.
[b] Mawdsley, McGuire and O'Donnell (2004).
[c] Kearns, McGuire, McKiernan and Smyth (2006).

6.22 The main assumptions underlying the two **"bottom up"** tests conducted in 2004 and 2006 are summarised in Table 6.2. Broadly speaking, the scenarios involved a cumulative decline of real GDP of 2 to 4 per cent during the three year period into the future; relative to the baseline assumption of continued positive growth the difference was of course much larger. Unemployment would roughly double, from around 4 per cent at the outset to almost 10 per cent by the end of the three years, compared with virtually no change in the baseline. The divergence in house price movements was

more marked; in the 2004 exercise, prices were assumed to rise cumulatively by only 2 per cent relative to the baseline increase of 24 per cent, while in the 2006 test, the baseline assumed continued cumulative growth of 20 per cent compared to a scenario assumption of a 20 per cent decline.[112]

6.23 The results of the exercises for both periods were very similar. Despite an expected significant slowdown in asset and loan growth under the shock scenarios and an accompanying increased provisioning requirement due to deteriorating asset quality, profitability remained robust (no institution experienced losses) and solvency and liquidity indicators remained comfortable.

6.24 The **"top down"** methodology (Kearns, 2004) estimated the likely level of provisioning required under the same macroeconomic "shock scenario" employed for the "bottom up" test; the financial implications for banks were very similar. Subsequently Kearns (2006) followed the approach of calculating the impact of a worsening of non-performing asset (NPA) and loss-given-default (LGD) rates on banks' financial positions; the 2007 FSR contained an update. The results for both exercises did not differ significantly. Using aggregate data, the weighted (by total asset size) average capital ratio fell below the regulatory minimum of 8 per cent only when the LGD rate is 50 per cent or higher and when the NPA rate exceeded 5 per cent (i.e., a six fold increase over then current levels). The appropriateness of the rates chosen was not assessed in the report.

6.25 Some of the well known limitations of these types of stress tests were explicitly recognised in the FSRs and appropriate "health warnings" provided (especially in the detailed background papers). In particular the "bottom up" tests relied on the banks' own judgements as regards the impact of shocks on their loan portfolios, including the extent of realisable collateral in a sharp downturn. While there were some discussions between CB and the banks' analysts, it was not possible for CB staff to assess independently the appropriateness of the models used, which differed significantly in

[112] There is the question as to whether the scenarios that were chosen were sufficiently severe. Any given external shock to the economy would lead to knock-on effects through the worsening of overall financial weaknesses, depressed private demand and fiscal difficulties, leading to further downward pressure on the property market. How banks' behaviour might react in such an environment and the consequent further macroeconomic and financial impact, is not captured. Moreover, macroeconomic models are generally built on the basis of log-linear relationships; for example, doubling the size of a shock will generate a proportionate increase in its effect. In reality, however, in a situation of considerable stress, the effect might well increase more than proportionately.

sophistication and rigor across banks.[113] In fact, none of the banks had reliable models, tested and calibrated on Irish data, which could credibly predict loan losses in different scenarios.

6.26 The issue of whether the scenarios represented a sufficient "turning up of the switches" also deserves attention. In the case of the "bottom up" exercises, the domestic shock scenarios were derived from considering "extreme downside risks" in the world economy (CBFSAI 2006, p. 114); in the case of the 2004 exercise, based on historical behaviour, these were chosen to reflect a probability of "between one in a hundred and one in a thousand of actually occurring" (CBFSAI 2006, p. 106)[114]. A useful complementary approach could have been to apply a significantly more severe macroeconomic scenario to capture, for example, sharper property price falls directly.

6.27 Finally, the presentation of aggregate weighted average results, in particular those of the "top down" approach, masked differential impacts across individual institutions. The 2006 FSR did indicate that at least one institution's capital ratio fell below the regulatory minimum when NPAs more than doubled and the assumed LGD was higher than 25 per cent. However, the more comprehensive data provided to the subsequent Roundtable Discussions with banks in late 2006 (which were not published or referred to in the FSR) revealed a more worrying picture; thus, assuming an NPA ratio of just over 5 per cent, one third of the twelve banks covered fell below the regulatory minimum with a 50 per cent LGD, while this number rose to 9 (representing 88 per cent of total banking sector assets) assuming a 75 per cent LGD. The corresponding exercise described in the 2007 FSR did not contain any references to distributional issues. As already indicated, more coverage of such distributional aspects should and could have been presented in FSRs without compromising the confidentiality of individual institutions' data.

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[113] For example an internal FR report noted in 2008 that one bank did not have a defined stress testing framework supported by either formal processes or documentation. The bank did not employ an economist and their stress tests did not reference economic data such as GDP, interest rates or unemployment; bank representatives argue that the latter may not be as necessary in the bank's case given that they occupied the most profitable economic sector. While the bank did conduct what was referred to as "ad-hoc stress tests" these appeared to assess the impact of actual events (e.g., the impact of the smoking ban on the pub trade) rather than severe but plausible events.

[114] The shocks in question referred to a 20 per cent appreciation of the euro, a 6 per cent decline in world trade and a 20 per cent fall in equity prices. The biases in using Gaussian distributions to infer tail probabilities for asset price developments were not mentioned.

Section 6: The Views of Outside Observers

6.28 FSRs were prepared "in house" by the Financial Stability Department (FSD), without structured involvement *vis-a-vis*, for example, the academic economist community.[115,116] Also, on one occasion, in 2005, prior to drafting the FSR staff met with representatives of financial institutions to elicit their broad views (normally, such an exchange occurred after FSR publication – see Chapter 7). The views of other external observers, principally the IMF and the OECD, while not discussed per se in the FSRs, played a significant role in helping to shape the consensus that emerged. Outside of official organisations, many economists were beginning to raise concerns from the early 2000s. By no later than 2003-04 a majority, but not universal, view was that prices had overshot the equilibrium and would inevitably fall. Most, though not all, studies foresaw a downturn in property prices triggering recessionary pressures.[117]

6.29 The assessments of the IMF did point to some of the risks present in the Irish economy, in particular to the financial system, with reference to banks' exposure to an overheated property sector and increased reliance on wholesale funding. However, without exception, the overall judgements of the IMF staff were reasonably reassuring from 2004 onwards[118]. Thus the 2005 Article IV report concluded that "while banking system profitability and capitalisation are strong vulnerabilities exist...." (IMF, 2005, p. 24). A year later the overall message given was similar. In reviewing the housing market, the 2006 Article IV Report carries the same message, noting the continued strong capital position of banks and observing that "even a substantial withdrawal of private sector deposits would not exhaust the stock of liquid assets at any major lender, given banks' ample liquidity" (IMF 2006a, p. 10). In the following year, the conclusion remained generally reassuring, but with continued cautions.

6.30 Regarding the property market in particular (a subject discussed extensively from 2005 onwards), it was noted that "staff analysis suggests that not all of the increase in house

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[115] However, on a number of occasions, outside economists (for example, Alan Ahearne, whose views on the property market were less sanguine than those contained in FSRs) were invited to make presentations within the CBFSAI.

[116] Internally, there was significant scope for ensuring more structured coordination between FSD staff and other CB economist staff as regards both (a) the setting of research priorities relating to financial stability issues; and (b) the appropriate presentation of research results within an overall FSR context.

[117] "All we can hope to do is identify whether a country is within or outside a 'zone of vulnerability', where a crisis equilibrium could arise if confidence were to falter. So is Ireland in such a zone. I think that the answer must be yes. Certainly the rate of credit expansion – the classic indicator which I am just one of many to have employed in the past – is a waving red flag at present." (Honohan, 2004).

[118] The 2003 Article IV Report was somewhat more cautious.

prices over the past several years can be attributed to fundamentals..." (IMF, 2005, p. 5). In 2006, concerns were noted that "house prices are now becoming overvalued...[while] the central expectation is for an orderly slowing in the housing market...a sharp correction cannot be ruled out" (IMF, 2006, p. 6). By the time of the August 2007 Article IV consultation, the risks of a property price fall had become more apparent, and the staff described the kind of downward financial and economic spiral that could develop. It also commented that cross country comparisons "suggests that sharp increases in house prices are followed by sharp declines about 40 per cent of the time" (IMF, 2007, p. 9). Overall, it appears that the IMF assessments were somewhat more cautious in tone than those of the FSRs. Nevertheless, the IMF did not demur from the latter's conclusions that banks could cope quite satisfactorily with quite substantial property price falls.

6.31 In addition to the regular Article IV Reports, the IMF carried out two specific reviews of Ireland's financial sector stability framework (including financial regulation) in the context of its Financial Sector Assessment Program (FSAP) programme. The first was conducted in 2000 and an update involved a team visiting Dublin for two weeks in March, 2006. Their Report was published in August of that year.

Box 6.1: Main Findings of the 2006 IMF FSAP Team

The Irish financial sector has continued to perform well since its participation in the Financial Sector Agreement Programme in 2000. Financial soundness and market indicators are generally very strong.

The outlook for the financial system is positive. That said, there are several macro-risks and challenges facing the authorities. As the housing market has boomed, household debt to GDP ratios have continued to rise, raising some concerns about credit risks. Further, a significant slowdown in economic growth, while seen as highly unlikely in the near term, would have adverse consequences for banks' non-performing loans. Stress tests confirm, however, that the major financial institutions have adequate capital buffers to cover a range of shocks.

Good progress has been achieved in strengthening the regulatory and supervisory framework, in line with the recommendations of the 2000 FSAP. The strategy of creating a unified approach to risk with common elements across different sectors where appropriate, but differentiated where necessary, is being put into practice well. Improvements could nonetheless be made to enhance some aspects of supervision, especially as regards supervision of insurance and reinsurance.

Source: IMF (2006b).

6.32 Bearing in mind how late in the boom this was carried out, the conclusions of this update were strikingly positive (Box 6.1). Anyone concerned about the health of the banking sector would have been reassured to read the first paragraph: "Financial institution profitability and capitalisation are currently very strong, with Irish banking sector profits amongst the highest in western Europe. Reflecting their good performance, the major Irish banks receive upper medium to high-grade ratings from the international ratings agencies." (IMF, 2006b p. 5).

6.33 The main recommendations of the FSAP team (Box 6.2) focused on upgrading staff numbers and skills, with the stress-testing exercise selected for special mention. However, allaying any possible concerns on this score, the team remarked reassuringly that "reflecting the general robustness of the financial system and the supervisory framework, these recommendations are primarily for further enhancements rather than reflecting a need to address fundamental weaknesses." (*ibid* p. 6).

6.34 As far as risks to the banking system were concerned, in addition to the credit risks mentioned as one of the "main findings", liquidity risk was noted, but downplayed: "a growing share of banks' funding has been from other financial institutions, including from off-shore; heavy reliance on wholesale funding potentially increases liquidity risk. As shown ... however, the off-shore funding is diversified." (*ibid* p. 11).

6.35 The purpose of the FSAP mission was not merely to look at current risks, but also to assess the overall quality of the institutional framework for financial sector stability policy including micro-prudential supervision and regulation. The FSAP team's assessment of the new integrated supervisory framework was positive; it noted that "notwithstanding the higher profile of the IFSRA's consumer protection activities, there have also been significant achievements in the prudential framework", and that "it has created an organisational structure and a consistent corporate culture that are likely to enhance financial stability." (*ibid* p. 24). So far as the Basel Core Principles (BCP) for Effective Bank Supervision were concerned, the assessment found "a high degree of observance of the BCPs. The main challenge was seen as ensuring continuation of existing very high standards." (*ibid* p. 28).

6.36 All in all, the 2006 FSAP Report would have had a significant dissuasive effect on concerns that might otherwise have been raised about prudential supervision and the risks to financial stability. This was especially the case since only a few CBFSAI Board

or Authority members were raising such concerns with any vigour. In hindsight such an unwarrantedly favourable report by an authoritative international body was clearly unhelpful.

Box 6.2: Ireland: FSAP Recommendations

Financial Stability Framework/Stress Testing

1. Medium term
   - Continue to upgrade the CBFSAI's stress testing framework.
   - Conduct coordinated bottom up stress testing exercises at least once every two years and investigate the potential for upgrading the templates used for bottom up stress tests, taking advantage of the richer models that banks are developing in preparation for Basel II.
   - Consider extending the tests to the banks' foreign exposures, given the sizeable cross-border linkages of domestic credit institutions.

Regulatory Framework

1. Ongoing
   - Continue to develop the necessary expertise and ensure adequate staff resources for supervising an increasingly sophisticated financial system, especially taking into account ongoing regulatory developments (Basel II, Solvency II and the regulation of reinsurance).

2. Short term
   - Enhance the current scope and intensity of the on-site supervisory program, in particular to strengthen the assessment of the risk management and corporate governance practices of insurers.
   - Implement enhanced public disclosures by insurers, in line with the best practices established by the IAIS to allow for effective market discipline.
   - Consider upgrading the position of the Prudential Director as regards IFSRA Board membership, on par with the Consumer Director.
   - Strengthen monitoring of credit risk transfer activities by financial institutions.

3. Medium term
   - Have a full reassessment of the IAIS Core Principles undertaken, once sufficient time has passed so that transposition of the EU Reinsurance Directive can be effectively assessed.

Source: IMF (2006b).

6.37 Although earlier reports had raised warning flags, by 2006, the views expressed in OECD Reports had also become reasonably sanguine, observing that although "house prices have risen faster than in any other OECD country" and "may have overshot fundamentals to some extent...this does not imply that they will fall significantly. A soft landing is the most likely scenario but a hard landing cannot be ruled out". The report noted two alternative scenarios: first, that the housing boom would not run out of steam of its own accord, leading to serious overvaluation and imbalances throughout the economy; the second would involve a sharp fall in house prices, either because they

were more overvalued than appeared or due to a negative shock, with a large adverse impact on activity and the budget.[119] Their 2008 assessment was broadly similar. While "the exceptional rise in property values in recent years was largely driven by higher income and demographics [it] did appear to have overshot the sustainable level... [However] Irish banks are well capitalised and profitable and should have considerable shock-absorption capacity. ... [The CBFSAI] has clearly identified the major vulnerabilities and taken action to mitigate them" (OECD, 2008, pp. 41, 8, 51).

Section 7: Conclusions

6.38 The CBFSAI's Financial Stability Reports throughout this period were broadly similar in approach to those undertaken by central banks elsewhere[120]. The reports presented the standard "health indicators" of the financial system accompanied by analysis of some of the underlying factors at play, as well as the results of various stress tests. Risks were highlighted. However, the key message was that these risks – to the extent it was believed that they might materialise – were manageable and not a major cause for concern.

6.39 The coverage of the FSRs was broadly appropriate in terms of the aggregate indicators of the banking system. However, the analysis underlying the published conclusions did not focus sufficiently on the concern that exceptionally fast balance sheet and loan growth in one or more entities would, via competition, lead to a general lowering of lending standards and end up posing a real risk for the system as a whole. More generally, discussion of the "qualitative" aspects of banks' loan activities was absent not only from the FSR itself but also from the deliberations of the Financial Stability Committee, the appropriate forum for reviewing micro-prudential aspects with a potential systemic impact.

6.40 The FSRs contained considerable analytical work addressing many of the relevant issues. Various models and calculations regarding the outlook for residential house prices were presented; these suggested a wide range of possible overvaluations during 2004-06, ranging from 55 to 73 per cent to zero (the CBFSAI's "fundamental factors"

[119] (OECD 2006b, pp. 8, 16) The report also recommended the phasing out of the strong bias towards housing that was embedded in the tax system.

[120] See Wilkinson, Spong and Christensson (2010) for a review of cross-country experiences with FSRs, with a particular focus on those undertaken by the United Kingdom, Sweden, the Netherlands and Spain. It notes that while the FSRs were generally successful in identifying the risks that played important roles in the crisis, they underestimated its severity.

approach). The 2007 FSR, by contrast, did not include these calculations; in particular, an update of an earlier staff model (the results of which had been published in the 2006 FSR) which would have indicated a possible overvaluation of about 35 per cent as of mid 2007 were not considered. The central conclusion of the 2007 FSR regarding a likely "soft landing" for the housing market does not appear to have been based on specific quantitative evidence or analysis.

6.41 The 2007 FSR contained, for the first time, an analysis of the commercial property market which suggested the possibility of significant overvaluation. Clearly, priority should have been given to devoting greater efforts at an earlier stage to this topic, especially in view of evidence elsewhere that a bursting of a property bubble in this sector can have a more serious adverse financial effect than in the case of residential housing.

6.42 The stress tests that were conducted followed international practice and the standard qualifications as to their interpretation were presented. However, it is clear that the shocks involved, while thought to be "extreme" at the time, did not in fact capture the scale of what could and did happen. This was true of both the adverse international and domestic macro scenarios and the assumed deterioration in the quality of banks' loan portfolios.

6.43 The FSRs from at least 2004 onwards could be interpreted as not dissenting from – at least implicitly – the view of many outside commentators that property prices were more than likely in excess of their equilibrium level. The question is why these commentators nevertheless tended to be either agnostic or vaguely reassuring on the potential implications for financial stability. Implicitly it seems to have been assumed that lenders had protected themselves against loan losses through sufficiently low loan-to-value ratios (sufficiently high co-financing), or assurance of other sources of income to service loans. However, only the CBFSAI could have had access to the information that could confirm the true situation, whether through regulatory inspections or the bottom-up stress test exercises. But the approach used by the Financial Regulator did not yield the information needed and the implementation of the stress tests did not seek to verify or assess such aspects as loan-to-value ratios for development property lending. In the event, the implicit assumption that either the banks, or the Financial

Regulator had ensured sufficient buffers against whatever fall in property prices might occur proved to be misplaced.

6.44 The overall optimistic conclusions of successive FSRs thus reflected, in part, an overly sanguine interpretation of the prospects for the property market and an underestimation of the risks faced by the financial system; these weaknesses were also present to a large extent in the assessments of outside observers such as the IMF and the OECD. In particular, the unwarrantedly favourable FSAP Update Report by the IMF in 2006 – offering a financial system stability assessment – was unhelpful.

6.45 At the same time, however, many participants – at all levels – in the FSR drafting process have indicated that the highly "nuanced" messages conveyed reflected an institutional desire at senior levels in the organisation to adopt a very cautious approach. In particular, there was a concern that the results of some of the analytical work might be described by the media as the CBFSAI conveying a "bearish" view of the property market and/or a less than sanguine view of the state of the financial system. This message was conveyed to staff working on FSR matters and, given the CBFSAI's hierarchical culture, was clearly a factor inhibiting staff presentation of alternative analyses and assessments. While this underlying feature was present in the preparation of all FSRs, it emerged most prominently in the case of the 2007 FSR, the message of which, arguably, could be characterised as reflecting a "triumph of hope over reality"[121].

6.46 The emphasis on adopting a cautious, conservative tone reflected several interrelated concerns. In earlier years, it was felt, given the diverse analytical findings described above, that the evidence favouring significant house price overvaluation was not sufficiently clear cut. Thus, assigning greater weight to the downside risks could have left the CBFSAI open to the criticism of acting precipitously and, possibly, causing housing market instability. This concern was heightened by the "crying wolf" problem – the Central Bank had warned in the preceding decade of a possible housing market collapse which had not, in fact, occurred. As one moved through 2006 and 2007, although the likelihood of a "non-soft landing" was increasing significantly, a reluctance to emphasise the risks predominated, less the CBFSAI be accused of

[121] This aspect is reflected in several references in the Minutes of FSC meetings throughout the period. As one example, it was decided in 2006 to exclude from the main text of the report data and references to a likely 15 per cent house price overvaluation that was contained in a themed research paper.

precipitating a crisis. In a sense, the earlier desire "not to rock the boat" was overtaken by a fear of "frightening the horses".

