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Joint Committee of Inquiry into the Banking Crisis

Witness Statement of

Frank Browne

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INTRODUCTION AND RESPONSES TO SPECIFIC LINES OF INQUIRY

Introduction

The Joint Committee of Inquiry into the Banking Crisis (the “Inquiry”) has directed me, pursuant to section 67(1) of the Houses of the Oireachtas (Inquiries, Privileges and Procedures) Act 2013, to provide a written statement relative to my role as Head of Monetary Policy and Financial Stability in the Central Bank of Ireland (the “Bank”) on 12 separate lines of inquiry which cover an array of subjects over a lengthy period of time. I am pleased to provide assistance to this Inquiry in relation to matters within my knowledge that I believe are relevant to the work of this Inquiry. However, it is not possible for me to properly address these issues with several years of intense activity in a short statement limited to replies to specific lines of inquiry. Therefore, to assist this Inquiry, I have prepared a comprehensive supplemental statement which supports the short statement addressing the specific lines of inquiry and which is referred to as Appendix 1. Prior to preparation of my submission to this Inquiry, I raised this issue with the Inquiry and note from their letter to me on 20th July 2015 that the Inquiry will accept supporting documentation in relation to my short statement which is limited to the specific lines of inquiry. Appendix 1 and the exhibits referred to therein provide necessary amplification on certain specific lines of inquiry that have been raised and also provide a detailed account of the function and operation of financial stability and crisis management within the Bank during the relevant period.

Appendix 1 is accompanied by a USB key containing all supporting documents referred to therein. I confirm that such documents are, according to the best of my knowledge, information and belief, true and correct. Many of these documents are not currently in the public domain and therefore the contents of this USB key should be treated in confidence by the Inquiry.

At the time of preparing my submission to this Inquiry, I did not have access to the relevant files and records held by the Bank. Accordingly, I have relied upon scanned image versions of such documents that were available to me. Therefore, I am not in a position to provide a metadata sheet in connection with the contents of the USB key. I presume that the originals of these documents are available from the Bank, if required.

1. **R1a. Appropriateness of regulatory regime.**

Do you believe that the FR and the IFSRA Boards has sufficient powers to take direct action against banks – if it became necessary to avoid a financial stability crisis? Can you assess how these powers were used and whether, in your belief, their use was effective?

Question 1

It is my belief that the FR had sufficient powers to take direct actions against the banks. The FR action in relation to capital ratios taken in 2006/7 was an example of this. A draft paper circulated by the Financial Regulator proposed an increase in the risk weighting for new residential mortgages from 50 per cent to 60 per cent of Tier 1 capital. As noted in the minutes of the FSC meeting for the 14th of February 2006, the measure was being considered at the time to demonstrate the FR's concerns at the extent of mortgage lending among retail credit institutions "while being sufficiently conservative not to impact competition." Thus, with respect to this particular power to increase capital ratios, it is apparent that it was not effectively exercised.

2. **R1b. Effectiveness and appropriateness of supervision policy and powers.**

One of the statutory objectives of the central bank was "the promotion of the financial services in Ireland". In your view was there a conflict between this objective and the Financial Regulator's responsibility for prudential supervision?

Question 2

In principle, there should not have been a conflict between the FR's responsibility for prudential supervision and the objective of "the promotion of the financial services industry in Ireland".

My understanding is that, in the statute governing the Financial Regulator's mandate, there was a hierarchy of objectives. The FR would have been expected to contribute to "the promotion of the financial services industry in Ireland", but only on condition that its primary objective of overseeing the prudential health of the banking system had been fulfilled. Indeed, a quote from a speech from an IFSRA executive¹ would suggest that this

¹ IFSRA speech: "The Future of Financial Regulation: Principles or Rules – Issues for the Irish Financial Services Sector", 2005.

hierarchy of objectives was not observed in practice. It says: “Finally, let me assure you that we, as Regulator, will not introduce or impose unnecessary regulatory burdens that will affect the continued competitiveness of our financial industry and will minimise the impact of such burdens from Europe.” I have highlighted in yellow certain portions of text within Appendix 1 that should likewise be treated in confidence.

Given the considerable scope for these two objectives to interfere with each other in reality, it is therefore better, in my opinion, not to have the same institution pursuing both of these objectives. This is the regulatory arrangement currently in force, in which the regulator (i.e. the Central Bank of Ireland) has no role in any industrial policy viz-a-viz the financial services industry.

3. **R1b. Effectiveness and appropriateness of supervision policy and powers.**

The Financial Regulator proposed a number of initiatives to impose more explicit requirements on banks (e.g., the Directors’ compliance Statements, Corporate Governance Guidelines and the Fit and Proper Requirements). These proposals were not or not fully successful. What was your view of these initiatives and can you describe the circumstances in which the Financial Regulator chose not to implement the original proposals these initiatives?

Question 3

These seem to be very worthwhile initiatives and would probably have helped to bolster the health of the banking industry if implemented. However, I do not know why they were not implemented.

4. **R1b. Effectiveness and appropriateness of supervision policy and powers.**

In your opinion did the Financial Regulator, as suggested by Patrick Neary at his Hearing, have the power to stop banks to pay out dividends? If so, would it have been appropriate for the Financial Regulator to use these powers in view of the potential market impact? And why?

Question 4

It is my belief that the Financial Regulator did have the power to stop the payment of dividends by banks under the under Section 10 and Section 21 of the Central Bank Act 1971. I think it would have been appropriate for the Financial Regulator to have used these powers in 2008 given the impending threat to the banks' capital positions coming from significantly misaligned property prices.

The FR had a statutory obligation to protect public goods, such as the prudential health of the banking system and bank deposits which are the payments medium for the economy. Therefore, where these statutory mandates are jeopardised, it would in my view be appropriate to exercise the power to preclude payment of dividends. The strongest bulwark against any threat to the achievement of these public good objectives is the prudential buffer against insolvency in the form of the banks' capital ratios. These should be maintained at all times at a level sufficient to cope with adverse tail events and their consequences. Any payment of dividends that would compromise the shock absorption capacity of these capital buffers should, in my view, be prohibited. When indispensable public goods are threatened, private market interests (as reflected in the payment of dividends) may have to be curtailed in the interests of protecting these public goods.

5. **R1c. Appropriateness of the macro-economic and prudential policy.**

Apart from the publication of the Financial Stability Reports how did the Central Bank ensure that the Government was, at all times, well informed about the current macro-economic situation and trends.

Question 5

There were channels of communication other than those related to financial stability, such as the Central Bank's Monthly Bulletins and Annual Reports, regular meetings which I believe occurred at the highest level between the Governor and the Minister of Finance in the context of the economic forecasts and the Bank's advice on fiscal policy. Moreover, there was also the Annual Governor's Letter to the Minister for Finance before the budget giving the Bank's perspective on fiscal matters. More specifically, the Secretary General of the Department of Finance was a member of the Board of the CBFSAI.

Although I was not engaged in economic forecasting nor in broader conjunctural assessment, my understanding is that there was routine information flows between those involved in these areas of work in the Central Bank and the Department of Finance. In this area of work, it appears to me that there were lines of communication between the Central Bank and the Department of Finance and that the latter was informed about the current macroeconomic situation.

6. **R2b. Nature and effectiveness of the operational implementation of the macro-economic and prudential policy.**

In your recollection, what were the reasons for the Central Bank and Financial Services Authority of Ireland Board/Department of Finance in favouring a soft landing scenario for the property market over a hard landing? Were these reasons ever discussed in detail? Honohan points out the FSR sights no quantitative analytical evidence for this conclusion.

Question 6

There was a multitude of fragilities affecting the financial system in Ireland in the lead-up to the financial crisis: a property price bubble that could collapse and undershoot on the downside; an elevated level of leverage in both the corporate and household sectors; low interest rates which had already started to increase with an imminent danger of a doubling in rates; banks' reliance on highly volatile wholesale funding for around half of its overall funding needs; a fiscal policy which was heavily dependent on temporary tax receipts related to property markets; along with a banking system that provided the only source of financial intermediation in the economy. These interactions, once ignited by an exogenous shock, could easily yield a collapse and downward spiral, and a hard landing, in house prices.

The Honohan report notes that the FSR 2007 cites no quantitative analytic evidence for its conclusion of a soft landing. This is correct. It is my belief that senior management adhered so strongly to the soft landing belief that it felt that it did not need any evidence for it – it certainly never asked for evidence. Please refer to Appendix 1 for further commentary in this regard.

7. **R2b. Nature and effectiveness of the operational implementation of the macro-economic and prudential policy.**

Could you describe the nature and extent of the co-operation and exchange of information between economists in the Department of Finance with colleagues in the Central Bank, ESRI and other external economic forecasters during your tenure at the Central Bank/Department of Finance?

Question 7

During my tenure at the Central Bank I was not involved in economic forecasting. I understand there was a regular exchange of information between my colleagues in the Central Bank dealing with the forecasts and external forecasters.

8. **R2c. Effectiveness of the Supervisory Practice (Central Bank, Regulator) Adequacy of the assessment and communication of both solvency and liquidity risks in the banking institutions and sector.**

Can you give us your perspective on the solvency of the banks in 2008 in the context of the capital injections that followed?

Question 8

Following the start of a wave of financial market liberalisation in the early 1970s, banks became increasingly exposed to financial markets. The unavoidable consequence of this was that events in financial markets (where prices were increasingly given to growing volatility and substantial misalignments) would have had an important bearing on the health of the banking system.

Given the wild bubble-induced swings in financial market prices, and accordingly in the shadow value of the assets on the banks' balance sheets, where the liability side of the balance sheet has only very limited scope for price flexibility, one would require deep capital buffers to avoid the threat to insolvency. This is, arguably, the kind of financial market environment in which Irish banks found themselves in the years leading up to the financial crisis. It was one in which an adverse shock might lead to a substantial erosion of banks' capital threatening their solvency.

It is likely that the size of the insolvency was directly related, not just to the size of the asset (property) price bubble which was very large but, in addition, to the extent of the deterioration in economic fundamentals from the property price collapse (which was the main driver of loan defaults) as well as the extent to which property prices would undershoot even this new lower equilibrium price (driving the extent of the loss given default). It would appear that all of these three components of the house price fall (the bubble collapse, the reduction in the fundamental house price and the undershooting of this new lower fundamental price) contributed to the exceptionally severe crash in house prices in the Irish case. I think that this probably explains for the most part why the capital injections that followed had to be so large to bring the banks back to a state of operational health. Please refer to Appendix 1 for further commentary in this regard.

9. **R3b. Nature and appropriateness of the relationship between the Central Bank (including the Financial Regulator), Department of Finance and the Banking Institutions.**

Looking back to the period leading to the crisis, what is your view on what is called “Constructive Ambiguity”? Was it effective or did it possibly obscure the hard realities of the liquidity and solvency issues of the banks?

Question 9

The following are my views on constructive ambiguity.

A fractional reserve banking system is vulnerable to runs, which are highly destructive. To prevent this happening, the financial stability authorities internationally have forged a very elaborate and complex safety net. An important element of this safety net is the central bank’s function of lender of last resort (LLR, or emergency liquidity assistance (ELA)) which, in theory, would be available to solvent banks only. The main purpose of this part of the safety net is to prevent contagion across the banking system (which would threaten the supply of public goods such as payments and intermediation and even the operation of monetary policy) because of a dearth of liquidity.

If banks know that this policy will be activated, it may be very difficult to avoid a moral hazard response on their part. This would be inimical to market discipline, would contribute

to lax loan underwriting and would tend to contribute to financial instability. Most central banks, therefore, seem to believe that constructive ambiguity in their ELA policies is important, indeed essential, for imposing and maintaining market discipline.

Activating ELA could have the effect of precipitating a threat to financial stability against which ELA itself is designed to safeguard. The granting of ELA by the central bank cannot be easily done covertly. Supplying ELA transparently can precipitate a run on the recipient bank resulting in its insolvency. This is what appears to have happened in the case of Northern Rock. If ELA were known to be extended irrespectively of the solvency of the bank, then the market does not know whether the recipient is solvent or not, in which case a run can be avoided. This again is an argument for those central banks subscribing to a policy of constructive ambiguity to reconsider whether there might not be other ways of dealing with the moral hazard consequences.

Since it is known that some banks are too big to be allowed to fail (TBTF), and since ELA may well be required to prevent a TBTF bank from failing, there can, in fact, be little ambiguity about the central bank's approach to its policy of ELA with respect to such banks. The market knows that ELA will be triggered. One would have to conclude, therefore, that an attitude of constructive ambiguity by the central bank could be, to a large extent, illusory.

Some observers believe that it is a myth that a clearcut distinction can be drawn between bank illiquidity and bank insolvency. Any bank that needs the assistance of the ELA may already be seen, in the eyes of the market, as being insolvent. If the market does not lend and if the bank is deemed by the central bank to be TBTF or TCTF (Too Complicated To Fail), then the central bank itself will have to lend. In such circumstances, it is irrelevant to the central bank whether the bank in question is illiquid or insolvent with respect to the decision to lend or not – it has to lend given its TBTF policy stance. This is particularly so if the banking industry is highly concentrated, as in Ireland (even in the lead up to the crisis), where a few banks accounted for the bulk of loans and deposits.

Moreover, the likely existence of contagion, which could amplify a single bank problem into a systemic banking problem, argues for the systematic rescue of almost any bank, insolvent or not. Research concludes that in practice, ELA assistance has been directed more to insolvent than solvent banks, since for example TBTF banks tend to be always saved (bailed

out). This would seem to be another reason why a policy of constructive ambiguity might not be particularly effective.

Indeed, if liquidity has to be supplied urgently which is typically the case (to prevent a run, retail or wholesale), there will be little or no time available to do due diligence to see if the bank in question is illiquid and solvent or illiquid and insolvent. A central bank would have to cease giving the impression that it can differentiate and instead devise a policy that is not subject to constructive ambiguity and deal with the moral hazard repercussions otherwise.

Some observers believe that the advent of deep and sophisticated secondary money markets has allowed for a change in the ELA policy, i.e., the market can supply liquidity to solvent banks. I think this is doubtful. Bearing in mind the market failure of asymmetric information, which makes it nigh impossible for a potential creditor bank to distinguish between banks that are insolvent and ones that are merely illiquid, especially in periods of financial stress, a solvent bank may not be able to source liquidity. That places the ball back in the central bank's court. It may not be willing to take the chance of refusing liquidity, especially to a solvent bank, and more so if the supply of public goods is at stake.

Therefore, the existence of a deep and sophisticated secondary money market has not obviated the hard realities of a market failure stemming from asymmetric information, which renders it very difficult to distinguish between an illiquid but solvent bank and an illiquid but insolvent bank. Since the system cannot survive without liquidity and since liquidity can dry up entirely in periods of heightened uncertainty, making this distinction is unlikely to be possible in the short run. Central banks have little option but to supply whatever liquidity is needed without being sure that it is supplying liquidity to only solvent banks. So, again, constructive ambiguity can be illusory and ineffective as a policy.

Since the paralysis in the system stemming from a dearth of liquidity can only be resolved by activating the central bank's ELA policy, there would seem to be little point in maintaining a public attitude of ambiguity with respect to this policy. Moral hazard remains a problem, but one with which central banks may have to find new ways of dealing.

ELA is designed to be availed of by a single financial institution confronted with liquidity difficulties. It was not designed for a situation in which several, or indeed all (as in the Irish

case in September 2008), were being faced by severe liquidity shortages. Activating ELA in such circumstance could place the Central Bank in a position of supplying enormous and open-ended amounts of funds, which could place its balance sheet at risk.

10. **R4a. Appropriateness of expert advice sought, quality of the analysis of the advice and how this advice was used.**

After 2004 the IMF, OECD and Ecofin all clearly recommended a tighter fiscal stance and the building up a “cushion” for the time when income from property related transactions would fall. Can you discuss why, in your view, the Central Bank’s recommendations to the Minister did not more forcefully alert to this issue?

Question 10

The idea of maintaining a fiscal “cushion” seems eminently reasonable to me. However, fiscal policy is not my area of expertise. I don’t therefore have any particular expertise to bring to bear on this issue.

11. **R4c. Analysis and consideration of response to contrarian views (internal and external).**

Morgan Kelly published an article on a potential house price bubble in the Irish Times at the end of 2006 and later published a report on the same theme as part of the ESRI bulletin in summer 2007. Can you recall if any discussions were held at Senior Management level in the Central Bank/Department of Finance afterwards? Were Morgan Kelly’s concerns given serious consideration?

Question 11

I recall a discussion on various perspectives in relation to the housing market at the meeting of the FSC on the 15th of May 2007, at which, inter alia, the Kelly paper was discussed. There may have been other such discussions but this is the only one involving senior Central Bank management of which I was aware. I was not aware of any discussions in the Department of Finance in real time.

It was noted in the minutes of the meeting that the Kelly analysis did not take a models-based approach to fundamentals “but instead looks at patterns of price rises and falls in

isolation.” The following points were also noted from internal Bank research: (a) the behaviour of nominal house prices were quite different to real house prices in boom/bust episodes; (b) nominal prices may be more relevant to the analysis of financial stability than real house prices; (c) most of the boom/bust episodes studied in the international literature were in the higher inflation periods of the past and were therefore not so relevant to the new price stability environment, the inference being that a collapse in nominal house prices is by no means inevitable following a nominal house price boom.

The overall assessment of this FSC meeting was that “the housing market, while slowing, is encountering a soft landing, with fundamentals still proving supportive of demand.” One would have to conclude that Kelly’s concerns were not given serious consideration.

But as Honohan notes, in his report on the financial crisis, Kelly’s analysis is “not all that far from the scenario painted in the 2004 FSR...”, i.e. three years earlier. Please refer to Appendix 1 for further commentary in this regard.

I think it is worth noting that as Vice-President of the IEA in April 2007, and being concerned with developments in the housing market, I decided to devote an entire plenary session at the annual IEA conference to this topic. The aim was to garner as wide a diversity of opinion on the market as possible. Morgan Kelly was one of the economists I invited to present at the conference.

12. **R6a. Adequacy and impact of international organisations’ oversight on banking regulation and supervision activity.**

Do you judge the IMF country reports and OECD reports as an important information instrument to aid in banking regulation, banking supervision and financial stability issues? If yes, why, if not, why not?

Question 12

I do not think that they were helpful since they did not address financial stability issues.

