# Who saw it coming? The UK's great financial crisis

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Abstract: Who foresaw the UK banking crisis? This paper addresses this issue through detailed empirical work on the content of the Chancellor of the Exchequer's speeches, Bank of England Financial Stability Reports, Financial Service Authority reports and speeches by Bank of England officials, editorials in the Times and Financial Times, bank annual reports and financial statements, credit rating reports, share price movements, Parliamentary questions, Treasury select committee reports and the output of academic economists. We find that few people inside or outside government recognised the existence of significant financial vulnerabilities in the financial system in the years prior to the collapse of Northern Rock in September 2007. We use the conceptual lenses of individual, institutional and paradigmatic pathologies to provide explanations for this failure to detect looming crisis conditions. We argue ultimately that regulators and commentators were blinded by faith in market forces and the risk-tempering properties of securitisation.

Key words: financial crisis, Northern Rock, UK, warnings

## Introduction

In the few years prior to the 2008 financial crisis in the UK, what evidence existed of vulnerabilities in the banking system, and what evidence is there that policy makers and significant actors outside government were aware of any such vulnerabilities and raised concerns accordingly? These issues are significant, because hindsight has a habit of producing narratives that "rewrite history" from the vantage point of a crisis that actually happened. In his memoirs, Gordon Brown (2010, 19) suggests that he had been growing increasingly concerned about financial stability and had pressed for coordinated international action to address the issue prior to 2008.

Yet, such claims did not seem to filter through to his successor, Darling (2011, 3), who reported that the economy was in good shape when he took over, and that "many people have claimed to have predicted what was going to happen. Most of them failed to mention it at the time".

Literature on the politics of crisis management helps us understand how, in the aftermath of crisis – a period of catharsis where there is typically a search to hold someone or something accountable – a number narratives can emerge (Brändström and Kuipers 2003; Drennan and McConnell 2007; Boin et al. 2008). These range from personal claims to have anticipated a crisis but no one listened, to claims that warning signs were clear but somehow those in positions of power and responsibility failed to recognise and act on them. The global financial crisis conforms with "normal", post-crisis behaviour. Since late 2008, politicians and regulators across the world have been blamed for their failure to anticipate and so prevent the global financial crisis. Voters may hold banks responsible for causing the crisis, but they also blame policy makers for failing to recognise that banks were taking too many risks and that the financial system was vulnerable (Hellwig and Coffey 2011). Krugman (2009, 163) maintains that "politicians and government officials should have realised that they were recreating the kind of financial vulnerability that made the Great Depression possible". Former US Vice President Cheney has argued that the absence of warnings was because "nobody anywhere was smart enough to figure it out" (quoted in Roubini and Mihm 2010, 1).

Retrospective analysis has attractions because we know that the "story" culminates in crisis, and so it is relatively simple to construct a narrative that is highly critical of policy makers, regulators and others for being blind to forces that should have seemed inevitable. Yet, what is less easy is to consider the extent and quality of evidence of the time (warning of potential crisis or at least the possibility of such), as well as potential counter evidence and its context, which might help explain a lack of awareness and a lack of action. The goal of this paper is to address these questions under the umbrella of "who saw it coming?" and to seek plausible explanations for what transpired in the months and years leading up the 2008 crisis – including the collapse of Northern Rock in September 2007. While our questions are empirical ones, our analysis is informed by conceptual literature across a range of different disciplines that addresses evidence of threats and the consequent processing of such threats in decision making, institutional and societal contexts.

The paper proceeds as follows. Initially, on a conceptual level, it considers the role of "evidence", focusing particularly on pathologies at the level of individual decision makers, institutions and societal paradigms that might explain failures to be alert and/or address evidence of impending failure.

Then, after placing the UK banking crisis in the historical context of bust, boom and bust again from the late 1980s through to 2009, it directly addresses the matter of "who saw it coming?". Our empirical work is based on a survey of the content of the Chancellor of the Exchequer's speeches, Bank of England Financial Stability Reports, Financial Service Authority reports and speeches by Bank of England officials, editorials in the Times and Financial Times, bank annual reports and financial statements, credit rating reports, share price movements, Parliamentary questions, Treasury select committee reports and the output of academic economists. It is possible, of course, that vulnerabilities in the financial system were identified and highlighted in places and by people not surveyed here – by leader writers on the Guardian rather than on the Times; by market analysts rather than credit agencies; or by ministers other than the Chancellor. But we have no reason to believe this to be the case. No doubt particular individuals, such as the market analyst, Meredith Whitney (Banks 2011, 136), were expressing concerns about future price movements. But if a large number of individuals had been predicting the end of the financial boom, we would have expected to see reference to this in the sources examined here.

Specifically, we develop four empirical arguments. The first is that there is evidence that the banks had been operating an increasingly risky business strategy in the years prior to the crisis and that these risks were reflected in the content of the banks' balance sheets. The second is that there is little evidence that policy makers within government were aware of or concerned about vulnerabilities in the financial system prior to the failure of the Northern Rock bank in September 2007. The third is that there is little evidence that actors outside of government recognised the existence of such vulnerabilities either. Editorials in the Times and Financial Times, questions asked by MPs in Treasury Questions, Treasury select committee reports, Bank annual reports, credit rating agencies and academic economists expressed few concerns about financial stability. The fourth is that the failure of Northern Rock did not lead to a fundamental and widespread reassessment of financial stability. A number of actors inside and outside of government seem to have regarded the Northern Rock case as sui generis. The article concludes by revisiting the lenses of individual, institutional and paradigmatic pathologies to argue that a generalised faith in market efficiency and an entirely mistaken understanding of how securitisation was being employed by banks blinded actors to the existence of systemic risks within the financial system.

## Thinking conceptually: evidence of impending failure

The nature of "evidence" is a contested one in public policy, manifested particularly in recent debates about evidence-based policy making

(Pawson 2006; Head 2008; Monaghan 2011). One tendency, in the rationalist-scientific tradition, is to consider evidence as an objective fact, while a counter-tendency, in the interpretative, discursive tradition, is to consider evidence as a construct – often skewed in favour of powerful actors, coalitions and institutions in the policy process (see Bovens et al. 2006; McConnell 2010a, 2010b). This lack of agreement is instructive. From a retrospective standpoint, whether or not we are armed with knowledge that a crisis actually happened and want to consider whether a trail of evidence existed that might have prevented the crisis or at least mitigated its impact, we are left with two seemingly divergent ways of thinking about the issue. Put crudely, the rationalist-scientific tradition would consider evidence of threats as "real", and therefore ask what decision-making pathologies led to credible evidence being ignored. By contrast, the interpretative tradition would focus on why policy makers perceived there to be no credible evidence of impending threats. We cannot hope to resolve such issues here, especially given deeper ontological and epistemological issues that typify the deeper diversity of methods and approaches with political science (see e.g. Hay 2002). Nevertheless, an analytical framework to help us consider both can be derived from literature on the broader and complex causal factors of crisis. In the crisis and disaster literature, it is well accepted that failure is not the product of a single, context-free phenomenon (Gilpin and Murphy 2008; Woods et al. 2010; Boin and Fischbacher-Smith 2011). Rather, failure is the product of multiple individual, institutional and societal factors that coalesce in pathological ways. By focusing on each factor in turn, we have a framework for circumventing (at least for present purposes) deeper approaches to "evidence" of system vulnerability, which allows us to consider differing explanations for evidence being ignored. The additional advantage of this approach is that it allows us to capture typical post-crisis discourse that seeks to privilege some causal factors over others by blaming individual decision makers, flawed institutional frameworks or misguided societal paradigms about how we should be governed. We can briefly address each under the rubric of "pathology" by looking at pathological decision-making, pathological institutional frameworks and pathological societal paradigms. This typology will be used later in the article to help identify and explain who did or did not see coming a crisis in the UK banking system.