6.47 It can be argued that by 2007 the remedial options open to the CBFSAI had become fairly limited – at that point the "die was largely cast". Nevertheless, a better balance could have been struck in preparing both the market – and policy makers – for the strong likelihood that a major problem had developed, something that the reassuring message of the 2007 FSR failed to do. In particular, a strong message could have been conveyed to banks that a strengthening of their capital position was essential to help weather the likely storms ahead. With respect to earlier years, however, the argument in favour of a cautious assessment is not convincing. Uncertainty will always be present and reliance on rigorous statistical evidence is a luxury one cannot always afford. Waiting until more clear-cut evidence becomes available runs the clear risk that by then it may be too late to take effective offsetting action. An unduly passive approach may also create "moral hazard" by providing comfort to market participants and implicitly encouraging, or not discouraging sufficiently, continued risky borrowing and lending behaviour.

6.48 It was also felt that the adoption of a more "bearish" public posture by the CBFSAI in the face of growing risks would have been in the face of most prevailing public opinion which believed – or wanted to believe – that the property market in which so many at all income levels had invested would not suffer a severe crash. This sentiment was in turn reflected in the views expressed by many politicians – across the political spectrum – throughout the period. "Swimming against the tide" by the CBFSAI thus would have required a particularly strong sense of the independent role of a central bank in being prepared to "spoil the party" and a willingness to withstand possible strong adverse public reaction.

6.49 In any event, the FSRs did not end up conveying an appropriately forceful message that could have served as a springboard for strong remedial action. Some have suggested that even if they had done so, this might not have helped greatly, since there were doubts regarding the CBFSAI's ability to take meaningful and effective action. This question is addressed in the following chapter.

CHAPTER 7: MACRO-PRUDENTIAL POLICY IMPLEMENTATION

Section 1: Introduction

7.1 This Chapter assesses the options available to the CBFSAI to take remedial action with a view to lessening the risks to financial stability described in successive FSRs. Section 2 reviews a number of specific options that were either employed or might have been employed, specifically, moral suasion, increasing capital requirements in respect of property-related lending sectoral credit limitations, limitations or prohibitions on certain lending instruments such as 100 per cent LTV mortgages and increased provisioning for impaired loans. Section 3 discusses three issues that surfaced frequently during CBFSAI consideration of possible options: the effects such measures might have had on the competitive position of Irish regulated financial institutions; the fear that more robust regulation might make Ireland less attractive for international financial investment; and the view that some forms of intervention might run counter to the FR's "principles-based" philosophy of regulation. Conclusions are provided in Section 4.

Section 2: Instruments – Options and Choices

7.2 The powers of the CBFSAI to impose tougher requirements on credit institutions in order to choke off the boom appear to have been quite extensive. Nevertheless, internal papers show that four categories of measures were recognised by FR staff as available. These included: (i) direct controls on lending (including the prohibition of high LTV, or interest only, or very long maturity mortgages); (ii) increased capital requirements; (iii) sectoral limits – there was already a schedule of these, which had fallen into disuse, reflecting the probably correct perception that they were too easily evaded; and (iv) moral suasion. The latter was the tool most favoured in the Board Paper presented to the Authority in September 2006 (especially as being thought to be consistent with the principles-based approach), even though the Board Paper acknowledged that it might be of limited direct effect. This paper had been prepared at the request of the Chair, who was increasingly concerned about the continued expansion of credit to the property market.[122] In practice, only (ii) and (iv) were used in the period under review.

[122] See Section 4 of Chapter 4 above for further details.

- Moral suasion

7.3 The concept of moral suasion consists of the central bank/regulatory authority exercising their powers of persuasion – either publicly or privately – to convince financial institutions to modify their behaviour in some desired fashion. Since it does not involve direct interference in an institution's lending or other activities it is often considered the most desirable form of intervention, at least as a first step. At the same time, it is recognised that in many circumstances, unless accompanied by a credible threat of more forceful action, moral suasion by itself may not have the desired effect.

7.4 During the period reviewed, as discussed in Chapter 6, successive FSRs expressed concerns publicly regarding the risks to financial stability posed by evolving trends in institutions' lending aggregates. Press conferences and public speeches by the Governor echoed these concerns. Nevertheless, these pronouncements stopped short of actually calling on credit institutions to modify their behaviour or indicating that the CBFSAI would consider taking specific steps should they fail to do so.

7.5 However, as a follow up to publication of the FSRs, starting in 2004 "Roundtable **Discussions"** were held annually between CBFSAI officials and senior representatives of the major lending institutions to exchange views on the analysis and messages contained in the Financial Stability Reports.[123] In parallel, the Governor held meetings on a number of occasions with the Chief Executive Officers of credit institutions.

7.6 Detailed written records are not available of what transpired during these discussions and meetings.[124] However, based on participants' recollections, it appears that the institutions' representatives generally speaking took a more sanguine view of the situation and outlook and tended to downplay whatever worries were expressed in the FSRs. It has been suggested by some that the CBFSAI, in these private gatherings, expressed stronger concerns than those conveyed in the public messages of the FSRs. This suggestion has been emphatically refuted by representatives of the institutions

[123] CBFSAI participation was normally headed by the Director General and included the CEO of the FR as well as staff involved in the preparation of the FSRs. The credit institutions were typically represented by their Head of Lending (or the equivalent) and Chief Economist.

[124] In the case of some of the Roundtable Discussions a short summary of the "Conclusions" is available. However, these tended to echo the main conclusions of the FSRs themselves and did not convey a flavour of any differing points of view that may have been expressed by participants. The CBFSAI Board minutes do not record the meetings of the Governor with the credit institutions.

present. In any event, there is no evidence that the CBFSAI's concerns – such as they were – were taken heed of to any major extent subsequently.

7.7 Apart from informal meetings, moral suasion in many instances can take the form of letters from the Governor – which may or may not be confidential – to heads of financial institutions drawing their attention explicitly to the views of the authorities. In the years prior to 2002 the CB employed this practice frequently;[125] several of these communications are notable by the unambiguous and direct "tone" of the messages conveyed.[126] In reviewing why this practice ceased after November 2002 one reason that has been suggested is that under the new CBFSAI structure it was the responsibility of the Financial Regulator, rather than the Central Bank, to issue such a letter or letters. On the other hand, as noted in Chapter 3, according to the 2003 MoU, the Central Bank's responsibilities included "analysis of the micro-prudential – where appropriate – as well as the macro-prudential health of the financial sector." In any event, to the extent that ambiguity might have been present on this score, a simple expedient would have been to send a letter signed jointly by the Governor and the Regulator.

7.8 Annual pre-budget letters expressing views on fiscal matters were sent by the CBFSAI Board to the Minister for Finance. These letters regularly highlighted the issue of house price inflation and the size of the construction sector, particularly in the letters of 30 September 2003 – "The level of house prices along with continuing high rates of increase in prices pose macroeconomic as well as financial stability risks," and 12 October 2004 – "There remains a risk, however, in that the current rate of housing output is, on some estimates very much higher – not far off twice – the underlying demand for housing." In the latter letter the Governor states that: "Fiscal policy could also play a role in smoothing the adjustment of demand for property by limiting its more speculative components. In this regard, it would seem appropriate, for example, to

[125] Such letters were sent by the Governor at least annually and in 1999, 2000, and 2001 twice a year. The letters commenced in June 1997.

[126] For example, in a letter dated 4 February 1998, "The Central Bank has repeatedly advised all credit institutions of the critical importance of maintaining the traditional standards in lending for house purchase. There is evidence that these traditional standards are being breached and that loans up to 100 per cent of the property value are available. The Central Bank considers this to be inadvisable." On 27 July 1998 the Governor wrote: "... it is abundantly clear from previous experience that, if standards are relaxed during a period of prosperity, there will be a price to pay later in terms of excessive bad loans." On 7 March 2000, "There is a distinct possibility that the continuing large-scale surge in credit may fuel the economy to the point where overheating and its damaging consequences might become unavoidable. ... I am writing to request you ensure personally that your organisation is fully conscious of the potentially damaging economic and social consequences and the damage to your own institution and credit institutions in general, if reasonable restraint is not exercised at all times."

allow no further extensions to the termination date of mid-2006 for the range of tax driven incentive schemes for housing." However, as regards risks to financial stability, there is no evidence that any messages different from those contained in the FSRs and related public statements were conveyed.

- Increased capital requirements: Risk weighting of residential mortgages

7.9 The FR was not passive in responding to the renewed system-wide expansion of property-related credit. From at least mid-2005 the idea of a capital surcharge on the riskier property-related loans came to the fore. Internal documentation pointed to a recognition of: (i) the unprecedented demand for housing credit; (ii) the IMF opinion that Irish property prices were overvalued by more than in other countries; (iii) high household debt/income ratios by international standards; (iv) increasing competition between lenders resulting in lowering of credit standards, notably the spread of 100 per cent mortgages; (v) the move to IFRS provisioning standards which reduced the general provisioning available in the banking sector to protect against increased defaults; and (vi) the prospect of slower property price growth. An internal memo of August 2005[127] proposed what now seems a very modest increase in capital requirements for new high LTV mortgages (above 80 per cent LTV).[128] (It proposed a sliding scale which, by progressively increasing the "risk-weighting" of mortgages from 50 to 60 per cent depending on the LTV rate resulted in a 2.4 per cent Tier 1 capital requirement for 100 per cent mortgages, compared with 2 per cent before).

7.10 There was some delay before this proposal was brought to the Authority, reflecting hesitation as to its advisability, despite the imposition – as noted in the documentation – of more stringent national requirements by the regulatory authorities in Australia, Canada and Germany. The proposal was finally approved by the Authority at end-March 2006 and became effective 1 May 2006 (i.e., Box 7.1). Interestingly, in this case there was only a short period of prior consultation with mortgage providers. Indeed, the Consultative Industry Panel expressed "surprise" that there was no advance notification to it.[129]

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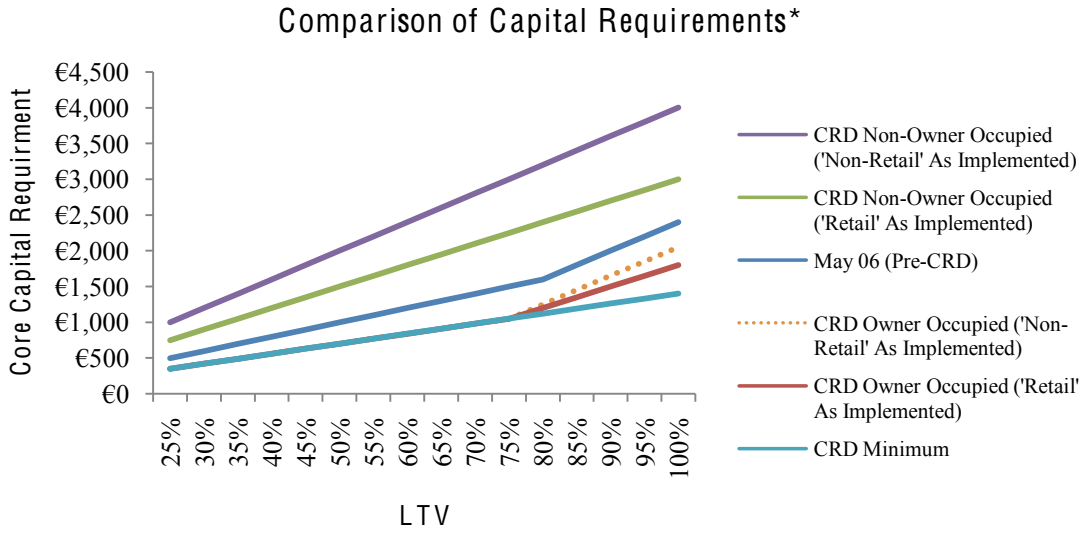
[127] The memo, "Risk Weighting of Residential Mortgages." was from the Head of Banking Supervision to the Prudential Director, 12 August 2005.

[128] The internal document proposing the measure also includes newspaper cuttings highlighting public concern about lending standards, including articles by David McWilliams and Richard Curran. Somewhat surprisingly, it does not make any reference to the FSR.

[129] New requirements for credit loss provisioning, including requirements for credit risk management were introduced in October 2005. The purpose of these requirements was to ensure that credit

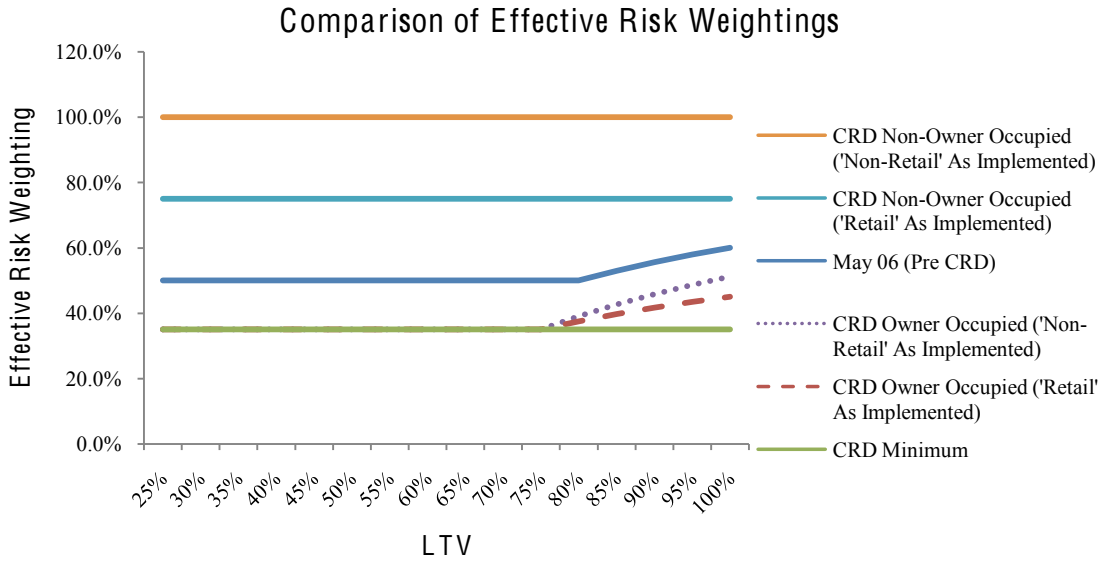
Box 7.1 Increasing the Risk Weightings for Residential Mortgages

The FR increased the risk weighting of residential mortgages for calculating capital requirements in May 2006 and following the implementing of the CRD in 2007 applied risk weightings for various mortgage types that were in excess of EU minimums. The graph below sets out the level of core capital a credit institution would have to set aside assuming it was providing a mortgage for the purchase of a property valued at €100,000. The graph caters for the rules applying to different types of mortgages at different times, and different loan-to-value ratios.



*Assumes a core capital requirement of 4 per cent

An alternative way of examining the impact of the FR's approach to the risk weighting attributed to residential mortgages is to look at the effective risk weightings as they applied to various loan-to-value ratios. This is addressed in the chart below.



institutions managed their credit risk appropriately and that appropriate levels of provisions were made for impairments and uncollectable amounts written off. The rules included not only qualitative requirements on credit risk management and impairment provisioning, but also quantitative criteria and reporting guidelines for impairment provisioning.

- The EU Capital Requirements Directive

7.11 A few months later, in the context of the application of the new EU Capital Requirements Directive (CRD), the FR added speculative property development loans to the class of loans attracting a higher capital ratio. The CRD, which was implemented on 1 January 2007 and became fully effective on 1 January 2008, introduced a new capital adequacy regime for banks, based on the Basel 2 framework. As the FR's Annual Report 2008 put it:

> "The Directive gives supervisors some flexibility through national discretions to tailor the capital requirements to reflect their national circumstances. We used these discretions to introduce a more stringent capital regime than the Directive, aimed at supporting the measures already introduced here in respect of property transactions....The Directive allowed us to decide that exposures, associated with particularly high risks such as investments in venture capital firms and private equity investments, be assigned a risk weight of 150 per cent. We applied this discretion [*inter alia*] to speculative commercial real estate, as we determined it to be a high-risk category. We were the only regulator in the EU to use this provision in relation to commercial real estate." (FR, 2009a, pp. 11-12).

These measures were applied only to credit institutions regulated by the FR.

7.12 Before introducing the CRD measures, the FR issued a consultation paper (FR, 2006j) and received a number of responses including one from an industry representative body which expressed its strong belief "that the proposal to introduce a 150 per cent weighting to speculative commercial lending [was] unwarranted," noting its expectation that recent interest rate increases would "deliver a more effective cooling of the property market". The FR held its ground, though, and following the required consultation with the Governor (who expressed his full agreement with the measures in a letter dated 22 December 2006)[130] introduced the measures as planned.

7.13 The capital surcharge measures introduced in 2006-7 show what could have been done, albeit much earlier. By the end of 2006 the residential property market had peaked, and few big speculative property deals were concluded after mid-2007, well before the effective date of the capital surcharge affecting them. Furthermore, the measures were in reality also rather modest in their likely impact. It was too little too late.

7.14 Even the 150 per cent weighting on speculative property lending only increased the Tier 1 capital requirement on such lending from 4 to 6 per cent. After being watered down

[130] The Governor's agreement was needed because the proposed measures had implications for financial stability. For details of these arrangements between the FR and the Governor see Chapter 3 above.

already by the start of 2007,[131] the retail residential mortgage weighting only increased the Tier 1 capital requirement on a 100 per cent LTV loan from 2 to 2.25 per cent[132].

7.15 It is also apparent that despite the extensive expertise available among Central Bank staff that could have been made available to assist the Financial Regulator's staff in quantifying the estimated impact of the measures outlined above this analysis was not undertaken. Such work, involving analysis of valuation techniques, rising property prices and appropriate LTV ratios for banks would have formed the basis for a more informed assessment and could have set the stage for more aggressive intervention. (See Box 7.2 for a more detailed discussion.)

7.16 There appears to have been a consensus among Financial Regulator and Central Bank staff that the capital requirements measures – which in addition to being very modest in size only came into effect close to the tail end of the boom – were viewed as a "shot across the bows" of the credit institutions, rather than an attempt to try to make high LTV transactions prohibitively costly. This is also reflected in the minutes of the Authority meeting for February 2006 when, in discussing the risk weighting of residential mortgages, reference is made to the fact that "the proposed change is not designed to interfere in the operation of the market or to reduce the level of mortgage lending, but to signal the determination of the Financial Regulator to ensure that there is appropriate capital provision." In this sense, they might more accurately be regarded as being in the realm of the moral suasion approach referred to earlier.[133]

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[131] Having been recalibrated in line with the EU Capital Requirements Directive (CRD), the schedule adopted was the same as that envisaged in mid-2005. However, the CRD, which was introduced to Ireland from the beginning of 2007, actually lowered the basic international requirement for residential mortgages from a risk-weight of 50 per cent to one of 35 per cent. At that point the new Irish sliding scale was amended, with the effect of actually lowering the Tier 1 capital requirement again somewhat for retail residential mortgages. To go further would have represented a national "super-equivalence", i.e., tougher requirement, which, in the FR staff's opinion could "be challenged by the industry on those grounds".

[132] For non-owner occupied residential mortgages, a higher requirement was imposed, namely more than doubling of the basic CRD requirement. For non-owner-occupied, non-retail mortgages, the ratio was almost trebled.

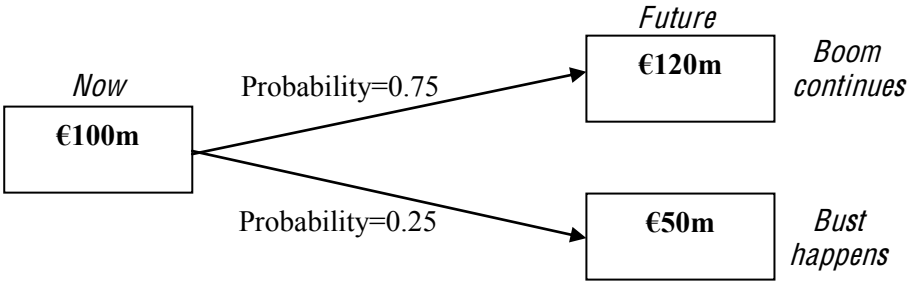
[133] Given their easy access to wholesale funding throughout the period, institutions would have had little difficulty obtaining the additional funding needed to meet the requirement at an unchanged cost. However, their profitability per unit of borrowing would have declined, albeit very marginally, compared to the situation prevailing prior to the measure.