It appears to me that, before the financial crisis in Ireland, the IMF Country Reports for Ireland, which were prepared as background documentation for consultation with the member state, did not devote any particular attention to financial stability issues. The 2007-

specific report for Ireland looks at, inter alia, international financial linkages. Within this context, it looks at the effects of shocks to US GDP on Irish GDP, but not on Irish banking. It did not attempt to relate this external shock to, for example, the Irish bank loan defaults nor to a potential drying up of liquidity in the inter-bank market. The report also looks at private credit growth in Ireland but only from an efficiency gains perspective, but even at this late stage, no issues were being raised about the elevated levels of indebtedness among Irish households and corporates. In this report at least there does not appear to be any consciousness of the vulnerabilities inherent in the Irish banking system at the time. It did flag the deteriorating competitiveness which, in the event, played an exacerbating part in the financial crisis. The IMF country reports for Ireland did not flag any warnings about broader financial stability concerns. However, the IMF also produced reports following FSAP missions to Ireland in 2000 and in 2006, in which it concluded on both occasions that there was no systemic threat to banking system from real estate price falls.

The acute problems experienced by the banks because of the use of volatile wholesale funding as a basis for long-term lending, especially mortgage lending, could have been analysed in the context of the literature on large capital surges followed by sudden stops. An analysis of this in the context of the effects it might be expected to have on the health of the Irish banking system and on overall financial stability would have been very worthwhile and very much within the ambit of the IMF's expertise.

The situation has changed substantially after the crisis. Take the Article IV Consultation paper for 2015 for example. Although it does not attempt any financial stability assessment, it does warn about the effects of easy international financial conditions which could increase the risks of an eventual slump in prices, having noted that an international search for yield appeared to be a significant factor driving the Irish commercial real estate market. It appears to me that the IMF now pays much more attention to some specific financial stability issues (such as banks' non-performing loans and residential and commercial property markets.)

The OECD's focus on Ireland, on the other hand, is, from what I can ascertain, much more thematic in nature with in-depth surveys of specific issues such as a review of migrant education and a report on the Irish Public Service.

From my knowledge of country reports from the IMF and the OECD over the years, my judgement is that they would not have assisted greatly in bank regulation, banking supervision or, indeed, with respect to broader financial stability issues, except for the qualification that these international organisation now appear to be taking a greater interest in examining threats to financial stability.



APPENDIX 1

Table of Contents

Part 1	3
Financial Stability 2000 -2007	3
Introduction.....	3
2000-2003.....	5
Setting up the Financial Stability Function	5
Production of the Financial Stability Report	8
Year by Year Account of Production of FSRs	14
2004.....	14
April 5 2004	14
June 3 2004.....	15
July 7 2004	19
July 14 2004	19
October 11 2004.....	20
December 3 2004	21
2005.....	22
March 8 2005.....	24
March 22 2005.....	24
June 14 2005.....	25
June 23 2005.....	26
July 12 2005	27
September 19 2005	27
September 29 2005	30
2006.....	33
January 10 2006.....	33
February 14 2006.....	34
March 14 2006.....	34
March 30 2006.....	34
June 29 2006.....	35
July 11 2006	36
July 27 2006.....	36
September 12 2006	37
September 28 2006	37

2007.....	38
March 29 2007.....	38
April 17 2007	38
May 15 2007	39
June 12 2007.....	39
June 26 2007.....	39
Work practices, processes and procedures in relation to the 2007 FSR	40
Part 2	45
Crisis Management 2001-2008.....	45
Introduction.....	45
2001-2004 Early work on Crisis Management	46
The Black Book (BB).....	46
Legal Vacuum.....	48
Guiding Principles	49
2005 -2007.....	51
Crisis Management Work Committee Structure	53
2008 Papers	54
Papers and Presentations on Crisis Resolution produced in 2008	54
The Third Scenario.....	54
April Crisis Resolution Options Paper and PP Presentation.....	55
June Crisis Resolution Options Paper	56
Special Resolution Regime.....	57
September Crisis Resolution Options Paper	58
Additional Contributions	58
Concluding Remarks	59
ANNEX 1.....	62
Liquidity and Financial Stability	62
References	66

Part 1

Financial Stability 2000 -2007

Introduction

I make this statement as an appendix to my evidence to this Inquiry on the specific standard format questions and for the purposes of providing a comprehensive account of the circumstances prevailing within the Bank which are directly relevant to the fundamental issues tasked for investigation by this Inquiry.

My evidence to this Inquiry as detailed in this statement is that economic research and analysis conducted within the Monetary Policy and Financial Stability (MPFS) department headed by me, pointed to a risk of a substantial property bubble in 2004, and a growing liquidity risk within the banks. The risks and vulnerabilities from emerging imbalances in the financial system were identified clearly by those conducting research and analysis and were presented to senior management at the Financial Stability Committee. However, they were toned down or even ignored completely by the senior management of the CBFSAI.

I also highlighted to senior management as early as 2002 that the Bank needed to commence important preparatory work in the area of crisis prevention and management. It is my view that more could have been done in terms of crisis prevention if sufficient heed had been paid to what the background research and analysis conducted by MPFS had been pointing to as far back as 2004.

Unfortunately, these warnings were not listened to. As explained later in this statement when corroborating evidence also pointing to substantial overvaluation in the Irish housing market emerged in 2007, the results were suppressed in favour of an overall conclusion that presented a favourable perspective on the housing market and on financial stability more generally in Ireland.

The Bank's Financial Stability Reports (FSRs) are the instruments which set out the Bank's analysis of the risks and challenges facing the banking sector in Ireland. Honohan notes (on page 10 of his report) that "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."

Peter Nyberg states (on page vii of his report) that “warnings of stability risks appear to have been sidestepped internally or when made public especially in the Financial Stability Reports, toned down in policy conclusions.” In his testimony to this Inquiry on 15 January 2015, Governor Honohan concurred fully with Nyberg (page 149).

Tom O’Connell, former Assistant Director General and Chief Economist at the Bank, stated to this Inquiry: “The main body of the FSRs set out extensively how almost all indicators were pointing massively in the wrong direction. By contrast, the overall assessment and tone which reflected the views of the two Boards tended to be reassuring – talking of a soft landing”.

Therefore, while the theme of my evidence is consistent with published reports on the banking crisis and evidence that has already been tendered to this Inquiry, arising out my role as head of MPFS, this statement and the accompanying documents (contained on a USB key submitted to this Inquiry with this statement) clearly details the extensive amount of empirical evidence that was made available to senior management and the Board at the Bank but which went unheeded.

One reason why action was not taken was, in my view, attributable to the organisational culture prevailing in the Bank at that time. Senior management was reluctant to countenance any dissent from the “right” message. It is unfortunate in retrospect that economist expertise at senior management level and on the FSC, was limited, especially after the retirement of Mike Casey, the ADG for Economic Services in April 2005.

It is my view that this put enormous pressure on staff working on financial stability issues and influenced the work of professional economists in the Bank. In my opinion, it resulted in output of research and analysis on financial stability issues being used selectively to convey externally a misleading impression of the true state of health of the financial system in Ireland. It appears to have culminated in 2007 in the suppression of important information on the underlying health of the overall financial system.

It is worthwhile making the following critical observation at this early stage. I confirm that I was not aware in real time that the McQuinn/O’Reilly model was updated in 2007 or in 2008. Nor was it clear to me from the Honohan Report that his Inquiry was aware that the McQuinn/O’Reilly model was updated in 2007 showing a misalignment of 39 per cent.

Between the Honohan Inquiry and the Nyberg Commission, I investigated the events of this period as best I could. I am aware that there are inevitable gaps in my knowledge of these events. In this process I have, however, discovered hand-written contemporaneous minutes of the FSC for much of the period from March 2005 to April 2007. These minutes were prepared by the secretary to this

Committee and are exhibited with my statement, where relevant. I have also discovered the handwritten contemporaneous minutes of the FSWG held on the 11th of March 2005 together with two handwritten notes dated September 2004. These have been helpful in complementing information I already had and I have cited these supporting documents in my evidence, where relevant. These supporting documents also comprise presentations, papers and analyses prepared and submitted to senior management at the Bank. It is, therefore, important that this statement be considered in conjunction with the accompanying documents cited therein and contained on a USB key submitted with this statement.

I was informed by the Banking Inquiry that a Book of Core Documents has been compiled to the specific themes that I was asked to address. On examining this material, it became very clear to me that a large amount of critically important material was omitted.

2000-2003

Setting up the Financial Stability Function

In 2000 I returned to the Central Bank of Ireland after an absence of ten years. I spent four years in the OECD, and then returned to the Bank for a period of two years. I then spent six years at the EMI and the ECB. I obtained both of these positions through open competitions.

I attach a copy of my CV (Tab 1), which reflects my academic qualifications, peer-reviewed publications in leading international academic journals, experience in working for international institutions (the OECD, the EMI and the ECB) and many years' experience as a member to the ECB's Monetary Policy Committee and its Financial Stability Committee (formerly, the Bank Supervisory Committee). While at the ECB, I was chairman of the Working Group on Econometric Modelling, a working group of the ECB's Monetary Policy Committee.

Shortly after my return, I was appointed to the position of Head of the Monetary Policy and Statistics Department of the Central Bank.

During this time I was asked to set up and chair the Working Group on Financial Stability (WGFS) which consisted of a small team of economists whose function was to feed into the agenda of the newly established Financial Stability Coordination Committee (FSCC).

The terms of reference of the WGFS was to carry out the work programme as proposed by me and as agreed with the FSCC; attend the FSCC as necessary; analyse and research financial stability issues

which may be useful to the FSCC in discharging its function (Tab 2). The work of the WGFS was typically presented to the FSCC at its meetings.

The terms of reference of the FSCC was to; monitor, coordinate and review the work of the Bank in contributing to the stability and strength of the financial system; and promote the development of policies in the Bank for, inter alia, the minimisation of the risk of financial stability problems (Tabs 3 and 4).

In the context of the growing importance of financial stability issues worldwide and in the EU, I was requested to help set up a financial stability function in the Bank. I was also asked to retain my existing responsibility for the monetary policy function. In 2002, I became Head of the Monetary Policy and Financial Stability (MPFS) Department which was comprised of two functions – the Monetary Policy function and the Financial Stability function. Each of these functions was headed by a Deputy Manager.

The objective of the MPFS Department was to contribute to the fulfilment of three of the high-level goals in the CBFSAI's Strategic Plan, namely:

- contributing to the maintenance of price stability through having an input into the ECB's Monetary Policy Committee (MPC) and through research and analysis on monetary policy issues;
- having an input into ensuring the monetary policy operations were efficient, in particular monitoring breaches to the reserves requirement system of the Euro system's monetary policy operational framework and implementing sanctions; and
- Contributing to financial stability both domestically and in the EU, again discharging the latter through participation in the ECB's Financial Stability Committee and in many of its sub-groups as well as through research and analysis on financial stability issues.

In addition to managing the Monetary Policy function, my objective at this time was to build up the financial stability function within the Bank to a fully operational unit within the MPFS department dealing with financial stability issues. I built up this function *de novo*. My aim was directed at trying to uncover reliable indicators of the risks and vulnerabilities in the financial system. I proposed the work programme for the department which was agreed by the FSC (Tabs 5, 6, and 7). Most of the work in the programme was directed at elaborating a framework for thinking about financial stability issues, bearing in mind that, at that time, financial stability as a separate discipline was in the early stages of development.

It was expressly stated therein that one of the most important tasks of a supervisory authority is to try to identify a reliable early warning system of banking crisis and that the Bank needed to be pre-emptive in preventing financial crisis. I also questioned whether interbank exposures have reached levels for concern. In relation to asset prices, I outlined that if the actual price exceeds the fundamental price, 'an asset price collapse is inevitable'. I stated that an especially important macro prudential indicators (MPI) is therefore, asset price misalignment. Significant research and analysis into this area ensued in subsequent years which demonstrated, on a qualified basis, such an asset price misalignment.

Since financial stability is not an academic discipline, new recruits had to go through a process of learning about financial stability issues on the job. It was very difficult to replace existing expertise which was lost to the ECB at a critical time in the Department's development. Knowledge and know-how had to be built up gradually so that the department could function as intended.

I invested a lot of time and effort in searching the literature and conducting extensive research and analysis on developments in financial stability globally, in the EU and in Ireland. One output from this work was an initial attempt to elaborate a comprehensive early warning indicator for Ireland (Tab 8). In this paper, issued on 22 January 2001, I pointed out that since there had been no financial crisis in Ireland, the usual statistical tools based on past data are not applicable but there is a consistent set of MPIs that have helped predict banking crises that have occurred elsewhere. In that regard, I referred to the IMF paper and noted that while Ireland emerged quite favourably from this exercise, the results did reveal some vulnerability to a systemic crisis if the economy were to experience a 'hard landing'.

In an interview I gave to the Irish Times around this time the discussion centred on the need to prepare an "early warning system" to help the Bank to avert the risk of a potential crisis. I noted the need to review continually and to develop and refine the Banks tools of analysis so as to improve its understanding of the mechanisms giving rise to financial fragility. See report of an interview with the Irish Times in 2001 on this subject (Tab 9).

My role as Head of MPFS was to manage both the monetary policy and financial stability functions in the Bank. Broadly, this involved drafting work programmes to guide the work of each function over the forthcoming year on both the monetary policy and financial stability sides, having this work programme approved by the FSCC and the Management Board, and overseeing the completion of these programmes for both functions.

Each Deputy Manager had responsibility for monitoring the work on an on-going basis and was required to report back to me on the progress being made with respect to completing the work programme for the respective functions and on whether any slippages were being encountered in this respect.

I had a lot of bilateral contact with staff since I tended to involve them in the research/analytical projects which I had in hand myself, with many such papers being produced in this way over the years. This had the double advantage of allowing me to mentor and monitor staff and to ensure the production of quality papers on both monetary policy and financial stability issues.

Much of my work consisted of presentations on monetary policy to the Governor's informal monetary policy committee, briefing the Governor for his attendance at the Governing Council meetings, presentations to the FSC and the Joint Board and publishing work on monetary policy and financial stability topics.

Departmental meetings were held to monitor progress with the implementation of the Department's work programme. Another purpose of these meetings was to get feedback from staff on any issues it might want to bring to my attention.

The number of people in the department fluctuated during the period. The work of the department was constantly disrupted by staff departures from the financial stability function to the ECB (over a short space of time, five economists left for the ECB Oireachtas Oir). Many of these left on temporary contracts with the ECB and I could not therefore replace them.

It is noteworthy in this period that, despite the importance of the key functions of monetary policy and financial stability in the Bank and the analysis and research being conducted by the MPFS Department in this context, my request for extra staff by the third year of the work programme was not agreed by senior management – indeed, the staff complement for 2003 was cut back (Tab 10).

Between 2002 and 2003 considerable time was spent on the development of the MPFS Department and the production of the Financial Stability Report the purpose of which was to review the health of the domestic financial system from a macro-prudential perspective. At this stage, the Report was included in the Annual Report of the Central Bank and consisted of a financial stability assessment based mostly on standard IMF-type indicators.

Production of the Financial Stability Report

In late 2003, it was decided to produce and publish an annual standalone Financial Stability Report (FSR). This was partly motivated by what central banks elsewhere in Europe were doing at this time. It was also motivated by the fact that the methodology behind the conjunctural forecasts of the economy (concerned with the mean of the distribution) was quite different to that involved in the scenario methodology behind financial stability analysis (dealing with the tail of the distribution). It was believed that having had both forecast and scenario analysis in the same publication as in previous years, had led some to confuse a forecast with a scenario.

Despite this, it is my belief that in subsequent years senior management did not pay sufficient attention to the financial-stability threatening, low-frequency, but high-impact, events in the tail of the distribution and were overly preoccupied with the mean of the distribution (i.e., the central scenario). It was decided that the structure of the standalone report would be as follows:

- Executive Summary: summary of Report and Policy Implications;
- Part 1: Financial stability analysis and Overall Assessment (Main Report);
- Part 2: Thematic paper – unsigned – the Bank’s view;
- Part 3: Special topic papers – signed but with a disclaimer.

In the early years, the normal procedure was for the background research and analysis to be completed by the MPFS Department and the WGFS. The results our work was presented to the FSCC whose function was to monitor, coordinate and review the work of the Bank in contributing to the stability and strength of the financial system; and to promote the development of policies in the Bank for the minimisation of the risk of financial stability problems.

Typically in the early years and until 2004 the first draft of the Executive Summary of the FSR was written by me. The Overall Assessment was drafted by the economists in the MPFS department with input from the FSWG. The thematic papers were intended to highlight a particular risk that appeared to be emerging in the system at the time. These papers were unsigned and expressed the Bank’s views (not necessarily the author’s views) on the issues under discussion in these papers. The signed articles were written mostly by the economists in the MPFS department but signed articles from other departments addressing financial stability issues were included. The original objective of producing these papers was to add to knowledge of financial stability issues and add to our list of information-rich financial stability indicators. If these were deemed to be useful by the FSC then they could be used to enrich the quality of the analysis in the Overall Assessment section of the FSR and might, in time, contribute to the development of a composite early warning indicator.

Initially, I was present at the FSCC meetings by virtue of my role as chairman of the FSWG. There was a proposal to expand the membership of the FSCC (to include myself and others) at its meeting on the 23rd of July 2004. However, this proposal seems never to have been accepted. The membership was reviewed again in mid-2005, when I was listed as a member. In any case, my remit was to conduct the research and analysis into financial stability issues and bring the results to the Committee for deliberation. In that context, I had no executive or editorial role in relation to the Committee's publications.

The Director General of the Bank was the chairman of the FSC, and the secretary of the FSC was either the deputy manager or senior economist from the Financial Stability unit of the MPFS department. The secretary of the FSC liaised directly with the chairman in relation to the business of the FSC which was mostly concerned with the production of the FSR.

It was not unusual for there to be some iteration of the Overall Assessment and Executive Summary of the FSR. In later years, 2006 and 2007, the number of iterations increased significantly. The first draft was circulated to the FSCC which would normally make comments on the draft and return it to the FSWG for incorporation of the amendments into the following draft. Typically, the report was discussed and reviewed again by the FSCC before being sent to the Governor and senior management for further comments and amendments. Substantial amendments tended to be made especially to the overall conclusions and the tone of the report. After a number of iterations, the amended draft, as amended further by the Governor and senior management, was then sent to the Joint Board for approval before publication. These endless rounds of editing by senior management did not favour a coherent message emerging from research and analysis. It was typically sent to the Board Directors seven days before the scheduled meeting of the Board.

The draft Executive Summary, Overall Assessment, Thematic papers and signed articles for the FSR were then discussed at a meeting of the Joint Board, i.e., a meeting of the directors of both the CBFSAI and the IFSRA (FR), usually held in June (for a first iteration) and September (for a second and final iteration before publication).

The process of producing the FSR also included PowerPoint presentations of the Overall Assessment, and of the thematic article to the FSC and the Joint Board.

In my view the FSWG functioned well. It gave the Bank a channel of communication with the FR. Although somewhat thin on the ground with respect to human resources, it nevertheless managed to do a substantial amount of good quality work.

The interface with the FSCC also worked well. There was strong support for the work of the FSWG and the MPFS Department from Mike Casey, as ADG for the Economic Services, who had a very good understanding of the issues involved.