*Individual pathologies*. Crises often begin as unclear, ambiguous and even contradictory signals, placing political and policy actors in the role of "sensemaker", needing to rationalise the scale and significance of what might or might not happen (Boin et al. 2005). Yet, human beings are fallible. Understanding fallibility cuts across many groups of literature,

including human error (Reason 1990; Dekker 2006), stress and decisionmaking (Janis and Mann 1977; Post 2005), military folly and incompetence (Dixon 1994; Tuchman 1995). Individuals may, for example, misperceive potential threats as "safe" or even be blind to the possibility of failure for reasons, such as blocking out potential bad news as part of a coping strategy, overconfidence, risk-taking, cognitive biases in information processing and misjudgement. While individual failures can be subject to either accusations (decision makers should have known better) or defence (decision makers did what they thought was right at the time), the focus for explanations remains fixed firmly on individuals holding positions of power and authority who should have been alert to any evidence of failure appearing on the horizon.

Institutional pathologies. Public, private and non-governmental institutions and the myriad of relationships between them provide the forums in which strategies are formed and decisions taken, impacting on everything from how societies are governed to how economies perform. This breadth and depth is studied across literatures as diverse as new institutionalism, administrative theory and state theory (see e.g. Hood 1998; Bell and Hindmoor 2009; Peters 2011). Institutions may not be adept at dealing with potential evidence of danger for reasons such as delivery on core goals taking priority over potential threats to these core goals, biased information processing to fit with institutional priorities, and norms and culture that do not reward or even discourage the reporting of potential "bad news" (Weick 2001). Amid the diversity of literatures and explanations, a strong implication in terms of evidence and warnings is that failure happens when we are not well served by the those institutions that should have been alert to and prepared to act upon credible evidence showing that safety, security, stability and performance may be at risk.

Paradigmatic pathologies. The grander models and principles that guide societies are at the heart of often bitter disputes about the ideals best able to provide societal success and avoid failure. Academic disciplines, from political science and economics to history and philosophy, are replete with divergent views on the virtues or evils of capitalism, free markets, regulation, public provision and more (see e.g. Osborne and Gaebler 1992; Friedman 2002; Klein 2007; Bennington and Moore 2010), Many explanations and arguments exist that might help us understand why societies may not be as vigilant or as receptive as they should to evidence that their overarching paradigms could be at risk of generating failure. They include assumptions about the capacities of existing models to promote selfstabilisation (e.g. the self-correcting abilities of markets) and a propensity

for evidence about potential new threats to be dismissed by pointing to historical precedents for averting crisis or recovering rapidly in the event that the "worst" happens (see e.g. Brändström et al. 2004). Once we locate our understanding primarily at this paradigmatic level, explanation for failures to be alert and/or act on evidence of system vulnerability rest essentially with grander ideological assumptions, rather than the institutions and individuals who operate within these broader parameters.

At very least, we can see that the role of evidence and explanations for failure to be alert to/act upon indications of banking vulnerability in the UK prior to 2008 is far from straightforward. Issues of ambiguity and contestability, as we will argue later, form an important part of what we consider to be a plausible explanation for what evidence and argument there was of the role of failure, to be filtered out of decision maker, institutional and paradigmatic agendas. Before addressing these issues in detail, let us turn our attention first to the context of the banking crisis and then an empirical assessment of "who saw it coming?"

The banking crisis. The reinvention of the City of London as a global financial centre began with the creation of the "Eurodollar" market in 1960s, gathered pace with the abolition of domestic exchange and capital controls in 1979 and reached at least a symbolic crescendo with the "big bang" of stock market deregulation in 1987 (Kynaston 2011, 558-575). Over the following decade, the reputation and profitability of British banks and financial institutions were shredded by deregulation and competition (Augar 2010, 16-27). The manipulation of share prices during the takeover of a large brewer, Guinness, in the late 1980s exposed a number of banks to charges of insider dealing and mendacity. The spectacular collapse of the Bank of Commerce and Credit International in 1991 and of Barings in 1995 exposed the limitations of the Bank of England and a weak culture of self-regulation. In the early 1990s, nearly all of the most venerable and ancient British merchant (investment) banks including Barings, S. G. Warburg, Smith New Court and Kleinworth Benson, were taken over by or merged with larger American, Japanese or European firms.

The fortunes of London's established banks may have floundered, but the City of London nevertheless flourished as a global hub of financial trading in the late 1990s and early 2000s. London's convenient time zone, social cosmopolitanism and high quality legal and information technology support services, and the UK Government's commitment to a "light touch" regulatory approach, attracted new global entrants. Gowan (2009, 16) argues that, during the first part of the new Century, London became to New York something akin to what Guantanamo Bay would become to Washington: the place where you could do abroad what you would not be

allowed to do at home. Furthermore, the UK's previously staid high-street banks, Barclays and Lloyds, as well as their fast-growing rivals, the Royal Bank of Scotland (RBS, which took over Nat West in 2000) and HBOS (formed from the merger of the Bank of Scotland and the Halifax Building Society in 2001), and the British-headquartered global giant, HSBC, prospered. The total assets of these five banks rose from £82,000 billion in 1990 to a staggering £1,300,000 billion in 2007. The Lobby Group, CityUK (2007), estimated that financial and banking services together contributed £103 billion to the British economy in 2006, comprised 8.3 per cent of GDP (compared with 12 per cent for manufacturing), employed 303,000 people in London, generated a £44 billion trade surplus, attracted £40 billion in foreign direct investment and accounted for 25 per cent of Corporation Tax revenue.

We now know how this financial boom ended. In 2006, falling house prices in the US bankrupted regional real estate firms and local mortgage lenders. In August 2007, the US investment bank, Bear Stearns, and the French bank, BNP Paribas, announced that they had sustained significant losses through hedge funds invested heavily in the US housing market. Banks and other financial institutions started to demand higher interest payments and higher-grade collateral in return for lending to other banks. The first major victim of this "credit crunch" was the Northern Rock bank, which had to be rescued in September 2007. We argue that this watershed moment marked the start of the financial crisis in the UK. From that moment on, the relevant question for policy makers was not whether the financial boom in the UK would come to an end but how.

Following the turmoil in financial markets in August and the collapse of Northern Rock in September, central banks took coordinated action to inject liquidity into financial markets. This made little difference. Confidence continued to ebb away as banks sold their assets and attempted to raise new capital in order to repair their balance sheets. In March 2008, Bear Stearns failed and was bought by JP Morgan. On 16 September, Lehman Brothers, an investment bank with 25,000 employees and \$600 billion in assets, declared bankruptcy. With panic spreading, the giant insurance group AIG, the two government-sponsored mortgage providers, Fannie Mae and Freddie Mac, and Washington Mutual and Merrill Lynch were either taken over or effectively nationalised. The collapse of Lehman Brothers also destroyed what little confidence remained within the UK banking sector. On 18 September, HBOS - which had incurred eyewatering losses in commercial property markets - was taken over by Lloyds TSB. On 29 September, the Bradford and Bingley bank was nationalised. On 1 October, the Bank of England announced that it was extending a £30 billion bridging loan to the RBS. On 8 October, the government unveiled a £37 billion scheme to recapitalise all the major banks. Over the next few weeks, Lloyds and the RBS were effectively nationalised. With bank share prices still moribund, the Treasury (2009) unveiled a new Asset Protection Scheme in January 2009, which gave the banks the option to insure themselves, at the taxpayer's potential expense, against further losses on their most risky assets.

It is within this context that our empirical work has produced four key findings, which we detail below.

There is evidence that banks had been operating an increasingly risky business strategy in the years prior to the crisis, with these risks reflected in the content of the banks' balance sheets.

Government ministers and lobby groups like CityUK and the British Bankers Association celebrated the growing size and profitability of the banking system during the financial boom. Yet, the banks' publicly available balance sheets revealed a number of significant vulnerabilities.