Box 7.2: Was 150 per cent Risk Weighting For Speculative Property Enough?

If property that was backing loans to developers was correctly valued when the loans were issued, how has it happened that the same property is now being valued (sometimes by the same valuers) at much lower prices – often a half or less than the original value? This question is sometimes asked in a way that suggests that bankers could not have reasonably anticipated their current difficulties.

However, a simple example shows how valuers might have been fully consistent in reflecting current market prices both before and after the crash; the problem the banks are faced with is due to their not making sufficient provision (at the time the loan was granted) for the uncertainty of the future price of the property, and in particular not either requiring the developer to put up more of their own money or setting aside enough capital themselves against the risks being taken.

The following very simple example illustrates the point. Suppose the future can be either good (boom conditions, property worth €120m with probability 0.75) or bad (bust conditions, property worth only €50 million with probability 0.25). In other words, the odds are 3 to 1 against the boom ending in the coming year. Such a scenario would rationalise a current market price of around €100 million – indeed, the expected value of the property next year is €102.5 million.



The bank would, however, be foolish to lend the full amount. If the bust comes, the developer will fail and the bank will only get €50 million back; and if the boom continues, the banks will only get its money back with interest, not otherwise sharing in the upside of the property value.

Even if the bank lends only €70 million at 9 per cent interest, its expected rate of return can readily be calculated as -0.4 per cent. And, if the bust conditions materialise, it will have lost over 30 per cent of its outlay. The needed capital cushion for such a loan would therefore be of the order of 30 per cent. Alas, such calculations are all too similar to what has been observed in many cases. And with such a high proportion of the balance sheet of the banks tied up in the same kind of business, the simultaneous bust affecting most of the property collateral resulted in catastrophe.

Of course in normal times the range of likely price movements would not be so high, and prudent bankers would diversify their business broadly. But in the late stages of a correlated property boom such as experienced in Ireland, the above example would not have seemed farfetched to analysts. Thus, increasing the risk-weighting to just 150 per cent only lifted Tier 1 requirements from 4 to 6 per cent on such lending; to achieve adequate protection, the risk-weighting should have been of the order of 750 per cent.

This calculation does not take account of cross-collateral arrangements and lending on the basis of a second lien. In the above example, a second lien loan of €20 million with, say, 15 per cent interest (to take account of the weaker security) would yield an expected rate of return to the bank of *minus* 13.8 per cent, and should have been backed 100 per cent with the bank's equity capital – equivalent to a 2500 per cent risk weighting.

- Other possible quantitative actions

7.17 An additional possible measure that could have been considered was the banning of mortgages with an LTV exceeding a certain prudent level. Such a measure would have been out of tune with the overall regulatory approach adopted, and with the main currents of international practice of the time – though some countries had such restrictions. However, rather than giving a strong warning signal on this issue, at the time of the 2006 decision, the discussions at the CBFSAI Board and the Authority emphasised that care should be taken to avoid any misunderstanding that the move was a ban on 100 per cent mortgages.

7.18 There appears to have been little serious thought given to the idea of setting binding or even non-binding limitations on credit extended specifically to the property sectors which had been expanding at truly unprecedented rates. Sectoral limits had in earlier years prior to the adoption of the euro formed a significant part of the arsenal of instruments used by the Central Bank. While of course these were no longer relevant as monetary policy instruments in the context of Ireland's membership in the eurozone, their reactivation and use for prudential reasons would not have required any additional powers being given to the FR/CB. Rules of this kind were actually in effect, but not enforced. Specifically, there was a long-standing ceiling (200 per cent of own funds) which was supposed to be applied to loans to any one economic sector (various classes of property loan were treated as different sectors, so the overall property ceiling was higher). This requirement seems to have become a bit of a dead letter, with violations being noted but not acted upon. Albeit old-fashioned, this kind of rule would, if enforced, have been quite effective in slowing the bubble. It is fair to acknowledge, however, that experience shows that quantitative credit limits can be circumvented fairly easily.

7.19 Alternatively, a ceiling could have been placed on the rate of growth of credit extended by one or more institutions, especially those experiencing dangerously high growth. This would have been a major departure from the moral suasion approach to enforcement and would not sit comfortably with market-oriented policy in normal times. But with the protracted and record-breaking run of house price appreciation and credit expansion, crude measures such as this could have been justified and could have been very effective in stopping the bubble in its tracks. Certainly the rate of growth of

Anglo Irish Bank – the fastest in the market – should certainly have been the trigger for much more intense scrutiny of its business than it received, including giving consideration to the possibility of restraining its growth directly.

7.20 Another relevant action could have related to loan loss provisioning for impaired or problem loans. Under the Basel Core Principles supervisors should, for example, assess "whether the classification of the credits and assets and the provisioning is adequate for prudential purposes. If provisions are deemed to be inadequate, the supervisor has the power to require additional provisions or to impose other remedial measures."

7.21 In contrast to the imposition of higher capital requirements for risky lending – which would cover against unexpected losses – the purpose of provisions is to take account of what is likely to occur in respect of loans expected to suffer losses. The changes to International Financial Reporting Standards (IAS39) of 2005 were interpreted to limit the degree to which specific provisions could be taken in respect of loans where no impairment had occurred. But provisions could be taken if there was any objective evidence of impairment. In later stages of the boom, when the relevant property markets had already began to turn down, regulators could have required more provisions to be taken, thereby inducing the banks to consolidate their capital, for example by limiting dividends, or by issuing new capital.

7.22 Finally, it might be suggested that liquid reserve requirements should have been higher, or that ceilings should have been imposed on banks' loan-to-deposit ratios. While the first of these approached might not have had much impact, the second could have had a decisive and early effect in restraining the bubble before it really got under way. Of course by the same token it would have been vigorously resisted. Such measures are now likely to be adopted internationally, though discussion of them in this context smacks to some extent of hindsight.

Section 3: Concerns

7.23 During this period, apart from a possible overall reluctance to swim against the tide of public opinion and/or to contribute or to be seen to contribute to market disorder (discussed in Chapter 6) three specific (and to some extent interrelated) concerns appear to have militated against more decisive and aggressive intervention. These were voiced frequently by external interest groups (most notably by representatives of the credit institutions themselves) and were reflected – sometimes explicitly, sometimes implicitly – in internal discussions within the Central Bank and the Financial Regulator. There would also certainly have been a consumer backlash against regulatory action which made products such as 100 per cent mortgages less available, given their increasing importance, particularly for first time buyers (Honohan, 2009, Figure 8, p. 216).

7.24 The first worry was that stronger regulatory action would adversely affect the competitiveness of credit institutions regulated by the FR, i.e., those operating either on a consolidated or subsidiary basis. The FR did not regulate branches of foreign credit institutions; moreover, institutions could switch from subsidiary to branch status, although this was not necessarily an altogether costless exercise. It was therefore argued that if the FR imposed more onerous regulations on institutions under its remit, they would be faced with a competitive disadvantage and risk losing market share to other institutions that operated on a branch basis in the State or marketed services into the State on a cross-border basis.

7.25 While this issue cannot be dismissed, its merits were overstated considerably. First, key elements underlying the argument were not addressed in any systematic manner, including: the relative importance and market power of existing Irish-regulated institutions; the ease or otherwise of entry of other institutions; the potential loss in competitiveness facing "home" institutions; and finally, the possibility of exploring with other national regulators a "coordinated" regulatory response. The only reference in a Board Paper to the issue concerns the impact of the introduction of the risk weighting of residential mortgages; the competitiveness aspect is discounted on a number of grounds including the fact that "Irish licensed institutions account for almost

the entirety of mortgage lending in Ireland."[134] Irish regulated credit institutions between 2000 and 2008 comprised in excess of 96 per cent of the domestic mortgage market.

7.26 There are also more fundamental problems with this argument. As noted in Chapter 3, while the CBFSAI's mandate does include the promotion of the Irish financial services industry, it also states that this is subject to promoting financial stability. Indeed, if, as a result of more aggressive intervention, Irish-regulated institutions had ceded some of their property lending activities to others, their own situation today could have been considerably stronger. The possible costs of inappropriate lending by others would have been the responsibility of the regulator of the other jurisdiction rather than of the Irish authorities. This "division of labour" was clearly set out in the euro area arrangements relating to financial supervision.[135]

7.27 The second concern was that more robust regulation might make Ireland less attractive for international financial investment. A non-intrusive regulatory environment

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[134] The full discussion is as follows: "A further issue to consider is whether a unilateral increase in risk weightings by this jurisdiction will put Irish licensed institutions at a competitive disadvantage to institutions licensed overseas. A number of factors suggest that this will not have a material competitive impact on domestic banks:

i) at present, Irish licensed institutions account for almost the entirety of mortgage lending in Ireland. It is considered that the proposed capital increases are unlikely, in themselves, to lead to an immediate change in this position. Pricing of loans and the expenditure necessary to develop market presence is considered to be of greater importance to any decision to enter the market on a branch or cross border basis;
ii) although the Irish system currently allows the 50% weighting to apply to the full value of a residential mortgage (and in this respect is similar to the UK), a number of other jurisdictions only allow this weighting up to a specific LTV. It is understood that Germany, Australia and Canada use cut-offs of 80 per cent, 80 per cent and 75 per cent respectively for this standard weight. Loans above the cut off attract a 100% weighting on the full amount of the loans. The proposals in this paper are less stringent than such approaches; and
iii) Irish licensed banks, which are part of banking groups in other jurisdictions, could be considered to be at an advantage as, from a group perspective, Irish residential loans would be absorbed into the group's balance sheet and be subject to the home State's regulator's rules. This may place them at an advantage to banks which consolidate in Ireland. However, a number of points should be noted here:
    a) the amounts involved will not be material from these groups' perspective;
    b) the Home State regulator may apply some rules in this area in a different manner to the Financial Regulator already; and
    c) the same rules will apply to all local banks, i.e., there will be a level playing field nationally." (FR, 2006k, pp. 9-10).

[135] It has also been suggested at times that restrictive actions *vis-a-vis* Irish-regulated institutions would not have curtailed the property boom as other institutions would have entered to pick up the slack. Abstracting from the practical issues described above, this observation is true but not relevant. In a monetary zone, no individual central bank can do much to control aggregate demand pressures – this is a zone wide responsibility. The key role of national central bank/regulatory authorities is to help safeguard the stability of institutions under its remit and thereby contribute to zone-wide financial stability.

conducive to promoting the IFSC was considered important by Government.[136] The Department of the Taoiseach took a lead role in coordinating support and the development of the international financial services industry. Partly, this was done through a consultation mechanism, the Clearing House Group at which senior FR representatives as well as industry personnel were present to identify issues of major concern to the development of the sector. The Chair and CEO of the FR participated in several roadshows to promote the IFSC (e.g., Patterson 2007).

7.28 The FR and the CB were mandated by legislation to pursue two goals – financial stability and promotion of the financial sector – which may well have been in conflict. The FR was in a difficult position as the possible adverse effects on discouraging inward investment in the IFSC were more immediate and real than what were perceived as more distant concerns about financial stability. While the stability goal was given explicit priority, the potential conflict between the two goals complicated policy choice.

7.29 A third concern was that more aggressive use of some of the instruments discussed above could have been criticised as running contrary to the spirit of principles-based regulation. The latter assumed that financial institutions would at the end of the day operate in their enlightened self interest and that by and large they should be left to so unencumbered by unnecessary, and especially, heavy handed, regulatory intervention. However, such an argument is based on an insufficient appreciation of the risk that poor judgements by decision makers in institutions will lead not only to costs for themselves but also for the wider public given, in many cases, the institutions' systemic importance and the consequent pressures to " bail them out" to a greater or lesser extent during a crisis.

7.30 As noted in Chapter 4, several key architectural aspects of the principles-based approach had not been applied, or applied only partially, in Ireland since 2003. But even if these elements had been fully in place it would not have protected the financial system from the potential for misjudgement that led to the financial crisis. These misjudgements – in the form of excessive reliance on a massive expansion in property-related lending – were probably facilitated by an incentive structure which, to varying extents, in the face of aggressive competition, tended to reward volume at the expense

[136] For example, "A number of factors have underpinned our attractiveness as a location for international financial services, including an attractive fiscal and regulatory environment ..." (Department of the Taoiseach, 2006, p. 8). See also *ibid*, (pp. 12-13).

of quality. Strong intervention by the authorities to counteract the possibility that institutions will not take into sufficient account these potential costs to society (often termed "externalities") and therefore will under-price the risks involved is entirely consistent with the principles-based regulatory approach.

7.31 In addition, even absent the above problems in each individual institution, when the behaviour of all the banks, taken together is considered, systemic financial stability issues may well arise. The fact that loans to overlapping subgroups of the same set of property developers accounted for such a high fraction of credit outstanding from most of the credit institutions implied a systemic risk not captured in risk assessments carried out for one bank at a time. This problem also has cross-border dimensions which are currently the subject of discussions at international level on improvements in information exchange.

Section 4: Conclusions

7.32 Notwithstanding the relatively sanguine message conveyed by successive FSRs, the Central Bank/Financial Regulator could and should have used to a much greater extent the array of instruments available so as to effect a change in institutions' behaviour and thereby reduce substantially the emerging risks to financial stability. Although Roundtable Discussions were held between CBFSAI staff and representatives of credit institutions following the publication of FSRs and the Governor met with CEOs on several occasions, there is no evidence that any stronger warning messages were conveyed during these contacts. Neither was the avenue of writing to the institutions – a practice that had been followed in earlier years – accompanied by a concerted campaign, perhaps in cooperation with the Government, explored. In sum, the moral suasion approach appeared to have been entirely ineffective in terms of inducing any significant change in institutions' lending behaviour.

7.33 The authorities did implement, after considerable internal debate, increases in capital requirements applied to various categories of property-related lending. However, no analysis was undertaken as to what, if any, quantitative impact these measures might have and, even at the time of their introduction, it appears there was a strong element of

symbolism involved. In any event, it is widely acknowledged that the actions were too little and taken far too late.[137]

7.34 Other options were in principle available. These included prohibitions on certain types of lending products, for example, 100 per cent LTV mortgages and/or quantitative limitations on lending to the property sector, including increased provisioning. While recognising that such measures would have been out of tune with the principles-based approach and with the then prevailing international regulatory fashion (as well as, in the case of sectoral lending limits, subject to evasion) they needed to have been given serious consideration, especially since the other approaches appeared to be having little or no impact.

7.35 The reluctance to employ more aggressive intervention seems to have reflected not only a concern that consumers would react adversely if products such as 100 per cent mortgages became less available but also to a significant extent fears as to the possible adverse impact on the competitive position of domestic institutions *vis-a-vis* their counterparts that were operating – or might start to operate – in Ireland. Excessive weight was given to this aspect, probably in light of lobbying objections from institutions who feared a diminution in their market share. In the first place, no quantitative analysis was undertaken that supported this concern. More fundamentally, while part of the CBFSAI's mandate was to promote the growth of the Irish financial sector, the legislation clearly specified that this was conditional upon the CBFSAI acting to promote the stability of the Irish financial sector. The latter objective, in line with policy throughout the euro zone, was paramount and should have been recognised as such.

7.36 Finally, the suggestion that stronger intervention would not have been consistent with the general approach of principles-based regulation is not convincing. Even if all the architectural (especially governance) elements underlying the principles based approach had been fully in place – which they were not – financial institutions, in Ireland as elsewhere, are prone to significant misjudgements, especially in the presence of an incentive system which can tend to favour short term returns over longer term risk

[137] In the case of the FR, the Chair of the Authority stated, "with the benefit of hindsight, our measures were insufficient given the severity of the recession that has emerged. However, it is arguable whether any regulator acting in an economy focused on growth and fostering competition, could have materially mitigated the property bubble.". (FR, 2009a, p. 4)

avoidance considerations. Even in the absence of the above concerns the concentration of overlapping risk in the property development sector was likely to have entailed significant systemic financial stability risks. In a world where mistakes may end up costing society – and the taxpayer – dearly, regulatory intervention to ensure a more appropriate pricing of risk, as well as being necessary, is entirely consistent with the principles-based approach.

7.37 Overall, the view that the CBFSAI did nothing to try to slow the boom is not consistent with the facts. But its actions, which were tentative and timid, were implemented too late and were wholly inadequate to alter behaviour. Procedures were not in place to escalate action when the intended results – when they were clearly specified – were not achieved within a set timescale. Neither side of the organisation ever fully resolved the tension between the need to stop excesses and the fear that too sharp an intervention would send the economy into an avoidable tailspin. Despite the CB's primary responsibility for financial stability, it was, in fact, the FR side, and not the CB, which took the most concrete action to intervene via the system wide capital requirement surcharges. But, while the measures were not easy for the FR to implement given the circumstances and timing, they were always destined to have little more than a token effect at best. True, the CBFSAI's passivity was not out of line with what happened elsewhere (in the US and UK, for example), but the extent of Irish exposure to the property sector development and the associated reliance on international wholesale funding was on an almost unmatched scale which required much stronger intervention.

CHAPTER 8: CRISIS MANAGEMENT – AUGUST 2007 TO SEPTEMBER 2008

Section 1: Introduction

8.1 After wholesale markets for liquidity started to dry up in August 2007, and especially following the collapse of Northern Rock the following month, the CBFSAI's attention began to focus on the liquidity pressures being encountered by the Irish banks and on making preparations for a possible further deterioration in their funding situation. Central banking and regulatory policy in the period between then and the end of September 2008 is considered in this chapter, which is divided into three main parts.

8.2 Section 2 reviews policy actions and planning during this period. Strengths and some shortcomings of crisis preparations are noted. Section 3 focuses on the events of September 2008 as the crisis came to a head, accelerated by the near-paralysis of the international market for short-term liquidity after the bankruptcy of Lehman Brothers (Annex 3), and subsequent events. The discussions leading up to and on the night of 29/30 September are described in this context. Section 4 takes a broader perspective on the guarantee decision, placing it in the context of crisis containment actions taken around that time. It considers whether the guarantee was a reasonable policy response under the prevailing circumstances. Some conclusions follow.

Section 2: Contingency Preparations

8.3 Given the scale of their net international position, the Irish banks were all highly exposed to the disruption in the international market for short-term bank funding from early August 2007 onwards. At first the most conspicuously affected banks worldwide were those who had specialised in buying and re-packaging US mortgage loans, funded through short-term borrowing. The reluctance of wholesale lenders to provide liquidity to these banks (or to the special purpose vehicles which they had created to hold the mortgage-backed securities), reflected: a re-assessment of the likely repayment performance of the underlying mortgages; a realisation that the ratings that had been assigned to the mortgage-backed securities were unreliable and systematically biased towards over-optimism; and uncertainty as to where the worst losses would occur, given the complexity of the packaging and re-packaging involved. Some of the most conspicuously exposed institutions were rescued from collapse early on, including the

German bank Landesbank Sachsen, which had conducted this type of operation, mainly through its Dublin offices.

8.4 Although the main Irish banks had not been much involved in US mortgage-backed securities, they were highly dependent on wholesale funding. The fact that their portfolio was so heavily oriented towards property and that Irish property prices were falling also helped explain why they began to find it harder and harder to attract longer-term funding. But there was also a general world-wide retreat from lending into any type of risk that could not be easily assessed, and the Irish banks suffered.

8.5 As 2008 progressed, liquidity difficulties deepened, especially around mid-March, when the investment bank Bear Stearns was rescued by the US authorities. The share prices of Irish banks also continued to drift lower, a matter which should not in itself be a matter of concern to the Central Bank or Financial Regulator except when, as is nowadays often the case, a share price weakening is taken as a signal by wholesale depositors to withhold their funds.

8.6 Among the actions taken to enhance preparedness were: (i) enhanced cooperation between the CBFSAI and the Department of Finance, via the Domestic Standing Group (DSG) including a crisis simulation exercise; (ii) the preparation of a crisis management manual, including specific institutional issues that arose in light of the Northern Rock collapse[138] and preparation for the possible use of emergency liquidity assistance (ELA); (iii) enhanced monitoring of liquidity flows; and (iv) advance consideration of some practical issues relating to crisis resolution options. These are reviewed in turn.