In my view, this favourable situation for communicating financial stability concerns lasted up to mid-2004. It was possible to convey the basic message concerning the state of health of the Irish financial system to the Joint Board. An example of how well it had worked is reflected in the discussion on the residential property market which followed the presentations to the Joint Board in June 2004. The minutes of that meeting show that the Directors discussed the issues and seem to have become concerned. The main thrust of our message (albeit diluted by the results of the McQuinn (2004) paper) emerged at that Board meeting and in the published 2004 FSR.

However, for reasons that were not apparent, the true picture with respect to financial stability which was worked out in the context of the research and analysis conducted by MPFS began, sometime in 2004, to be diluted at various stages in the production process of the FSR. Not all of the risks emerging from the research and analysis survived to the stage of the Joint Board and less so to the public domain. Those that did were watered down by the time they arrived at this stage. Others appear to have been censored before they might have come into the public domain.

Senior management appears to have been more concerned with getting the tone of the FSR “right” than they were in flagging the real dangers overhanging the Irish financial system. There is a strange irony in this since the Bank had pronounced in the FSC meeting of 7th July 2004 that, in the absence of other policy instruments, it wanted the FSR to serve as “a significant instrument of moral suasion” (Tab 11). It seemed to me that, even at this early stage, senior management was antagonistic to the “wrong” result emerging from the MPFS financial stability analysis.

In my view, the up-shot was that not sufficient attention was paid to the risks, vulnerabilities and warnings emerging from the original research and analysis. The message that emerged in the Executive Summaries of the FSRs did not have the impact it should have had because of its toned down state. The necessary pre-emptive policy actions were not taken, almost certainly to the detriment of the economy as we now know.

When the output of MPFS began to show serious risks emerging in the economy the FSC took “ownership” of the FSR with a view to “further refinement of, and agreement on, the overall conclusions and message of the report” adding that “the aim being to refine the Summary and Overall Conclusions texts that would be submitted to the CBFSAI Board meeting on 14 July.” (Tab 11).

As mentioned above, signed articles reflected the views of the authors and were accompanied by a disclaimer but senior management and the FSC nevertheless reserved the right to accept or reject papers for inclusion in the report. Senior management also had the right to insist that certain views be taken on board in the rest of the report including in the thematic articles. Accordingly, if a conflict of views arose between the author of the thematic article and senior management, senior management had the last say.

One instance where this happened was in relation to the house prices in 2004. My own efforts to home in on the elusive fundamental house price relied on the well-accepted and respected finance-based indicators (i.e., the P/E and the PV ratios). The application of these indicators to the Irish property market revealed house prices to be substantially out of kilter with fundamental prices. Nevertheless, I was told by the chairman of the FSC to take the results in the McQuinn (2004) paper on board in the thematic article and in the overall assessment of the report.

The author of this paper was neither on the WGFS nor in the MPFS Department. The paper was not presented or discussed at the FSC. However, it was presented and discussed at an internal seminar and the published version of the paper acknowledges the comments of a number of economists, all from Economic Affairs Research and Publications (EARP), but none from MPFS. I was not present at the seminar nor was I asked to comment on the paper.

My results in the thematic article were diluted by the McQuinn (2004) paper, which employed a structural model of the housing market, and came up with results which showed no misalignment. This allowed senior management to conclude that there was no conclusive evidence of misalignment. This is an example of the results of research and analysis being used selectively to convey a more favourable impression of the health of the financial system in Ireland. This perspective is supported by the Honohan report (paragraph 1.16) which states: "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."

In 2005 senior management also insisted that a paper produced in EARP (Maguire) be included in the FSR as a signed article. Furthermore, they stated that it required "special attention" and that it was to be included in the main body of the report. This paper argued that the long-term underlying demand for housing units in Ireland was 50,000. This was considerably greater (by a factor of 2/3rd) than the 30,000 being argued by the ESRI. A higher longer-term demand meant a lower current overhang of unsold properties, a lower probability of a house price collapse and a smaller drop in prices if a collapse were to occur. Despite this overly optimistic message, the FSC noted that there was a "need to give guidance to Directors that they should read this one", with **Oireachtas** (a

member of the FSC and secretary to the Board) saying that “this one needs special treatment”. It was also indicated that the conclusions should be reflected directly in the Overall Assessment (Main Report). (See below).

It should also be noted that the evidence from the McQuinn (2004) structural model showed no evidence of misalignment in 2005 while the finance-based indicators were flagging a large and growing departure of house prices from underlying warranted levels. Yet senior management continued to adhere to the “no conclusive evidence of misalignment” view.

In his statement to this Inquiry, John Hurley states that the number of economists available to the MPFS department significantly understates the resources devoted to financial stability. He notes that economists from other departments, for example EARP, were significantly involved, and that this is reflected in the number of signed articles in the FSRs and Bulletins. It is true that the EARP Department was increasingly brought into the picture with respect to financial stability analysis. However, the mandate of the EARP Department related mostly to conjunctural and forecasting work on the domestic Irish economy. It was, therefore, concerned for the most part with the average outcome for the economy (i.e., the central expectation). This contrasts with financial stability which is focused mostly on exceptional, but high impact, events occurring in the tail of the distribution. One of the main reasons for embarking on the production of a standalone FSR in 2004 was to obviate the confusion that was likely to arise between a forecast and a scenario. Unfortunately, senior management insisted that the work of the EARP Department be brought into our deliberations on financial stability. I think that this had the effect of diluting the impact of the more bearish financial stability analysis coming from the MPFS Department.

In 2006 a further paper dealing with house prices also from EARP (McQuinn and O’Reilly (2006)) was included in the Financial Stability Report as a signed article. This paper showed a qualified misalignment of 15%. Despite this, there was no mention of house price misalignment in the Overall Assessment or in the Executive Summary of the report, except to say that the variables included in the model (i.e., income and interest rates) “can broadly explain developments in house prices over the period 1980 to 2005”. But as in the previous year, the P/E and PV ratios were flashing ever greater misalignment. Again, senior management continued to subscribe implicitly to the view that there was no conclusive evidence of misalignment in house prices.

In 2007 when the updated version of the McQuinn/O’Reilly paper mentioned above showed a misalignment of 39 per cent, which brought it into the territory of substantial misalignment already being reflected in the finance-based indicators (e.g., the PV (adj) indicator flagging a misalignment of 45 per cent), it presented senior management with a stark choice: either incorporate this new

information into the FSR which would have revealed that the CBFSAI was wrong all along and that there was a large bubble in the housing market or suppress the results of this research and analysis.

As we know now it chose the latter, which brought it into agreement with the comforting message in the Executive Summary of the 2007 FSR. Senior management failed to acknowledge the weight of results of research and analysis supporting misalignment in house prices. In effect, it wasted the last opportunity, however belatedly, to call a hard landing, which would have focused all of the financial stability authorities' attention on crisis management and resolution. It might thereby have helped to head off the worst aspects of the crisis.

I will outline below the main events relating to the production of the FSR for each of the years from 2004 to 2007, and indicate in some detail how the process of production did not work smoothly and how established procedures were not always observed.

Year by Year Account of Production of FSRs

2004

At this time, FSWG and MPFS were working on indicators that would foreshadow future dangers for the financial system in Ireland. In identifying the risks using these indicators, we concluded, despite the *apparent* robust health of the Irish Banking system at that time and the unlikelihood of it being compromised in the medium term, that the main risk to the financial stability in 2004 was house prices, which had by then increased very rapidly since the mid-1990s, albeit coming from levels that may have been too low relative to their fundamentally warranted levels. We noted, according to the IMF international assessment that large house price increases sustained over a number of years tend to be followed by fairly steep falls in prices.

This risk was clearly flagged to senior management and to the Joint Board on 24 June 2004 at the Joint Board meeting held in Sandyford. In order to clearly highlight the various risks and enhance awareness of them, a traffic light warning system, which the FSWG proposed for the various sectors of the economy, had the top risk warning, i.e., red, attaching to the housing market while “banking” and “households” attracted amber.

The following is an account of the salient events in 2004.

April 5 2004

At the April meeting of the FSCC I reported back on three separate meetings we had with the three main mortgage lenders: AIB, IL&P and Bank of Ireland (Tab 12). Some points to emerge from these meetings note:

- People opting for variable rate mortgages because of cash constraints, which suggests that they would be very vulnerable the interest rate increases;
- The driver of the loan book was property;
- Corporate Ireland was in a healthy state; it was argued by the banks that it was (at the time) difficult to make a mistake in lending in Ireland; low interest rates, and low volatility of interest rates, had been a great boon to industry.

It is notable that this realistic information was elicited from the banks when MPFS staff met them on a bilateral basis. The later formula for meetings with the banks all at the same time in a “Roundtable” format (the first such meeting took place on the 3 December 2004) may not have been well designed to elicit realistic assessments on the part of the banks in relation to their own prudential health. Also notable here is the emphasis which the banks placed on interest rates and how low rates were such a boon to the banking industry. However, when there are public goods involved (such as the integrity of the payments medium and infrastructure) the apparent superficial health of the banks’ bottom line can be misleading and an unwarranted source of comfort for the authorities. (This point is noted in paragraph 1 page 82 FSR 2005).

June 3 2004

The minutes of the FSC of 3 June 2004 note that Allan Kearns and I gave a presentation on the structure, content and key messages in the draft FSR (Tab 13). On 9 June 2004 I circulated a draft Executive Summary to the FSC, which had been redrafted in the light of comments received at the FSCC meeting the previous week (Tab 14). We noted, inter alia, that, according to the results of IMF research, that international experience with respect to house prices was not reassuring for Ireland. In this context, we also noted that “Unless some cogent arguments can be offered for why Ireland should be exempt from this past international pattern, the prospects for a soft landing for Irish house prices is not favourable.” This version of the Executive Summary was amended further and the above reference excluded before it was sent to the Board.

June 24 2004

The Joint Board meeting to consider the draft FSR was held in Sandyford on 24 June 2004. At that meeting I gave an introductory presentation on the approach and techniques used in financial stability, noting that it was at the time still a frontier discipline. (Tab 15). In my introductory comments I note that the “health of banks is.....crucially important to the health of the whole economy. This is the consideration that inspires the economic and legal underpinnings for central banks’ concern for financial stability. It is, accordingly, extremely important for the CBFSAI, which is being charged with a mandate for contributing to financial stability, that it have at its disposal some indicators that can signal a warning that trouble lies ahead. The reason why advance signals are so important is because a policy of prevention is vastly superior to one of cure. If a reliable early warning system is available, then remedial action could, in principle, be taken to pre-empt an incipiently fragile situation facing the banking system from blowing up into a systemic crisis with hugely adverse effects for the whole economy.”

The introduction goes on to note that it is misalignments and imbalances in the economy that distort decision making relating to investment and portfolio allocation whose consequences cumulate over time and threaten financial stability. I note that a “particular difficulty confronting those charged with financial stability responsibilities is that these types of vulnerabilities are most likely to building up when the economic situation looks most rosy from the perspective of all private-market participants.”

Allan Kearns an economist in MPFS and a member of WGFS gave a presentation summarising our assessment of the financial stability of the Irish banking system based on our indicators. As noted above, we used a traffic light warning system (devised by the WGFS), to clearly draw attention to the level of risks. It had a red light flashing for the “housing market”, an amber light for “banks” and “households” and green lights for the rest (i.e. “corporates”, “Irish economy”, “payments systems”, and “the insurance sector”) (Tab 16).

I gave a further PowerPoint presentation describing the different methodologies used to detect the existence of an asset price bubble (Tab 17). Financial theory based indicators of valuation suggested a substantial overvaluation for Irish house prices. Calculations using these standard rule-of-thumb indicators (namely the present value (PV) and price/earnings (P/E) ratios) showed qualified evidence of a fairly substantial bubble existing at that time. As indicated in Table 6.1 page 83 of the Honohan Report, the P/E and PV ratio indicators revealed a rapidly growing misalignment in residential property prices ranging from 6 per cent in 2003Q4 to 35 per cent in the second quarter of 2004 (and rising to 45 per cent in the second quarter of 2006).

As can be seen from this table, structural models indicated the absence of any bubble (Tab 18). Such structural models tend to ascribe most of the variation in house prices to putative fundamental influences and accordingly tend to yield a more benign perspective on price misalignment. In fact, the McQuinn encompassing model suggested little evidence of a bubble. In the presentation to the Board, I noted that encompassing model results are “not entirely convincing”. Moreover, I also cautioned that fundamental driving forces can themselves deteriorate leading to falling actual house prices (Tab 17). However, McQuinn did note (in the signed article in the 2004 FSR) that “the housing market is liable to be highly sensitive to any significant interest-rate changes.”

In my presentation I stressed the role played by the use cost of capital in housing (UCCh). The analysis argued that, potentially, capital gains, especially if untaxed, could generate an unsustainable spiral, and a bubble, in house prices. Falling interest rates, especially leading up to the start of monetary union, the strong capital gains reflecting escalating house prices and favourable tax treatment of homeownership all contributed to this spiral. I noted at the time that the result of this analysis was “shocking” (Tab 17, slide 17).

Our warnings were based on the output from our research and analysis and on the draft thematic article, *The Irish Housing Market, Fundamental and Non-Fundamental Factors* which was sent to the directors before this meeting.

In the thematic article I drew attention to a number of aggravating factors. The first of these is the fact that the extent of the overall fall in property prices, following a bubble collapse, could be well in excess of the size of the pre-existing bubble itself, viz: “Because property is such an important part of household balance sheets, a collapse in prices, especially if it involves undershooting, would probably cause many of the fundamental determinants themselves to deteriorate, driving prices down even further”. This is why these types of asset price swings, and particularly those relating to property, can be so catastrophic for the banking system.

In such circumstances, prices wouldn’t just fall by the size of the bubble; they would also undershoot and bring down the fundamental price at the same time. Loan default and loss given default, arising from such a steep fall would (depending on the exposure to property, which in the Irish case turned out to be huge) propel banks past any loss-absorbing layer of capital they might happen to have.

As noted I stressed the role played by the user cost of capital in housing (UCCh). It is a comprehensive indicator of the cost of homeownership. For reasonable assumptions about how house price expectations are formulated, it tended to take on negative values for the most part. This probably explains why, despite the fact that even when property price increases have

outstripped increases in disposable income, prospective homeowners are willing to take on high levels of indebtedness to acquire a residential property and why demand for housing continued to be so robust in the face of rapidly rising prices.

I also noted that the cause for concern was all the greater in the context of Ireland's membership of monetary union. This is because there was no longer any national discretion over short-term interest rates, limiting the scope for policy to pre-empt a bubble or, if one arose, dealing with the fallout.

It is noted in the "Conclusions" section to the thematic article that "...our key concern is with a continuation of the current strong rate of price increase which is less strongly underpinned by fundamentals. If this continues, the risk of a sharp correction in prices in the future will increase". It also notes elsewhere in the "Conclusions" section 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 banking system. A significant fall in the level of house prices would have a negative impact on the banking system's profitability, provisioning and capital reserves. The magnitude of the impact would vary with the size of the fall in prices as well as the level of default among mortgage-holders. The most significant losses for the banking system would arise from those borrowers who have only recently taken out mortgages and have not yet built up significant equity in their properties. A sizeable correction in prices would be devastating for those households who would be unable to ride out any such fall in house prices."

Such a warning of a sharp correction in house prices is, potentially, much more useful to the financial stability authorities, who should be concerned with taking policy actions that would pre-empt a bubble, than warnings emanating from the conclusions of analysis completed after the bubble had matured, when it is in danger of imminent collapse and when the financial stability authorities would be severely restricted in their policy responses.

Therefore, contrary to popular view, the relevant decision makers were informed in good time before the financial crisis about the imminent and growing risk of a property bubble and were enabled to make the appropriate decisions based on such information.

The overall bearish sentiment of our work was reflected in the comments of the Board members, who were clearly becoming concerned. The Board minutes of that meeting noted that the continuing very high rate of credit growth, particularly for the property sector, represented a potential risk to Irish banking system and to financial stability. The Board also noted that: "The

continuing rate of credit growth and asset price increases were getting closer to a position where other economies had experienced serious financial instability”.

Despite the content of our presentations and the largely negative sentiments expressed in the Board, the minutes seemed to come down on the side of the view that there was no bubble at that time. However, the minutes go on to state that “If prices continue to increase, however, a risk of a price bubble would become more acute”.

My recollection of that meeting was that the Board members were concerned with the financial stability risks and vulnerabilities highlighted in our presentations.

The bottom line here is that the FSR, published in late 2004, contains a strong statement about the dangers to the domestic banking system coming from emerging distortions in the residential property market despite there being “no conclusive evidence” of misalignment.

Yet, curiously, after three years (2005, 2006 and 2007) of accumulating evidence of growing dangers of misalignments and disequilibria in the domestic financial system, the CBFSAI concluded, in its FSR for 2007 page 11 that “.....the Irish banking system continues to be well placed to withstand adverse economic and sectoral developments in the short to medium term”

It should be noted here that the red light assignment to the housing market was changed the following year to amber (by senior management) without this change being warranted by any substantive change in the housing market noted in the Overall Assessment – if anything the weaknesses identified had deteriorated.

July 7 2004

The Bank’s reaction to the aftermath of Sandyford, where these risks were flagged, was surprising. It was announced at the FSCC meeting of the 7 July 2004 (i.e., just 15 days later) that the FSCC was taking ownership of the FSR (Tab 11). It would appear from these minutes that senior management wished to gain tighter editorial control over the message being conveyed by the FSR to the Joint Board and the public. It seems that it deemed that the best way of doing so was by assuming ownership of the FSR.

This FSCC also discussed what actions could be taken to pre-empt instability. Any change in regulatory capital was dismissed since it would make Ireland super-equivalent and would introduce competition issues. The only options remaining which were noted were moral suasion via extensive use of the analysis in the FSR “which will be a significant instrument of moral suasion”, stress testing and requirements on banks to highlight to borrowers the effects of higher interest rate which would be revisited with the Consumer Director. One would imagine, therefore, that the instrument of

moral suasion would be strengthened to get the correct message across – instead, in my view, it was beginning to be substantially watered down.

In taking ownership of the FSR, the FSCC declared that one of its future functions would be to refine the conclusions and message of the FSRs as they went to the Joint Board and as they went for publication. It also indicated at this time that it would review the terms of reference of FSC. It changed the name of (FSCC) to the Financial Stability Committee (FSC) to reflect the expectation that it would be making policy recommendations (note that the FSCC also had mandate for policy advice).