First, the banks had significantly extended their leverage – that is, the value of their assets relative to their equity – to unprecedented levels. Average leverage within the largest UK banks rose from an already high 23:1 in 2000 to 28:1 in 2007 (Haldane et al. 2010, 86–87). Banks held significant assets in off-balance sheet conduits within the "shadow" banking system that were particularly vulnerable to the freezing of short-term wholesale credit markets. In 2006, RBS held £48 billion of assets in conduits to which it was forced to extend a £15 billion credit line in early 2007. HBOS held £37 billion in assets in an investment vehicle, Grampian, which had invested heavily in the US housing market. Lloyds held £8 billion of asset-backed securities through an off-balance sheet investment vehicle, Cancara (Lloyds 2007, 12). Leverage mattered, because it meant that the banks were exposed to huge losses when the value of their assets fell. At a leverage ratio of 30:1, a 3 per cent fall in asset prices is enough to leave a bank technically insolvent (Stiglitz 2009, 331).

Second, and in an effort to circumvent the limits imposed by the size of their deposit base, the banks borrowed heavily on wholesale funding markets, rolling over their debts on a yearly, monthly or, sometimes, even daily basis. Total deposits as a proportion of total assets at the five largest UK banks – HSBC, RBS, Barclays, HBOS and Lloyds – fell from 67 per cent in 2000 to just 37 per cent in 2007. The Financial Services Authority (FSA; 2011, 40) estimated that the "customer funding gap" at the major UK banks rose from just £1 billion in 2000 to nearly £600 billion in 2006.

Third, and as a result of their asset-purchase spree, the total size of the UK banking sector grew dramatically. In 1900, the assets of the three largest UK banks were equivalent to just 3 per cent of national GDP. By

2006, they amounted to over 500 per cent of GDP (Haldane 2010). This mattered because it meant that the banks were "too big to fail" and so became the ultimate responsibility of the taxpayer.

Fourth, the UK banks increasingly shifted their business model away from long-term domestic and business lending and toward trading (Erturk and Solari 2007). The securitisation of assets was a crucial part of this process. Rather than keeping assets (the loans they had made) on their balance sheets, banks increasingly "securitised" their assets into bonds that were then sold to outside investors. In theory, this reduced risk, because it meant that banks were not exposed to losses on the loans they had made. But, in practice, securitisation created new sets of vulnerabilities because banks were trading in these assets. We say more about this presently.

These vulnerabilities were compounded by the accumulation of personal debt, which rose from 80 per cent of GDP in 1999 to 115 per cent in 2007 (Turner 2009, 13). In a closed economic system, lower savings would have meant lower deposits and lower deposits would have limited the amount the banks could lend. The UK banks were, however, able to make up for the shortfall in deposits by borrowing on wholesale markets that had access to surplus funds generated by China and OPEC countries.

The financial crisis in the UK was driven by the interaction between these factors. A collapse in the US housing market and a downturn in the UK housing market in late 2007 exposed the banks to significant losses, because they held so many securitised loans as trading assets on and off their balance sheets. Because the banks were so heavily leveraged, these losses raised concerns about solvency. The lack of transparency in trading markets meant that nobody could be sure who had made what losses. In this uncertain environment, the banks exhibited an ever-greater reluctance to lend to each other. With the wholesale markets slowly freezing over, banks were forced to sell assets to remain within their regulatory capital requirements. This put in motion an increasingly vicious circle in which falls in asset prices required the banks to sell further assets, which resulted in further falls in asset prices. When Lehman Brothers failed, the financial sector imploded as banks, already overwhelmed by their losses, struggled to remain solvent.

If policy makers had recognised the existence of key vulnerabilities within the financial system and had taken action to address them, they might have prevented and would certainly have reduced the risk of a financial crisis occurring. Within the terms of the international Basel agreement, the FSA could have required the banks to raise additional capital or, more precisely, to raise the risk-weightings used to determine their minimal capital requirements for different categories of loans and trading activities. Regulators could also have blocked or at least imposed

additional restrictions upon RBS's takeover of the Dutch bank, ABN Amro, in 2007. The Bank of England could have required the banks to hold larger cash reserves, and the government could have legislated to make possible the orderly sale of a failing bank as a going concern. Although it might have risked undermining market confidence, the Bank of England's Monetary Policy Committee could also have raised interest rates in order to counteract the bubble in asset prices. There are limits to what policy makers could have achieved. Because London is a major global financial centre and because the UK-based banks held a large part of their assets overseas, it would simply not have been possible for policy makers to insulate UK banks from the impact of the global crisis. But the government could have acted to ensure that the banks were in a stronger position once that crisis began. They did not do so. The Treasury, the Bank of England and the FSA did not take any action prior to August 2007 to reduce the likelihood or likely impact of a financial downturn. To take just one example, the Treasury had identified shortcomings in its arrangements for dealing with a failing bank as early as 2004 (National Audit Office 2009, 9). It had not, however, regarded this issue as a priority and so had not pressed for new legislation to be promulgated.

There is little evidence that policy makers within government were aware of or concerned about vulnerabilities in the financial system prior to the failure of the Northern Rock bank in September 2007.

We start, briefly, with a review of the Chancellor's speeches between January 2004 and September 2007. In his 2004 Mansion House speech, Brown (2004) argued that the City had "learnt faster, more intensively and more successfully than others the significance of globalisation" and went on to suggest that what "you have achieved for the financial services sector, we as a country now aspire to achieve for the whole of the British economy". A year later, he told the Institute of Directors that the "City of London continues to lead the world" (Brown 2005a). At the "Advancing Enterprise" conference, he maintained that Britain was "at the cutting edge of global advance" in capital markets and financial services (Brown 2005b). In his Mansion House speech that year, Brown (2005c) boasted that "London is the favoured location of choice for more international business than ever before". Then, in June 2007, as liquidity in global credit markets was already tightening, Brown (2007a) famously declared "a new golden age for the City of London". Over this period, the Chancellor did articulate concerns about the economy – relating to rising oil prices (Brown 2004), European Union sclerosis (Brown 2005a), inadequate skills training in schools (Brown 2005b), global price inflation (Brown 2005c), excessive

public sector pay settlements (Brown 2006a), poor transport infrastructure (Brown 2006b), protectionism (Brown 2006c) and excessive regulation (Brown 2007b). In not one speech did he express concerns about UK or global financial stability.

The Bank of England offered a more nuanced set of reflections in the years prior to 2007. The Financial Stability Reports published between 2002 and 2007 contain often detailed discussions of subjects like securitisation, derivatives trading and capital reserves, which now form central parts of debates about the causes of the 2008 crisis. They also identify some significant sources of risk. The July 2006 report, for example, identifies six "vulnerabilities": unusually low premia for bearing risk; large financial imbalances amongst the major economies; rapid releveraging and underpriced corporate risk; high UK household sector indebtedness: rising systemic importance of large complex financial institutions with expanding balance sheets and risk appetites; and the dependence of UK financial institutions on market infrastructures and utilities for clearing and settling payments and financial transactions that might be disrupted in a crisis. These factors are all the subject of extensive commentary. Indeed, in its 2006 report, the Bank reports that it has conducted "stress tests" on these vulnerabilities, and that the "scale of the losses associated with them" could be "significant" (Bank of England 2006, 10).

Such concerns were echoed in speeches given by senior bank officials. As early as January 2004, the Deputy Governor of the Bank, Andrew Large (2004, 4), pointed to the problems posed by the "dynamics of collective, and sometimes irrational behaviour". The following year, Large (2005) expressed concerns about the absence of any clear targets for or measures of financial stability. Large's successor, John Gieve (2006a), argued that a bonus culture within the City of London had underpinned the growth in leverage. Later that year, the Executive Director of Financial Stability, Nigel Jenkinson (2006), warned that commercial property price increases were unsustainable and that any sudden crash could imperil financial stability. Finally, Jenkinson (2007) persuasively argued that the downturn in the US housing market had exposed limitations in the UK banks' risk assessment procedures.

There is, nevertheless, a danger in reading these expressions of concern outside of the context in which they were published. The remit of the Bank of England's (2006, 6) Financial Stability Reports is "not just to consider the most likely outcomes" but to look for "low probability events". As a result, the reports have a rather ritualised quality in that they commence with an upbeat assessment of the state of the economy before pointing to underlying risks and contra-indicators. In the case of the six vulnerabilities identified in its 2006 report, the Bank concluded that "far and away the most likely outcome in the near term is that none of the vulnerabilities crystallise" (p. 10). It also categorically states that the UK financial system is "highly resilient" and that, individually, none of the vulnerabilities pose a significant risk to the capital base of the UK banking system (p. 36). In a public *mea culpa* delivered in 2012, Mervyn King (2012) acknowledged that, while the Bank of England "had warned that financial markets were underestimating risks" (p. 5), it had not "imagined the scale of the disaster that would occur" and had "failed to shout from the rooftops that a system had been built in which banks were too important to fail" (p. 5).