- Domestic Standing Group

8.7 It is important in any country to have good communication channels between the main public agencies dealing with financial sector matters, namely, the Central Bank, the Financial Regulator and the Department of Finance. Schematically, the FR is the body with the best knowledge of the condition of each of the banks; the Central Bank can form a policy view with regard to the broad financial stability consequences of any given action and is best placed to decide on and implement decisions on the provision of liquidity in the form of short-term loans; while only the Government (represented by

[138] The Northern Rock collapse seems to have greatly influenced the Irish authorities thinking about crisis preparedness and is discussed in Section 4.

Department of Finance officials) can decide on covering underlying losses via taxpayer support.

8.8 In 2006, in line with new EU-wide procedures,[139] an inter-agency financial committee, the Domestic Standing Group, was established to deal, *inter alia*, with crisis management issues. The DSG comprises the Central Bank, the Financial Regulator and the Department of Finance; a Memorandum of Understanding between the parties entered into force in July 2007. The DSG is intended as a framework to help manage financial stability issues, including potential systemic crises. The chair was to be rotated among the three parties on an annual basis. It could meet at various levels. Typically at the early stage, envisaged participants would have included the Assistant Director General, Economics (Central Bank), the Prudential Director (Financial Regulator), and an Assistant Secretary (Department of Finance). From mid-2008 the group has also met as needed at the level of Governor, CEO (FR) and Secretary General or Second Secretary (Department of Finance). In addition, during this period, the NTMA participated. At the outset, the work program of the DSG included:

- exchanging information on market and regulatory issues;
- overseeing the updating of the crisis management manuals of the CB, FR and Department of Finance;
- participating in crisis simulation exercises;
- developing principles for the resolution of financial crises, taking account of work being done at the EU level;
- policy and procedural issues relating to deposit insurance; and
- examining the impact of company law provisions on insolvency in crisis situations.

- The Crisis Management Manual (also known as the Black Book)

8.9 The Black Book (prepared initially in 2001) in its original form included:

- the principles under which the Central Bank would operate during a crisis;

[139] In recent years, under the auspices of ECOFIN, there has been an increasing focus on developing co-operation between the relevant authorities in order to help manage cross-border crisis-related issues within the EU. In 2003 an MoU was agreed between all banking supervisors and central banks in the EU. A tripartite MoU involving ministries of finance as well as supervisors and central banks, followed in 2005. A number of European-wide crisis simulation exercises were conducted involving central banks, supervisors and ministries of finance. These were based on the potential consequences of an assumed failure of only one institution and did not address the possibility of a crisis affecting several institutions simultaneously. Therefore they turned out to be not particularly useful in the Irish crisis situation.

- operational procedures and terms and conditions for ELA;
- legal issues relating to insolvency laws and state aid to industry; and
- information and logistic issues such as arrangements for contacting the responsible persons in a crisis.

8.10 Following the experience of the UK authorities, close attention had been given to provision, if necessary, of ELA by the Central Bank. In the Eurosystem, this form of financial assistance may be used in the case of a solvent but illiquid credit institution which does not have sufficient collateral with the required characteristics for use in normal ECB lending operations. Such assistance can only be given on the basis of adequate alternative collateral and the associated credit risk is assumed by the national central bank and not the Eurosystem as a whole. The assistance is provided at a penalty rate of interest and is envisaged to be used only in an emergency and for a very short period. Following extensive work on the legal documentation and decision-making powers involved, the detailed procedures were presented[140] to the CBFSAI Board in November 2007 which approved the delegation of powers to the Governor with respect to the granting of ELA.

8.11 Aside from ELA, although a large amount of resources had been devoted to preparation of the crisis management manual, it was not employed to any significant extent during the actual crisis. This was due to the fact that the procedures outlined were excessively cumbersome, and sought to involve too many officials of the Central Bank and Financial Regulator at a time when rapid decision making was at a premium.

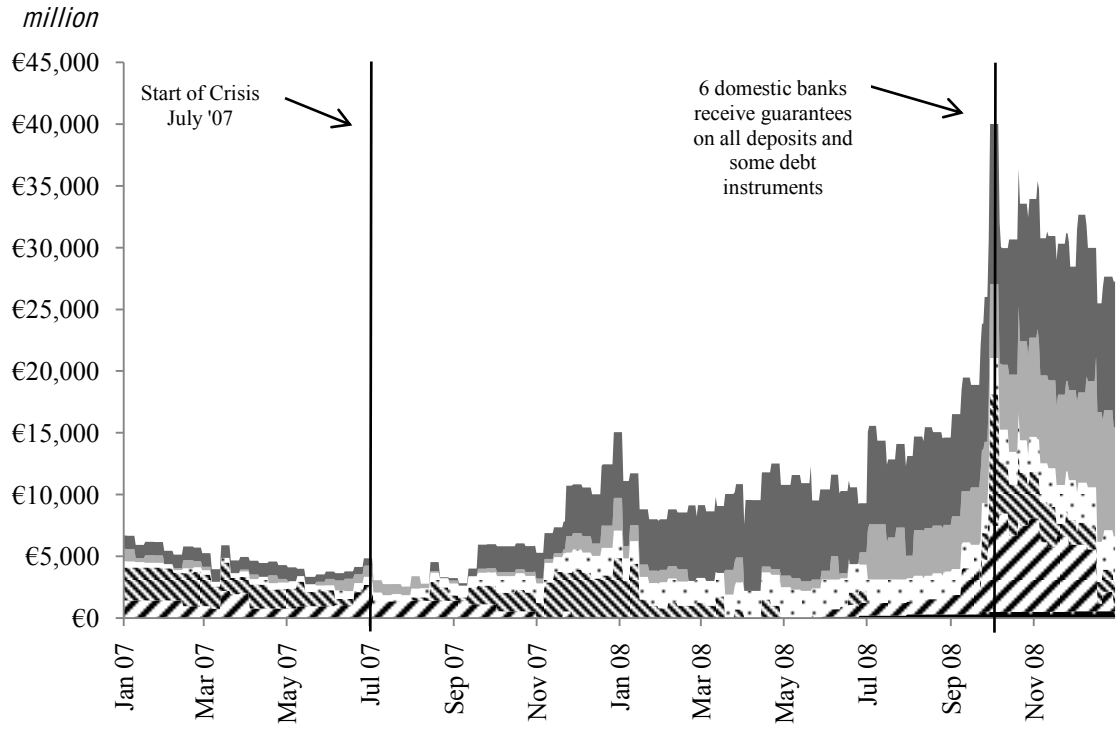
- Monitoring of liquidity flows

8.12 A Liquidity Group chaired by the Deputy Director General of the CB was established in early 2008 to obtain and disseminate information on liquidity developments from the main credit institutions and to identify any potential problems at an early stage. The group met at least weekly and shared data on the sources and maturity structure of funding, the bidding behaviour in Eurosystem operations which provided some idea of the liquidity needs of institutions participating in ECB refinancing operations, the use of collateral, fulfilment of the minimum reserve requirements of the ECB, interbank transactions and the likely observance of prudential liquidity ratios. While this exercise proved to be a valuable tool in helping to establish a "real time" picture of liquidity

[140] CBFSAI Board Paper No 151 of 2007, *Liquidity Management Procedures*.

developments during the turmoil, a comprehensive, daily picture of the actual liquidity flows had not been put in place before early 2009. During 2008, the liquidity situation deteriorated, as reflected in the unprecedented recourse to financing from the European Central Bank which rose from a monthly average of around €6 billion in September 2007 to €20 billion in September 2008 (Chart 8.1).

Chart 8.1: Refinancing Operations by the ECB for the Covered Institutions – January 2007 to December 2008



- Crisis containment options

8.13 A paper entitled Crisis Resolution Options[141] was discussed by the DSG in mid-2008. It reviewed the possible procedures and potential pitfalls involved in dealing with a troubled bank or building society. Two main crisis options were considered, namely assisted private sector acquisition and nationalisation (other possibilities briefly considered in an earlier draft included use of ELA, alternative mechanisms for providing liquidity, for example by investing (against collateral) some of the liquid assets of the NTMA, and a blanket guarantee). However, the paper offered little detail about implementation of the various options including that of the issuance of a guarantee (for example, it did not address the question of possible inclusion of

[141] Crisis Resolution Options, 11 June 2008: Financial Stability Department and Banking Supervision Department, CBFSAI.

subordinated debt)[142]. The note concluded with a series of recommendations requiring additional legislative work, including on nationalisation and resolution regimes. In the event, work was not pursued further at this stage and the paper's content appears to have been quickly overtaken by events.

8.14 In the case of private sector acquisition, the paper favoured, for operational reasons, implementing such a decision during a weekend. It sketched out the main steps that might be involved, including the possibility of temporary funding, perhaps via ELA. The paper argued that the alternative option of temporary nationalisation[143] should be considered only when all private sector solutions were exhausted. In this case, shareholders would not be bailed out and creditors and uninsured depositors should expect losses. Given the lack of a banking resolution framework, there was concern that simply announcing a nationalisation might not stop a run on the bank. Important elements that might be considered included a guarantee to prevent a run on the bank (although no details of such a guarantee were provided[144]), a trigger point for action by the authorities and provisions that would be necessary to avoid the immediate payment of a troubled institution's debt securities.

- Assessment of preparations prior to the crisis peaking

8.15 While considerable effort was thus devoted to preparing for a liquidity crisis, this period was also noteworthy for the unravelling of the Quinn-Anglo CFD affair, which was not ultimately resolved in a satisfactory manner.[145] This appears to have represented a major preoccupation for the Authority at a crucial time. It should be emphasised that because of the information gap discussed in previous chapters which acted as a blinker, at no point in this period was it thought by the authorities that any of the banks were

[142] As mentioned below, a more detailed discussion of options was prepared for the Department of Finance by Merrill Lynch – who had been engaged as consultants by the NTMA/Department of Finance in early September – on the weekend before the guarantee.

[143] It was not made explicit why this would solve the problem. (If the assumption was that government ownership was, by itself, a sufficient assurance to lenders, then this would not have been borne out by a comparison with the US, where very many insolvent banks have been taken under the control of the FDIC without all lenders being made whole.)

[144] A later note, undated but understood to have been prepared in the last days of September, drew on the June paper. It added a small but significant detail on the guarantee, specifically envisaging that such a guarantee would cover both senior and subordinated debt.

[145] As this matter is the subject of separate investigations, and does not centrally affect the conclusions of this report, it is not considered further here.

facing imminent underlying solvency risks.[146] This had the consequence that no attempt was made to urge the banks to raise – or even conserve – capital.[147]

Section 3: The Policy Discussions of September 2008

8.16 The publication of a very adverse rating agency report on INBS[148] on 5 September 2008 heralded the final stage of the run-up to the guarantee. More frequent and higher level meetings between the agencies represented in the DSG (with the NTMA), took place imbued with a growing sense of urgency.[149] The Department of Finance took a clear leading role at this stage (with the CBFSAI playing a less central role than might have been expected), commissioning consultants and advancing preparations for legislation to nationalise a bank and/or a building society and to provide an extensive guarantee of banking liabilities. The diminishing access of banks to liquidity was now an urgent focus of attention. While the INBS story had heightened concern, it was generally understood that it was Anglo Irish Bank that was most vulnerable on a week-to-week basis, depending in particular on how much of its maturing deposits would be rolled-over. Consultants were engaged to scrutinise the condition of INBS and Anglo.

8.17 As the discussions regarding procedures for crisis containment started to unfold, early on a clear consensus view emerged that no Irish bank should be allowed to fail, in the sense of having to close its doors and not repaying depositors and other lenders. This strong view departed from the textbook view that only systemically important institutions should be candidates for such protective treatment. (See below for a further discussion of systemic importance.) But it was shared without reservation by all the

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[146] Even executive directors of Anglo Irish Bank seem to have had no inkling of the problems to come if we are to judge from the fact that three of them acquired and held sizeable blocks of shares in the Bank close to the peak of its share price in 2007.

[147] Indeed, during the first nine months of 2008, Anglo paid out €0.14 billion in dividends, Bank of Ireland €0.39 billion, and AIB €0.72 billion – of which €0.27 billion was paid out as late as 26 September 2008, four days before the guarantee.

[148] A report by Reuters on 5 September indicated that, following a credit downgrading by Fitch, INBS had entered talks with its lenders to avoid insolvency. The report, which was subsequently withdrawn, appeared to reflect particular market concern about the widely publicised extent of INBS's property exposure. The Authority quickly issued a strong public statement denying the content of the Reuters statement. However, both the CB and the FR recognised that if the liquidity situation were not to improve serious thought would need to be given to the possibility of nationalisation using the draft contingency legislation prepared beforehand. In the event, the outflows of certain types of wholesale funding ceased over the following weeks and since much of the rest of INBS's resources were in the form of customer deposits that were considered relatively stable – partly due to the long-held expectation that the society would be de-mutualised providing a windfall to members, the liquidity situation became manageable. Thus, the nationalisation option did not resurface for INBS.

[149] The Governor was convalescing from an operation earlier in the summer and returned to duties only in mid-September.

key officials involved and, for good or ill, simplified the decision making process. By late September, it would have also reflected the broader reaction at European level to what was considered to be an ill-judged policy decision on the part of the US authorities not to save Lehman Brothers.

8.18 A detailed review of the ensuing discussions is hampered by the absence of an extensive written record of what transpired.[150] Although the minutes of meetings of the CBFSAI Board and the Authority during the period contain references to various options, there is an absence of documentation setting forth the advantages and disadvantages of possible alternatives and their quantitative implications. While CBFSAI Board members expressed some broad views on possible approaches, no decisions were taken, as the solutions would need to be found at Governmental level. The key discussions took place via the very many informal contacts and meetings between senior officials of the DSG agencies, the NTMA, and consultants; what follows relies to a very large extent on the personal recollections of participants.

8.19 Throughout this period – up to and including 30 September – as noted above, the clear consensus was that the problem was essentially one of liquidity rather than of solvency. (See Box 8.1 for a discussion of these concepts.) While some doubts may have been felt or expressed privately, the minutes of the CBFSAI Board and Authority meetings do not record any concerns as to possible underlying weaknesses of the various institutions which were believed to be suffering the consequences of a world-wide "financial tsunami". Thus the comforting reassurances provided to the CBFSAI Board and Authority on earlier occasions that there were no fundamental problems were not put into question.[151]

[150] Only sketchy records appear to have been kept of the intensive round of informal meetings in the days and weeks prior to 29 September or of the events of that night itself. Although recognising the severe pressures of rapidly unfolding events, greater transparency with respect to the unprecedented decisions being considered and their far reaching implications would have been desirable.

[151] While many banking observers were becoming increasingly concerned about the long-term prospects of Anglo (the institution under most pressure throughout September), given its business model based on wholesale funding for on-lending to property development, and some loan losses were clearly in prospect, neither the FR staff nor consultants engaged envisaged Anglo being insolvent.

Box 8.1: Liquidity versus Solvency

The average maturity of a bank's borrowing is typically shorter than the average maturity of its assets. Indeed, this maturity transformation is a valuable function that the financial system as a whole performs for society, allowing savers to have ready access to funds, while facilitating the financing of productive activities that take a long time to prepare and bring to fruition. A bank manages the risk that too many of its lenders will look for their money all at once by holding cash reserves, and by turning to the money markets for short-term borrowing. For fifty years Irish banks had no difficulty in accessing any short-term funding they needed. Liquidity was thus not a problem. However, after August 2007, and especially after the events of mid-September 2008 in the US, the access of banks worldwide to short-term borrowing became very constrained because of the heightened risk aversion and the uncertainty about the solvency of all financial institutions and about the willingness of governments to bail out insolvent banks.

It is in such circumstances that one can speak of a bank being solvent – in the sense that its assets will, *when they mature*, provide more than enough to repay those who have lent to the bank – while at the same time being illiquid – in the sense that the bank is unable to repay its borrowings *immediately* and cannot find other lenders who can tide it over. Obviously, putting a solvent but illiquid bank into bankruptcy is unnecessarily costly for society which is where emergency liquidity assistance ("lender of last resort") from the central bank arises. The emergency loans should be made at a penalty rate so that banks have an incentive to avoid getting into a situation of illiquidity. However, the main difficulty lies in determining whether the bank really is solvent. For this, one cannot rely on what will all too often be a self-serving and over-optimistic assessment from the troubled bank. Instead, the regulator must have assembled the necessary information and analysis to provide the needed advice.

8.20 Apart from the focus on liquidity issues, discussions were informed by the underlying principle – referred to earlier – that no Irish bank would be allowed to fail. In addition, it became apparent from informal contacts that notwithstanding the general turbulence, there was at that stage no European-wide effort under way to mount an initiative to help distressed institutions. Thus, each national authority would have to take whatever measures might prove necessary to deal with its own situation.

8.21 September progressed without any respite from the liquidity pressures. Following media coverage, including on a popular radio programme (*Liveline* on RTE), warning of a possible run on the banks, on 20 September the limit under the deposit guarantee scheme was raised from €20,000 to €100,000, and the coverage increased from 90 per cent to 100 per cent within that limit; and the Government issued a statement affirming its resolve to stand behind the banking system. While these actions helped forestall possible panic on the part of retail depositors they appeared to have little or no effect in stemming wholesale deposit withdrawals.

8.22 As the liquidity situation continued to deteriorate (especially the shortening of maturities), several specific options were discussed. First, for some time consideration had been given to whether legal powers existed to establish a domestic Secured Lending Scheme ("SLS") drawing on some of the CBFSAI's investable financial assets, together with contributions from the NTMA and/or the Pension Reserve Fund; a total of about €20 billion was mentioned, with about half of that to come from the CBFSAI. A variant/possible complement to this approach was the issuance of a State bond which could be used as ECB-eligible collateral by domestic banks. Some preparations along these lines were made. However, this approach was seen as having several shortcomings: first, the providing entities would be exposed to potentially serious financial risks (in particular the CBFSAI has only a small buffer of capital reserves); second, there was no certainty that the sums being spoken of would be sufficient to "stem the tide"; and third, issues might be raised at the European level as to whether this could be construed as the provision of state aid and/or, in the case of some components, ELA under another guise.

8.23 Second, the use of ELA itself was discussed.[152] While this would have had to be notified to the ECB, and any significant amounts would have required prior agreement (strictly speaking: no objection) by the ECB Governing Council there is no reason to believe that this would not have been forthcoming. However, it was observed that ELA was normally intended to be availed of in the case of a single institution facing difficulties. Using ELA to support the entire banking system – which might end up being necessary – could, it was thought, have had a major adverse reputational impact on the Irish banking system. More generally there was uncertainty whether use of ELA, if publicly disclosed or detected (as would be likely), would boost or detract from market confidence. Finally, as with the SLS option above, the potential open ended size of the operations and the associated balance sheet risk for the CBFSAI were seen as serious concerns.

8.24 As the crisis worsened and the unprecedented scale of the problem loomed larger the above possibilities were not pursued further. In the days before 29 September, the CBFSAI Board and Authority met on a number of occasions and more far reaching

[152] Provided a bank has eligible collateral, liquidity may be accessed via refinancing operations with the ECB. However, in the absence of ECB-eligible collateral an institution may, as indicated earlier, apply for emergency lending assistance from the CBFSAI.

options began to surface, in particular the proposal for a comprehensive or blanket State Guarantee. No clear consensus emerged; however, Board members indicated that the Governor of the CBFSAI and the Chair and the CEO of the Financial Regulator had their full support ahead of what were expected to be intensive discussions with the Government.[153]

8.25 On Sunday, 28 September, it was thought that Anglo would be able to survive the full week. The focus in Dublin that day was on the acute liquidity pressures facing Depfa bank, by then an Irish subsidiary of the German bank Hypo RE. But the weekend's events in other countries (Annex 3) shook markets. With Anglo Irish Bank's shares collapsing on the Monday[154] – indicating a general loss of market confidence in its survival – and its apparent inability to replace further liquidity withdrawals, it became clear that Anglo could not survive another day. Decisive action that evening was inevitable and the top officials from the agencies prepared for another round of meetings.