July 14 2004

The Board meeting held on 14 July discussed the draft FSR (Tab 19). The minutes note that, in discussions with the banks, the banks themselves, had expressed full confidence in their own assessment of “the soundness of their lending practices”. The minutes also noted that competitive pressures meant that “funds were readily available to borrowers at very competitive rates from many sources” saying that this was “supportive of continuing demand” but noted at the same time that the greatly increased supply of new housing units of approximately 70,000 to 80,000 units per year saying that this “must bring the market into balance sooner or later”. However, the Board does not seem to consider that such an optimistic scenario might not materialise. Instead, the likelihood is that it was speculative forces (having their origin in excess liquidity) that were driving a frantic search for yield and not fundamental demand ones, as seemed to be implied. Since this demand may not be sustainable, excess supply could start to cause prices to collapse. In my view, the warnings raised by MPFS at the June Board meeting were subordinated to those of the banks at this Board meeting. This is despite the fact that one cannot expect anything other than a self-serving and overly optimistic assessment coming from the banks themselves about their own state of prudential health.

October 11 2004

On the 8th of October, I circulated a memorandum to FSC members proposing an FSC Work Plan for the remainder of 2004 and for 2005 (Tab 20). This was in response to a request from the FSC at its previous meeting to propose a structure for FSC meetings for 2005. I proposed the following headings, notably many of which related to putting in place crisis management plans, under which it would be sensible to organise the work:

- Operational issues (including, inter alia, crisis management planning, ECB committee work and stress testing the financial system);

- Conjunctural analysis and briefing (including, inter alia, the identification of “burning issues” of the month, monitoring anomalous developments in financial soundness indicators and identifying themes and signed articles for future FSRs);
- Research and analysis: itemising a list of proposed analytical and research projects with a view to examining risks already identified and to be delivered in the following year, 2005 (of which the following is a sample: Macro Financial Indicators and early warning systems; examining the role of liquidity in financial stability, net worth and indebtedness, growing inter-bank lending exposures; asset prices and financial stability; and long-term trends in banking and financial markets);
- Crisis Management Planning: special attention was given to crisis management procedures in my memorandum. I flagged areas where further work was needed: streamlining crisis management procedures as already outlined in the Black Book; the need to conduct crisis management exercises to ensure that proposed procedures are both effective and efficient; and a proposal to have our procedures reviewed by an external expert (it was hoped from the Riksbank).
- Miscellaneous: comprising largely of committee and conference attendance on matters relating to financial stability as well as feedback on these matters to the Committee from these events.

My proposal was on the agenda for discussion on the 17th December but was postponed. It did not appear on the agenda for any future FSC meetings.

November 8 2004

The minutes of the FSC for November 2004 note that “The Operational Risk status of our crisis management procedures (including the Black Book) was discussed and it was agreed that the overall status was *low risk* (italics added) and “risk mitigants were in place to reduce the possible negative effects of an event” (Tab 21). This view may have compromised the urgency of the preparatory work on crisis management (See Part 2 of this Statement on Crisis Management).

December 3 2004

At the FSC meeting of the 8th November, it was agreed that the proposed roundtable with the banks would take place in early December. The meeting with 11 retail credit institutions was held on the 3rd of December. At the meeting I presented my thematic paper on house prices. It is worth noting that I stressed, as I had in my presentation to the Board, the key role of capital gains in the user cost of capital and how the interaction of this variable with other variables could generate a pattern of dynamic instability in house prices in the form of an unsustainable spiral in prices (Tab 22). As

previously stated in June 2004, this presentation also highlighted, albeit on a qualified basis (depending on what value the P/E ratio could be considered to be “normal” or “equilibrium”) a substantial overvaluation in house prices.

However, in the first draft summary of the Roundtable discussion, three points are made in relation to the discussion on house prices none of which mentioned “a soft landing” (Tab 23).

The summary of the Roundtable discussion as sent to CBFSAI directors (Tab 24) incorporated some amendments to the draft and added a paragraph, with an opening sentence which said: “In summary, there was a consensus around the *CBFSAI view* that the most likely outcome in relation to house prices would be a *soft landing...*” (Italics added).

In the Governor’s speaking note to the Board in December 2004 (Tab 25), he states, in relation to the Roundtable meeting held earlier that month that: “There was a consensus around the *CBFSAI view* on the housing market: namely, that the most likely outcome in relation to house prices would be a *soft landing.*”

In an extract from the Board minutes (Tab 26), reporting on the discussion at the Roundtable it is noted that this is now the view in the FSR: “While there was a consensus around the *Financial Stability Report’s view* that the most likely outcome in relation to house prices would be a *soft landing.....*” (Italics added). I did not become aware of the existence of this speaking note until recently.

From obscure origins, apparently during the discussion at the Roundtable, the idea of a soft landing caught hold on the mind-set and had the effect of compromising the message that was first put across in the thematic article in the FSR 2004, which, contrary to what the above Board minutes say, did not mention a soft landing. This, along with the comfort brought by the McQuinn result (i.e., no bubble in house prices) in a signed paper in the 2004 FSR may have had the effect of assuaging worries about downside risks to house prices in peoples’ consciousness.

The adherence to the low risk soft landing scenario looks all the more strange in the light of evidence brought to the Committee by Mike Casey showing that purchase prices per square metre were highest in Dublin while yields were lowest for the year 2004 (Tab 27) among a sample of seventeen European capital cities in December 2004.

2005

Nyberg notes that an active and suspicious central bank would have had concerns over the macro economic data emerging in mid- to late-2005 (page 67). He also notes that, by the end of 2005, the authorities should have been sufficiently concerned about the emergence of a property bubble to consider aggressive action to deflate it (page 60). Former Governor Hurley now agrees that there was a basis for action in 2005. The following is an account of what happened in 2005.

After protracted discussions between the Central Bank and the Financial Regulator, the Banking Supervision Department (BSD) in the Financial Regulator moved the three to four people they had assigned to monitoring financial stability issues from a micro-prudential perspective to dealing with the then imminent implementation of Basle II. This amounted to a big loss for the FSWG which then shrank to just MPFS and a few members from the economic departments in the Bank. Their loyalty would have been to their own department and management. They ceased attending subsequently and the FSWG shrank further to the financial stability function of the MPFS Department. The reallocation of staff in BSD in the FR also meant that MPFS had to take on many of the functions being relinquished by BSD (e.g., relating to stress testing, and attendance at BSC Working Groups in Frankfurt) at a moment in time when our resources were being stretched. This was a source of considerable disruption to the previously smoothly working relationship between MPFS and the BSD.

However, between September 2004 and early 2005, the FSWG and MPFS continued to focus on the risks and vulnerabilities in relation to the Irish financial system that should receive urgent attention.

I, in conjunction with my colleagues, flagged all of the risks and vulnerabilities in the Irish financial system which were the risks that were ultimately realised in the lead up to, and during, the financial crisis in Ireland (i.e., house price misalignment, the level of indebtedness and the speed of credit growth, the banks' high and growing exposure to property (both commercial and residential), interest rates persistently too low relative to equilibrium values, excess liquidity generally but manifested most dangerously in the banks' growing funding deficit, narrowing interest rate margins, shortage of long-term fixed rate mortgages and a configuration for the UCC in housing in Ireland that was generating an unstable dynamic along with the absence of any self-stabilising mechanism to counter this because of integrated financial markets within monetary union). As noted above the mandate of MPFS was to do research and analysis into financial stability issues. It was the responsibility of the Board and senior management to take policy decisions and in particular to decide on editorial content of Bank publications.

Many of these risks were discussed by the FSWG at its meeting on 11 March 2005. The handwritten minutes of the FSWG highlight our concerns at the time (Tab 28). These were interest rate risk, bank interest rate margin risk, liquidity risk, credit risk and real economy risk. I also flagged the funding deficit of the banks as an area which needed attention. I judged that the liquidity risk was one of the most pressing at this time.

In the new liberalised context, the monetary system seems to alternate between generating excess liquidity which then drives a search for yield and ultimately a bubble, followed by the bursting of the bubble, which then generates a deficiency of liquidity. The latter then contributes to an under-shooting of asset prices. It therefore seemed to me that the shock absorbing role of bank capital now needed to be much greater than in the past and certainly greater than before the effects of financial markets liberalisation began to take hold.

Identifying the disruptive role played by liquidity as one of the main causes of the weaknesses and vulnerabilities in the banking system proved to be an unpopular view with senior management in the Bank.

The following are the events that I believe led to the filtering of the results coming from research and analysis in the 2005 FSR.

March 8 2005

As reflected in the work programme (Tab 20) and in the handwritten minutes of the FSWG (Tab 22), I intended that the FSR for 2005 would highlight further risks to the financial system with a special focus on what I considered to be one of the most threatening risks at the time, i.e., liquidity risk. At the FSC meeting on the 8th of March, I gave a PowerPoint presentation on risks facing the financial system in Ireland with special emphasis on liquidity risk (Tab 29). Given the frothiness of asset prices (including house prices), I envisaged that this would be the thematic paper for the FSR 2005. The intention was to cover other types of risks (interest rate risk, real economy risk, and credit (or indebtedness) risk) in signed articles in the FSR 2005, i.e., the work being covered by the FSWG. I made an outline presentation of the paper which is summarised in the official minutes of the meeting (Tab 30) and (Tab 31).

The focus of attention (as evidenced by Tabs 29,30,31) was on the increase in financial stability risks arising from liquidity and asset price developments, with a particular focus on Ireland. I argued that excess money growth and the interest rate well below its natural level, globally and in Ireland, were generating a search for yield in financial markets, inflating asset prices and driving them into bubble territory.

However, the main message in my liquidity paper was not well received by senior management in the Bank. The Chairman of the FSC raised issues about the paper saying that it was “tricky stuff” and “political” (Tab 32). It is clear from the notes taken at the time that he was not receptive to the story I was endeavouring to tell. He referred to the paper in what I thought were quite disparaging terms saying that my analysis implied that the world was now “riddled with bubbles” and that central banks had “mucked it up”. Subsequently, I tried to persuade him again of my point of view in private conversation but to no avail.

March 22 2005

Two weeks later on the 22nd of March there was an unscheduled FSC meeting called. At this meeting, I tried to revisit the liquidity theme. I presented a document to the FSC outlining the liquidity theme (Tab 33). In this paper, I noted that asset prices in a number of markets had risen to ‘bubble levels’. I warned that this ‘would lead to a build-up of financial fragility if the world economy were to falter (whatever the cause) and asset prices were to collapse’. I also noted that a shock to the world economy would increase uncertainty and fuel a fall or collapse in asset prices. However, in a sharp exchange of views, the chairman repeated that this was “a highly political issue”. My response was: “detach it from the political” (Tab 34). In my view this marked a turning point in my role in the Bank.

In the event, the thematic paper on liquidity was rejected and was not presented to the Board. Instead, it was proposed by the chairman that the presentation at the forthcoming Joint Board would be a presentation that would “attempt to ground members’ knowledge of financial stability risks in a macroeconomic context” (Tab 35). I was requested to work on such a paper. This was, in my view, well removed from the more pressing liquidity considerations which I believed to be a serious risk to the health of the financial system in Ireland at the time.

The scheduled FSC meetings for the 12th of April and the 10th of May were cancelled and during this period Mike Casey, the ADG for Economic Services, retired and a new ADG was appointed.

It is notable that the specific responsibilities of the role of the ADG for Economic Services were inter alia, to oversee the development and implementation of the Bank’s Financial Stability Function and to oversee the publication of the Bank’s Bulletins, Annual Reports, stand-alone Financial Stability Reports along with other Bank publications, ensuring the highest possible standards in all of these publications (Tab 36).

June 14 2005

Two new ADGs, **Oireachtas** were appointed in May 2005 and became members of the Financial Stability Committee in June 2005. At the 14 June FSC meeting the issue was raised as to whether the ground had not “shifted” a bit, and whether we should not be more concerned with credit growth in the aggregate, while invoking the Roundtable conclusion that the consensus was for a soft landing in house prices (Tab 37). In the FSC minutes for this meeting it is noted that: “It was agreed that the major area of concern had moved from excessive house price growth last year to excessive credit growth” (Tab 38). This move would seem to reflect a change in thinking with respect to the hierarchy of risks in the system which would not seem to be warranted by any corresponding change in real developments.

However, the language of the subsequent drafting in relation to this issue would seem to suggest that risk had somehow mysteriously departed altogether from the residential housing market and entered the domestic credit market. What’s more unfortunate is that this change in perspective may have stemmed from confusion between the “central scenario” and the “downside risks” (Tab 37). New trend rates of growth in house prices and credit would have a bearing on the central expectation but would not necessarily affect the downside risks, which are the ones that concern financial stability and which should have been the real concern at the time. This ‘shift’ may therefore have been misguided. As noted, it was difficult to divert attention away from the central expectation to potential tail events despite the accepted rationale for embarking on a standalone FSR being motivated by this. I made three interventions during the meeting in an attempt to refocus attention away from the central expectation and towards the downside risks.

At this meeting it was also decided that the Executive Summary and Conclusions parts of the financial stability assessment would be combined into a short summary. I think this was detrimental to the production process of the Report and may have militated against the transmission of the results of the research and analysis to the Board and the public. It afforded senior management more editorial control over the results of research and analysis.

The “Conclusions” section to the Overall Assessment in the FSR 2004, before this change was made, is a good example of where the risks are stated clearly. In the FSR 2005, the much shorter “Conclusions” section follows on from the Executive Summary. Unlike 2004, there is no “Conclusions” section to the Overall Assessment. This lends much more control to senior management to adjust or tone down the message of the report as they wished. A specific instance of this is the failure to refer to estimates of house price misalignment noted in the Overall Assessment section of the FSRs in the Executive Summary of either 2005 or 2006 and above all in 2007 when the

existing evidence of misalignment was strongly reinforced by fresh estimates from new work being conducted in the Bank (i.e., McQuinn and O'Reilly) but all of them omitted from the 2007 report. By contrast, the Executive Summary of the 2004 Financial Stability Report notes that according to the P/E and PV ratios "property prices are currently significantly overvalued" (page 10).

June 23 2005

At the meeting on the evening of 22nd June of the Joint Board at Tinakilly House, Co. Wicklow, financial stability presentations on the draft Overall Assessment was made by myself and Allan Kearns (Tab 39). A further presentation on the so called "international macro" previously proposed by the FSC was made by myself (Tab 40). I think that the subject matter of this presentation although important deflected attention away from what I considered to be the most pressing risk at the time, i.e., liquidity risks in the domestic economy. Incidentally, there does not seem to be any minute of this meeting available.

In our presentation, the traffic light system was again displayed showing the red flag for the previous year (2004) but the corresponding slide for 2005 showed that the red flag for housing for 2005 was downgraded (by senior management) to amber. In this context, our presentation slides note sardonically that house prices will have "now *apparently* a soft landing...." and "primary risk *seems to have shifted....*" (Italics added).

The following day a Board meeting of the Bank was held. Neither I nor Allan Kearns was present since we had to attend meetings in Frankfurt. The Board meeting was joined by Oireachtas [REDACTED], all of the Central Bank. In their presence, the Governor announced that the "Financial Stability Analysis now identified the continued high rate of credit growth and indebtedness levels as the primary risk to financial stability". He informed the meeting that the FSR would be reviewed over the summer and would be presented again to the Board before publication in early October. He went on to add that: "In particular, further analysis would be undertaken of credit growth and to assess whether there are grounds for *serious concern*. The Bank will further examine the *real risks* to the system and reflect its considered view in the published Report" (Tab 41), (Italics added). He seemed to imply that the previous analysis of the housing market as presented in Sandyford in 2004, which flagged the downside risks in the housing market and highlighted the emergence of a bubble, was somehow wrong in the light of the fact that house prices had now moderated (of course, moderating house price growth is still consistent with a growing bubble).

It was also agreed at this meeting that it would be helpful to hold preliminary Roundtable meetings with the banks in September before finalising the report so that the Board would have the benefit of

feedback from the industry before approving the report for publication. This would seem to suggest that senior management thought that it was more important to incorporate the views of the industry (who would invariably be offering only self-serving views, especially in the “Roundtable” format where all banks were present simultaneously) than it was to tap into the thinking of its own economist staff on the systemic risks to the domestic financial system. In light of this, recall that the Bank’s intention was to use the FSR as an instrument of “moral suasion”.

July 12 2005

At the July meeting of the FSC I gave a presentation on the proposed article on credit as requested by the Board. The FSC noted that the paper should look at likely future developments (Tab 42). It “stressed” the need to benchmark Ireland against international standards. It also “stressed” that the paper should refer to economic structures which were favourable to increased indebtedness. All of the influences which the committee wanted to stress were arguments against the elevated level of private sector indebtedness being an imminent source of systemic risk.

September 19 2005

As indicated above the FSWG and MPFS had been conducting work in the area of risks to the Irish financial system. I outlined a number of areas of risk that should receive urgent attention. These were interest rate risk, bank interest rate margin risk, liquidity risk, credit risk and real economy risk. I also flagged the funding deficit of the banks as an area which needed attention.

However in light of the FSC’s views on the liquidity risk theme and the subsequent events at Tinakilly House it would seem that senior management felt that the financial stability function was not on the “right track”. A special effort was made to ensure that all senior members of the FSC were present for the FSC meeting due to be held on the 19th of September where the results of our work were to be presented (Tab 43).

At the meeting, the opening comments of the chairman were to wonder whether we had “enveloped” the papers in a financial stability context (Tab 44). There can be no doubt but that all of the papers listed (all dealing with risks needing pressing attention) were highly relevant to financial stability issues in Ireland at the time. Therefore, it is puzzling what the chairman might have meant by the need for these articles to be “enveloped” in a financial stability context. It is even more puzzling in light of the fact that these papers dealt with financial stability issues and were being submitted as signed articles with an accompanying disclaimer saying that the views expressed in these papers were the responsibility of the authors.

The meeting was critical of the papers produced by the MPFS (FSWG). It decided not to give the go-ahead for one of the papers on interest rate risk, i.e., one dealing with the lack of long-term fixed rate mortgage products in Ireland (Barham). Another paper dealing with interest rate margins (by Allan Kearns and Eoin O'Brien) was criticised while pointing to the "dangerous" bit being the conclusions. It was indicated that there was a "need to think more about 'political' conclusions" and the fear that the paper could hijack the Board meeting (Tab 44). As it happened, this paper was in fact presented to the Board but was rejected at that stage. Also, recall how my proposed thematic liquidity paper was rejected as noted above.

As noted above, a paper on the construction industry in Ireland produced in Economic Affairs and Research department. It reached the conclusion to the effect that the long-term underlying demand for housing units in Ireland was 50,000, rather than the lower 30,000 being argued by the ESRI. This was in the context of approximately 90,000 units being built at the time. Of course, a higher number for demand means a lower overhang, a lower probability of a house price collapse and a smaller drop in prices if a collapse were to occur. The FSC noted that there was a "need to give guidance to Directors that they should read this one", with Oireachtas (a member of the FSC and secretary to the Board) saying that "this one needs special treatment". It was also indicated that the conclusions should be reflected directly in the Main Report.

At this meeting I gave a presentation which had two parts: the first part outlined the key message of the Overall Assessment agreed by the FSC and by the Board the previous June. This was the Bank's Overall Assessment and was due to be presented to the Board for the final iteration the following week on 29 September.