In its annual Financial Risk Outlook (http://www.fsa.gov.uk/library/ corporate/outlook), the FSA offered a similar assessment of UK financial stability to the Bank of England. In 2004 and 2005, the "priority risk" the FSA (2005a, 2) identified for the UK related to the miss-selling of complex financial products to consumers and growing personal debt within the context of "sustained benign economic conditions". The FSA expressed few, if any, concerns about overall financial stability. In a press release accompanying the publication of its 2005 report (FSA 2005b), the FSA's Chairman, Sir Callum McCarthy, argued that economic growth would continue to underpin financial stability. In January 2006, the FSA (2006, 4) did express a concern that low interest rates might have led financial institutions to underprice risk and urged companies to conduct rigorous stress tests on their portfolios. Yet, this must be seen in the context of the FSA's (2006, 1) overall judgment that "our central macroeconomic case is one of continued economic and financial stability". By January 2007, the FSA (2007, 1) had recognised "an increasing risk that the business operating environment we will face over the next 18 months, both in the UK and abroad, could be more challenging than in recent years" and warned of the possibility of a "disorderly" unwinding. Yet, even then, such concerns were qualified by an assessment that "our central economic scenario is one of relatively benign economic conditions and financial stability, a view that is in line with consensus forecasts" (FSA 2007, 2). Indeed, we now know that between January 2006 and July 2007, of the 61 "major topics" placed on the agenda for meetings of the FSA's Board, only one related to financial stability. Furthermore, of the 229 items reported by the FSA's Managing Director of Retail Markets to the Board, only five related to bank prudential regulation (Treasury Committee 2012, 24).

Our survey of government deliberations prior to September 2007 is not comprehensive. We have not examined every ministerial speech or statement or every Bank of England publication. We have, however, examined key sources of available information. There is no evidence that policy makers within government recognised key vulnerabilities within the

financial system. The question that now arises is whether others outside of government demonstrated more prescience.

There is little evidence that actors outside of government recognised the existence of such vulnerabilities either. Editorials in the Times and Financial Times, questions asked by MPs in Treasury Questions, Treasury select committee reports, Bank annual reports, credit rating agencies and academic economists expressed few concerns about financial stability.

The *Times* is a newspaper of record whose contents have routinely been coded within other political science projects (John and Bevan 2012, 98). A researcher classified the subject content of 1,745 editorials published in the Times between 1 August 2005 and 10 September 2007 using the Policy Agendas framework. The Policy Agendas project coding system has been widely used to measure and compare changes in policy agendas across a range of sources including speeches, legislation, budgetary appropriations, legislative questions and newspaper reports (Dowding et al. 2012). Items are classified into one of 19 major policy codes and one of more than 250 policy sub-categories (http://www.policyagendas.org/). One of these major codes relates to banking, finance and domestic commerce. Evidence coded using the Policy Agendas method can be aggregated in a quantitative form. However, coding itself is a qualitative exercise.

We coded editorials rather than, for example, front page stories, because editorials give newspapers the opportunity to identify and express concerns about issues outside of the immediate headlines. Editorials are a particularly useful source of information, because they provide a window upon and a measure of the impact of anxieties expressed by other actors. If the Bank for International Settlements, the International Monetary Fund, UK-based economists or other actors had identified the risks accumulated within the banks' balance sheets and predicted a financial crisis, we would expect to see this being discussed in editorials.

Each editorial we examined was assigned one major and one minor code. Discussions relating to UK foreign policy or events in other countries

<sup>&</sup>lt;sup>1</sup> One of the two lead authors then randomly checked five per cent of these entries. The reliability of Policy Agendas coding has previously been assessed using correlation coefficients to assess the extent to which a coder's ratings are associated with those of another coder. Mikhaylov et al. (2010) show that this will generate misleading results if, for example, coders' results consistently differ from each other. They argue that the level of agreement is the key reliability measure, that is, the extent to which one variable equals the other. Krippendorff's  $\alpha$  is a standard content analysis measure of agreement (Hayes and Krippendorff 2007; Mikhaylov et al. 2010, 14; Dowding et al. 2012). At the major code level, the level of agreement within the sample checked was 0.96. At the minor code level, the level of agreement was 0.89.

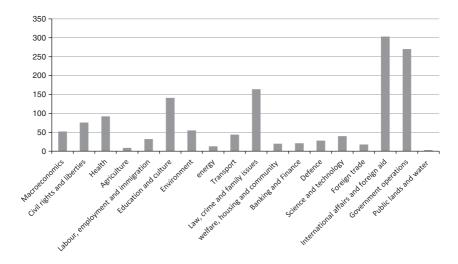


Figure 1 Policy Agenda Content of Times Editorials (August 2005–1 September 2007).

were classified as international affairs. Discussions relating to the government's handling of a particular issue or overall government efficiency were categorised as government operations, as were editorials relating to internal divisions or scandals within the political parties. A total of 309 editorials relating to stories on sport, celebrity, the changing of the seasons and a myriad of other topics unrelated to policy issues were coded using the standard "Other, Miscellaneous, and Human Interest" category employed within the Policy Agendas framework. We also created a second miscellaneous category in the case of 55 editorials relating to either government policy towards or the fortunes of and decisions made by non-financial companies. We did this because, within the standard Policy Agendas framework, stories relating to banking and finance would have been given the same major code as stories relating to domestic commerce. The remaining 1,381 editorials (the original 1,745 editorials minus the 364 miscellaneous editorials) were assigned one major and one minor code.

The results of this analysis are shown in Figure 1. The vertical axis shows the number of stories published on each subject over the period. The striking finding here is just how little attention was paid not only to banking and finance but to macroeconomic issues in the years prior to the crisis. Banking and finance was the subject of just 21 editorials (just over 1.5 per cent of the total). Macroeconomics was the subject of 52 editorials (3.7 per cent of the total). Judging by its choice of subject matter, the *Times'* leader writers must have considered the issue of financial stability to be of, at most, marginal significance relative to the problems thought to afflict health (92 editorials, 6.6 per cent of the total), education (141 editorials,

10 per cent) and crime (164 editorials, 12 per cent). We can place these results within a broader context. The UK Comparative Agendas Project has coded a number of sources of data including the contents of the Speech from the Throne (also known as the Queen's Speech) between 1911 and 2008 (policyagendas.uk.wordpress.com/datasets/). In this case, macroeconomics consumed, on average, 5.7 per cent of total attention, and banking, finance and domestic commerce 1.5 per cent of attention (Jennings et al. 2011, 95).<sup>2</sup>

It is also worth considering whether, within the limited coverage devoted to banking and finance issues, specific concerns were communicated about financial stability. We therefore inspected all the editorials relating to macroeconomics or banking and finance over this period to see whether they contained any discussions or arguments that could, with the benefit of hindsight, be interpreted as containing a warning that the banking and finance systems, either globally or in the UK, could be a potential source of future economic difficulties. Only two such editorials were identified. The first, "Wavering not Drowning" (Times, 2007a) warned that "economic and financial stability is endangered by personal and corporate indebtedness" and that "some of those who have lent money to high-risk US homebuyers are now squealing". This piece went on, however, to caution against cutting interest rates on the grounds that "overall economic growth is strong enough to give pause for inflationary thoughts". A second, "Panic or Picnic?" (Times 2007b), suggested that the European Central Bank's decision to inject liquidity into the market may have been "the clearest signal yet seen that the world's financial markets are up the creek" and that it may be "time to wake up to the possibility that the stock markets are in for an extended period of volatility".