8.26 That afternoon, the two main banks, Bank of Ireland and Allied Irish Banks (AIB), also came to the conclusion that decisive and immediate action by Government was called for. They foresaw otherwise the imminent collapse of Anglo Irish Bank – in effect its inability to meet its immediate payment obligations. Such an event would be devastating for all the remaining Irish banks, and result in an accelerated outflow of funds which, although neither of them was at that point close to having exhausted its eligible collateral, would nevertheless quickly bring them also to the edge. At their coordinated request a meeting with the Taoiseach and the Minister for Finance was set for later that evening.

8.27 There followed an all-night sequence of meetings, led by the Taoiseach and the Minister for Finance, and involving the Attorney General, and senior officials from the Departments of Finance and the Taoiseach and the CBFSAI; senior officials from the NTMA were also present for some of the discussions.

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[153] On 25 September the last Board meeting of the Central Bank prior to 29 September, the minute recorded a request from the Department of Finance that the Governor provide a formal view on the situation to the Department of Finance. In the event, on October 18, the Governor wrote to the Minister of Finance indicating his full support for the 29 September decisions.

[154] The share price closed on Monday at €2.30, compared with €4.28 on the previous Friday.

8.28 The main outcome of the meetings is well known: a blanket guarantee but no immediate nationalisations. For present purposes it is appropriate to focus on the views of the CBFSAI representatives and the banks on the main issues.

8.29 The Governor and DG of the Central Bank and Chair and CEO of the FR participated in some of the meetings that evening. Before the meeting they had all, with varying degrees of enthusiasm, come to the conclusion that a general guarantee was necessary and unavoidable. The question of nationalisation of Anglo Irish Bank and an associated change in management was also on the table. Among the reservations expressed by CBFSAI participants were fears as to how the market might react to such a move, and concerns about the operational risks involved in trying to nationalise mid-week (i.e., the matter could be deferred to the weekend if it still proved to be necessary).

8.30 The two banks (each of whom was represented by their Chair and CEO) only participated in two meetings with the Taoiseach and Minister. In the first of these they indicated that they favoured both an immediate general guarantee (including subordinated debt) and the nationalisation of Anglo Irish Bank (and possibly INBS). Their motivation for urging nationalisation was that this would remove these institutions' negative reputational effect on Irish banking generally. All concerned agreed that the banks did not participate in the subsequent discussion on what action should be decided upon.

8.31 The second meeting involving the banks occurred after the guarantee decision had been taken; the banks had been asked earlier whether they could provide an immediate short-term liquidity facility to Anglo Irish Bank, and (after eliciting what was technically feasible with their staffs) they indicated that each of the two banks could speedily make a total of €5 billion available for a matter of days, provided it was covered by a Government guarantee. It may be noted that neither of the banks gave any thought to involving Anglo representatives in considering their approach.

8.32 It was also agreed that the CBFSAI would make an amount of up to €3 billion available via an asset swap *vis-a-vis* Anglo Irish Bank, €1 billion of it the following morning. In the event, the strong reflow of funds in the following days made the banks' special

liquidity facility unnecessary and it was not drawn upon;[155] nor, was the CBFSAI funding. The question of nationalisation also evaporated by the following weekend.

8.33 Some of the parameters of a guarantee scheme had already been aired in discussions over previous days. These had to be finally decided now. One issue was the coverage of the guarantee. Apart from exclusion of shareholder funds, the question arose as to whether or not to include subordinated debt. Given that the whole point of subordinated debt is to be a form of risk-absorbing capital, and as such is sold as being explicitly more risky than senior bonds, it would have been reasonable to argue that subordinated debt holders should not be exempt from possible losses; as far as can be determined, no guarantee offered by any other government during the crisis covered such risk-bearing liabilities. The note prepared the previous weekend by the Merrill Lynch advisers had explicitly envisaged exclusion of dated subordinated debt from the coverage. The banks might benefit from inclusion, to the extent that their ability to issue new subordinated debt in the future would be hampered otherwise.[156] It was apparently also argued that, since many of the subordinated debt bond holders were also holders of Government Paper, their exclusion could adversely affect Ireland's debt rating. There was also concern that anything short of a comprehensive, simple to understand concept might cause confusion when markets opened and undermine the effectiveness of the Government's action. CBFSAI representatives did not challenge these propositions. In the event, it was decided to include dated, but not to include undated (perpetual) subordinated debt.[157]

8.34 Two other issues arose (apart from the duration of the guarantee for which the period of two years was quickly decided upon as beyond the likely duration of the prevailing market pressures). First, how much should the banks pay for participating in the scheme, given that – as had been rightly pointed out by Merrill Lynch in their options note – the sovereign credit rating, and hence the cost of borrowing, would likely be affected by the contingent liability (estimated at over €400 billion) associated with the

[155] The funds were already placed by the banks with the Central Bank.
[156] No new money has, however, since been raised through subordinated debt by any Irish bank (although there have been a number of debt swaps).
[157] Some of the dated subordinated debt had clauses permitting (but not obliging) the issuing bank to redeem it within the two-year period. In normal times, such debt is almost always repaid at the first permissible date, with the result that it would be seen as a sign of weakness for an issuing bank not to do so. There appears to have been some confusion about this issue on the night of 29/30 September, with some participants understanding that some or all of the dated subordinated debt would fall due before the end of the guarantee (see Annex 4).

guarantee. Second, what conditions (for example, as regards Government having a say in bank remuneration) would be associated with the scheme. While some informal discussions with bank representatives on these issues took place on the margins of the meetings, both aspects were left to be worked out later in the context of implementing legislation to follow shortly.

8.35 Prior to the announcement early in the morning of 30 September, both the ECB and the EU were informed of the Government's action. Some concerns were expressed bilaterally as regards the lack of international consultation prior to the Irish decision and the effect that it might have on flows of funds internationally. On the Irish side, participants have emphasised that given the very short time available prior to the opening of the markets, absolute priority had to be given to finding a solution which would ward off the possible imminent collapse of the domestic banking system.

Section 4: The Appropriateness of the Guarantee

8.36 Was the guarantee, backed as it was by the CBFSAI, the most appropriate policy response in the circumstances? Three specific aspects are addressed: namely, (i) the scope of the guarantee; (ii) the treatment of Anglo Irish Bank; and (iii) the extent of consultation with partner EU countries.

8.37 Before considering these issues it is important to recognise that the Irish decision was taken, not only in the face of a potentially disastrous situation at the heart of Ireland's banking system, but against the background of a bewildering sequence of bank failure events internationally (Annex 3). What is striking is the variety of policy measures that were employed. Some financial firms were nationalised in full or in part, some part-nationalised, some assisted with loans, both long-term and short-term, some were intervened with losses imposed on debt holders and large depositors while insured depositors were made whole, some were offered a priced guarantee for new borrowings, some were bankrupted. After the bankruptcy of Lehman Brothers, governments became increasingly concerned to avoid the collapse of another systemically important financial firm, and the interpretation of what was systemically important tended to become more lenient, given the fragile nervousness of financial markets. Even in the United States, which had extensive experience of closing banks and imposing losses on uninsured depositors and other creditors, and an impressive set of legal powers to do so,

policy makers became more cautious and began to rely more on open bank assistance of some form (Box 8.2).

Box 8.2: Recent Bank Closure Policy in the US

The experience of the US is often pointed to by advocates of bank closures. And indeed, with its very large number of mostly small banks, the United States has been the main laboratory of bank closures over many decades. The authorities have generally followed that classic rule: a bank that is solvent but illiquid (in the sense explained above) should be granted emergency liquidity by the central bank. But an insolvent bank should be intervened and wound up (unless it is systemically important, or unless a lower cost solution for the deposit insurance fund can be found). Then the insured depositors are paid from the deposit insurance fund and the other creditors paid out of the proceeds of the liquidation in accordance with their priority in law. Of course, in the United States, the very generous ceiling on deposit insurance cover ($250,000) and the large number of banks, combined with an efficient system of mortgage brokerage, means that most large retail depositors can and do spread their deposits between different insured banks with the result that – except in large banks – relatively few individual deposits exceed the covered ceiling. Partly for this reason, it is currently proving cheaper in most cases for the FDIC to sell the whole deposit book and part of the assets of a failed bank to a strong competitor, rather than simply paying off the insured depositors.

In dealing with the creditors of insolvent banks, the Federal Deposit Insurance Corporation (FDIC) has greater ability to differentiate between the claims of different creditors thanks to the fact that there is special resolution legislation in the United States for banks giving it such powers to alter the priority of bank creditors in an insolvency.

Since the end of September 2008, over 200 banks in the US have been closed. Most of these were very small – just a few hundred million in assets – but half a dozen were $10 billion or more. Despite the energy and experience of the FDIC in monitoring insured banks, and its statutory obligation to intervene whenever it becomes aware of the bank's capital dipping below a certain figure, the FDIC generally incurs a loss on these resolution activities. For the six largest banks, the FDIC incurred an estimated aggregate loss of $15 billion in paying out on $70 billion of deposits. Other non-deposit creditors in these banks lost out.

But for larger, systemically important banks, such as Citi, alternative approaches were employed, ensuring that creditors of such large banks did not suffer because of the wider implications for the functioning of the payments and economic systems and ultimately the need to ensure that the banking system could reliably perform the task of transferring ownership claims with legal certainty.

8.38 No other country had introduced a blanket, system-wide, guarantee, though this has been a relatively frequent tool in previous systemic crises (Box 8.3). As such, the Irish guarantee caused considerable waves, upped the ante for other governments struggling to maintain confidence in their own banking systems, and placed some direct competitive funding pressure on banks in the UK, where the liquidity position of some

leading banks was much more critical than was known to the Irish authorities at the time.

8.39 The scope of the Irish guarantee was exceptionally broad.[158] Not only did it cover all deposits, including corporate and even interbank deposits, as well as certain asset-backed bonds ("covered bonds") and senior debt it also included, as noted already, certain subordinated debt. The inclusion of existing long-term bonds and some subordinated debt (which, as part of the capital structure of a bank is intended to act as a buffer against losses) was not necessary in order to protect the immediate liquidity position. These investments were in effect locked-in. Their inclusion complicated eventual loss allocation and resolution options.[159] Arguments voiced in favour of this decision, namely, that many holders of these instruments were also holders of Irish bonds and that a guarantee in respect of them would help banks raise new bonds are open to question: after all, extending a Government guarantee to non-Government bonds has the effect of stressing the sovereign to the disadvantage of existing holders of Government bonds; besides, new bonds could have been guaranteed separately. The argument for simplicity also is weakened significantly by the fact that an actual dividing line between covered and non-covered liabilities was drawn at as least an equally arbitrary point; moreover, such instruments were held only by sophisticated investors.

8.40 Subordinated debt holders have suffered some losses, given the buy backs that have occurred at discounted prices.[160] Nevertheless, the inclusion of existing debt in the coverage of the guarantee likely increased the potential share of the total losses borne by the State. This eventuality deserved fuller consideration in advance.

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[158] And much broader than that offered by the UK authorities in the case of Northern Rock one year earlier, a case which had formed the backdrop to much of the Irish planning (see Box 8.3)

[159] For example, if the US authorities had decided to impose losses on debt holders in additional major banks during 2009, this would have altered the market context by setting a new standard for loss-sharing in a way that the guarantee might have made difficult to emulate.

[160] Losses of €5.1 billion have been realized by subordinated debt holders of the three largest banks to the time of writing. This estimate is not greatly altered if an allowance is made for the use of high coupons on some of the debt provided in some of the exchanges. In the case of Anglo Irish Bank, the realized loss is €1.2 billion out of an initial €4.9 billion at end-September 2008. Applying current market prices to the remaining €2.1 billion of nominal sub debt in this bank would entail an unrealized mark-to-market loss of approximately €1.2 billion.

Box 8.3: Northern Rock – Similarities and Differences *vis-a-vis* the Irish Guarantee

The experience with Northern Rock seems to have coloured the thinking of many official participants in the decisions of end-September 2008. It is useful to sketch some relevant aspects.

Before the collapse of Northern Rock one year earlier, it is probably fair to say that most individual bank depositors in Western Europe assumed that their bank deposits were not only perfectly safe, but fully guaranteed by Government. If the first might not have been completely true, the second most certainly was not.[a] It was only in 1989 that the Irish Deposit Guarantee Scheme (DGS) was introduced, at first covering only £10,000 of the first £15,000 of any individual depositor's loss.[b] (The DGS, which is a permanent statutory scheme, now fully covers deposits up to €100,000, following the latest increase in coverage announced in mid-September 2008).

This misapprehension became clear during the Northern Rock bank run of September 2007. Northern Rock was a Newcastle-upon-Tyne based bank (formerly a building society) which had specialised in aggressive mortgage lending financed through short-term wholesale borrowings channelled through special purpose vehicles. When its wholesale funding dried up, it received emergency liquidity assistance from the Bank of England, eventually amounting to £27 billion – a world record at the time. Announcement of the provision of ELA triggered a retail depositor panic and long queues formed outside Northern Rock branches from 15 September 2007, including in Dublin. On 20 September the UK Treasury announced guarantee arrangements – including for Irish depositors – which covered existing deposits in Northern Rock (and accounts re-opened by those who had closed them in the previous week). The guarantee was to remain in place "during the current instability in the financial markets" and was eventually withdrawn on 24 May 2010. Although the trigger for the guarantee was the sight of retail depositors queuing, much of the initial liquidity pressure on Northern Rock related to a withdrawal of wholesale funding.[c,d]

Unlike in the case of the Irish guarantee of September 2008, the Northern Rock guarantee extended only to existing and renewed wholesale deposits; and uncollateralised wholesale borrowing. It did *not* include other debt instruments such as covered bonds, securitised loans and subordinated and other hybrid capital instruments. (See Annex 4 for a discussion of the different classes of liabilities of banks involved.)

The Northern Rock guarantee did not explicitly extend to other banks – at the time no general market concerns were present – but it may have been taken as an implied guarantee, in that it revealed to the market the reluctance of the UK Government to let a medium-size bank (total assets were around £100 billion compared to Euro 100 billion for Anglo Irish Bank) fail.

Although Irish officials often refer back to the Northern Rock experience, the Irish guarantee differed in a number of important respects.

First, it was not preceded by a *retail* depositor run of any significance; instead it reflected a silent *wholesale* run, mainly on Anglo Irish Bank (which was facing imminent default on its obligations), but on other Irish banks also.

Second, the Irish guarantee covered not only retail and wholesale deposits and other short-term borrowing, but also almost all of the bank's uncollateralised long-term debt including much of the subordinated debt. Only the undated (perpetual) subordinated debt was not covered. It also applied to existing, as well as new debt, even though holders of long-term debt maturing outside the guarantee period could not withdraw their funds in this period.[e]

Third, and most important, the Irish guarantee was in effect a blanket system-wide guarantee (though not in practice covering foreign-controlled banks). Blanket deposit guarantees have been a relatively common feature of systemic banking crises of the past,[f] reflecting the concerns of governments that bank depositors will have an unfounded but hard-to-dispel fear that known solvency problems at one bank could imply problems at others.

Studies have shown that blanket guarantees have typically been associated with crises that resulted in larger fiscal costs which in turn reflected the underlying gravity of the situation that called for such a drastic step. However, there are indications that a regime that is prone to introducing a blanket guarantee is also more likely to have been associated with less adequate regulation that can result in large banking and fiscal losses.

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[a] While the US FDIC was created in 1934; the first nationwide scheme in Germany dates to 1966, in France and the UK to 1980; and in Italy to 1987 (Demirgüç-Kunt, Karacaovali, & Laeven, 2005).
[b] Depositors in Irish Trust Bank, which failed in 1976, were ultimately compensated by the Exchequer which provided £1.8 million to do so.
[c] Retail and wholesale funding fell by £14 billion and £18 billion respectively in the second half of 2007.
[d] Northern Rock was taken into temporary public ownership in February 2008. This whole experience focused the attention of the UK authorities on the need for a special resolution regime to enable them to deal promptly with a failing institution; such legislation was enacted in February 2009.
[e] Except in an event such as liquidation, at which point they would now be covered by the guarantee.
[f] They were introduced in 15 of 42 recent crises studied (see Laeven and Valencia, 2008) Such guarantees have been introduced both in cases where there were existing limited deposit insurance schemes and where there was no prior scheme. In most cases the guarantee was introduced after several months of crisis, and many such guarantees remained in place for a long period, for example for between 6 and 9 years in the cases of Finland, Indonesia, Japan, Malaysia, Mexico and Thailand.

8.41 Turning to the question of Anglo Irish Bank, in normal times, policy should not exclude the possibility that a small failed bank should be wound-up with losses to uninsured creditors. But in times of heightened risk aversion and uncertainty, the failure of even a medium-sized bank can have wider confidence implications of such severity that a rescue or bailout is the optimal public policy. More generally, a bank that might be a candidate for a bailout is generally termed "systemically important" – though it does not follow that all systemically important banks should be saved. Given the increasingly tense confidence situation in the weeks after Lehman's, the failure of almost any bank began to be seen by European policymakers as something to be avoided at almost all costs.

8.42 A question that has been the subject of considerable discussion following the guarantee decision is whether the authorities should have allowed a disorderly bankruptcy of Anglo Irish Bank or bailed it via the guarantee. As is confirmed in Box 8.4, which sets out current international thinking on what makes a bank systemically important, Anglo was clearly systemically important in the prevailing conditions at the end of September 2008

Box 8.4: Was Anglo Systemically Important?

A question frequently raised is whether it was correct to consider Anglo Irish Bank to be a systemically important bank. If not, it could be argued that its bankruptcy should be tolerated, even if losses were imposed on uninsured depositors and other claimants. To be sure, this bank was the third largest Irish-controlled bank in terms of its total balance sheet, and for a time in 2008 even became the largest bank by market capitalisation on the Irish Stock Exchange. But it was far from being a household name, had a branch presence in only six cities in Ireland and measured by employment and number of borrowers, was outstripped by several other institutions. Inasmuch as it had grown twenty-fold in a decade, the Irish economy had prospered without much overall contribution from it in the 1990s. It was not central to the payments system or involved in a large range of complex money market transactions with other financial market participants.
Nevertheless, as a recent paper prepared for the G20 clearly recognises, a judgment about systemic importance "is time-varying depending on the economic environment... It must also be conditioned by its purpose—whether it will be used for example, to define the regulatory perimeter, for calibrating prudential tools including the intensity of oversight, or to guide decisions in a crisis." (IMF et al., 2009) It is the final aspect that is most important for the current discussion.

Three criteria are generally considered according to which a financial institution can be viewed as systemically important, namely: size, inter-connectedness, and substitutability. The preceding discussion suggests that Anglo Irish Bank would be unlikely to satisfy the substitutability criterion (i.e. is there another institution that could perform the same functions) and might not even satisfy the size criterion, even at its peak. But its interconnectedness *vis-a-vis* the Irish banking system changes the story. Given what was happening in the US and European banking markets around that time, the survival of even long-established and relatively highly rated banks (such as RBS, HBOS, Lloyds, Bradford and Bingley, Washington Mutual, Fortis, Dexia and others) was clearly in question and rescue packages of one sort or another had to be put in place to protect their depositors. Under these circumstances a default by a €100 billion bank such as Anglo Irish Bank would undoubtedly have put funding pressure on the other main Irish banks via contagion, given the broad similarities in the type and geography of their property-related lending, their common implicit reliance on the backing of the Irish State, and even name confusion. In this sense, the systemic importance of Anglo Irish Bank at that time cannot seriously be disputed.