The other part of the presentation was based on the thematic article entitled "The Growth of Mortgage Indebtedness in Ireland". This paper was requested by the Board in June as the new thematic article for inclusion in the 2005 FSR. I was asked to draft it, as a paper reflecting the position of the Bank as opposed to my personal contribution which I did, under severe time constraints over the summer. Recall the FSC minutes for the 12th of July which were quite prescriptive as to what it would like to see in the article.

During the meeting I expressed the view that, whatever excess growth was present in the data, it was probably being driven by the unprecedentedly liberal international wholesale funding market then available to the Irish banks for the first time and that this was one of the risks to which the system was exposed. This prompted a question as to whether I was "making too much of international funding issues and whether Ireland was likely to be a poor source of risk." (Tab 44)

When I proposed using the loan-to-value ratio as a proxy for financial liberalisation, one senior member of the FSC asked whether this implied that banks were behaving irresponsibly, and if so, to avoid any such implication.

The presentations I gave to the FSC and the Board (Tab 45) (Tab 46) (see below), stressed that the overall conclusions from the thematic article were “highly tentative” They raised a number of econometric and other issues which were noted at the time, namely:

- outliers at end of sample suggesting that credit growth was excessive, but too few observations to justify robust conclusions, so even if substantial excess credit existed, it would be difficult to make reliable inferences about it;
- many of the significant factors behind fast credit growth could be interpreted as non-fundamental speculative ones or ones which could be viewed as being endogenous or at least partly endogenous to house prices;
- the scope for the fundamental variables themselves to deteriorate and bring down actual house prices; and
- the practical impossibility for the good fundamentals to persist into the future, suggesting that, if we did not see a discernible slowdown in mortgage lending from then (end 2004) on, it would be a serious cause for concern - since the data sample ended in Q4 of 2004.

Given the numerous theoretical, technical and data problems raised by this project, I concluded from the exercise that it was “*not conducive to a technical measure or empirical benchmarking*” and that “*a lack of data or appropriate benchmarks hinders conclusions*” (italics in original presentation for emphasis) (Tab 45). Although it makes sense to talk about a natural rate of interest or a natural rate of unemployment, it does not make sense to talk about a “natural” rate of credit growth. This would be a rate which would provide a benchmark below which credit growth is benign for the economy and above which it is malign. It is almost certain that the very rapid rate of credit growth (which went from approximately 70 per cent of disposable income in 2000 to almost 140 per cent of disposable income in the short space of time up to 2005) was symptomatic of a bubble in the residential property market and of excess supply in the domestic mortgage market. Mortgage growth could not therefore be fully accounted for by the so-called fundamental driving variables.

This point is reiterated in the published version of the paper where it was again noted that some of the driving variables “may be capturing speculative influences in the housing market” and that other

driving variables “may be partly endogenous”, with the result that some of the explanation of the variation in credit could be spurious.

It is also notable that, at this meeting, there was a further change in approach to analysis and commentary by the senior people on the FSC and this was that the stress should be put on only showing how things had changed since the last report (Tab 44). I think this had the effect of deflecting attention away from the danger inherent in the levels of risk variables such as house prices relative to their warranted levels based on fundamental developments.

September 29 2005

At the September meeting of the Joint Board, I presented the thematic article on the mortgage market just discussed above (Tab 46). This paper was approved by the Joint Board and was published as the thematic article in the FSR 2005. The Joint Board decided against the inclusion of an article on interest rate margins in the Financial Stability Report.

In my view, there was a bias displayed by senior management against background papers that sent a clear warning signal about the vulnerabilities in the financial system. Symmetrically, there was a bias in favour of background papers sending a favourable signal. This resulted in the subordination of the former papers in the attention they received. The following is a discussion of some of these papers.

Interest rate margins are the spread between banks’ interest income on its assets and interest expense on its liabilities normalised by the amount of their (interest earning) assets. This had been trending down for Irish banks for some time. However, rapid balance sheet growth had disguised its effect on the bottom line. If the volume of business were to slow sharply, then bank profitability and capital would be hit severely. However, curiously, this paper (by Kearns and O’Brien entitled: “*Trends in Margins of Irish Credit Institutions (1993 – 2004)*”) was rejected for publication as a signed article because, according to the minutes of the meeting (Tab 47), the impact of narrowing margins were already raised in the main body of the Report. However, it was understood that the insights from the signed articles, which helped to enhance the quality of the financial stability assessment in the main body of the report, would be recognised by their acceptance as signed articles, with disclaimers, in the report.

A paper, which I co-authored with an economist from the MPFS Department, stressed the gap between the actual and warranted (equilibrium) levels of the rate of interest (“*Assessing Interest-Rate Risk from the Rate’s Constituent Components*”, with Everett). This divergence posed a risk to the housing market, with knock-on effects for the health of the banking system. It stemmed from

the (at the time) growing likelihood of interest rate increases as the ECB started to react to accelerating inflation.

In this article, we concluded from various studies, including our own, that the equilibrium (or natural) nominal rate of interest was in the region of 6%, which was almost double the average variable mortgage rate at the time. We concluded, conditionally, that, for highly indebted borrowers, an increase in the rate to this equilibrium level “would be an intolerable burden and would almost certainly mean a sharp increase in the ratio of non-performing loans” (see Abstract, page 123). In the event, the Irish mortgage rate rose from 3.65 per cent in 2005 (average for year) to 5.86 per cent in 2008 (average for year) – a 61 per cent increase in just three years. I don’t think this idea of an equilibrium rate, acting as a magnet for the actual rate was taken seriously by senior management, nor did they take seriously the likelihood that the ECB would have to increase interest rates sharply in the face of accelerating inflation. If it had been acknowledged, then policy makers might have been alerted to a significant vulnerability in the domestic financial system and stronger pre-emptive action might have been taken. Indeed, it is also possible that households could have made more informed choices at the time if they had been alerted to this danger.

Although my original proposed thematic paper on liquidity was rejected by the FSC the previous March, two papers dealing with the broad area of liquidity as signed articles were published in the FSR 2005. Both papers were co-authored with others. The first of these “*The Role of Liquidity in Financial Stability*” (with McKienan) FSR 2005 dealt with aspects of the role of liquidity in asset prices and in financial stability. This paper adumbrated exactly the kind of problem that arose with Irish banks with the onset of the crisis, namely the evaporation of inter-bank liquidity. I am not aware of any other paper, domestically or internationally, that flagged this dangerous possibility in advance of its occurrence.

Apart from stressing again the role of excess liquidity in driving asset prices, liquidity is also likely to play a very disruptive, or even a chaotic, role in the wake of a large adverse shock. When this happens, liquidity can dry up, “even where it was previously in ample supply, starving the economy and financial markets of their circulating medium, and can thereby act as a catalyst for financial instability” (page 82 FSR 2005). I also drew attention to “...the increased reliance of the Irish banking sector on international funding”, which “exposes it to risks of a possible drying-up of liquidity, if a shock were to hit the system” (page 91 FSR 2005), a scenario close to what unfolded in reality about three years later. This would be likely to bring financial instability in its wake.

The other paper on liquidity in the FSR 2005: (“*Recent Developments in Asset Prices and Liquidity in the Context of an Evolving Relationship*”, co-authored with Cronin and O’Brien) dealt with the effects

of excess liquidity and exceptionally low interest rates on asset price developments. It argued that abundant liquidity stemming from monetary policy laxity was imparting significant momentum to asset prices internationally. This is because “excess liquidity tends increasingly to be deflected into financial asset markets thereby inflating asset prices”. This includes Ireland and, by implication, Irish property prices. It was noted that the bottom line of the paper was that ample global liquidity was becoming an increasing source of concern for financial stability. Although listed for inclusion in the FSR as signed articles, neither of these papers was reviewed at the FSC meeting of 19th September 2005.

It is my belief that the FSC and senior management in the CBFSAI were not well disposed to this liquidity argument on which I had written three papers for the 2005 FSR. In this context, it is worth noting that the German financial newspaper, *Borsen Zeitung*, printed a summary account of the paper above on the 18 of November 2005 (Tab 48) after it appeared in the FSR. The newspaper’s summary of our argument is stated accurately: “According to the economic textbooks, the level of consumer prices should rise in due course when the money supply expands rapidly. The authors suspect instead that surplus liquidity is what drives asset prices up. In their investigation, they establish that prices for government bonds, corporate bonds, equities, commodities and emerging market indices (equities and bonds) have increased sharply in value since the beginning of 2003. In the euro area, the nominal price level of the five aforementioned asset classes rose significantly since the second half of 2002 in the same way as the M3 monetary aggregate. The consumer price index has remained stable during the same period”. The paper goes on to note that: “The authors view the ample global liquidity as an increasing source of concern for the stability of the financial system”. The *Borzen Zeitung* piece was circulated to the members of the FSC on the 13th of December 2005. To the best of my recollection, there were no comments. See **Annex** to this document, for further relevant detail on the issue of liquidity and financial stability.

2006

In 2006, I was asked to draft the thematic article on “*Systemic Consequences of Long-Run Trends in Banking*”. Bearing in mind that the thematic articles were supposed to highlight an important imminent risk, in my view this subject was not designed to deal with any such imminent risk.

Also, in 2006, it seems that the Bank was becoming increasingly concerned with the HR issues of mobility and succession planning and bringing new people through the hierarchy. Giving more junior economists an opportunity to present work at Board level was part of this initiative.

Furthermore, the traffic light warning system was suspended. In my view, this system was a good way of clearly highlighting the risks. Recall that in 2004, this system had a red light for the housing market, in 2005 it was downgraded to amber while in 2006 the traffic light warning system seems to have been suspended completely. I think its discontinuation may have the effect of clouding the issues in relation to the risks in the housing market. This occurred at a time when the risks in the market were actually increasing.

January 10 2006

At the January meeting of the FSC, it was noted that the renewed increase in house price inflation was considered a concern, with a view being expressed that this may be attributable to a lack of supply of land. My view was that it was speculative forces that were driving prices and that these forces were operating through the user cost of capital in housing. Attributing the price pressures to supply bottlenecks may have been another attempt to invoke more fundamentals to explain what was happening. But the industry, at this time, was producing units at a rate well in excess of even the Bank's own generous estimate of medium term demand at 50,000 per annum – so it is hard to see where the supply shortages might have been coming from (Tab 49) and (Tab 50).

In the context of a discussion on capital ratios at the same meeting, I noted that Latvia and Lithuania had increased capital requirements on mortgages (under national discretion) from 50% to 100%. The FR noted that the issue is not to go to 100% - it's more a question of whether the FR would consider even going from 50% to 55% as a signalling effect.

February 14 2006

A draft paper circulated by the FR proposed an increase in the risk weighting for newly issued residential mortgages from 50% of Tier 1 capital to 60%. The measure was being considered to demonstrate the FR's concerns at the extent of mortgage lending among retail credit institutions "while being sufficiently conservative not to impact on competition." The proposed measures were described as "a conservative signal....but a marker if you don't do something more prudent we'll take more action" (Tab 51). It was again agreed to hold the Roundtable with financial institutions before the publication of the FSR.

March 14 2006

In the discussion of the interim FSR, the FSC noted that "there was still a concentration risk for banks in relation to property lending and a risk of decline in the quality of banks' loan books given the increased leverage of new borrowers" (Tab 52).

It is notable, in this context, that it was agreed by the FSC that the Statistics Department would produce a paper for the next FSC on progress on the financial accounts (MUFAs) project in order to balance the Bank's analysis of household indebtedness with some information on household assets. This seems to reflect the predisposition of the Bank to seek out comforting news that suggested that rapid credit growth might not be all that bad when considered in the round. In the event, the data suggested that this balance was not available because it appears that the holdings of net financial assets are heavily concentrated in richer households. In addition, there was clear scope for the value of financial assets to inflate excessively in good times and to fall fairly steeply in a financial crisis.

March 30 2006

On 30 March the interim FSR was presented to the Board by an economist from MPFS. The interim FSR concluded that the central expectation was that the stability and health of the banking sector was deemed to be generally sound, it nevertheless highlighted, in its banking risk assessment, five main concerns. The rate of credit growth, which might have been already excessively high, was showing little sign of improving in the short term; exposure to property-related lending, from a situation in which it was an increasingly large share of the loan book, had increased; a further slight widening of the funding gap from an already elevated level; a further marginal decline in net interest margins which had already been declining for many years; and a fall in general provisions resulting in a lower level of overall provisions.

The minutes of the Board meeting note the following: "the Bank noted signs of a further build-up in vulnerabilities. In particular, the risks associated with the very high level of credit growth and the increase in the level of indebtedness combined with the reacceleration in house price growth and increasing repayment burdens constitute important vulnerabilities for the banking system in the medium term" (Tab 53).

June 29 2006

The presentation of the draft FSR to the Joint Board in June 2006 was given by two economists from MPFS. They flagged a reacceleration of house prices across all segments of the market and the fact that the risks of a correction had increased (Tab 54).

Recall that, at the Joint Board presentation in June 2004, I had concluded that if house prices were to continue increasing the way they had up to then, then there would be a risk of a sudden correction in prices. In the June 2006 Joint Board presentation, the indication was that there were no major changes in the driving forces that could warrant such reacceleration in house price

inflation, leading to the presumption that it was speculative forces that were driving house prices. The presentation also included evidence of deteriorating affordability.

At the same Board meeting, I was given a 15 minute time slot to make a separate presentation (Tab 55) based on the thematic article for 2006 on long-run trends in banking. I gave a presentation on this topic to the FSC on 13 June (Tab 56) but was asked to do a condensed version for the Board meeting on 29 June. This presentation addressed the likely future evolution of the banking industry more generally.

This presentation was based on the thematic article in the 2006 FSR. In that paper I flagged the increasing funding gap of the Irish banking system which was then the biggest in the euro area (FSR 2006 pages 74-76). I also flagged the danger flowing from this in the form of a possible paralysis in this market, if hit by some adverse shock. In this paper, it is noted that “international portfolio diversification also implies bank disintermediation through a retail deposit drain. However, ..., since international wholesale money markets and short-term debt securities markets are virtually fully integrated, banks can compensate for this deposit drain by borrowing in these markets...They are doing so in increasing amountsThis is especially true of Irish retail banks which have collectively the highest deficit among euro area countries”. The paper also goes on to note that “the higher the dependence on external funding the more exposed the banking system is to a country-specific shock.”

It is also worth noting that in my introductory comments to this presentation on the thematic piece, I noted that while the overall financial system internationally is probably more resilient to shocks this may not be the case for the banking system. I also noted that there was reason to be cautious about the standard indicators of the health of the banking system, including those for Ireland, because: “Imbalances and misalignments may be in the process of being built up just when all the indicators relating to banking are giving very favourable readings, as we tend to see at the moment” (Tab 57).

In a discussion on action points at the meeting, it is notable that the Board concluded that “competitive pressures on domestic banks from external banks must be taken into account when deciding on measures which would only apply to domestic banks” (Tab 58).

July 11 2006

At this FSC, two economists from the MPFS Department presented a paper which brought attention to the fact that residential property market is fairly homogenous (i.e., experiences high price correlation). The results for the various categories of the commercial property market are more

mixed (i.e., are less correlated). In addition some segments of the residential property market appear to be correlated with the commercial property market (Tab 59) and (Tab 60). Therefore, any fall in property prices could be expected to occur across all segments and all geographical regions at the same time. In the event of a widespread downturn in the economy, one would be likely to see a bigger clustering of bad loans which could pose a risk to Irish credit institutions, especially in the light of the steep increases in loans that had already occurred.

A senior member of the FSC noted that the study belied the belief among some credit institutions that different property sectors are not correlated and that, accordingly, their lending books were adequately diversified. It was decided that this paper should be presented to the Board at its July meeting.

July 27 2006

The above paper was presented at this Board meeting (Tab 61). The Board noted that it was important to get the message from this paper to the lending institutions. However, it was also noted that the Bank should do so in such a way as to avoid provoking an overreaction to the findings. It was agreed, therefore, that the message should be conveyed in the FSR. The Board also agreed that consideration should be given, in its forthcoming September meeting, to whether this should be a standalone signed article or as part of its message in the Overall Assessment Part of the report.

September 12 2006

At this FSC meeting, two economists (from the EARP department) presented the main findings of a paper on house prices (Tab 62). I was not present at this meeting. It indicated a price misalignment of the order of 15%, with the authors conceding that the price increases that had occurred since the paper was concluded could push the extent of overvaluation to 20% (Tab 63). The FSC indicated that “care would have to be taken in how the results would be presented publicly so that the analysis would not be misinterpreted to imply that house prices are definitively overvalued”.

When a member of the FSC asked how their estimate compared with other messages in the FSR i.e., house price misalignment estimates, there was no recorded response. This is interesting because the adjusted P/E ratio (which was used as an indicator in the FSR 2004) was flagging an overvaluation of up 45% for an assumed equilibrium interest rate of 6%. So this new model estimate was moving in the direction of the updated estimates as reported in the FSR.

September 28 2006

It is notable that there was no formal presentation of the second iteration of the Overall Assessment at this Board meeting.

The Board noted that the financial stability risks had increased since the 2005 FSR largely due to the very high rate of credit growth and continued increase in the level of indebtedness. The Board also noted that the Annual Report Comment had flagged that the recent house price increases might not have been “fully supported by fundamentals”. It was also noted that “care would have to be taken to ensure that the tone of the FSR does not itself provoke an over-reaction.” It is curious that the Board also noted that “the tone of the report with regard to house price development was tentative and would be updated in the coming weeks to take account of the latest official statistics and *anecdotal evidence* (italic added) that became available before publication on the 8th November.”

The McQuinn/O’Reilly paper was presented to the Joint Board. In the model, house prices depend on how much people can borrow which, in turn, is assumed to depend on the demand-side factors of disposable income and interest rates. It was agreed that the paper could be published as a signed article in the FSR 2006, but again with the same proviso as that stipulated by the FSC, namely that “care should be taken to ensure that it was not interpreted as a definitive indicator of future price falls” (Tab 64). It was agreed that the article would be revised to take account of these concerns.

In relation to the McQuinn/O’Reilly paper, there was no mention of this new misalignment estimate in either the Overall Assessment section or the Executive Summary section of the Financial Stability Report. Curiously, however, there was a graph presented which showed no overvaluation from the earlier McQuinn model. This looks like another example of toning down a message that was coming from research and analysis.

The paper “Is there a Homogenous Irish Property Market”, which had been revised on the basis of a discussion at the previous July Board meeting, was again presented to the Board. The paper incorporated a review of international evidence with a view to placing the Irish results in an international context. It also presented a new “more circumspect conclusion”. This had the effect of qualifying extensively and weakening much of the previous conclusions which would have justified serious concerns that banks specialising in either residential or commercial property sectors would likely face falling prices across many of their respective sub-segments.