The Financial Times is the premier European business and finance newspaper. Did it have a better record than the Times in identifying vulnerabilities within the financial system? We coded 1,030 editorials published between 1 January 2006 and 10 September 2007. Because the Financial Times is dominated by coverage of business and finance issues, we did not use the Policy Agendas framework to code content. Instead, we focused upon the content of the editorials themselves.<sup>3</sup> In "Dangerous Liaisons" on 17 May 2007, the Financial Times (2007a) warned that a "pressure to do deals" may have resulted in weakening credit standards.

<sup>&</sup>lt;sup>2</sup> The data are not entirely comparable because the figures are for banking, finance and domestic commerce, while we coded only for banking and finance under this major code.

<sup>&</sup>lt;sup>3</sup> It has been suggested that we might instead have coded the *Lex* column on global economics and finance or the work of particular columnists like Gillian Tett or Martin Wolf. We maintain that, if Financial Times journalists had started to harbour serious doubts about financial stability, that this ought to have been reflected in editorial comment.

It went on to quote a Bank of England report that "the transfer of credit risk could make a financial crisis more likely". In "Lots of Unknowns" on 26 June 2007, the paper drew attention to a critical report from the Bank of International Settlements about the dangers of securitisation and urged central bankers "to heed [its] warning" (Financial Times 2007b). But, such concerns need to be placed in context. The *Financial Times*' most pressing concern was not financial stability but domestic inflation (the subject of 76 separate editorials over this period) and government debt (the subject of 41 editorials). These issues dominated all other concerns. Indeed, during the period preceding the collapse of Northern Rock, the Financial Times expressed some measure of optimism about the state of the world economy. On 12 April 2007 in "The IMF Reports on a Wonderful World", the paper described the chances of a significant downturn in the US economy as "relatively low" (Financial Times 2007c). On 28 June in "Global Credit Woes", it suggested that "lasting contagion from the subprime crash seems unlikely" (Financial Times 2007d). On 21 August in the course of a piece cautioning against a cut in interest rates, it expressed confidence that "defaults on US subprime mortgages are miles off a level at which triple-A bonds backed by them would suffer losses" (Financial Times 2007e).

Within adversarial political systems, opposition parties have a strong incentive to expose limitations in the government's performance and warn of dangers ahead. At a time when Labour Ministers were proclaiming the end of boom and bust, did Conservative and Liberal Democrat MPs warn of an impending crisis? We examined the content of 15 sessions of Treasury Questions between January 2006 and the Parliamentary recess of July 2007. Treasury Questions is a forum in which MPs, including the Shadow Chancellor and the Liberal Democrat's Treasury Spokesman, can address open questions to Treasury ministers. Each question was coded using the Policy Agendas coding framework. A total of 205 questions were asked by Conservative MPs and 67 questions by Liberal Democrat MPs. The most popular issues raised were related to taxation (75 questions), inflation (42 questions), employment (27 questions) and education and training (26 questions). Under the heading of banking and finance, opposition MPs raised issues relating to household and personal debt in 19 questions, the provision of financial services in 12 questions and housing affordability in nine questions.

The fact that questions were asked about housing affordability and debt might seem potentially significant. It was, after all, a downturn in housing prices that sparked the financial crisis. The issues being raised in these questions, however, related not to financial sustainability but to housing access for key workers and those on lower income and to the potentially adverse effect of high mortgage payments on high street spending. Not one

MP connected the evidence of rising house prices to the possibility that prices might subsequently fall, let alone that such a fall could undermine financial stability. Indeed, there were only two questions that might be thought to constitute a clear expression of concern about financial stability. One was actually asked by the Labour MP Harry Cohen (2006) in October 2006. He pointed to rising levels of debt and a "financial mess" in the US and sought assurances from the Chancellor that the UK had "built-in protections ... against the growing US financial crisis". A second from Vince Cable (2007a) in March 2007 asked about the "issue of highly leveraged private companies" and the Chancellor's views on private equity.

Outside of the bear pit of the Parliamentary chamber, select committees offer MPs the opportunity to identify longer-term policy challenges with the assistance of outside experts in a relatively bi-partisan atmosphere (Hindmoor and Larkin 2009). Did members of the prestigious Treasury Committee identify the potential for financial instability? The Committee published 84 reports between January 2000 and September 2007. Of these, 53 of these reports related in some way to overall economic conditions within the world or UK economy or banking and finance. Once again, we read these reports to see whether they contained any warning signals relating to the financial system.

In July 2007, the Committee published a report on Private Equity, which noted that: "the Bank [of England] is concerned that the increase in corporate borrowing makes companies more reliant on benign macroeconomic conditions" and that "developments in the sub-prime mortgage market in the US may provide a warning of problems ahead" (Treasury Committee 2007a, 69). In a report on the performance of the Monetary Policy Committee two months later, the Committee (Treasury Committee 2007b, 174) was warned by Ray Barell of the National Institute Economic and Social Research that "the Bank has to keep an eye on issues like the emergence of debt and asset price bubbles partly because [these] can be harbingers of banking crises". Yet, these warnings were qualified. In its report on Private Equity, the Committee (Treasury Committee 2007a, 69) states a view that there is no "systematic risk in the system". The report on the Monetary Policy Committee (Treasury Committee 2007b, 174) suggests that, while some large companies might take on too much debt, this ought not to have any broader macroeconomic consequences, "particularly at a time when bank balance sheets look pretty robust".

The Treasury Committee failed to anticipate the crisis. In so far as it focussed upon banking, it was concerned with issues relating to competition, transparency of fees and social inclusion - a recurring theme in Banking Consumers and Small Business (Treasury Committee 2001), Split Capital Investment Trusts (Treasury Committee 2002), Restoring Confidence in Long-Term Savings (Treasury Committee 2003), Banking the Unbanked: Banking Services, the Post Office Card Account and Financial Inclusion (Treasury Committee 2005a), Financial Inclusion: Credit, Savings, Advice and Insurance (Treasury Committee 2005b) and European Financial Services Regulation (Treasury Committee 2005c). The Committee did not express any significant concerns about the banking system prior to the collapse of Northern Rock.

Did professional and academic economists identify key vulnerabilities? Dirk Bezemer (2009) directly addresses this question. He seeks to identify economists who predicted an economic crisis prior to 2008 that did so by linking a downturn in the housing market to an economic contraction and who provided a theoretical explanation for why a crisis would occur. He argues that just 12 economists satisfy these criteria: the academic economists Dean Baker, Wynne Godley, Michael Hudson, Stephen Keen, Jakob Brøchner Madsen, Nouriel Roubini and Robert Shilller; investors Eric Janszen, Kurt Richebächer and Peter Schiff; and commentator Fred Harrison. As Robert Wade (2012, 2-3) observes while commenting upon Bezemer's work, a large number of economists not only failed to predict the financial crisis but actively maintained that the economy was resilient. He cites Robert Lucas (2003) as arguing that the "central problem of depression prevention has been solved"; the OECD's Chief Economist, Jean-Phillipe Cotis (2007, 7), arguing as late as May 2007 that "the current economic situation is in many ways better than what we have experienced in years"; and the prominent British economist and newspaper columnist, Anatole Kaletsky (2007), declaring in December 2007 that the "great moderation" is "closely connected to the abandonment of fixed exchange rates and the deregulation of financial markets".

Did participants in financial markets perform better? The two UK-based banks that recorded the largest losses during the financial crisis were RBS and HBOS. RBS received a total of £45 billion in government subsidies between 2008 and early 2010, having recorded pre-tax losses of £25 billion in 2008 and £2.6 billion in 2009. HBOS recorded losses of £10 billion in 2008 and £12 billion in 2009. Neither bank demonstrated any awareness of the financial catastrophes that were about to befall them. In his foreword to the bank's 2006 Annual Report, RBS's Chairman, Sir Tom McKillop, reported that the bank expected to benefit from "benign economic conditions" and was "well-positioned for growth" (RBS 2006, 4). When reporting upon the bank's interim results in August 2007, McKillop confidently told analysts that: "this morning is very much about business as usual and here at RBS business is very good indeed" (RBS 2007a). In 2006, HBOS's Chief Executive, Andy Hornby, predicted "continuing GDP growth in each of the major economies in which we operate" (HBOS 2006, 13). In a

trading statement in June 2007, the bank confirmed that "after a slow start in mortgages we are now back on track" and that each of the bank's divisions were "performing well" (HBOS 2007, 3).