8.43 There can be little doubt that a disorderly failure of Anglo would, in the absence of any other protective action, have had a devastating effect on the remainder of the Irish banks. Given the other banks' reliance from day-to-day and week-to-week on the willingness of depositors and other lenders not to withdraw their funds, and the certainty that those lenders would infer from the failure of Anglo that all the other Irish banks might be in a comparable situation, in all likelihood the main banks would have run out of cash within days. They did not have unused collateral eligible for borrowing at the ECB's facilities in sufficient amounts to meet a run on the scale which would have ensued. Absent Government support or ELA they would have to close their doors also, unable to pay out on cheques presented and other payments instructions. Closure

of all, or a large part, of the banking system would have entailed a catastrophic immediate and sustained economy-wide disruption involving very significant, albeit extremely difficult to quantify, social costs, reflecting in particular the fundamental function of the payments system in a modern economy. These costs would have been broad-based in terms of income, employment and destruction of the value of economic assets and would have been on top of the recessionary downturn which has actually occurred. Considering the experience of other countries in such circumstances, the social and economic costs, if they could be quantified, would surely have run into tens of billions of euros.[161] There would also have been spillover effects *vis-a-vis* other countries. So either Anglo's disorderly bankruptcy had to be avoided, or protective measures taken for the rest of the system, or – as was decided – both[162].

8.44 These immediate costs were avoided by the guarantee. But was the likely deferred cost of a guarantee also perceived to be small? After all, there is a natural tendency, even for public servants, to avoid immediate crystallisation of problems even at the cost of larger likely subsequent costs. In this case, though, at the time the authorities did not believe that Anglo was heading towards insolvency. The potential for a major payout from the guarantee was not considered large, though no attempt was made at quantification. There were arguments against a blanket guarantee, including one made by the Department of Finance's advisors Merrill Lynch who observed that the assumption of such a large contingent liability would have an adverse effect on the borrowing costs for the State. And there is a moral hazard involved in any such

[161] The indirect costs of the failure of systemically important institutions, triggering a wider systemic collapse, are hard to evaluate. In most historic cases governments have stepped in to prevent disorderly bankruptcies, instead absorbing some of the failing banks' losses into the fiscal accounts but keeping the day-to-day operations of the banks going. Recent cases where this did not occur include Indonesia in 1998 and Argentina in 2001. These economies were already gripped in deep recession when their banks failed. The disorderly bank closures contributed to a deepening of the crisis, but to what extent nobody has been able to estimate with any precision. Of course a comparison with these economies needs to take account of the fact that they both operate with much smaller banking systems relative to their economy, and that most of their economic structure did not depend on unquestioned reliance on financial contracts. The case of Iceland is also relevant (see Box 8.5).

[162] With the benefit of hindsight, a plausible case can be made for a more complicated policy as perhaps offering a lower net cost in the end. Thus, the whole system *except Anglo* could have been guaranteed, allowing the latter to close, without that implying destruction of the rest of the system. Given what we now know about the extent to which most of the final fiscal costs of the guarantee come from Anglo, on the face of it such a course would have offered savings. It would not, however, have been trouble-free. It would have earned harsh criticism from other EU countries as being a "second Lehmans" imposing a destabilising spill-over effect on them, would have caused a jump in government borrowing costs and would have entailed large and arbitrary costs to Anglo creditors, including other banks, resulting in economic disruption and job losses. Since the decision makers had no inkling of the scale of the looming net deficiency in Anglo, this option – with its sizeable risks in an already volatile environment – did not seem worth considering. As such, it is of academic interest only.

guarantee, though this argument does not appear to have been made. Still, given the perceived lack of a solvency problem at Anglo (or the other banks) on balance a guarantee seems to have been the best approach, not least because no other clear and effective medium-term solution appeared available. This is not to underestimate the huge cost to the bailout which has ended up in excess of 15 per cent of GDP.

Box 8.5: Contrasts between Ireland and Iceland

The country with the largest banking sector failures relative to the size of the economy in the current global financial crisis is Iceland. Little affected by the US subprime market problems, the Icelandic banking system was destroyed by a nationally-generated bubble.

Although it was also a locally-generated bubble that created the problems in the Irish banking system, the parallels between the two countries' experiences are not all that close, as is revealed by the Report of the Investigation Commission in Iceland.

For one thing, the expansion of the Icelandic banking system – where the three main banks expanded twenty-fold in seven years – an annual average rate of growth of over 50 per cent, far higher than even the growth rate of Ireland's fastest growing bank Anglo. Furthermore, the losses that have been incurred almost ten times those of Ireland when measured relative to each country's GDP. The average asset-write-down for the three Iceland banks is estimated at 62 per cent – far higher than the write-downs required even for the worst of the Irish banks in relation to their NAMA loans.

The pattern of bank behaviour in Iceland was also different. Property lending was not so central to the Iceland case. The SIC reported an extraordinary amount of self-lending by bank insiders; the largest exposures of Glitnir, Kaupthing Bank and Landsbanki were the banks' principal owners. While loans to Directors in one Irish bank have been the focus of attention, it was on a much smaller scale. The Icelandic banks took on a sizeable exposure to their own shares, and the shares of the other banks, especially during 2007; by mid-2008, own- and cross-exposure had reached the level of 70 per cent of core capital; in effect, the banks had collectively financed far too high a proportion of their owners' equity. (The CFD-related transaction in one Irish bank represented a much smaller fraction). Other features lacking in the Irish situation but important to Iceland were the growth in investment funds managed by the banks, and the extraordinary late expansion into retail franchises in other countries as the Iceland banks attempted to substitute wholesale funds with retail deposits.

Finally, in contrast to the Iceland authorities, the CBFSAI did increase capital requirements in an attempt to slow risky lending – albeit by too little.

8.45 If ELA had been used to maintain the system to the end of the week it could also have allowed the nationalisation of Anglo Irish Bank to be carried out without operational

risk. Given the true underlying situation of Anglo Irish Bank and INBS, namely that they were heading toward loan losses that would more than wipe out their capital, it could have turned out to have been quite risky to leave them under unchanged ownership.[163] Furthermore, a better loss-sharing arrangement with providers of capital might have been more easily negotiated had one or two banks been dealt with separately[164] from the system. Still, even given these considerations, it is hard to argue that the delay of five months in eventually nationalising Anglo Irish Bank had a major financial impact.

8.46 The sudden introduction of the scheme with hardly any notice to partner EU countries presented some issues, given the existence of a single EU banking market. The Irish subsidiaries of foreign banks were only included subsequently (on 9 October) following representations. The guarantee created market and political pressure for the introduction of similar schemes across Europe and some dissatisfaction was expressed at high political level with the Irish action. In the event, in the following ten days, six other countries[165] introduced blanket deposit guarantees – though none of them were as extensive as the Irish scheme. While this is conjectural more prior consultation on alternative options might have alleviated the pressures on Ireland without creating the tensions prompted by a sudden unilateral action. After all, an EU-wide response to the crisis did eventually emerge in the following week. It is possible that recourse to ELA might have bought some time for such eventualities.

Section 5: Conclusions

8.47 There is no doubt that from mid 2007 onwards Ireland increasingly faced a potentially serious financial crisis. Although the deteriorating international environment was what finally set the flames alight elements had been building for some considerable time beforehand. The overly sanguine, even complacent, view presented in the 2007 FSR and the resulting ensuing conviction that whatever problems that might arise would only be one of a liquidity led to two missed opportunities; first, to convey a strong message

[163] The looting of insolvent banks by management is extensively documented in the historical literature concerning similar events in other countries. However, there is no reason to believe that this occurred in either Anglo or INBS. Any such risks that may have been considered to exist were mitigated by intensified supervision and the appointment of two Directors on each Board by the Government.

[164] Some of Anglo Irish Bank's subordinated debt was bought back by the bank at well below par, although the net present value of the savings from these transactions have not been examined for this report.

[165] Austria, Belgium, Denmark, Germany, Slovak Republic and Slovenia. Other EU countries also increased the ceiling on their existing deposit insurance schemes during this period.

to the banks that they needed to build up capital urgently to be able to handle contingencies, or even to require them to do so; and second, to undertake comprehensive preparatory work to analyse quantitatively policy options available in the event the unthinkable might transpire.

8.48 Although it was not underpinned by specific analysis, the decision early on not to countenance the "failure" of any bank simplified subsequent decisions. This decision was not initiated by the CBFSAI, but was consistent with its view. However, it was an oversimplification which short-circuited decisions that deserved closer scrutiny. Under the circumstances of the extraordinary international financial market environment of those weeks, it was an understandable position. But it could not be a permanent policy if severe moral hazard was to be avoided. And it was also conducive to downplaying the importance of developing an appropriate legal framework for a special bank resolution regime scheme.

8.49 The "no failure" policy also took the question of optimal loss-sharing off the table. In contrast to most of the interventions by other countries, in which more or less complicated risk-sharing mechanisms of one sort or another were introduced, the blanket cover offered by the Irish guarantee pre-judged that all losses in any bank becoming insolvent during the guarantee period – beyond those absorbed by some of the providers of capital – would fall on the State.[166] Given the "no failure" policy, a guarantee with its costs were inevitable.

8.50 The inclusion of subordinated debt in the guarantee is not easy to defend against criticism. The arguments that were made in favour of this coverage seem weak: And it lacked precedents in other countries (although subordinated debt holders of some other banks since rescued abroad have in effect been made whole by the rescue method employed). Inclusion of this debt limited the range of loss-sharing resolution options in subsequent months, and likely increased the potential share of the total losses borne by the State.

8.51 In addition to influencing financial stability policy, a key role of the Central Bank in a crisis is to ensure adequate provision of liquidity. It was prepared on the night of 29/30

[166] Cynical critics might suggest that the introduction of the guarantee immediately following the steepest one-day share price fall for an Irish bank might have reflected an attempt to protect even the shareholders. However, the evidence provided suggests that this was not a concern of policymakers.

September to extend a modest amount of ELA, but not enough to ensure that Anglo would get through the week. Thus back-up liquidity provision was instead hastily secured from the two largest commercial banks, and, crucially, backed by Government guarantee. In effect, the commercial banks were stepping in to provide the lender of last resort facility – which of course was in their own interest to do. The reluctance to deploy more significant ELA facilities from the Central Bank is open to question: such facilities were being used elsewhere and too much was likely made of the reputational risks involved (especially given that the guarantee was about to be announced). It is unlikely that even extensive use of the facility to buy time to facilitate nationalisation the following weekend would have been viewed negatively by partner central banks under the circumstances. While use of ELA would only have been a temporary solution, it might have bought some breathing space while other possibilities were being explored to address the unprecedented situation that many – not only in Ireland – were facing.

8.52 The decision not to proceed with nationalisation of Anglo Irish Bank on 29/30 September has become the subject of considerable public debate and controversy. Two questions are raised. First, should policy makers have had a greater sense that Anglo was facing not only a liquidity, but also a potential solvency problem? The answer is probably yes. Second, would nationalisation of Anglo on 30 September – compared with its nationalisation five months later – have made a significant difference to the overall cost of the bank bail out to the taxpayer? Here the answer is "probably not".

8.53 Finally, there has been some criticism, including from abroad, as regards the hurried nature of the decision and in particular, the lack of prior consultation with partners. This criticism may have some basis, especially since, as argued above, there was scope for more thorough exploration of options – including *vis-a-vis* European partners – in the period leading up to 29 September. At the same time, given the position the authorities found themselves in on that night it is understandable why, given the extreme time pressures, all efforts were devoted to finding an immediate way to save the Irish banking system from looming disaster.

ANNEXES

ANNEX 1: TERMS OF REFERENCE

An Roinn Airgeadais
Department of Finance

Oifig an Aire
Office of the Minister

Sráid Mhuirfean Uacht,
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4 February 2010

Professor Patrick Honohan
Governor
Central Bank and Financial Services Authority of Ireland
PO Box 559
Dame Street
Dublin 2

Dear Governor

As you know the Government considers it essential to thoroughly examine the conduct of the banking sector in recent years in order to arrive at a fuller understanding of the root causes of the systemic failures that led to the need for extraordinary support from the State to the domestic banking system.

In light of this, the Government has agreed (Decision S180/20/10/1289 of 19 January 2010) a framework for such an investigation into the banking system. The investigation will have two stages. The first stage of the investigation envisages the preparation of two separate preliminary reports; one to be prepared by you and a second report to be commissioned from Mr Klaus Regling, a recognised international expert. These reports will provide a basis for the Government and the Oireachtas to prepare the terms of reference for the second stage, which will involve the establishment of a Statutory Commission of Investigation.

Issues to be examined in your report
As part of the preliminary stage of this investigation, I am writing to request you to prepare a report on the performance of the respective functions of the Central Bank and Financial Regulator over the period from the establishment of the Financial Regulator to the end of September 2008. In that context I should note that you may consider the inclusion of any matter that you feel should be brought to my attention which might inform the preparation of the terms of reference of the statutory inquiry.

In preparing your report, you should have regard to the respective statutory powers, roles and responsibilities of the Central Bank and of the Financial Regulator as well as consider the international, social and macro-economic policy environment which provided the context for the recent crisis in the banking sector. I believe that your report should have regard in particular to the work of the Central Bank and Financial Regulator in assessing and responding to risks to the stability of individual institutions

as well as to the banking system as a whole. Your report should also have regard as appropriate to existing analysis, such as the European Commission's High Level Group on Cross-Border Financial Supervision (de Larosière Report) and the Financial Services Authority's Turner Review.

In preparing your report, I would also ask that you highlight key areas that you consider necessary for subsequent investigation by the statutory Commission of Investigation, which is to be established by 30 June 2010.

Practical arrangements
The Government has decided that both preliminary reports should be submitted to me not later than the end of May this year. I might note that your report should be prepared with a view to its publication in full and its laying before the Oireachtas following its consideration by Government. I should also bring to your attention that a discussion with the relevant Oireachtas Committee will be required so that you may set out to the Committee how you propose to prepare your report and that you may also be briefed on the Oireachtas' own priorities for this investigation.

Following the completion of both preliminary reports, the Government intends that they be laid before the Houses of the Oireachtas and the appropriate Oireachtas Committee will be invited to consider the findings of the reports. It may be anticipated that your appearance before the relevant committee will also be required at this juncture.

As regards the work of the statutory Commission of Investigation, you might note that the Government envisages that the terms of reference and draft Government Order to establish the Commission will be laid before the Oireachtas and the report of the Commission of Investigation will, when completed, be laid before the Oireachtas for further consideration and action.

On behalf of the Government, I would like to express my appreciation for your agreement to the preparation of this report. I am aware that the timetable for this work set down by the Government is ambitious but that your contribution to this process will ensure that the report will be both robust and meaningful and will be a key addition to the subsequent work of the Commission of Investigation.

Yours sincerely

Brian Lenihan T.D.
Minister for Finance

ANNEX 2: MEMORANDUM OF UNDERSTANDING ON FINANCIAL STABILITY BETWEEN THE GOVERNOR AND BOARD OF THE CENTRAL BANK AND FINANCIAL SERVICES AUTHORITY OF IRELAND AND THE IRISH FINANCIAL SERVICES REGULATORY AUTHORITY

1. This Memorandum of Understanding (MoU) sets out principles for cooperation between the Governor and Board of the CBFSAI (hereinafter referred to as "the Bank") and IFSRA (hereinafter referred to as "the Financial Services Regulator") in the field of financial stability. It sets out the role of each party and explains how they will work together towards the common objective of financial stability.

2. Financial stability is a situation where the components of the financial system (financial markets, payments and settlements systems and financial institutions) function smoothly and without interruption, with each component resilient to shock. A financial stability matter may include, but would not be restricted to, any event which could threaten the stability of an important financial institution or number of institutions; disrupt the workings of financial markets and/or the payment system, or undermine the soundness of, or public confidence in, the financial system.

3. Three guiding principles will govern cooperation between the parties:
   i) *clear accountability and transparency:* each party will be accountable for its actions as set out in this MoU;
   ii) *no duplication:* each party will ensure that duplication does not occur, as far as is reasonably possible; and
   iii) *data and information exchange:* both parties will ensure that the content and frequency of exchange of data and information will enable each party to discharge its responsibilities as efficiently and effectively as possible.

4. **The Bank's Responsibilities for Financial Stability**

   The Bank is responsible for contributing to the overall stability of the Irish financial system. This mandate for financial stability is derived from:
   i) the Bank's statutory duty under the CBFSAI Act of 2003. The Act specifies that "the Bank has … the objective of contributing to the stability of the financial system"; and
   ii) the mandate of the European System of Central Banks, which requires the European Central Bank and National Central Banks to contribute

to financial stability in the euro area. This, therefore, requires that the Bank contribute to financial stability, both in Ireland and, as far as is practicable, elsewhere, through its involvement in international fora.

To carry out the Bank's mandates for financial stability, the Governor and the Board's responsibilities therefore involve:

i) *stability of the monetary system*. This will be monitored as part of the ESCB monetary policy function. As necessary, actions will be taken in the markets and fluctuations in liquidity dealt with;

ii) *financial system infrastructure, in particular the payments and securities settlements system*. The Governor and/or Board will advise the Minister and Financial Services Regulator on any significant matter affecting these systems. The Governor and/or Board will continue to promote the smooth operation of the payments and securities settlement systems and will also seek to strengthen these systems to reduce systemic risk;

iii) *overview of the domestic financial system as a whole*. The Governor and/or Board will advise all relevant parties on the implications for financial stability of developments in domestic and international markets and payments systems and assess the impact on monetary conditions of events in the financial sector;

iv) *analysis of the micro-prudential – where appropriate – as well as macro-prudential health of the financial sector*. In this context, the Governor and/or Board's objective is to identify developments which could endanger the stability of the system as a whole and will advise accordingly;

v) *undertaking official financial operations*. The Governor and/or Board may authorise official financial operations in exceptional circumstances, in order to limit the risk of difficulties affecting particular institutions spreading to other parts of the financial system; and

vi) in addition to the above mainly domestic responsibilities, they *contribute to promoting improvements in the international financial system,* mainly through involvement in international fora.

5. The Financial Services Regulator's Role in contributing to Financial Stability

The Financial Services Regulator is responsible for contributing to the maintenance of proper and orderly functioning institutions and exchanges and protecting depositors, insurance policy holders and clients of investment firms. In carrying out these

functions, the Financial Services Regulator will support the Bank's objective of contributing to financial stability.

The Financial Services Regulator's responsibilities in this area therefore include:

i) the *prudential supervision* of banks, building societies, insurance companies, stockbrokers, exchanges, investment firms, retail intermediaries (both investment and insurance intermediaries), credit unions and collective investment schemes (managed funds); and

ii) providing *advice, information and assistance* in relation to the Bank's functions to the Bank's Board and the Governor, both on request and at other times as may seem appropriate.

6. Data and Information Exchange

There will be close and regular contact between the parties and a framework of cooperation will be developed with regard to financial stability matters. Information sharing arrangements will be established, to ensure that all information relevant to the discharge of their respective responsibilities will be shared fully and freely between the parties. Each party will seek to provide the other with any additional information on request and as appropriate.

7. Crisis Management

The parties will immediately inform and consult with each other in relation to any matter which either party deems to have the potential to threaten the stability of the financial system. The general procedures to follow in such an event will continue to be for agreement between the parties.

8. Consultation on Policy Changes affecting Financial Stability Matters

The parties will consult and inform each other about any policy changes which will have a bearing on the responsibilities of the other.

9. Financial Stability and Membership of Committees

The parties will cooperate fully in their relations with and participation in international fora on financial stability issues. In some cases, this will involve dual representation in certain fora. In cases where only one party is represented, the other undertakes to contribute information and advice in advance of any meeting. The party attending will fully brief the other after the meeting.

10. Records

The Financial Services Regulator will be responsible for the custody of all records relating to the prudential supervision of authorised institutions. The Governor and Board of the Bank will have free and open access to these records on matters relating to financial stability.

ANNEX 3: BANK RESCUES WORLDWIDE IN THE DAYS BEFORE THE IRISH GUARANTEE

Although financial authorities in the US and other countries are now criticised for treating the crisis that emerged in July/August 2007 as primarily a crisis of liquidity – with which they dealt well – whereas important systemic solvency issues underlay it, there is no doubt that action to deal with the particular banks that came under particular pressure was in general prompt and decisive.