Similarly, the important messages from this paper, just like those from the McQuinn/O’Reilly model, did not feature in either the Overall Assessment or in the Executive Summary of the FSR. Not only did senior management not use the new information about risk in the main FSR but it even toned down the conclusions from this research and analysis in signed articles which were accompanied by a disclaimer. This constitutes selective use of the results of research and analysis to support prior views.

2007

It is notable that in 2006 I gave one short presentation to the Board. In 2007 I was not invited to present to the Board at all.

March 29 2007

A presentation on the interim FSR was given to the Board on 29 March by two economists from MPFS. The Report noted “three major vulnerabilities” for financial stability, namely the continuing high rate of credit growth and increased level of indebtedness along with the increased repayment burden facing households on foot of interest rate hikes. In addition, the interim report flagged the slowdown in house prices. It noted that further analysis on these issues was continuing.

Although I was not present at this meeting, the work I was undertaking at the time on liquidity risks, which were now seen as “key factors in the assessment of risks to financial stability”, was noted. (Tab 65).

April 17 2007

It was agreed that an analytical paper on liquidity issues would be a useful contribution to this year’s FSR as the thematic article. It was also agreed that net interest margins, on which a paper had been produced for the 2005 FSR, would need to be reanalysed and reported, given the increased prominence of net interest margins in reviews of financial stability risks *in other countries*. The FSC minute goes on to say that “In preparing a revised paper on this issue, concerns raised previously would be taken into account.” (Tab 66). Note that MPFS had already raised both of these issues in papers scheduled for inclusion in the 2005 FSR but both papers were rejected for inclusion in that report.

May 15 2007

It was observed at this meeting that the Bank of England’s FSR had raised the issue of the impact of a change in liquidity conditions in international markets as a vulnerability for financial stability. This was an issue which I had flagged two years earlier in a presentation to the FSC back in March 2005. The possible implications for Irish banks, “given their reliance on funding from abroad” were also highlighted. It was questioned at this meeting whether the drying up of liquidity would affect Irish banks on account of the very large funding gap. It was argued by senior management that factors mitigating against this were the relative sophistication of Irish banks’ funding strategies and the absence of any default risk premium in the cost of funding to Irish banks (Tab 67).

June 12 2007

I prepared a PowerPoint presentation for the FSC on 12 June dealing with bank liquidity (Tab 68). This was proposed as the thematic paper for the 2007 Financial Stability Report. Although it was listed on the agenda I did not get an opportunity to make the presentation. The matter was postponed to the July meeting (I was not at that FSC as I was at the ECB's Bank Supervisory Committee meeting in Frankfurt) and then finally scheduled for the September FSC meeting. Unlike previous years, I was not invited to present this thematic piece on liquidity to the Joint Board Meeting on 26 June.

June 26 2007

The presentation to the Joint Board on the Overall Assessment of the FSR 2007 was made by Allan Kearns on 26th June 2007 (Tab 69). In light of the fact that house prices were at very elevated levels (and according to estimates based on P/E and PV ratios substantially overvalued) and had reaccelerated again between the latter half of 2005 and the latter half of 2006 to a 15 per cent annual rate and, despite some deceleration in the latter half of 2006, it was curious to find in the June Joint Board discussion of the FSR for 2007 the following comment on the report: "...property prices should not be focused on to a disproportionate extent, bearing in mind that the analysis in the Report was consistent with the most likely outcome being a soft landing" (Tab 70). It was extraordinary the extent to which the idea of a soft landing (which, to my mind, was never properly debated or justified) was inuring people to the possibility of a house price implosion. It is also indicative of how attention to the central expectation had come to dominate thinking at the expense of the possible realisation of a tail event, the real financial stability concern.

Work practices, processes and procedures in relation to the 2007 FSR

The first I heard of the large house price overvaluation estimate for the year 2008 reported by McQuinn and O'Reilly was at the Honohan inquiry. It is not clear from the Honohan Report that the McQuinn/O'Reilly model was updated in 2007. I was not aware in real time that the McQuinn/O'Reilly model revealed a figure of 39 per cent misalignment for 2007.

After the Honohan report and prior to the Nyberg Investigation, I attempted to dig deeper into the processes and procedures followed for the production of the 2007 FSR. I discovered a draft of the Overall Assessment section of the report dated the 10th September 2007 containing a reference to the 39 per cent misalignment estimate (Tab 71, page 15). I also discovered that the 39 per cent figure was removed from a later version of the same paper.

Tom O’Connell indicated that a research study on the extent of overvaluation in house prices was deliberately omitted from the 2007 FSR on the basis that to include same “could have spooked the horses”. In his evidence to this inquiry, he stated that the instruction to delete the reference to this estimate of overvaluation came from a level above his (i.e., Deputy Director General, Director General or Governor). If Tom O’Connell knew about this estimate of overvaluation in real time, he did not inform me.

In retrospect, it is my view that there were a lot of peculiarities with respect to the production of the FSR for 2007. The events that took place now appear quite extraordinary. The following is a careful narrative of what happened as far as I can understand it from memory, inference and the records available.

Liam Barron retired in July 2007 and a new Director General was appointed. This is the period associated with the beginning of the crisis. Part 2 of this Statement deals with crisis management and will detail how I was excluded from the committees dealing with crisis management issues at this time. It also seems that I was excluded from other meetings and I was not informed of vital new information in relation to financial stability even though I was head of the financial stability unit of the MPFS department.

On the afternoon of 22nd August an email was circulated by [redacted] Oireachtas (which refers to a meeting held that morning) flagging an Ad Hoc FSC meeting for the 28th of August 2007 the purpose of which was to exchange views on the evolving international financial market situation and its implications for Ireland (Tab 72). I was omitted from the circulation list of this email. We are talking here about a comprehensive drop-down circulation list for the FSC. It appears to me that it could not, therefore, be a case of forgetting to put my name on the list. I would, accordingly, have to have been deliberately omitted from the email circulation list. The [redacted] Oireachtas [redacted] Oireachtas [redacted]. However as head of MPFS I would have expected to be kept abreast of all developments.

I can only try to infer what was going on here looking at the situation in retrospect. It seems (unbeknownst to me) that the McQuinn/O’Reilly model had been updated for 2007 and that the authors were now finding a very large overvaluation of 39 per cent for the first quarter of 2007. This brought the bubble estimate into line with the estimates of overvaluation which were being reported in the Overall Assessment of the FSRs since 2004 based on the PV and P/E(adj) indicators which showed growing overvaluation. This was now crucial information which could no longer be ignored. It is my view that the meeting of the 28th of August, of which I was not informed, was for the purpose of discussing how to manage this now very awkward issue and its implications for the

assessment of financial stability and an update of the Executive Summary of the report. It is notable that [redacted] Oireachtas [redacted] was on the circulation list for the Ad Hoc meeting of the 28th of August. [redacted] Oir [redacted] was not a member of the FSC. Nor was he in the Financial Stability unit of the MPFS department. I surmise, therefore, that the only reason why he was present was to discuss how to deal with this new information, he being [redacted] Oireachtas [redacted] Oir [redacted]

According to the P/E and PV methodologies, and in the light of what happened in the market since 2004 when I presented my paper at the Joint Board in Sandyford, it was obvious that house prices had been overvalued for some time. I think that this overvaluation message had been neutralised by senior management in the CBFSAI instructing that the conclusions from the McQuinn paper in 2004, as updated in subsequent years and included in the Overall Assessment (Main Report) of the FSR, which inferred that there was no bubble, should be acknowledged and taken on board in the Overall Assessment section of the Financial Stability Report. Again, it seems that this was because senior management was well predisposed to the view that there was no bubble and that a soft landing was in prospect. They may have felt more comfortable calling a soft landing if they could fall back on “inconclusive” evidence in relation to residential property price overvaluation.

However, now that the evidence from two studies using different statistical methodologies was coming together and were overwhelmingly pointing to a significant property bubble, senior management was presented with a stark choice, either:

- incorporate this new information into the FSR and send to the Joint Board, and then publish, which would have revealed that the CBFSAI was wrong all along and that there was a large bubble in the housing market at a time when the markets were starting to become bearish on Irish banks or
- Suppress the results of this research and analysis.

It would appear that they chose the latter. I don't know why I was excluded from the meeting of the 28th of August but one possible inference is that the P/E and PV-based estimates which were updated annually and which showed large and increasing overvaluation had been consistently ignored. Curiously, there is no trace of the minutes of the ad-hoc FSC meeting on the 28th August. The [redacted] Oireachtas [redacted] now thinks that the meeting may not have taken place. However, the minutes of the next FSC on 13 September refer to the minutes of Ad Hoc *meetings* (plural) held in August.

The next unusual event is the FSC meeting held on 13th September 2007. Recall that the proper forum for the discussion of financial stability matters was the FSC. The agenda and executive summary of the draft FSR were circulated on the 11th of September (Tab 74), and the Overall Assessment (Main Report) was circulated on the 12th of September by Allan Kearns.

This email of the 12th of September states that the Overall Assessment (Main Report) was for “information purposes only and not for discussion at the meeting” (Tab 75). I am not sure if the draft Overall Assessment sent by Kearns on the 12th September contained the 39 per cent overvaluation. I presume that it did since it was noted in an earlier draft dated 10th September, but I did not review the Overall Assessment at that time. In the first instance, I was fully occupied preparing a presentation which I was scheduled to make to the FSC the following day on bank liquidity and financial stability (Tab 76) based on the paper which I had drafted (Tab 77) and which was scheduled to be the thematic article in the FSR for 2007. Secondly, I was aware that the Overall Assessment had been circulated on the proviso that it was not for discussion and for information purposes only.

Even though the Overall Assessment was not for discussion, the Executive Summary was discussed. There was nothing in the Executive Summary relating to the 39 per cent and nothing to lead one to believe that the Overall Assessment contained new information indicating a 39 per cent house price misalignment. It seems to me, in retrospect, that the reason why the Overall Assessment was not for discussion was because of the new overvaluation figure.

The paper which I presented on liquidity and which was scheduled to be the Thematic article in the 2007 FSR was rejected for publication on the basis that it was too high level in a context in which banks were beginning to experience actual liquidity problems. The discussion focused on the difficulty of separating an “arms-length” information article from the then current discussions about stressed conditions in the market for bank liquidity. In the event, there was no thematic article in the 2007 Financial Stability Report.

A paper dealing with the commercial property market was presented by an economist from MPFS. Using private sector data in its analysis, it noted that the capital values for Irish commercial property had persistently outpaced the growth in total rental values since late 2003 and that this had led to considerable yield compression in recent years. The results suggested a possible overvaluation of commercial property prices. Again some comfort seems to have been taken from the fact that yields on European commercial property had also declined significantly. It was agreed to review this aspect of the text to see how it could be presented sensitively given the likely media interest in this topic.

As mentioned above after the Honohan Inquiry and before the Nyberg Investigation, I discovered a draft FSR dated the 10th of September 2007 containing a reference to a 39 per cent overvaluation by McQuinn/O'Reilly.

I also discovered that a draft FSR, Paper No. 112 of 2007 dated the 21st of September which also noted the 39 per cent overvaluation (see page 14) (Tab 78). It notes that: "A recently developed model of house prices in the Bank, based, inter alia, around the borrowing capacity of house buyers points to an overvaluation of the order of 39 per cent in the first quarter of 2007". This was accompanied by a footnote referring to the McQuinn/O'Reilly paper.

Both the above quote and the footnote relating to the 39 per cent overvaluation in the 21st of September version had a biro strike through them, presumably indicating that they should be deleted from the FSR 2007 text (Tab 79).

However the reference to the estimates of overvaluation based on the P/E and PV ratios which, although flagging substantial and growing overvaluation ever since they were first introduced in 2004 remained in the Overall Assessment of the report at that stage.

In the Executive Summary, Paper No. 111 of 2007 (Tab 80), there is no mention of overvaluation in residential property prices. The summary to the section "Residential property market" in the Executive Summary is entirely at odds with property values being overvalued to the extent of 39 per cent.

In the light of this new information and what was happening in financial markets, this summary section is almost beyond belief. It says: "...the underlying fundamentals of the residential market appear to be strong and the current trend in monthly price developments does not imply a sharp correction. The central scenario is, therefore, for a soft landing." (Page 13 paragraph 2 Executive Summary Paper No. 111 of 2007).

Both the Overall Assessment Paper No. 112 of 2007 and the Executive Summary Paper No. 111 of 2007 were due to be circulated to the Board on 21 September for the meeting on the 27 September 2007 as was the established procedure.

It is not clear which version of the Overall Assessment paper was sent to the Board. What is clear is that there was an amendment made to the report on the morning of the meeting (at 8:48 am). The amendment was to delete the reference to the 39 per cent overvaluation and the footnote from the Overall Assessment (Main Report) (see separate USB key).

The presentation of the Overall Assessment (Main Report) to the Board was made by Allan Kearns (Tab 81). The Governor's briefing note (Tab 82) did not mention the 39 per cent overvaluation nor did the presentation of the Overall Assessment by Kearns. Indeed, the overall tone of the presentation would have been entirely inconsistent with all indicators now pointing to such a large overvaluation.

It is very likely that, if the Board members had the information on the 39 per cent, they would have noticed this inconsistency. I could be wrong, but this leads me to believe that the Board members did not have the document with the 39 per cent included and that the version of the report which they received was the one that was amended on the morning of the meeting.

However, I am now aware from Tom O'Connell's testimony to this Inquiry that this information did not reach the Board. It therefore appears that, at the Board meeting, neither the Board members nor I were aware of the 39 per cent bubble estimate while, it looks as if senior management and some staff were aware (but I clearly cannot be sure of this).

Of equal concern to me is that another major amendment to the Overall Assessment was made unbeknownst to me. It turns out that after the Board meeting all of the estimates of overvaluation were removed from the text of the Overall Assessment including the ones based on the P/E and PV methodologies which had been updated and appeared in the Financial Stability Reports ever since the thematic paper appeared in 2004 and which had shown growing overvaluation since then. These are also absent from the published FSR for 2007 (Tab 83).

A Cover note enclosing the revised Executive Summary, Main Report and Box C was circulated to the Directors on the 11th of October (Tab 84). They were invited to submit comments on these documents before the next scheduled meeting of the Board on the 18th of October 2007. The cover note states "The Main Report has been updated for new data where available and also to be consistent with the change in tone and balance of risks now presented in the Executive Summary." This amounted to adjusting the data to conform to the more comforting message in the Executive Summary. So, rather than adjust the comment to facts and the results of research and analysis, the opposite was now happening. This begs the question as to why we would need research and analysis at all.

The upshot of this was that crucial information deriving from the results of research and analysis by me and other economists within the Bank did not emerge into the public domain. This had the effect of conveying to the public at large a more favourable impression of the health of the financial system in Ireland than was the reality. Senior management failed to acknowledge the weight of

results of research and analysis supporting misalignment in house prices. As previously stated in this context, the effect of this was that it wasted the last opportunity, however belatedly, to call a hard landing, which would have focused the financial stability authorities' attention on crisis management and resolution. It might thereby have helped to head off the worst aspects of the crisis.

Part 2

Crisis Management 2001-2008

Introduction

Part 2 of this document outlines work done in the area of Crisis Management by MPFS.

The focus of financial stability is concerned with tail events, i.e., low probability high impact events. It involves, inter alia:

- Research and analysis into the financial system to identify risks and vulnerabilities; and
- Preparation for crisis management and resolution, given the likelihood of such a tail event occurring.

Since tail events may threaten the viability of the whole banking and wider financial system, there is an on-going need for work in relation to contingency planning, crisis management and crisis resolution. The purpose of this is to leave the authorities in a better position to deal with any such crisis.

All advanced industrial countries have crisis management procedures and infrastructures. This, in effect, acknowledges, almost ubiquitously that, even in the presence of a comprehensive safety net, a tail event may occur and threaten the stability of the banking system. If the nature of such a tail event could be anticipated then it may be possible to head off its worst effects with decisive action.

There is also a danger that the crisis management preparation will be dictated by the nature and experience of the last crisis and that the next crisis will be essentially different leaving the financial stability authorities futilely fighting the last war.

2001-2004 Early work on Crisis Management

The Black Book (BB)

In the early years (2001-2003), the background work in relation to crisis management was conducted by the WGFS and by the MPFS Department when it was established in July 2002. This comprised the following contingency planning tasks:

- Drafting the so-called “Black Book” (BB) manual on crisis management;
- Presentations to the FSC and the Board/Joint Board on matters relating to crisis management;
- Identifying the roles and responsibilities of the various Authorities in a crisis.

Much of the early work on crisis management was completed in the context of the preparation of a crisis management manual, i.e., the Black Book, initially drafted by myself and others. It was developed during the period from about mid-2001 to mid-2002. The results of the work in this area were presented to the FSC and senior management (Tab 85). The BB was sent to the Board in June 2002. In the explanatory Memorandum the Board was requested to note the content of the BB. (Tab 86). The BB was the first formal set of procedures adopted by the Bank for dealing with a financial crisis in a credit institution.

The main elements of crisis management, as encapsulated in the BB, were identified as comprising:

- The clarification of statutory responsibilities;
- The implied identification of tasks;
- Legal provisions;
- A list of Guiding Principles (including the Bagehot principles relating to ELA)
- The committee structure for crisis contingencies and management;
- The identification of essential liaison personnel;
- Communication channels and when they should be opened.

I gave a PowerPoint presentation to the Board in December 2002. This presentation, entitled “Financial Crises Can, and Do, Occur” focused on the BB and highlighted contingency planning issues that would have to be taken into account, in preparation for, and in conducting, crisis management. (Tab 87) See Slide 2 in particular. See Speaking Note dated 9 Dec 2002 for that presentation (Tab 88).

It was noted in the BB and in my presentation that the most likely scenario giving rise to a financial crisis in Ireland would be a situation in which a large adverse exogenous shock (domestic, but more

likely, foreign in origin) would interact with pre-existing vulnerabilities in the Irish banking and financial system.

Since little or nothing could be done about the shocks, it was stressed that it was all the more important to focus analytical and research attention on uncovering as much as was possible about any pre-existing vulnerabilities in the domestic financial system. Since some policy instruments, such as interest rates, were no longer available for domestic financial stability purposes, macro prudential policy measures would be needed to mitigate these vulnerabilities in order to minimise the chances of a shock amplifying into a full-blown financial crisis.

It was also noted that an expeditious response in a crisis necessitated the maximum prior preparation. But it was also stressed at the same time that preparation could never be complete since all financial crises contain unique elements (which could not be foreseen). As remarked in the explanatory note about the BB as sent to the Board (Tab 86), given the large element of uniqueness of individual crisis events, there could not be a standard blueprint for the management of financial crises. So the purpose of the BB was largely to document the procedures to be followed in the event of a crisis.