It might be objected that we ought not to invest too much significance in the public statements of bank executives who were being paid to put the best possible spin on their bank's performance and outlook. Yet, neither should we dismiss such statements out of hand. Neither bank changed their business strategies in the year prior to the crisis. RBS pressed ahead with its take-over of ABN Amro in 2007 and continued to build its trading portfolio during the rest of that year (FSA 2011, 144–146). The simplest explanation of why bank executives said that their financial prospects were so good is that they genuinely believed that they were good.

The major credit rating agencies also demonstrated an enduring faith in RBS and HBOS. Moody's awarded RBS a long-term debt credit rating of Aa1 (one notch below its maximum of AAa) in 2006. Fitch actually raised HBOS's rating from AA to an AA + in August 2006 and RBS's rating from AA to AA+ in March 2007. Were shareholders reassured by such assessments? Largely they were. The share prices of the largest banks did not fall significantly prior to the collapse of Northern Rock, Barclays' share price peaked at £6.9 in June 2007 before falling to £6.1 in August. Lloyds' price peaked at £5.67 in April 2007 before falling to £5.4 in June. HSBC's price peaked in October 2006 at £9.94 before falling to £8.9 in March 2007. But the decline was far from calamitous. By May 2007, HSBC's share price had reached £9.34 and by August 2007 was at £8.97. Of the two banks that sustained the heaviest losses during the crisis, RBS's share price actually rose from £5.9 in June 2006 to a peak of £6.8 in January 2007 before falling slowly to £6.3 in June 2007 and then more rapidly to £5.7 by August 2007. Clearly, and at this point, investors had recognised weaknesses in the bank's balance sheet. HBOS' price fell from a peak of £11 in January 2007 to £9.6 in June 2007 and then £9 in August. Again, the pace and extent of the decline in the share price in the two months immediately preceding the collapse of Northern Rock is eye-catching. To put these figures in context, the overall FTSE100 opening share price index rose from 6,220 on 2 January 2007 to 6,360 on 1 August 2007. Overall, however, it is difficult to see in these share price movements evidence that investors anticipated a financial crisis rather than a mild downturn.

The failure of Northern Rock did not lead to a fundamental and widespread reassessment of financial stability. A number of actors inside and outside of government seem to have regarded the Northern Rock case as sui generis.

On the evening of 13 September 2007, the BBC broke a story about the financial difficulties being experienced by Northern Rock. The next morning,

queues began to form outside its regional branches as customers withdrew their deposits. On 17 September, the Chancellor intervened to guarantee all deposits held by Northern Rock. With the benefit of hindsight, it is clear that not only was Northern Rock the first victim of the global credit crunch but that its collapse was a harbinger of events to come. Northern Rock had pursued an aggressive growth strategy that had resulted in high leverage and a dependence upon wholesale funding and securitisation to sell its loans. This same balance sheet combination undid the RBS and HBOS a year later.

The Bank of England did react to the Northern Rock crisis. The opening page of its October 2007 Financial Stability Report recognises that "the resilience of the United Kingdom and the international financial system has been severely tested"; that the system remained "vulnerable to new shocks"; and that "clear lessons" need to be learnt in relation to liquidity management, stress testing, securitisation and the valuation of assets (Bank of England 2007, 5). Furthermore, the Bank, even at this stage, argued that a "return to earlier conditions" would be "undesirable" as past market prices had "involved an underpricing of risk" (ibid).

Speeches delivered by the newly appointed Chancellor, Alistair Darling, in late 2007 and early 2008 also show an appreciation of the pressures confronting financial markets. In October, Darling (2007a) signalled the need to be "ready to take further steps to ensure we can respond to rapidly changing international market conditions" and promised to press for new international regulations on bank solvency, liquidity and the transparency of off-balance sheet arrangements. A month later in a speech in Scotland given over largely to a defence of the Union, Darling (2007b) suggested that "the recent turbulence in the international markets reminds us what happens when an event in one part of the world can touch us all in just a few weeks". Yet, far from seeking to warn his audience about the price to be paid for past excess, Darling described the growth of the financial services sector as a "modern Scottish success story". By November 2007, Darling (2007c) was telling the CBI that, while problems in the US housing market "have quickly affected countries across the world", "there are good reasons to be optimistic" and the UK and global economy will "continue to grow next year and the year after". In a speech to the Royal Society for the Encouragement of Arts, Manufacturers and Commerce in the New Year, Darling (2008a) continued to argue that the UK was in a "position of strength to face current international uncertainty".

The delivery of reassuring and optimistic speeches might reasonably be seen as a key part of the Chancellor's job during a period of financial instability. But this does not explain why, in a speech to the Worshipful Society of International Bankers in February 2008, Darling (2008b) highlighted the "strength and depth of the talent that underpins our truly global financial services industry", lauded the "tremendous contribution" financial services made to the UK economy, and assured his audience that the UK had been "right to resist a disproportionate response to the Enron and WorldCom scandals" and that the Government would not now "revert to more heavy-handed or mechanistic regulation". This does not suggest that the failure of Northern Rock had led the Treasury to question its own convictions about financial stability.

Beyond government, the response to the Northern Rock crisis was more often muted. We examined 803 editorials published in the Times between 11 September 2007 and 15 September 2008 (immediately prior to the collapse of Lehman Brothers). Of these, 176 were classified under one of the two miscellaneous headings. The remaining 627 editorials were classified into one of the 18 major policy codes. The collapse of Northern Rock provoked, as might have been expected, a flurry of 21 editorials on banking. Indeed, the proportion of articles coded as banking and commerce rose from 1.5 per cent in the earlier period to 3.2 per cent. This increase is significant: in terms of the benchmarks usually employed within the Comparative Agendas Project, it constitutes a clear "punctuation" in attention (John and Bevan 2012). However, it is important to note here that Northern Rock is generally interpreted as a corporate morality play in which incompetent chief executives had been exposed rather than as a signal warning of wider financial instability. In "A (Northern) Rock and a Hard Place" on 15 September, the Times (2007c) suggests that "any adverse impact on the 'real economy' [from the failure of Northern Rock] should be modest" and promises to subsequently "name and shame" supposedly "responsible institutions ... which have rushed to the exit with all the charm and grace of a panicky pre-pubescent". In "Northern Crock" on 20 November, the Times (2007d) argues that "the Northern Rock affair is a nasty blemish on the reputation of Britain's financial system" but that "as things stand, however, it is little more than an embarrassment, and capitalism has far more successes than failures". There are some exceptions. One editorial on 1 October 2007, "First Step" (Times 2007e), cautions that "it would be complacent to assume this [the Northern Rock rescue] is the end of the story". Another on 18 September, "Northern Exposure" (Times 2007f), recognises that "confidence in the financial markets would be shattered by a downturn in the housing market". These are, however, passing straws in the wind.

In this respect, the *Financial Times*' record is different. Once Northern Rock collapsed, the Financial Times identified more general problems within the UK and global financial systems relating to capital, liquidity, securitisation and declining credit standards in other banks. For example, in "Jump-Starting the Debt Markets" on 9 October 2007, the paper expressed concerns that the banks were "finding clever ways not to mark their loans to their true (reduced) value" and urged "regulators to watch what the banks are doing" (*Financial Times* 2007f). A few days later on 15 October in a piece called "Cleaning Up After Credit Innovation", the paper asked a number of pointed questions about banks' off-balance sheet losses and warned that the "credit freeze is not over yet" (*Financial Times* 2007g). Furthermore, once the US market had started to fall apart in early 2008, the *Financial Times* carried a number of articles about balance sheets, subprime lending credit default swaps and securitisation that referred to a financial crisis in the present rather than future tense.