Thus, that governments in Europe and the US were not slow to contain emergent solvency problems at specific banks from the start of the crisis in July/August 2007 is evident from the treatment of such entities as Sachsen Bank, IKB bank, and Northern Rock in July-September 2007, Bear Stearns in March 2008, Indymac, Roskilde Bank, Freddie Mac and Fannie Mae in June-September 2008, among others. But not before September 2008 was there a full recognition that solvency problems could be broad-based.

The much-discussed events of the middle weekend on September 2008 culminated in the bankruptcy of Lehman Brothers on Monday, 15 September. The decision not to save Lehman Brothers now appears to be regretted by most of those concerned, though the decision to allow the failure had its defenders at the time, given the moral hazard of repeated bail-outs, and the fact that Lehman Brothers was an investment bank – not an insured bank.

Following this shocking event – the largest bankruptcy in history – containment measures by the authorities gathered momentum. In particular, the two weeks before the introduction of the Irish guarantee saw an accelerating trend of bank rescue actions by governments to contain emergent problems and try to prevent the spread of the crisis. This started in the US, which was already exploring system-wide interventions, but by the weekend of 25 September had spread to Europe where some large individual banks had to be dealt with.

First, the large US insurance company AIG, which had been a key player in providing credit insurance products to large commercial and investment banks, was nationalised and recapitalised on 16 September. The announcement on Tuesday 16 September that

the net asset value per share of a sizeable, famous and long-established US money market mutual fund, Reserve Primary, had fallen below the target floor of $1 ("breaking the buck"), as a result of losses on Lehman-related assets, prompted huge withdrawals – amounting to 5 per cent of the total – from other money market mutual funds. This prompted the US Treasury to introduce, on Friday, 19 September, a $50 billion insurance programme allowing money market funds to insure themselves (for a fee) against "breaking the buck". The program stabilised the liquidity of the money market segment.

That same day (19 September), the US Treasury Secretary initially recommended to Congress the creation of a very large program, eventually called TARP, to stabilise the banking system. The initial design envisaged that the funds would be used to buy up toxic and hard-to-value mortgage-backed securities from troubled banks (though in the end the funds were used in a quite different manner). The rejection by Congress of this proposal on Monday, 28 September, was a destabilising factor for the markets.[167]

The 7th largest US bank Washington Mutual (WaMu) was intervened by the FDIC on Thursday evening 25th September following deposit withdrawals totalling $17 billion in the previous 10 days. Its mortgage book and deposits were sold to JP Morgan, but its debt (senior and subordinated) with a face value of $23 billion was left to recover what it could in the bankruptcy.

UK mortgage lender Bradford and Bingley was also nationalised and the retail business sold to the Spanish bank Santander over that weekend, following downgrades by rating agencies and withdrawal of its license on Saturday 26th by the FSA with the shares being suspended as from the opening of business on the Monday. The UK Government promised to repay all outstanding unsubordinated wholesale deposits and borrowings when due, and to continue this guarantee for a period of six months.

In a complicated three-government rescue, Fortis was part-nationalised over the weekend and supported with promised injections of capital and, as was subsequently made public, a massive ELA line of credit. This was not sufficient to restore market confidence however, and the bank's share price fell sharply on Monday and it continued to suffer outflows for the rest of the week until a revised package was announced the following weekend.

[167] The scheme was eventually approved in modified form on 3 October.

The Fortis Case

Fortis was structurally a liquidity-deficit bank. Because of a capital weakness following its over-ambitious participation in the purchase of ABN-AMRO (a purchase designed in part to strengthen its structural liquidity position), it was, from June 2008,[168] seen as a vulnerable bank and began to lose liquidity rapidly at end-September. By Friday 26th it suffered a silent run (unable to raise its usual €15 to €20 billion in the overnight interbank market) and started to lose institutional and retail deposits. That day it resorted to the ECB's standing Marginal Lending Facility (MLF) in the amount of €5 billion to meet its immediate liquidity needs. It was clear that it would not be able to get through Monday without defaulting, having exhausted its ECB-eligible collateral. A complicated three-government capital injection deal was negotiated over the weekend, with Belgian, Dutch and Luxembourg Governments announcing that they would inject a total of €11.2 billion between them to acquire 49.9% of the group. ELA was also authorised (but not announced at the time).

Despite being described by the Dutch Ministry of Finance in a statement as offering a 'solid guarantee' to ensure financial stability and protect the interests of account holders at Fortis and ABN AMRO, these measures were insufficient to boost market confidence on Monday. Indeed, the bank was downgraded and its share price fell sharply on Monday. By Friday October 3rd, according to the Shareholder Circular and the Panel of Experts' report (p. 49), ELA drawdown reached €61 billion, out of €65 billion that had been authorised (€58 billion from the Belgian National Bank and €7 billion from the Netherlands Bank – in addition to classic ECB funding and drawings on the MLF and the US Federal Reserve's discount window). At this point a second round of equity acquisitions and capital injections from governments was undertaken, leaving the Netherlands subsidiary wholly in the hands of the Dutch government and with the French bank BNP acquiring most of the remainder of the banking assets. (The Dutch government statement did not provide a general explicit guarantee.[169] However, it did guarantee the long-term debt of the Dutch subsidiary to the Belgian parent in the amount of €16 billion). After that weekend, ELA declined speedily with the payment of €51 billion from the Netherlands government and with additional funding from BNP. (The use of ELA had fallen to €6 billion already by 9 October).

The German bank Hypo RE, which had acquired Irish-based DePfa in 2007, was bailed out early in the morning of Monday, 29 September, by a consortium of German banks and the Federal Government, reflecting the funding difficulties of the highly leveraged DePfa (as well as – it later proved – solvency issues in the parent). (This particular deal fell through but was replaced on 4 October by another deal involving banks and the Bundesbank). Total funding required was €50 billion.

Dexia hit problems on Monday, 29 September, with a sharp fall in its share price. The following day Moodys downgraded its intrinsic strength to C-. Expected losses from

[168] When a capital need of €8.3 billion was announced.

[169] It stated: "This provides a strong safeguard for all those involved in these institutions and for the stability of the Dutch financial system. Under the current exceptional circumstances, the interests of account holders and other parties concerned must be safeguarded."

its US subsidiary and a large loan to DePfa were mentioned as causes. Rescue measures involving a capital injection of €6 billion and a government guarantee covering new borrowings,[170] plus ELA from BNB, were announced on 30 September.

Intervention by FDIC and the sale of the 6th largest US bank Wachovia to CitiGroup was announced Monday, 29 September. (The deal was subsequently renegotiated with Wells Fargo as the buyer – at no cost to the FDIC). This followed withdrawals of €26 billion by corporate depositors, or one quarter of their total, mainly in the last days of September.

Bearing in mind the Congressional rejection of the first version of the US TARP plan that day also, this, then was the state of play on the evening the Irish authorities faced the decision to introduce its blanket guarantee. The crisis continued to deepen over the following days with, for example, the UK starting, without publicity, to extend ELA facilities to HBOS (from Wednesday 1st October) and RBS[171] (six days later), before the summit meetings later in the month that led to the coordinated cross-country announcement of huge rescue packages – not all of which were subsequently drawn down.

While the range of containment measures finally adopted was wide, including equity, preference share and hybrid capital injections, asset insurance and loss-sharing agreements, assisted and encouraged mergers, asset purchase programmes, guarantees for depositors and other creditors, and emergency liquidity provision, it is worth noting that most, if not all, of these had already been employed in the period from August 2007 to the day of the Irish guarantee.

[170] The guarantee covered Dexia's liabilities towards credit institutions and institutional counterparties, as well as bonds and other debt securities issued for the same counterparties, provided that these liabilities, bonds or securities were falling due before 31 October 2011 and had been contracted, issued or renewed between 9 October 2008 and 31 October 2009.

[171] The peak drawings from the two banks totalled £62 billion by mid-November, and HBOS had not fully repaid it until mid-January 2009.

ANNEX 4: DEPOSITS, BONDS, SUBORDINATED DEBT, AND THEIR RELEVANCE FOR LOSS ALLOCATION

A bank funds its loans not only with deposits placed by its depositors and by its common equity shareholders. Indeed, in recent years, customer deposits and equity formed a diminishing fraction of Irish banks' resources, and they became dependent on other sources, including large amounts coming from abroad.

Thus in particular, banks also (i) borrow money from other banks, financial institutions, large companies and public institutions, often pledging collateral (or through a collateral-like mechanism called repo); (ii) issue uncollateralised debt instruments (e.g., bonds, notes or corporate paper) at various maturities ranging from a few days up to several years; (iii) issue asset-backed securities such as covered bonds – this was not a large part of Irish banks' business in the run-up to the crisis;[172] and (iv) issue explicitly subordinated debt instruments, preference shares and other instruments which explicitly rank behind deposits and other debt.

Regulators insist that a certain fraction of the bank's assets be financed by risk capital, made up mainly of equity and various forms of subordinated debt which rank behind the rest of the bank's debt in a liquidation. The purpose of these regulations is to ensure that the bank can (a) survive despite losses, if the losses do not exceed the equity (b) depositors need not lose even if the bank becomes insolvent, if the losses do not exceed the sum of the equity and the subordinated debt. Equity can be seen as *going concern capital*, because it can be replenished before the bank becomes insolvent; while subordinated debt is *gone concern capital* – which need suffer loss only in the case of insolvency.

The various forms of non-equity capital which make up what we are calling subordinated debt can be divided into two main groups: those which qualify as "upper Tier 1" capital – in particular these must not have a fixed redemption date, and the rest. In addition to the fixed redemption date, at which bonds must be repaid, there can, however, be an earlier date at which the bank can choose (with the approval of the regulator) to repay. The practice has been to repay at this earlier date, and some argue that to do otherwise is almost like a default, though that is not legally the case.

[172] Though notoriously it was central to the problems emanating from the US mortgage market.

Loss allocation

The isolated failure of a bank entails costs which will be borne by some stakeholders. Even from the narrow contractual point of view of the direct financial losses, it is an important policy issue as to whether to intervene in the loss allocation that will result from the liquidation of the bank and the distribution of the proceeds to the creditors in accordance with their strict priority: shareholders to bear the first losses, then subordinated debt holders before the rest.

Containment and loss allocation are logically separate aspects of financial crisis management, but different containment measures can have implications for what is possible in terms of loss allocation. This is most evident in debt-insurance schemes, but is true for other measures also. An injection of equity capital protects all more senior creditors of the bank, for example, whereas ELA can protect (by allowing the exit of) depositors, but leaves equity and subordinated debtholders at risk. The Irish guarantee in effect protected all creditors with claims of less than two years' remaining maturity.

Of course, the failure of one or more systemically important institutions will entail losses going well beyond the contractual claimants on the bank's assets. It is indeed for the purpose of protecting some of these innocent others that governments may do well to choose an allocation of the direct financial losses that seems arbitrary or even regressive.

When considering the allocation of losses in the case of an insolvent bank, there is an important difference in the law between the United States on the one hand and Ireland (and the UK) on the other. Since 1993, US law gives depositors priority over bondholders and general creditors in their entitlement to be paid out of the proceeds of a bank liquidation. Irish and UK law make no such distinction: unless explicitly subordinated, bond-holders are entitled to share *pari-passu* with depositors and other general creditors. This is an important distinction presenting complications to the idea of discriminating between such creditors in a liquidation.

The relative importance of different funding sources in practice

Market value of shareholders' funds in the four listed Irish banks peaked in 2007 at an aggregate of around €60 billion. Market value of equity of course takes account not

only of the book value (share subscriptions and retained earnings, etc.) but also the market's expectation of future profits. Aggregate book value of shareholders' equity in these banks at the end-year balance sheets on or before end-September 2008 was €22 billion. Considering that most of this value is being wiped out by actual and prospective loan losses (the value of the life company in ILP being an exception), and the current estimates of the long-term direct fiscal cost of interventions to recapitalise the banks at around €25 billion, it can be argued that the State has paid for roughly one half of the banking losses; the shareholders for most of the rest. (That does not take account of the knock-on or indirect effects of the worsening of the recession exacerbated by the banking failure, which have been borne widely.)

Chart A4 shows the funding sources of AIB and Anglo in 2007-08, broken down into these categories. Note that less than half of AIB's funding came from customer deposits and about half of that for Anglo.[173] Senior, i.e., unsubordinated debt accounts for between a sixth and a quarter of the financing sources, with banks (including central banks) representing another large element. Equity and subordinated debt represent only a relatively small cushion.

Table A4: Tier 2 Sub Debt, etc. in the Banks according to their 2008 Reports

€ billion	Dated sub-debt	Undated sub-debt, etc.	Shareholders' funds*
AIB	3.0	1.6	8.4
Bank of Ireland	4.6	3.2	6.5
Anglo Irish Bank	2.1	2.8	4.1
Irish Life and Permanent	1.1	0.6	2.3
Irish Nationwide Building Society	0.3	0.0	1.3
Educational Building Society	0.3	0.0	0.7
Total	11.4	8.2	23.2

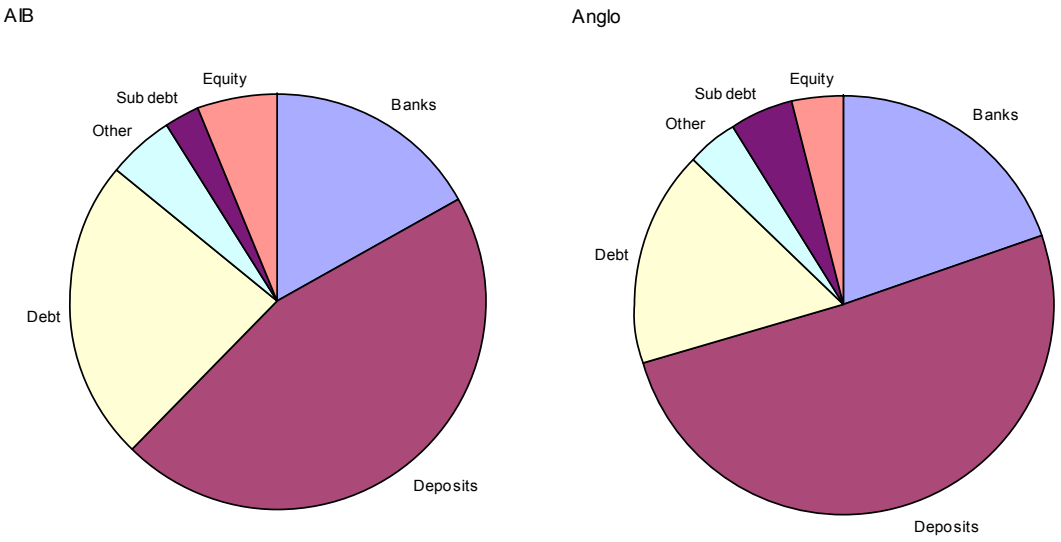
* Reserves in the case of Building Societies

Most of the banks covered by the end-September 2008 (CIFS) Guarantee conduct sizeable business (both assets and liabilities) outside the State. Heading into the guarantee they had sizeable net liabilities to non-residents: about three-quarters of the debt issued by these banks was held abroad, while about a quarter of the deposits (from nonbanks) were held by non-residents.

[173] The customer deposit figures for Anglo do not include the large deposit received from ILP at end-September 2008.

About a half of deposits were held by individuals – the bulk of the remainder were held by nonbank financial institutions and nonfinancial firms. It can be assumed that a large fraction of the personal bank deposits were owned by relatively well-off individuals. Indeed, judging from data available for other countries, aggregate bank accounts of individuals in the bottom half of the income distribution likely accounted for well under 10 per cent of total personal bank accounts. All of the bank deposits of these individuals were fully covered by the permanent Deposit Guarantee Scheme. So the guarantee protects the less well-off not directly by covering their bank deposits (if any), but by underpinning the functioning of the economy which provides employment and generates the tax revenue needed to pay for public services. Relatively little of the guarantee goes to protecting the bank deposits of the more prosperous members of society – though it does do that, in effect socialising their losses.

Chart A4: Composition of the liabilities of AIB and Anglo Irish Bank



Source: AIB, Anglo Irish Bank annual reports.

ANNEX 5: CRISIS TIMELINE

Date	National developments	International developments	Eurosystem measures	Fed initiatives	BoE initiatives	Other CB initiatives
23/06/2007		US: Bear Stearns pledges $3.2 billion to aid one of its ailing hedge funds				
26/06/2007						SEC begins investigation of 12 CDO issuers
28/06/2007				FOMC maintains the target fed funds rate at 5.25%		
09/08/2007		BNP Paribas freezes three funds after an inability to value subprime mortgage based assets	The ECB notes that there are tensions in the euro money market and announces a liquidity-providing fine-tuning operation aimed at assuring orderly conditions in the euro money market. The ECB allows 100% of the bids it receives			
10/08/2007			Another liquidity-providing fine-tuning operation is conducted aimed at assuring orderly conditions in the euro money market	Fed issues statement that it stands ready to provide liquidity via the discount window		
13/08/2007			Another liquidity-providing fine-tuning operation is conducted			
14/08/2007			Another liquidity-providing fine-tuning operation is conducted			
17/08/2007				Spread between the primary credit rate and the target fed funds rate is reduced to 50bp		
20/08/2007			ECB allots above benchmark in regular MRO but announces that it intends to gradually reduce the large reserve surplus which has accumulated in the first weeks of this reserve			

		maintenance period		
22/08/2007		ECB announces a supplementary liquidity-providing longer-term refinancing operation with a maturity of three months for an amount of €40 billion		
27/08/2007		ECB continues to allot above benchmark in MROs		
03/09/2007		ECB continues to allot above benchmark in MROs		
06/09/2007		ECB announces a supplementary liquidity-providing longer-term refinancing operation with a maturity of three months. This operation aims to support a normalisation of the functioning of the euro money market. It is to be conducted in addition to the regular monthly longer-term refinancing operations, which remain unaffected. The operation will be carried out as a variable rate tender, with no preset allotment amount.		
13/09/2007	UK : Northern Rock receives emergency loan from the Bank of England			
18/09/2007			FOMC lowers target fed funds rate 50 bp to 4.75%	
08/10/2007		ECB announces that it will reinforce its policy of allocating more liquidity than the benchmark amount in main refinancing operations to accommodate the demand of counterparties to fulfil reserve requirements early within the maintenance period.		
10/10/2007				US Treasury Secretary Paulson makes statement on "private sector alliance" to prevent

			mortgage default
16/10/2007	US : Citigroup begins a string of major bank writedowns based on subprime mortgage losses		
31/10/2007			FOMC lowers target fed funds rate 25 bp to 4.50%
02/11/2007			Fed approves Basel II
08/11/2007		ECB announces that it will renew the two supplementary longer-term refinancing operations (LTROs) that were allotted on 23 August 2007 (€40 billion) and on 12 September 2007 (€75 billion) that mature on 23 November 2007 and on 12 December 2007, respectively. In addition, it will conduct two new supplementary LTROs which will be carried out through variable rate tenders, each with a preset amount of €60 billion. The first operation will be settled on 23 November 2007 and will mature on Thursday, 21 February 2008. The second operation will be settled on 12 December 2007 and will mature on Thursday, 13 March 2008.	
27/11/2007	US : Citigroup raises $7.5 billion from the Abu Dhabi Investment Authority		
30/11/2007		ECB announces that, as an additional measure over year-end, that it will lengthen the maturity of the main refinancing operation settling on 19 December 2007 to two weeks. The new maturity date will be on 4 January 2008 instead of 28 December 2007. In this operation, the ECB will aim to satisfy the banking sector's liquidity needs for the entire two-week period, covering both the Christmas holidays and the end of the year	
11/12/2007			FOMC lowers target fed funds

			rate 25 bp to 4.25%	
12/12/2007		ECB announces that it will conduct two US dollar liquidity-providing operations, in connection with the US dollar Term Auction Facility, against ECB-eligible collateral for a maturity of 28 and 35 days. The US dollars will be provided by the Federal Reserve to the ECB, up to US $20 billion, by means of a temporary reciprocal currency arrangement (swap line).	Term Auction Facility (TAF) is announced and swap lines are established with the ECB and SNB for $20 billion and $4 billion, respectively	
17/12/2007		ECB announces that the allotment amount in this two week operation (see above) will not be bound by the benchmark amount. Specifically, as a minimum the ECB will satisfy all bids at or above the weighted average rate of the MRO settled on 12 December, i.e. 4.21%.	The first TAF auction takes place for $20 billion of 28-day credit	
21/12/2007		ECB announces, in conjunction with the Federal Reserve and in the context of the Term Auction Facility (TAF), that it will further offer US dollar liquidity in January. The operations will have the same size and will be conducted according to the same procedures as those carried out in December 2007.	Fed extends TAF auctions "for as long as necessary to address elevated pressures in short-term funding markets".	
11/01/2008	US : Bank of America announces purchase of Countrywide Financial for $4 billion			
22/01/2008			FOMC lowers target fed funds rate 75 bp to 3.5%	
28/01/2008				Economic Stimulus Act of 2008 proposed
29/01/2008	US : Rating agencies threaten to downgrade Ambac Financial and MBIA, two major bond insurers			