The presentation to the Board envisaged various types of crises of which a Level 1 crisis was one example used for illustrative purposes. It was envisaged that further work would examine preparation for other types of adverse events impacting the banking system.

One such case could involve a situation in which it would be difficult, if not impossible, to discriminate between a bank which is just illiquid, or one which is insolvent. I attach 2 slides from the June 2002 presentation to illustrate how costly errors can be made when the financial stability authorities are confronted with such a choice – a choice which is eminently realistic given the opaqueness of banks as well as their likely incentive to misrepresent their true state of health to the financial stability authorities (Tab 89).

Legal Vacuum

The presentations recognised that there was a legal vacuum in relation to crisis resolution and management insofar as Bank intervention in a relevant financial institution is properly provided for within the current legal framework. Importantly, this legal vacuum meant that the financial stability authorities could be “outflanked by the application of a very well-established corpus of company law” which, when triggered by some private stakeholder, would leave the central bank on the sidelines looking on but powerless to do anything to protect the integrity of a public good if threatened by private legal conflict (Tab 90).

There could, therefore, be a conflict, in a period of financial turbulence, between the protection of private property rights and the financial stability authorities' ability to achieve systemic (public good) objectives, such as protection of payment systems, financial intermediation and the operation of monetary policy.

My explanatory memorandum to the Board in June 2002 (Tab 86), proposed to open discussions with the Department of Finance. In this regard, the FSC minutes of 5 July 2002 note that the BB was also circulated to the DoF with a request for comments (Tab 91). The FSC minutes of 13 Nov 2002 note that no comments had been received and that Oireachtas indicated that he would pursue the matter (Tab 92). At the FSC meeting of the 3 Dec 2002 it was agreed that Oir would initiate contact with the DoF to get their comments on the BB (Tab 93).

In February 2004, the FSC minutes note, under the heading of a proposed meeting with the Department of Finance, that it was agreed, inter alia, to have an exchange of views on financial stability matters and to highlight legal issues in relation to crisis management (Tab 94).

In a note I sent to Financial Stability Committee members on 8th October 2004 (Tab 95), I presented an outline of the work programme for the MPFS Department for the coming (2005) year; under "crisis management procedures", I flagged:

- the need to discuss crisis management pre-planning with the FR and DoF;
- the need to conduct a crisis simulation exercise to ensure that the procedures detailed in the BB were appropriate and efficient;
- the need to look at other type of "generic crisis events" with additional corresponding war games;
- the need to draw on the experiences of peer central banks who had already completed similar exercises; and
- the need to have the whole simulation exercise reviewed by an external expert (it was proposed from the Riksbank).

In the minutes of the FSC for November 2004, it is noted that "The Operational Risk status of our crisis management procedures (including the Black Book) was discussed and it was agreed that the overall status was low risk and risk mitigants were in place to reduce the possible negative effects of an event" (Tab 96). This may have compromised the urgency of the preparatory work on crisis management.

I understand that the meeting proposed with the DoF in June 2002 eventually took place in late 2004. I did not represent the Bank at the meeting with the Department. The FSC minutes of 11 January 2005 report that;

“The Committee was updated on the crisis management discussions with the Department of Finance. In the latest phase, these have looked at legal questions, such as the scope for the Department to take action in the event of a request for an injection of public funds. A “Gap Analysis” in relation to legislative needs is being developed.” (Tab 97).

I am not aware of any follow up on legal issues until the DSG was formed in 2007 at which time the crisis was beginning to hit.

Guiding Principles

In relation to ELA, as has long been recognised, in a crisis situation, the financial stability authorities engagement with the banking industry is subject to constructive ambiguity. This is because central banks cannot enter into specific legal commitments indicating that they would act in a particular way when a bank gets into trouble lest it encourage moral hazard behaviour which would probably take the form of excessive risk taking by banks which, in turn, would only serve to weaken the financial system.

It is notable that there is nothing equivalent, in the area of financial stability and crisis management, to the ECB’s “General Documentation” which lends statutory guidance to the operation of monetary policy in the Eurosystem. In other words, there is an absence of statutory underpinning guiding the response of the competent financial stability authorities in a crisis situation in respect to ELA.

In order to mitigate this lack of legal protection, there is a need for a set of guiding principles (which would include the famous Bagehot principles in relation to the central bank’s lender of last resort function). It would furnish the broad normative contours within which the financial stability authorities would operate in a crisis but which would not, at the same time, tie their hands too tightly (see chapter 4 in the BB) (Tab 98).

The importance of the guiding principles was recognised at the FSC meeting on the 14th November 2006 where it was acknowledged that, “while a rigorous plan for dealing with a systemic event was not possible as each event would have to be dealt with on a case-by-case basis, some Guiding Principles, however, would be very beneficial. It was agreed that this would be an opportune time to review the Guiding Principles as outlined in the CBFSAI’s Crisis Management Handbook” (see Tab 99). The aim was to discuss the principles again in the December 2006 FSC meeting. In the event,

the conclusion from that discussion was that the Guiding Principles (as in the BB) “were appropriate and should be incorporated into the revised crisis management procedures” (see [Tab 100](#)).

Although some cross-border (EU) committees were reported in 2008 as addressing the issue of “agreeing common principles to guide decisions on crisis management work”, it is not obvious what role these may have played in the policy deliberations in the real crisis that followed after the collapse of Lehman Bros in September of 2008.

With regard to the Guiding Principles, it is worth noting that in March 2003, and in my capacity as head of MPFS, I felt it necessary to write to the secretary to the Board since I was concerned, that, in a speech made by the Chairman of the Financial Regulator, the long-established position of the Central Bank on constructive ambiguity was being brought into question ([Tab 101](#)). The moral hazard consequences of this could be damaging to the long-run health of the banking system. There was no feedback from the secretary.

It is noteworthy in this period that, despite the importance of the key functions of monetary policy and financial stability in the Bank and the analysis and research being conducted by the MPFS Department in this context, my request for a complement of staff by the third year of the work programme was not agreed by senior management – indeed, the staff complement for 2003 was cut back severely as noted in my Memo to Dr Casey on 2 July 2003 ([Tab 102](#)). I also exhibit further documents outlining this predicament at ([Tab 103](#)) and ([Tab 104](#)).

It is noteworthy that it was also during this time period that the FSC took ownership and FSR, clearly with a view to exercising tighter editorial control of the financial stability message as conveyed to the outside world. Indeed, it seemed that the FSC was becoming more concerned with toning down the message in the FSRs rather than progressing work on research and analysis and crisis management in order to be in a position to cope with any emerging crisis (since it was deemed by the FSC that the risks of this were low and, furthermore, there were adequate mitigants in place, see above). It is also noteworthy that it was around this time that the idea of a “soft landing” emerged (see above). After the meeting in January 2005 with DoF which identified a need for a Gap Analysis in relation to legislative needs in the area of crisis management, very little progress was made in this crucial work.

2005 -2007

Crisis management during this time period is notable for two issues; the formation of the Domestic Standing Group (DSG) and a number of crisis simulation exercises (CSE).

Domestic Standing Group

The DSG was set up under EU and Irish legislation. It was chaired by the DoF and comprised high level representatives from the DoF (at Assistant Secretary Level), the Bank (at Assistant Director General Level), Oireachtas and Financial Regulator (at Prudential Director Level), Oireachtas

The MoU agreed on the 2nd July 2007 noted that: “(t)hrough the DSG, the parties will develop a framework aimed at managing potential systemic crises by overseeing the preparation of contingency plans and conducting simulation exercise and stress testing, as well as by participating as appropriate in these exercises and reviewing the outcomes. The DSG will develop general principles to guide the resolution of financial crises, taking account of EU work in this area.”

The Red Book was produced under the auspices of the DSG and replaced the BB. The MoU seems to have recognised the need for a list of Guiding Principles to steer the work on crisis management. Such a list of principles were originally included in the BB but were not transferred to the RB when the latter was being drawn up. The Red book accordingly paid more attention to the detailed logistical arrangements needed in the event of a crisis.

Crisis Simulation Exercises

There were four Crisis Simulation Exercises (CSEs) conducted during this period, two domestically (2005 and 2007), and two (both in 2006) under the auspices of the ECB and the EFC-EU respectively. A significant shortcoming of all four exercises is that they were mostly focused on the case of a single bank encountering difficulties, rather than a clustering of banks, or as in the Irish case, almost all banks encountering difficulties at the same time.

Feedback from participants with respect to the ECB and the EFC-EU CSEs indicated that the issues discussed included the lack of legal guidance and protection for decision makers and the difficulty in assessing the systemic impact of individual credit institutions encountering problems. The Report on the Eurosystem exercise highlighted the need to enhance Eurosystem procedures for dealing with a potential cross-border systemic crisis.

The May 2005 CSE involved only the CB and FR. Feedback from the participants (Tab 105) was circulated to senior management at the FSC meeting on the 6th December 2005 (Tab 106). I was not present at this meeting.

It was proposed that work would proceed on a number of legal issues in relation to the powers of the Central Bank and Financial Regulator in dealing with insolvency issues as well as constraints imposed on these financial stability authorities’ policy options by private company law, competition law and winding up directives (issues already raised in my 2002 presentation).

Following a discussion the FSC agreed that legal and logistical issues should be prioritised and the series of crisis groups with different roles as outlined in the BB would be replaced with a single high level “Crisis Steering Group”.

The December 2007 CSE was completed under the auspices of the DSG. Feedback from the participants’ reactions to the game were circulated to senior management and I believe to the DSG (Tab 107).

At the FSC held in January 2008 the committee sought to prioritise important issues raised in the feedback using a modular approach and listed a number of key issues to be tackled at future meetings with “pre-prepared templates of press releases” at the top of the list and a “template of factors that would be taken into account in liquidity and solvency analysis” at the bottom.

Given the extensive feedback by participants in the domestic CSEs from as far back as 2005, it now looks like a missed opportunity not to have progressed many of these issues more expeditiously which would have left the financial stability authorities in a better state of preparedness for any crisis especially in light of the fact that financial stability conditions continued to deteriorate.

Recalling the work which I completed on this issue in 2002, I was strongly of the belief that the design of the CSE should have entered into the grey area of uncertainty as to whether the troubled bank was insolvent or merely illiquid. In this realistic case, the policy decisions that have to be made by the financial stability authorities were much more difficult. An awareness that crucial judgement calls would be involved and could be very costly. This would help to focus attention on the risks in the system.

It also appeared to me, in retrospect, that the legal issues being prioritised by the FSC, although important, were fairly narrowly focused (e.g., on collateral issues) rather than on the broader legal issues of which financial stability authorities, if any, was empowered to take decisive policy action to protect the integrity of public goods – points flagged in my presentations on crisis management as far back as 2002 (Tab 87).

Finally, it seems to me that the usefulness of these domestic CSEs were, in retrospect, unfortunately limited in the light of the fact that they did not succeed in testing the procedures and the crisis committee structure outlined in the BB nor did the CSEs leave any role to be played by the Guiding Principles.

Crisis Management Work Committee Structure

In mid-2007 Liam Barron retired from the Central Bank and Tony Grimes took over as DG and as chairman of the FSC which is the period that is usually identified as the start of the financial crisis. The new DG set up a number of committees in relation to crisis management:

- Crisis Standing Group which was chaired by Oir [REDACTED]
- Working Group on Crisis Management chaired by Oir [REDACTED]
- Working Group on Liquidity chaired by Oir [REDACTED]
- Working Group on Deposit Guarantee Scheme chaired by Oir [REDACTED]
- The Domestic Standing Group (DSG) (set up in 2006/7) Oireachtas [REDACTED]

The only one of these committees of which I was a member was the Crisis Standing Group (CSG). The intention was that it would be activated in a crisis event and act as a “hub” for discussion and analysis of the event and liaising with the Board/Authority as needed. In an *ex post facto* review of the committee structure which prevailed in the lead up to the financial crisis (Tab 108) it is stated that “in practice, as the crisis evolved meetings tended to be ad-hoc meetings on specific issues rather than a formal convening of the CSG. FSD for example, were not generally involved in these ad-hoc meetings”. I certainly don’t recall having attended any of these meetings. The CSG was not convened in the event of the actual crisis triggered in September of 2008 or, if it was, I was not asked to attend.

Nor was I asked to be a member of any of the other committees just noted above, despite the fact that I was head of financial stability and despite having written most of the early background documentation in relation to crisis management in the CBFSAI.

In addition, in 2008, the FSC which should have been held monthly met only four times before 29th of September 2008, i.e., 16th of January, the 13th of February, 23rd of June and the 10th of September. I missed the last of these since I was on annual leave. The FSC also met on the 12th of November 2008.

Since there was no forum for briefing staff, I found myself in a position in which I was increasingly out of the “loop”, receiving very little information or feedback and being requested to undertake work on an ad hoc basis.

2008 Papers

Papers and Presentations on Crisis Resolution produced in 2008

Below is a list of papers and presentations, which were produced by me and other economists in MPFS on crisis management and resolution in 2008.

The Third Scenario

In 2007 the Department of Finance produced a “scoping paper” dealing with crisis management issues. It had two scenarios: (a) a bank was either illiquid but solvent or (b) unequivocally insolvent or unequivocally approaching insolvency. It was sent to the Central Bank for comments (see [Tab 109](#)).

My comments on the scoping paper emphasised a third scenario. In this scenario, it is uncertain as to whether the bank is merely illiquid or is insolvent and this uncertainty case may indeed constitute a more realistic scenario (see [Tab 110](#)). With banks increasingly involved in financial markets it may be very difficult, in a period of severe asset market turbulence, to know or even ascertain (without an in-depth and time-consuming examination) the true market value of a bank’s assets or the asset market to which it may have a big contingent exposure. It may, therefore, be difficult to infer whether a bank is just illiquid or has become insolvent, especially in light of the incentives a bank may have to disguise its true state of health from a central bank or financial regulator.

It has, therefore, to be conceded that this uncertainty can lead to errors in crisis management decision making. The Central Bank may lend to an institution which is insolvent. This is prohibited by the general terms and conditions embedded in law in the Eurosystem’s “General Documentation”, which says that borrowing counterparties must be financially sound. The Central Bank is open to making a second type of error and this is to refuse to lend to a solvent bank which is merely illiquid, possibly thereby driving that bank into an unwarranted insolvency. Ascertaining the true state of a bank’s health to the maximum extent possible before policy action is taken is crucially important.

As noted above my comments in relation to the third scenario were included in the Central Bank’s response to the DoF (see [Tab 111](#)) and were taken on board in the final version of the DoF scoping paper almost verbatim (see [Tab 112](#)). The final version of the scoping paper was discussed at the DSG on January 11th 2008.

At this meeting under the heading of Work Programme I raised the issue, inter alia, of an insolvency regime for banks (see [Tab 113](#)). At the DSG, on the 8th of February, (I was not present), the DoF made a presentation following up on the scoping paper stating that it was unlikely “that more fundamental structural reforms if concluded to be desirable (e.g., Special Insolvency Regime for

banks) could be achieved quickly.” (Tab 114). In the report of the DSG of that meeting, it is noted that the CBFSAI commented inter alia, that, “Examination of the insolvency regime for banks may need to be undertaken” (see Tab 115).

April Crisis Resolution Options Paper and PP Presentation

This paper dated 10 April 2008 (Tab 116) which I wrote with others examines alternative crisis resolution options for a medium-sized bank that finds itself in difficulties. It discusses the objectives which the authorities are trying to achieve in managing and resolving a crisis besetting an individual bank. It discusses four resolution options (takeover, examination, direction and nationalisation) in two settings (i.e., pre- and post-ELA) and assesses the pros and cons of each.

Section 11 of the paper addresses shortcomings of the existing legal framework with respect to bank resolution in Ireland. It noted the lack of any special insolvency regime for banks to be invoked in turbulent times and that existing private company law could impede the achievement of the authorities’ financial stability objectives. It flags an SRR as a way of dealing with this.

I also made a PowerPoint presentation based on this paper to the Governor and senior management of CB and FR on 24 April 2008, (but not to the Board/Joint Board). In the presentation I again noted the advantages of having a SRR as a crisis management tool (Tab 117).

I understand that the issue was discussed subsequently at a DSG meeting and I understand that the DSG decided that the best course of action by way of follow up would be to consult the Attorney General. To the best of my knowledge, the legal advice was that such a measure would be unconstitutional and could interfere with property rights and that it would require primary legislation which would have the effect of delaying the introduction of the appropriate legislation. However, I have not seen any such advices from the Office of the Attorney General.

June Crisis Resolution Options Paper

It was decided by senior management that we should prepare a paper which would focus on just two resolution options. Accordingly, the June paper (15 pages long) narrowed down the resolution options looked at, as requested, in the April paper (71 pages long) to just two, namely an assisted private sector takeover and nationalisation. It looked at the likely steps and potential pitfalls involved in these two crisis resolution options. The analysis leads to seven recommendations to improve the infrastructure for crisis management and resolution.

This paper (Tab 118), was sent to senior management on 11 June 2008 (Tab 119). The final version of the paper was updated and sent to the DoF on 19 June 2008 (Tab 120) understood to be for a DSG

meeting later that day. There was no feedback from this meeting and there are no minutes available.

One particular view expressed in this paper is worthwhile flagging in the light of the importance it subsequently assumed in the context of the blanket guarantee of the 29th of September. My views were stated quite clearly (see top page 6) to the effect that: “It is generally accepted internationally that shareholders and uninsured creditors should bear the responsibility for their investment decisions and not be protected against losses, whereas unsophisticated depositors are often protected to some extent via deposit insurance schemes”. Moreover, it is noted on page 8 of the same document that “public sector solutions should only emerge when all private sector solutions have been exhausted, bank management should remain ultimately responsible, shareholders should not be bailed out, and creditors and uninsured depositors should expect to face losses”. Accordingly, it was my view that if there were to be a guarantee, it should be confined to deposits, which are the payments media in the economy.

The paper also noted the possibility of introducing a Special Resolution Regime for banks. Most large developed countries have either a unique resolution regime for banks or specific exemptions carved out for resolution in the case of banks.

While the paper argued that there was a strong “case for examining a special insolvency regime in the near term, given the long-term reputational damage that might arise for Ireland as a financial centre as a result of the severely restricted crisis resolution options and vast uncertainties the financial stability authorities are currently faced with”. A Special Resolution Regime for banks would have been a key legal device to protect the public interest by giving the financial stability authorities the first mover capability in an impending crisis.

As far as I am aware no further work seems to have been done on this during the summer months. As I note above, this was probably an opportunity missed.

Special Resolution Regime

Governor King of the Bank of England noted in his testimony to the Treasury Select Committee: that “(t)he UK Authorities are alone in the G7 in being unable to deal with a distressed bank under a special resolution regime. We rely instead on normal corporate insolvency law”.