Turning now to Parliament, the Treasury Committee (2008) published an early report on the collapse of Northern Rock and, as events unfolded, the broader banking crisis (Treasury Committee 2009). The clarity with which the Committee analysed the UK's changed financial position was not, however, reflected more widely in the concerns expressed by MPs during the six sessions of Treasury Questions between September 2007 and July 2008. Conservative and Liberal Democrat MPs asked a total of 163 questions relating to some aspect of the failure of Northern Rock – either the terms of the government intervention; delays and uncertainties in the government's response; poor coordination between regulatory authorities; or the qualifications of its Directors. But, at the time, and prior to the session in July 2008, only a handful of MPs raised these issues in relation to the stability of the entire banking system.

The Liberals' Treasury Spokesman, Vince Cable (2007b), and his colleague, Tom Brake (2007), did, during this period, express concerns relating to, respectively, the spread of bad lending practices beyond Northern Rock and the threat of a UK recession being imported from the US. The Conservative MP, John Redwood (2007), warned that the government's failure to deal promptly with Northern Rock would endanger other UK banks. In an additional debate on Northern Rock on 10 March 2008, which fell outside of the routinely scheduled Treasury Question sessions, the Conservative Philip Dunne (2008) asked, most presciently, about whether the failure of off-balance sheet vehicles and monoline insurers in the US might, "heaven help us", destabilise the UK banking system. A number of Labour MPs also asked pointed questions about the stability of the UK banking system. Jeremy Corbyn (2007) asked the Chancellor whether he had "any concerns that any other bank, along the lines of Northern Rock, has borrowed excessively ... and therefore put itself and its customers in some danger". The Chancellor singularly failed to respond. Yet, these were only a small fraction of the overall number of questions asked.

As for the banks themselves, in December 2007, the RBS's chief executive, Sir Fred Goodwin, was assuring investors that the bank expected to deliver results "well ahead of market forecasts" (RBS 2007b, 2). It was

only in the first few months of 2008 when the bank revealed significant credit write-downs that optimism faltered. In February 2008, HBOS's Head of Corporate Banking, Peter Cummings, berated the other banks who were winding-down their commercial property lending for a "failure of nerve" and promised to continue lending (Aldrick 2012). As late as June 2008, HBOS's (2008, 1) Chief Executive argued that HBOS was "on track to demonstrate a resilient performance". The credit rating agencies also responded extremely slowly to the onset of the financial crisis. Moody's placed RBS on a review for a negative downgrade in April 2008 but only announced an actual downgrade in June. Even more startlingly, Moody's only downgraded HBOS from Aa1 to Aa2 in September 2008. Fitch actually raised RBS's rating from AA to AA + in March 2007 and did not downgrade this rating until September 2008.

The clearest reaction to the sudden failure of Northern Rock and the slow-motion collapse of global financial markets in late 2007 and early 2008 came from shareholders. The share price of HSBC fell from £9.05 in September 2007 to £7.5 in January 2008 and £7.6 in June 2008. Barclays' price fell from £5.9 in September 2007 to £4.7 in January 2008 and £2.9 in June 2008. Lloyds' price fell from £5.29, to £4.24 and then £3.03 over the same period. The largest falls in share prices, however, were sustained by the banks RBS and HSBC, which eventually sustained the heaviest losses. RBS's price fell from £5.7 in September 2007 to £3.8 in January 2008 and £2.1 in June 2008. HBOS fell from £8.9 in September 2007 to £6.7 in January 2008 and £2.7 in June 2008. To put these figures in context, the FTSE100 fell from 6,306 on 2 September 2007 to 5,636 on 1 September 2008. Investors did recognise the existence of fundamental problems within RBS and HBOS. Even then, investors nevertheless underestimated the extent of the problems they faced. By December 2008, RBS's and HBOS's prices had fallen, respectively, to £0.5 and £0.6.

# Why did nobody see? Three conceptual lenses revisited

"Why did nobody see it coming"? Queen Elizabeth posed this question to economists at the LSE in the aftermath of the 2008 banking crisis (Pierce 2008). This question is a powerful one, because the vulnerabilities that destroyed the financial system now seem so obvious. How could policy makers have failed to anticipate and so prevent the crisis from occurring? The British Academy (2009) concludes that the "failure to foresee the timing, extent and severity of the crisis .... was principally a failure of the collective imagination of many bright people, both in this country and internationally, to understand the risks to the system". We feel, however, that our three frames that focus on different levels of pathological decision making (individual, institutional, paradigm) help provide what we consider to be more plausible explanations. Addressing the three frames in reverse order helps articulate the connections between them.

Failures to be alert to the prospect of banking failures can be attributed to the broader paradigmatic assumptions of the banking system. In the 1990s, the efficient market hypothesis emerged as the "working ideology" of both Wall Street and the City (Johnson and Kwak 2010, 5). Within the Treasury, the Bank of England and the FSA, this meant that financial markets were viewed as being generally self-correcting; market transparency was seen as a more effective check upon bank behaviour than regulatory supervision; management and boards of directors were thought to be best placed to monitor and manage risk; and competition rather than regulation was thought of as the most effective guardian of consumer interests (Turner 2009, 87). As Wade (2012, 11-13) argues, the economic models that the vast majority of academic economists employed, models that provided the foundations of the forecasting models used within the Treasury and the Bank of England and, it might be added, the risk models employed within the banks, assumed that markets equilibrate and that exogenous shocks to the financial system would be contained.

How could policy makers and others have continued to believe in the existence of efficient markets when there was an abundance of evidence of past financial instability? Why had the Savings and Loans debacle of the late 1980s, the East Asian financial crisis, the failure of Term-Capital Management in 1998 and, in the UK, the failure of the Bank of Credit and Commerce International in 1991, the failure of Barings in 1995 and the Equitable Life Assurance Society in 2000 not led actors to revise their views? As Reinhart and Rogoff (2009) argue, participants in financial booms always persuade themselves that this time is different: that the establishment of a new market or the development of a new trading instrument means that risks have been contained and future profits effectively guaranteed. In the 2000s, participants were bewitched by the promise of securitisation - the belief that banks and other financial institutions had overseen the development of a new kind of "originate-and-distribute" system of banking in which loans and thereby risks had been packaged and sold to outside investors. As the Chairman of the Federal Reserve, Alan Greenspan (2005), argued:

The development of [securitised] financial products has contributed to the development of a far more flexible, efficient, and hence resilient financial system than the one that existed just a quarter-century ago.

The operation, culture and values of political and financial institutions fell into line with these broader paradigmatic assumptions. The Bank of

England professed its faith in securitisation. The Deputy Governor, Andrew Large (2003), argued that the way markets had absorbed crises such as the failure of Long-Term Capital Management and the 9/11 attacks had shown how financial innovation had actually "contributed to flexibility and resilience in the system". His replacement, John Gieve (2006b), argued that "the probability of a contagious crisis may have fallen" because risks had been dispersed across a larger number of firms. It was for this reason Gieve (2006b) argued that "near-term risks to UK financial stability remain low" while recognising the scale of the losses associated with the US housing downturn. Leader writers at the *Financial Times* were also persuaded of the virtues of securitisation. With the US housing market already in turmoil, on 27 April 2007 in an editorial called "Securitised Stability", it argued that there are "benefits from dispersing credit risk across the economy", that securitisation "makes banks less vulnerable" and that "ratings agencies have evolved to keep an eye on things" (Financial Times 2007h).

Importantly, major banks in the US and UK failed to signal to investors a crucial shift in their strategies in relation to securitisation. As we have seen, securitisation was understood to involve a process of originating but then distributing loans and, it was thought, risks. But the reality was very different. From around 2004, the banks realised that they could earn additional profits and reduce their Basel I capital requirements by either buying the securitised assets of other banks or holding their own securitised assets on their own balance sheets (Acharva et al. 2009). Trading in securitised assets and other forms of derivatives became "the basic business of banking" (McLean and Nocera 2010, 53). The proportion of securities held on the UK's five largest banks' balance sheets for trading purposes rose from five per cent of total assets in 1990 to 21 per cent in 2007. This shift in business strategy resulted in a rapid growth in short-term profits and overall bank assets. It also exposed the banks to huge losses when the market value of these assets collapsed. The banks did not, however, seek to draw investor's attention to this change prior to 2008.