30/01/2008				FOMC lowers target fed funds rate 50 bp to 3%	
01/02/2008				TAF auction size increased to $30 billion every two weeks	
06/02/2008	Irish Life & Permanent Chief Executive Denis Casey says sharp falls in Ireland's banking stocks have been a "huge over-reaction" given the resilience and sound fundamentals of Ireland's economy and banks.				
07/02/2008			ECB announces that it will renew the two supplementary longer-term refinancing operations (LTROs) that were allotted on 23 November 2007 (€60 billion) and on 12 December 2007 (€60 billion) and which will mature on 21 February 2008 and on 13 March 2008, respectively.		
13/02/2008					Economic Stimulus Act of 2008 signed into law
17/02/2008					Britain nationalises Northern Rock
07/03/2008					SEC proposes a ban on naked short selling
11/03/2008			ECB announces that it will provide US$ liquidity (via TAF) for as long as is needed	Term Securities Lending Facility (TSLF) is introduced and swap lines with the ECB and SNB are increased	
13/03/2008		US : Bear Stearns reports a $15 billion (88%) drop in liquid assets			
14/03/2008		US : Bear Stearns receives emergency lending from the Fed via		Fed approves purchase of Bear	

		JP Morgan		Stearns by JP Morgan	
16/03/2008	Over this week (to 20/03) shares in Anglo Irish fell sharply circa -18%, with analysts worrying about their exposure to the UK commercial property market	US : JP Morgan announces it will purchase Bear Stearns for $2 per share		The spread between the primary credit rate and target fed funds rate is cut to 25 bp The spread between the primary credit rate and target fed funds rate is cut to 25 bp	
18/03/2008				Target fed funds rate is lowered 75 bp to 2.25%	
19/03/2008					Fannie Mae and Freddie Mac capital requirements are eased to allow for increases in lending
24/03/2008	Over this week (to 28/03) Anglo's share price recovered somewhat but its CDS widened 50bps to 425. During the week S&P gave a positive outlook on Irish banks.	US : JP Morgan's purchase price for Bear Stearns increases to $10/share			
28/03/2008			ECB announces that it will conduct supplementary longer−term refinancing operations (LTROs) with a maturity of six months. In addition, the Governing Council decided to conduct further supplementary LTROs with a three month maturity. One supplementary six-month LTRO with a preset amount of €25 billion will be allotted on Wednesday, 2 April. Another supplementary six-month LTRO, in the amount of €25 billion, will be allotted on Wednesday, 9 July.	Target fed funds rate is lowered 25 bp to 2%	
24/04/2008	Over this week CDSs on Irish financials tightens significantly. This tightening of CDS spreads amid falling equity prices seen as consistent with the				

	recapitalisation initiatives (viz. RBS), which are seen as shoring up banks and strengthening their solvency but diluting their earning potential.			
30/04/2008			TSLF eligible collateral expands to include AAA rated ABS	
02/05/2008	Over the week (to 02/05) Anglo Irish Bank is the best performer on the ISEQ (up 15% to €9). Irish financials together with international banking indices are buoyed by improved investor sentiment on the growing belief that the worst of the credit crisis is over. In addition, providing some extra support to Anglo is a report in the Sunday Independent that a group of Anglo Irish Bank clients plan to set up a fund to buy shares in the troubled bank		The ECB announces, in conjunction with the Federal Reserve and in the context of the Term Auction Facility, to increase the amount of US dollar liquidity provided to the counterparties of the Eurosystem to US $25 billion in each bi-weekly auction. The operations will be conducted every second week with a maturity of 28 daysTAF and swap lines increase	
07/05/2008	Over the week to 07/05, Irish financials rise following the earnings announcement from Anglo (with pre tax profits up 17% in the 6 months to March '08) and a management statement from IPM that they would achieve earnings targets for 2008 buoyed the bank stocks. CDSs on Irish financials tightened over the week.			
21/05/2008	Bank of Ireland becomes the first of Ireland's leading banks to hint profits may fall, responding to the worsening economic slowdown at home and the deepening credit crisis globally. Its share price falls 8%.		Bank of America's purchase of Countrywide Financial is approved	

05/06/2008		US : S&P downgrades the two largest monoline bond insurers from AAA to AA			
06/06/2008		US : Lehman reports a loss of $2.8 billion in the second quarter			
16/06/2008					The FDIC takes over IndyMac
11/07/2008		US : After FDIC take-over, IndyMac experiences a run on deposits			
11/07/2008			Lending to Fannie Mae and Freddie Mac at the primary credit rate is authorised		
13/07/2008					Treasury Secretary Paulson requests government funds to potentially support Fannie Mae and Freddie Mac
15/07/2008	Allied Irish Banks says first half earnings fell 4 percent and warns of a 10 percent drop for the full year but offers shareholders a chunky dividend hike that it says reflects the bank's capital strength.		84-day TAF auctions are introduced and the ECB swap line is increased		
06/06/2008	Over week Anglo and BoI share prices (-7% and -6% respectively) fall sharply following news after Bradford & Bingley (B&B), the largest UK buy-to-let mortgage lender reported a near 50 percent year-on-year slump in profits for the first four months of 2008.				

13/06/2008	Shares in Irish banks continue to fall (ISEF down more than 10%) amid general sell-off in financials together with broker downgrades and worries over exposure to UK and domestic property market	
27/06/2008	Irish Financial shares continue to fall (-9%), in line with sector peers amid heavy falls in shares of Fortis, Citibank and worries over monoline insurers	
04/07/2008	In the week to 04/07, Irish financials fall sharply and underperform European peers. Irish Life & Permanent (IL&P) fall sharply as Standard & Poor's downgraded its long-term credit rating on the bankassurer from A+ to A amid a weakening outlook for banking stocks. S&P also lowers its outlook for the ratings of Allied Irish Banks, Bank of Ireland and Anglo Irish Bank. S&P lowers the outlook for its A+ ratings for both AIB and Bank of Ireland from 'positive' to 'stable', while its outlook for Anglo's A rating from 'stable' to 'negative'.	
10/07/2008	In the week to 10/07, Irish financials continues their sharp fall. BoI in its interim management statement says that the deteriorating Irish economy is "adversely impacting" earnings. There are negative comments on Irish banks from Goldmans, Merrill Lynch, Credit Suisse, Lehmans and RBS. In addition, IL&P ratings outlook is lowered to negative by analysts at Moody's, citing dependence on	

	wholesale funding and falling profit. The CDS spread on IL&P subsequently hits a record high.			
18/07/2008	In the week to 18/07, Irish financials fall following Fitch's decision to change AIB's outlook from "stable" to "negative" . In addition, the use of contracts for difference (CFDs) come into focus over the period amid media reports that Ireland's richest man Sean Quinn, is estimated to be nursing a €500mn to €1bn loss from his 15pc leveraged derivative position in Anglo Irish Bank.			
25/07/2008	Fitch reaffirms its stable ratings for Bank of Ireland, saying that the bank is "relatively well-placed" to cope with a reasonable amount of stress in the markets.			
30/07/2008		CB announces, in conjunction with the Federal Reserve, its plan to establish a cycle of 84-day Term Auction Facility operations. Starting on 8 August, the ECB will conduct 84-day operations under the Term Auction Facility, while continuing to conduct operations with a maturity of 28-days. The ECB will conduct bi-weekly operations, alternating between operations of US $20 billion of 28-days maturity and operations of US $10 billion of 84-days maturity		Fannie Mae and Freddie Mac are placed in Federal conservatorship
31/07/2008		ECB announces that it will renew the two outstanding three-month supplementary longer-term refinancing operations (LTROs) that were allotted on 21 May 2008 (€50 billion) and on 11 June 2008 (€50 billion) and that will mature on 14 August 2008 and on 11 September 2008, respectively		
01/08/2008	Over the week, AIB's H1 results			

	are released and are generally in line with expectations with the company reporting pre-tax profits of just over €1.3 billion for the first half of this year, up 8.6% on the same period last year. However, AIB notes it now expects adjusted earnings per share to decline by 8-10 percent instead of the previous low single digit growth. Financial shares finish the week lower, with Anglo down more than 20% on downgrade from NCB. In addition, Anglo Irish Bank Corp. are among banks "most exposed" to falling commercial real-estate values in the UK, according to Merrill Lynch	
15/08/2008	The main news on the week is the release of the Anglo Irish Bank's IMS statement that is in line with expectations with the company reiterating its forecast that earnings would rise 15 per cent for the full year to September 30th. Anglo says that the economic environment would remain "significantly challenged." Following the statement Fitch Ratings affirms Anglo's long-term rating at A+ and maintains its outlook as "stable."	
22/08/2008	Irish financials lower this week, particularly Anglo after UBS slash its forecasts for the coming two years and downgrade its stance on the bank's stock to outright "sell". There is some positive news however, with Fitch Ratings affirming Irish Life & Permanent's Individual and Support ratings at 'B' and '3',	

	respectively.			
04/09/2008			ECB announces that it will renew the outstanding six-month supplementary longer-term refinancing operation (LTRO) of €25 billion that was allotted on 2 April, and that will mature on 9 October 2008. It also decides to renew the two three-month supplementary LTROs (€50 billion) that will mature on 13 November and 11 December 2008, respectively.	
07/09/2008		US : Lehman announces $3.9 billion loss in third quarter		
10/09/2008		US : Moody's and S&P threaten to downgrade Lehman		
11/09/2008	A volatile week for Irish financials (-7%), amid general negative market news (GSE rescues, worries over Lehman) while Irish Nationwide is downgrads by Fitch to BBB+, EBS reported a H1 drop in profits of 37% while JP Morgan and Dresdner cut estimates for Irish banks.			
12/09/2008				Eligible collateral for TSLF and PDCF expanded
14/09/2008		US : 10 banks create $70 billion liquidity fund		
14/09/2008		US : Bank of America purchases Merrill Lynch		
15/09/2008		US : Lehman files for bankruptcy		
		US : AIG debt downgraded by all three major ratings agencies		

				Fed funds rate maintained at 2%	
16/09/2008		US : RMC money market fund "breaks the buck"		$85 billion loan given to AIG	
		US : More money market funds come under pressure			
17/09/2008	Short Sales of financial stocks prohibited indefinitely by Financial Regulator	Sweden : Government Issues large amount of T bills to counteract market shortage		Swap lines increased by $180 billion	
18/09/2008		UK : Short Sales of financial stocks prohibited, disclosure of short positions required	ECB announces that to reinforce its joint action with the Federal Reserve, it is adding an overnight maturity to its operations providing US dollar funding to Eurosystem counterparties and by increasing the amounts offered in the Term Auction Facility operations. As regards the overnight US dollar funding, the Eurosystem shall conduct US dollar liquidity-providing operations with its counterparties against Eurosystem-eligible collateral, applying a variable rate tender procedure. It is intended to continue the provision of US dollar liquidity for as long as needed in view of the prevailing market conditions.		
		France : Short Sales of financial stocks prohibited, disclosure of short positions required		AMLF established	Treasury establishes the money market guarantee program
19/09/2008	Irish equities again volatile but benefits from the decision of the Financial Regulator to ban short-selling in the four big Irish financial shares. In addition there are reports about a takeover of Irish Nationwide by Anglo Irish Bank, while Reuters reports interest in Bank of Canada : Short Sales of financial stocks temporarily prohibited.				Paulson calls for government plan to purchase troubled assets from financial institutions

				Goldman Sachs and Morgan Stanley approved as bank holding companies	
21/09/2008				New swap lines opened with Bank of Australia, Sveriges Riksbank, Danmarks National bank, and Norges Bank	
24/09/2008	Ireland becomes the first euro zone country to slide into recession in 2008, with economic activity in the former "Celtic Tiger" at its weakest in a quarter of a century after its property bubble bursts.	US : Washington Mutual closed by OTS. Its banking assets are sold to JP Morgan for $1.19 billion			
25/09/2008				ECB and SNB swap lines are increased by $10 billion and $3 billion, bringing total swap line to $290 billion	
26/09/2008		Germany : Hypo Real Estate receives €35bn guaranteed financing	ECB announces that it will provide US dollar one week funding over the quarter end to Eurosystem counterparties against Eurosystem-eligible collateral, applying a variable rate tender procedure and with an intended volume of US €35 billion.	84-day TAF allotments increased to $75 billion, two forward TAF auctions totalling $150 billion introduced, and total swap line doubled to $620 billion	US : Treasury bailout plan is voted down in the House
29/09/2008		US : Systemic risk exception allows open bank assistance to Wachovia	ECB announces that it will conduct a special term refinancing operation settling on 30 Sept and maturing on 7 November. This operation would later become the maintenance period operation.	Fed agrees to provide Citigroup with liquidity to aid in Wachovia purchase	
		UK : Bradford & Bingley nationalised, branch system and deposits sold to Banco Santander			
30/09/2008	Six domestic banks receive guarantees on all deposits and some debt instruments	France : Government and state-owned bank contribute €3bn to Dexia recapitalisation			

01/10/2008	Italy : Short Sales of financial stocks temporarily prohibited			
03/10/2008	UK : Deposit Insurance increased to GBP 50,000	ECB announces that, from 6 October 2008 until further notice, all institutions that are eligible to participate in Eurosystem open market operations based on standard tenders and that fulfil additional operational or other selection criteria specified by the respective national central bank will also be eligible to participate in quick tenders, i.e. the tender procedure normally used for fine-tuning operations.		Revised Treasury plan passes the House along with new clauses raising FDIC insurance limits to $250,000
	Canada : Prohibition on short sales extended until end of SEC's ban			
05/10/2008	Germany : Government guarantees all private banks			
06/10/2008	Sweden : Deposit Insurance extended to all types of deposits, up to SEK 500,000		TAF increased to provide $900 billion of funding over year-end	
06/10/2008	Germany : Hypo Real Estate financing guarantee increased to €50 billion			
	Iceland : Announces part of a financial rescue plan for its banking sector. The country's largest banks agree to sell off some of their foreign assets and bring them home. Iceland's PM warns country faces "national bankruptcy"			
	Denmark : Introduces guarantee on savings			
	Iceland : Icelandic government takes control of Landsbanki, which owns Icesave in the UK. Icesave freezes all deposits in the UK		Commercial Paper Funding Facility (CPFF) established	

07/10/2008	Iceland : Icelandic FSA appoints a Resolution Cmte for Icelandic banks Glitnir Bank and Landsbanki Islands			
	UK : First Parliamentary reading of Banking Bill - introduction of Special Resolution Regime			
	Sweden : SEK5 Billion liquidity facility created for Kaupthing Bank		In conjunction with cuts by other central banks, target rate lowered to 1.5%	In conjunction with cuts by other central banks, target rate lowered to 1.5%
08/10/2008	Commercial Paper Funding Facility (CPFF) established	ECB announces that as from the operation settled on 15 October, the weekly main refinancing operations will be carried out through a fixed rate tender procedure with full allotment at the interest rate on the main refinancing operation, i.e. currently 3.75%. As of 9 October, the ECB will reduce the corridor of standing facilities from 200 basis points to 100 basis points around the interest rate on the main refinancing operation. Therefore, as of 9 October, the rate of the marginal lending facility will be reduced from 100 to 50 basis points above the interest rate on the main refinancing operation. The two measures will remain in place for as long as needed, and at least until the end of the first maintenance period of 2009, on 20 January		
	UK : Credit Guarantee Scheme announced to guarantee debt of short maturity			
	France : Government guarantees 36.5% of €150 billion Dexia refinancing		Payment of interest on reserves begins	
09/10/2008	Italy : Government states that no banks will fail, no depositors will suffer losses			

		Iceland : Icelandic FSA appoints a Resolution Cmte for Kaupthing Bank		
		Canada : Government will purchase 25bn in government insured mortgage pools		Sweden : Central bank announces it will discontinue repo ops for monetary policy and will issue debt to absorb liquidity
10/10/2008		Spain : Government creates a fund of up to €50bn to buy top-rated assets from Spanish banks and other financial institutions		
				Wells Fargo's purchase of Wachovia is approved
12/10/2008		UK : Capital Injections of GBP37bn to HBOS/Lloyds, RBS		Fed uncaps ECB, BoE, and SNB swap lines
13/10/2008		France : €320 billion fund to provide loans to banks and other financial institutions announced	ECB announces that starting on 15 October the Eurosystem will, every Wednesday, conduct a liquidity-providing US dollar operation with a term of 7 days. All future auctions with a term of 7 days, 28 days and 84 days will be conducted at a fixed rate with full allotment	
		Germany : €400 billion plan to guarantee bank financing announced		
		Italy : Government passes bank financing guarantee, will provide unspecified amount		
	The Irish Government hikes taxes and reins in spending in an emergency budget and predicts its budget deficit risks smashing EU rules.	Japan : Disclosure of short positions now required by sector		Bank of Japan swap line is uncapped

14/10/2008	US : 9 Large banks agree to capital injection from the Treasury			
	US : DOW suffers its biggest percentage fall since 26 Oct 1987 (7.87%)			Treasury announces $250 billion capital injection plan
				FDIC insures all senior debt of regulated institutions
15/10/2008	Switzerland : Government injects CHF6bn into UBS and creates an SPV to buy illiquid assets, funded by UBS capital and a central bank loan		Tier I capital definition changed to include stock purchased by Treasury	
16/10/2008	Sweden : Government will guarantee up to SEK1.5trn in new debt issues			
20/10/2008	Sweden : Stabilisation fund announced, with SEK15bn initially; government will be given the right to buy out shareholders in systemically important institutions at market price			
	France : Government subscribes to €10.5bn in subordinated debt issue by six largest banks			
21/10/2008				Rate paid on excess reserves increases by 40 bp
22/10/2008	Canada : Canadian Lenders Assurance Facility announced to guarantee debt up to 3 years		Money Market Investor Funding Facility (MMIFF) is established	
23/10/2008	Sweden : SEK1bn liquidity facility created for Carnegie			Rate paid on excess reserves increases by

				40 bp
27/10/2008	Germany : Financial rescue fund Soffin begins operation, with power to guarantee financing, buy assets, and recapitalise firms	ECB announces that in the 3 month longer-term refinancing operation which settles on 30 October and in which all bids will be satisfied (i.e. there will be full allotment), the fixed rate will be equal to the rate on the main refinancing operation of 3.75%. In subsequent longer term refinancing operations with full allotment, the fixed rate may include a spread in addition to the rate on the main refinancing operation depending on the prevailing circumstances		
	Japan : Naked short selling banned, exchanges must disclose holders of 0.25% short position, until end April			
	Sweden : Carnegie liquidity facility increased to SEK5bn			
28/10/2008	Italy : Prohibition on short sales extended to year-end		Fed funds rate cut 50 bp to 1%	
29/10/2009			US $ Swap lines established with Brazil, Mexico, Korea and Singapore for $30 billion each	
04/11/2008		ECB announces that, in co-operation with the Swiss National Bank, it will start to conduct 84-day CHF swap tenders.		

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