Similarly in Ireland, in turbulent times, if a bank (or more than one bank) were approaching insolvency, there was only private insolvency law available which treats banks and non-banks in the same way. It is aimed at protecting private interests and not to prioritise the public good. In other

words, there was no legal provision for safeguarding the public good when it is most threatened (Tab 117, see slide 20).

An early intervention by the financial stability authorities to take control of a bank, which is still solvent according to the generally accepted accounting rules and maintain it as a going concern, would likely yield a superior social outcome relative to allowing the bank to become insolvent, in the wake of an inevitable collapse of a house price bubble. It would, therefore, seem important that the authorities be allowed to take control of the troubled institution before it becomes unequivocally insolvent without having to take into account the interests of the existing shareholders, so as to protect public goods such as the retail and wholesale payment systems, the smooth transmission of funds from ultimate savers to ultimate investors and the transmission of monetary policy.

More specifically, an early intervention permitted by the powers conferred by an SRR would allow the authorities to undertake some combination of, or indeed, all of the following: direct and accelerate the transfer of banking business to a third party, in order to facilitate a private sector solution; take control of all or part of a bank through a “bridge bank” as is possible in the US and Canada; appoint a suitable person or “restructuring officer” to carry out the resolution; in the case where an immediate closure of the bank is appropriate, implement a bank insolvency procedure to facilitate a fast and orderly payment of depositors’ claims; and, allow the authorities to take temporary ownership of all or part of a bank as a last resort (Tab 117).

Under ordinary private company law, and without the protection of an SSR any intervention by the authorities could be in contravention of property and other legal rights. What was needed, therefore, was a law that superseded private law and which was aimed at safeguarding the public good. The lack of such a law impeded the authorities in their endeavours to achieve and maintain financial stability. In short, the valuable tools that an SRR would have made available were simply not factors that were there for consideration by the authorities at the time of the financial crisis.

September Crisis Resolution Options Paper

I was on annual leave from 24th of August to 12th of September 2008. This paper was based on my previous June paper but with important differences. I was not involved in the production of this September paper. This paper was also entitled “Crisis Resolution Options”.

I don’t know, but I suspect, that this is the paper which the Honohan report refers to in footnote 144 which says: “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”.

This is diametrically opposed to what is said in the June paper on this topic, namely that if a guarantee were deemed unavoidable to pre-empt a run on the banking system then it should be confined to depositors only. Governor Honohan subsequently acknowledged to me that he could not trace the author of that note but it was evidently not from me.

Additional Contributions

On returning from leave, my deputy manager asked for my assistance on some short notes requested by senior management. I was not asked directly by senior management to undertake this work. In this context, I recall having been requested to list succinctly the pros and cons of a generalised blanket guarantee of deposits. The note had to be produced at very short notice. As can be seen from this one page note (Tab 121) it relates exclusively to a generalised guarantee on deposits. I think that it is clear from the note that the “cons” outweigh the “pros”. I also note in point 8 of the “cons” of a blanket guarantee just on deposits that: “If the authorities have misjudged the situation and poor underlying asset quality leads banks into insolvency then fiscal costs could be potentially very large”.

To the best of my knowledge this note, which was accompanied by some other equally short notes dealing with the crisis issues completed by other economists, was sent to the Director General and possibly other senior management. Since I was not being consulted at the time and since the formal committee structure had been suspended, it was difficult to know what the exact purpose and intended destination of these papers was. There was no feedback from senior management at this time.

Concluding Remarks

There is no doubt that the language of successive FSRs was too reassuring, especially that for 2007, which was published after extensive filtering, and ultimately suppression of, the results of background research and analysis. There are two aspects to this that need to be addressed. Firstly, a careful reading of the FSRs between 2004 and 2007 reveals that, as the objective situation became more financially fragile, the language of concern was going in the opposite direction. It was being toned down at the level of senior management in the CBFSAI. Each draft FSR went through much iteration before it was deemed fit to be sent to the Board or for publication. Secondly, tight editorial control was exercised most intrusively in the case of the Executive Summary but also to some extent in relation to the Overall Assessment, especially in 2007 when the latter was amended to suit the former.

The 2004 FSR reflected a general agreement among the members of the FSC, senior management and members of the Board/Joint Board with the generally bearish message in the report. There is little doubt but that there was general agreement with the risk assignment in the report and those charged with responsibility for financial stability were becoming concerned. But, despite the justification for concern at the start in 2004, and despite the fact that most financial stability indicators pointed to a significant deterioration in the health of the banking system between 2004 and 2007, the FSR for 2007 painted a very up-beat assessment of the health of the domestic banking system

In contrast to the 2004 FSR which contains quite bearish commentary on the Irish housing market and on the state of financial stability in Ireland more generally, the tight editorial control exercised by senior management, after 2004, meant that it was nigh impossible to have any mention of misalignments or bubbles in property prices appear in the Executive Summary of the FSRs. The unwillingness of senior members of the FSC to countenance any mention of property prices being overvalued is well illustrated in the minutes of these meetings. Indeed, when all the indicators, at least with respect to house prices, began pointing simultaneously in the same dangerous direction, the response of senior management was to suppress or dilute the information.

During my time as head of financial stability, I felt that the Governor and senior management did not have much of a sense of the real importance of financial stability, especially in the new financially liberalised environment both internationally and domestically. The financial stability function was severely under resourced. There was no attempt to replace the input lost when the Banking Supervision Department of the FR transferred all the staff in the micro-prudential unit of that

department to work on Basle II and left the FSWG badly depleted and lacking a conduit to the FR. They did nothing to counter the haemorrhage of staff from the financial stability function to the ECB when staff who knew something about financial stability were very hard to find.

Although requested to conduct research and analysis, the results of this work was neglected and ignored for the most part by senior management. There was little or no engagement from senior management on the economic substance of these papers. In fact, the Governor told me that he did not agree with my analysis of financial instability. There were at least three other instances where there were efforts made by the Governor and the Director General to quash any attempts at expressing my views on the sources of financial instability. I have documented two instances above involving heated exchanges of views, with the chairman of the FSC stating that my views were “political”. He rejected my views about the risks as I saw them emerging from the research and analysis work. On another occasion in a monetary policy briefing, when I was endeavouring to argue that excess liquidity was not having the expected effect on overall inflation (during the 2004 – 2005 period) because it was spilling over into financial markets instead and driving up asset prices, the Governor told me, in front of about 10 other senior staff members attending the meeting, that he did not want to hear any more of what I was saying. On yet another occasion, when the staff was briefing the Governor for an Oireachtas Committee Hearing, I posed some difficult questions to the Governor because these were the kinds of questions he was likely to be asked at the meeting. His retort to me was to ask “whose side are you on anyway?”

I felt that editorial pressures were also exercised in other more subtle ways. Each draft FSR went through much iteration before it was deemed fit to be sent to the Board or for publication. Any coherent message coming from the research and analysis tended to be lost by these endless rounds of editing by senior management. Another pressure that increased from about 2005 onwards related to the presentations to the Board. I was given progressively shorter and shorter time slots in which to make my presentation (e.g., 15 minutes to deal with a longish paper on long-term trends in banking). I was also informed by the ADG for Economic Services that my participation at the Joint Board meeting was too proactive and that the protocol was that I should only speak if invited to do so by the Chairman, who was the Governor. I had not previously been aware of any such protocol. Notably, I made only one short presentation to the Board in 2006 and in 2007 I was not invited at all to make a presentation to the Board.

Throughout the period I have, through my research and analysis and crisis management work, become conscious of the risks and vulnerabilities that were building up in the system, mostly from 2004 onwards. All of my work and concerns were presented to senior management and the Joint

Board. For some reason, unknown to me, around the end of 2004 or the beginning of 2005, it appears that a decision was made, which was not based on research or analysis that the risks of a crisis were low and that a soft landing was the most probable outcome. I think that the risks and vulnerabilities that were growing in the system did not attract the policy attention they warranted.

Despite these pressures, I continued to fulfil my mandate as best I could to oversee the conduct of research and analysis of monetary policy and financial stability issues which I considered to be of the highest relevance to the Bank and its statutory obligations.

I should also note that I was required to manage both the monetary policy and the financial stability functions of the Bank at the same time. It effectively meant that fifty per cent of my time was spent on each function which was quite onerous. In most central banks these are two major departments with hundreds of staff combined. It also required that I was a member of the ECB's MPC and BSC simultaneously, virtually unprecedented in the history of the Eurosystem, requiring my attendance at about 20 meetings a year each with extensive agendas most of which would require some intervention by me.

Yet despite this, from the time when I returned from the ECB to the Bank in 2000, I flagged consistently, from a variety of perspectives, the growing vulnerabilities of the Irish banking system in the face of a tail event occurring. I have supplied research and analysis on financial stability and crisis management issues on a consistent basis from as far back as the early 2000s. In retrospect, I would be willing, even in the light of the extraordinary events that have ensued in the meantime, to stand over these results.

It is notable that senior management at the Bank was aware of the results of other studies supporting my house price misalignment estimates, particularly the McQuinn/O'Reilly paper in 2007, and they singularly failed to have any regard for such warnings.

In the end result, it is clear that senior management was informed, and should have been aware, of the dangerous situation that was emerging between 2004 and 2007 in terms of a property bubble and an increasing liquidity problem as manifested most precariously in the banks' growing funding gap. However, senior management failed to have proper regard for this situation. Instead, they ignored the results of these studies with the ensuing adverse consequences for the economy of which we are now all too aware.

I am aware that John Hurley has stated to this Inquiry that he was not aware of contrarian views within the Bank which differed in substance to the Bank's overall assessment. With respect, I think the real issue is that the FSR Executive Summaries and the Governor's messages did not

acknowledge or reflect the empirical evidence from economists that was being provided to senior management as described in detail above.

I think that, if there had been sufficient engagement on these issues earlier and sufficient attention devoted to teasing out the issues, the property bubble and liquidity problems may have been addressed at an earlier and less acute stage. Further, our preparation for the crisis, which reached new levels of intensity in September of 2008, would have been more complete and the reaction would have been less panicked. Although these collectively would not have amounted to any kind of a panacea, they could, in combination, have helped crisis-management decision making and could, therefore, have helped to mitigate losses from the crisis.

ANNEX 1

Liquidity and Financial Stability

One of the main points I endeavoured to convey arising from my examination of the liquidity issue was to the effect that, when there is ample liquidity in the overall economy, bank balance sheets tend to look good. But this also tends to be the time when systemic vulnerabilities start to creep into the system. I first noted this insidious danger in late 2004. To convey a complete view of what I had in mind, I think it is necessary to quote the relevant piece (from my co-authored paper: *“The Role of Liquidity in Financial Stability”*, [1]) in full: “It is important, however, to flag that this danger of strong asset price increases leading to possible market correction – which, if realised, could have negative economic and financial stability effects – can exist alongside a situation in which banks, individually, appear to be strong and robust. This is the situation pertaining at present; according to the usual indicators of banking soundness, banks in the US, euro area and Ireland appear to be in robust health but, at the same time, the financial system could be systemically weak in the face of an asset price collapse”.

I stated this point even more strongly in a speaking note prepared for the Governor for the meeting of the Governing Council of the ECB on the 18th of May 2006 to discuss the ECB’s Financial Stability Review. I noted frankly the following: “it appears to me that imbalances and misalignments in the economy tend to be built up during good times, i.e., when economic recovery takes hold firmly and the sense of uncertainty about the future is dispelled. These imbalances and misalignments will tend to unwind when the economy is hit by a substantial adverse shock or when the misallocation of resources results in investment projects becoming commercially non-viable. But such eventualities are almost inevitable. The real problem then posed for financial stability is that, although the imbalances and misalignments tend to build up slowly as the economy recovers, they can unwind with frightening speed causing huge dislocation in financial markets and in the real economy. In a sense, the seeds of the problem are sown almost imperceptibly during good times of the economic recovery but their downside only becomes blatantly obvious much later” (Tab 122). I think that this is a fairly accurate description of what happened in reality of the financial crisis. However, I received no comments on the briefing note, nor even an acknowledgement of having received it.

Also, in my presentation to the Joint Board in June 2006 I emphasised both in my formal presentation and in my informal speaking note how excess liquidity can become a very disruptive influence (see above).

Excess money’s effect in creating insidious price distortions can reflect itself later in the form of an economy-wide misallocation of resources. The adjustments required to unravel these distortions

can be the source of financial instability. My viewpoint on the importance of excess liquidity in inflating asset prices and driving them into bubble territory was dismissed without discussion by both the chairman of the FSC and the Governor respectively.

In the presentation I made to the FSC on the 13th of September 2007 many of the same warning flags I raised in my (co-authored) paper on liquidity published in the 2005 FSR, were revisited and updated. It was noted that, for many decades before the crisis, banks had become more involved in financial markets (e.g., mixing commercial and investment banking) and accordingly had become more and more exposed, both directly and indirectly, to their vicissitudes. This has been a factor behind the growing number of bank insolvencies since the process of financial markets liberalisation began in the early 1970s.

The demand for money by households and corporates is very sensitive, and increasingly so, to episodes of heightened uncertainty (see [2], with demand soaring during such periods – i.e., liquidity can behave chaotically (as argued further in [3])). This means that the liabilities side of the banks' balance sheets can explode during such times. However, since most of the balance sheet has to remain par value, it cannot easily shrink when the environment of uncertainty abates, and changes to one of investor confidence and optimism. When this happens, the demand for money falls (again money, or liquidity, behaving chaotically), but the stock of money outstanding remains largely unchanged. The ensuing monetary overhang precipitates a search for yield, an asset price escalation and ultimately a bubble ([4], and as reported in *Borzen Zeitung* (2005)). This has also been demonstrated separately in the case of commodities (see [5] and [6])) and in the case of equities [7]) as asset classes. Analytical work conducted at the ECB and the BIS is also supportive of this view. Given banks' growing involvement in financial markets, the unravelling of this monetary overhang and the associated desperate search for yield had (has) the effect of inflating the asset side of the banks' balance sheets. At the same time the monetary overhang furnishes the funding (deposits) that allow some of these asset positions to be, frequently, highly leveraged. An asset price collapse in such circumstances can quickly erode the banks' capital base.

Two papers drafted in co-authorship with others [1] or by me exclusively (Tab 77) on the role of liquidity in financial stability were, as indicated above, not well received by senior management. Despite this, I persisted in my belief that liquidity risk was one of the most, if not in fact the most, threatening risk to financial stability at the time.

It is clear that money is not just a transactions medium but is also a financial asset. As a financial asset, it has risk/return features which in periods of heightened uncertainty render it a very attractive asset to hold. The corollary is also valid – in periods of returning investor confidence,

money becomes a very unattractive financial asset to hold. Therefore, an adverse shock hitting the economy can suddenly transform a situation of an ample supply of liquidity (money) into one of a dearth of liquidity supply. Wholesale liquidity can dry up because liquidity becomes such a valuable financial asset to hold [1]. An ensuing credit crunch and recession can then jeopardise the solvency of the banks or even the whole banking system.

Increased competition in banking in Ireland in the years leading up to the crisis (with the arrival of new entrants) was having the effect of compressing interest rate margins [8]. But since volume growth on both sides of the balance sheet was so robust due to the prevalence of ample liquidity, the effect of squeezed margins on the bottom line was disguised. Banks themselves, as well as the financial stability authorities, chose to neglect this trend compression in interest rate margins (which is an international phenomenon, see [9], thematic paper in the 2006 Financial Stability Report). However, since expanding volumes (driven by surplus liquidity) can evaporate rapidly in the face of an adverse shock, banks may be forced into making losses and having their capital cushion eroded on foot of such an event.

Persistent excess liquidity tends to lower the actual real interest rate relative to its equilibrium (or natural) level. Those who enter into variable rate loan (especially mortgage) contracts at these low rates may find that they can no longer afford to service the loan when rates rise to their equilibrium level, resulting in a clustering of loan losses and also serving as a threat to financial stability [10].

The attractiveness of money as an asset to hold at both the wholesale and retail levels has the effect of attenuating the effectiveness of monetary policy measures, inducing the central bank to increase the dosage of monetary policy and leading to enormous surplus or liquidity overhangs when the economy returns to a more normal state [11]. This only serves to increase the threat to financial stability.

This excess money (liquidity) view can also explain why the macro-economy could look so healthy, in terms of the usual indicators flagged, just as serious distortions are beginning to build up. Excess liquidity can, for example, drive a boom in, say, the construction industry just as serious distortions are beginning to build up. A boom in construction will stimulate growth and reduce unemployment. But if the industry is responding to a distorted signal (and does not know it) it will end up producing more housing units than are needed leading to excess supply and a collapse in the construction industry (a synopsis of what occurred in reality). If it is persistent excess liquidity that is responsible for the low interest rates, which I think it is, to which the industry is responding, then this signal is distorted and likely to lead to a misallocation of resources, whose correction (a painful reallocation of resources) weakens the real economy and jeopardises the stability of the banking system.

By way of interest, recalling the Regling and Watson report noted above, I would like to note that I was a discussant to a paper presented by the second of these authors, Watson, at a conference in the ECB entitled: “Real Convergence in Central, Eastern and South-Eastern Europe”, held on the 1st and 2nd of October 2007. In my response to Watson, (Tab 123) and (Tab 124), I adumbrated much of what can be found in the two retrospectives on the financial crisis. Indeed, I went beyond this in concluding that the convergence process for Ireland within the euro area gave rise to a dangerous dynamic instability. I concluded that “(t)he failure of Irish interest rates to respond to domestic Irish conditions meant that a natural market self-correcting mechanism was effectively absent. It looks, therefore, as if the sluggish convergence in living standards and price levels along with rapid convergence in money and capital markets gave rise to a situation in which a natural constraint on growth speed limits, i.e., the endogenous response of the real interest rate, was absent”. As I noted at the time: “(n)owhere was this strong dynamic more strongly felt than in the domestic (Irish) housing market” where the user cost of capital in housing was substantially negative for much of the period leading up to the financial crash (Tab 17 figure 4). I argued that speculative forces (facilitated by the more than ample supply of liquidity) could drive an upward spiral in house prices stemming from an upward-sloping demand curve. This would not happen under financial autarchy where the increasing demand for loanable funds would put upward pressure on the domestic interest rate thereby choking off demand automatically [12].

This convergence theme as an input into the financial crisis in Ireland was picked up more formally in a paper which I presented to the Bank of Israel in 2012 which was published in 2013 [13]. It focused on the pronged dislocation in the economy stemming from two distortions relating to nominal wage setting and nominal interest rate setting. These distortions drove a wedge between the actual real rate of interest and the actual real growth rate and this wedge, in turn, caused serious dislocation and a misallocation of resources. The correction of this (i.e., a painful re-allocation of resources) weakened the economy and helped to undermine financial stability.

Identifying the disruptive role played by liquidity as one of the main causes of the weaknesses and vulnerabilities in the banking system proved to be a very unpopular view with senior management in the Bank. This view has, however, been corroborated by the event of the financial crisis.

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