Nested within the paradigmatic assumptions and institutional arrangements are individual decision makers. Baumgartner and Jones (2005) argue that punctuations in policy attention occur, because boundedly rational policy makers can only address a limited number of policy issues at any one time. Can we thereby explain the failure of policy makers to address issues relating to vulnerabilities in the financial system in terms of the greater priority they attached to other issues, such as the wars in Iraq and Afghanistan or the demands of education and health reform (Hindmoor and McConnell 2013)? We think not. Rather, the faith of policy makers and other actors in market and securitisation were such that vulnerabilities in the financial system were simply not recognised. Policy makers, MPs and

newspaper commentators gave more attention to Iraq than to financial stability. But they did not do so because they thought Iraq was the more serious and pressing of the two problems. They did so because they did not perceive there to be a problem with financial stability. Traders, bank executives, regulators, politicians and ministers genuinely believed in the efficiency of financial markets and the virtues of securitisation. Why? How can we explain the cognitive grip of ideas that were soon to be so thoroughly discredited?

The first point to make in answering this question is that, prior to the dislocation of US and European financial markets in August 2007 and the collapse of Northern Rock a month later, bank executives, regulators and others had no reason to doubt the veracity of their beliefs. In the UK and US, profits had increased dramatically at the same time overall volatility within markets had fallen. Financial markets had recovered rapidly from the collapse of Long-Term Capital Management and the bursting of the dot-com bubble and the 9/11 attacks. Inflation – which throughout this period was the personal focus of Mervyn King's attention (Giles 2012; also see Gieve and Provost, 2012, 66-67) - was also relatively low and stable, which did not suggest the presence of an unsustainable bubble. Furthermore, and as the Bank of England (2006, 40) noted in defence of its claims that a financial crisis was unlikely, the interest rate spread on the purchase of credit default swaps to insure securitised assets remained exceptionally low even once the US housing market had turned. We now know those selling credit default swaps were consumed by the same "irrational exuberance" as regulators, and that their judgments about the risks attached to their products were flawed. Yet, given the underlying belief of so many actors that markets were efficient, the fact that conditions within the financial markets remained so benign in 2006 was significant.

Actors may have genuinely believed in the virtues of markets and securitisation, but they also had self-interested reasons not to question those beliefs. Bank traders and managers had no reason to challenge the assumptions being made about the dispersal of risk within the financial system while they were receiving large bonuses linked to short-term profit statements divorced from long-term risk implications. Risk managers had no reason to challenge the sustainability of risk-taking practices for fear of either being sidelined or made redundant (Treasury Committee 2009, 24–25). Credit rating agencies had no incentive to question the ratings given to securitised loans, because the seller of those loans - the bank could always seek an alternative rating (Richardson and White 2009). Economists who benefited from the patronage of governments and corporations had no reason to challenge articles of orthodox economic faith (Wade 2012, 22–23). Labour MPs asking questions on the floor of the House of Commons had little career incentive to ask awkward questions. Finally, government ministers dependent upon tax receipts from the City to fund public expenditure commitments had little incentive to question whether the financial boom might one day draw to a close. We do not need to argue here that bankers, traders and politicians believed in efficient markets because it was in their self-interest to do so. Such an argument is too crude. As Pettit (1995) argues, self-interest often operates most effectively as a "standby cause", which can explain the resilience of particular patterns of behaviour.

Finally, it is worth noting that actors did not always have the information they would have needed to identify the vulnerabilities within the financial system. Professions of faith in market competition and light-touch regulation rested upon an assumption that banks were fully disclosing and honestly assessing the risks they had taken. This was not always the case (Financial Stability Forum 2008). In the US, traders at Merrill Lynch did not disclose to executives the existence of a "Voldermort" book recording the banks' holdings of securitised sub-prime loans (like the villain in the Harry Potter stories, the mention of its name was discouraged; Farrell 2010, 26). Goldman's withheld from regulators details of trades where it had effectively bet against the trading position of clients to whom it had sold securitised investments (Cohan 2011, 10-11). In the UK, banks did little to highlight the extent of the off-balance sheet liabilities they had accumulated. As we have already noted, HBOS held £37 billion in assets in an investment vehicle, Grampian, which had invested heavily in the US housing market, while Lloyds held £8 billion of asset-backed securities via an off-balance sheet investment vehicle, Cancara (Lloyds 2007, 12). In 2007, HBOS was forced to take a large part of Grampian's assets back on to its balance sheet and to write-down their value. In its 2007 and 2008 Annual Reports, there are a total 49 references to Grampian. In its 2005 and 2006 Annual Reports, there are zero references. In Lloyd's 2008 Annual Report, there are ten references to Cancara. In the bank's 2005, 2006 and 2007 Annual reports, there are precisely zero references.

## Conclusion

In this paper, we have argued that UK banks were operating an increasingly risky business strategy, which was reflected in the content of balance sheets. The information policy makers and others needed in order to know that they were in a vulnerable position was publicly available. At the same time, however, we have presented evidence that suggests that, at least in the UK case, "nobody saw it coming". There were some warning signals about vulnerabilities in the financial markets, but these were few and far between. The Bank of England, the Chancellor of the Exchequer, MPs, leader writers on the *Times* and the *Financial Times*, bank executives and credit rating agencies failed to identify key vulnerabilities in the financial system. Individual traders, such as Steve Eisman, one of the heroes of Michael Lewis' (2010) *The Big Short*, made personal fortunes by anticipating the implosion of the US housing market. Taken collectively, there is, however, no evidence that market investors recognised the vulnerabilities in the UK banks' balance sheets. Furthermore, a generalised faith in the efficiency of financial markets and the magical risk-dispersing properties of securitisation endured in some quarters even after the collapse of Northern Rock in September 2007: Britain's first bank run for more than a century.

If we return in this context to the multiple literatures addressing the source (s) of pathological failures to spot evidence of impending crises, all have some degree of plausibility. The concepts of pathological individuals, institutions and societies each forms part of an explanation of why those in positions of authority who might legitimately have "rang alarm bells" did not do so. Key individuals - traders, bankers, economic media analysts and politicians - all employed and clung to the same cognitive frames that emphasised the selfequilibriating powers of the market and the virtues of securitisation. Yet, as one of the most significant works on human error indicates, focusing on individuals as the source of errors and mistakes without proper recognition of contextual factors is little more than an identification of the symptoms of failure - not its causes (Woods et al. 2010). Key institutions - the Bank of England, the Treasury, the FSA and major banks in the UK and US shared a similar faith in markets. Dominant institutional values are classic "sensemaking" guides (literally the making sense of events and signs) that guide institutional responses. As Weick (2001) argues, institutions can be prone to "blind spots", because they use dominant and comfortable frames of reference to "make sense" of potential warnings as small and/or controllable. Yet, institutions themselves are not context-free, even when they are the focal point of analysis. As March and Olsen (2006, 4) suggest in their survey of the new institutionalism: "Institutions are carriers of identities and roles and they are markers of a polity's character, history and visions". It is clear, therefore, that pathological individual and institutional behaviour is contextualised in broader societal paradigmatic beliefs.

Analysing the pathological tendencies of individuals, institutions and societies in this way allows us to move beyond post-crisis blame games, which are prone to constructing narratives focusing only on one source of failure to "see it coming", whether it is the self interest of "greedy bankers", the incompetence of "lax regulators" or the self destructive tendencies of

"market capitalism". Whatever the pathological tendencies of individuals, institutions and societies to ignore or not recognise evidence of looming crisis conditions, the interrelationships are complex and mutually contingent. Observers did fail to anticipate the crisis and did fail to notice that it was already underway, even after the collapse of Northern Rock. However, our view is that the most convincing explanation is a collective one. The prospect of failure in Britain's banking system gained virtually no ground despite some credible warning signs. The prospect of failure was filtered out by inter-connected decision maker, institutional and paradigmatic agendas, imbued with assumptions that warning signs would manifest themselves in, and be corrected, by efficient markets.

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