

The Limits of Financial Risk Management: Or, What We Didn't Learn from the Asian Crisis¹

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Weaknesses in the financial sectors in some Asian countries increased their vulnerability to external shocks. These weaknesses included over-extended lending to the property sector, the build up of large off-balance sheet positions, excessive exposure to highly leveraged borrowers, policy directed loans and excessive reliance on short-term borrowing in foreign currency. Had information about these developments been more widely available earlier, the international markets and International Financial Institutions might have been better placed to assess the risks in Asia and elsewhere (G7 1998).

The turmoil in the most advanced financial markets that started in the summer of 2007 was the culmination of an exceptional boom in credit growth and leverage in the financial system. . . . Banks and other financial institutions gave substantial impetus to this process by establishing off-balance sheet funding and investment vehicles Both the banks themselves and those that rated the vehicles misjudged the liquidity and concentration risks that a deterioration in general economic conditions would pose. (FSF 2008: 5, 2)

It is hard to say which is more striking when we compare the international financial community's reactions to the 1997-98 Asian financial crisis and the current subprime mortgage crisis and credit crunch—the many similarities in the statements or the differences. In spite of the fact that the two crises are very different in character the parallels in the reactions are very clear from the above quotes: in the aftermath of each crisis, financial leaders focused on problems in the banking system, excessive leverage, the growth of off-balance sheet investments, a property bubble and, underlying much of

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these problems, a failure of risk assessment.² In the aftermath of the two crises, many of the suggested solutions are also similar—above all the constant refrain of the need for better information, more disclosure and greater transparency. However, these similarities also mask a very important difference: after the Asian crisis, it was assumed that these issues were largely a problem for emerging market economies and their governments and were not a serious threat to western financial systems.

The crisis thus did not challenge financial leaders' faith in the benefits of what Alan Greenspan then called 'the new advanced technology-based international financial system' (Greenspan 1998c). Instead, it was assumed that the problem lay with emerging market economies' excessive reliance on the state and underdeveloped regulatory systems; the problem was their lack of fit with the global financial system rather than with the system itself. The proposed solutions to the crisis were therefore also primarily focused on national institutional reforms, designed to bring emerging market economies into line with 'the standards that exist in the most advanced nations', as International Monetary Fund (IMF) Managing Director, Michel Camdessus put it (Camdessus 1999a). As problems in the banking sector have now emerged with a vengeance in these 'most advanced nations', it is no longer possible for finance ministers, central bankers or international financial institution (IFI) leaders to shift responsibility for the crisis onto emerging markets and their governments. They have therefore begun to turn their attention to problems within industrialised economies' regulatory structures and in the markets themselves. The call for transparency has returned, but it is focused in a different direction.

² For an interesting discussion of the parallels and differences between the two crises, see: (Ee and Xiong 2008)

Does this mean that we have learned collectively from the mistaken assessments of the previous crisis? Yes and no. I want to suggest in this article that while the international financial community has avoided repeating the first major error that they made after the Asian crisis—by recognising that the problems now lie as much at home as than abroad—they continue to make a second and more profound error in their response to the subprime crisis: in spite of their recognition of the need for some re-regulation, financial leaders continue to believe that a large part of the solution is to be found in greater transparency, more accurate risk assessment models, better due diligence—in short, to provide the markets with a truly comprehensive picture of the financial instruments that are being traded. I will argue that there are two crucial problems with this assumption. The first is that it is highly unlikely that it will ever be possible to truly calculate and quantify the indeterminacies—the risks, uncertainties and ambiguities³—that are at the heart of the process of securitisation and the originate to distribute (OTD) model. Even while advocating better risk management, much of the analysis by IFIs and mainstream commentators actually reveals the limits of the category of risk as an adequate means of capturing the indeterminacies involved, raising significant questions about the possibility of achieving the goals of transparency. The second problem is that even if it were possible to develop such a comprehensive picture

³ I have written elsewhere about the central role of ambiguity in international financial governance (Best, 2003; 2005) as well as, more recently, about the distinctions between risk, uncertainty and ambiguity as ways of conceptualizing indeterminacy (2008). For the present article, I will draw on the conceptual distinctions made in this 2008 article, in which risk is understood as a way of conceptualizing indeterminacy that seeks to make it amenable to probabilistic calculation; uncertainty, following Frank Knight, is that which exceeds efforts at calculation because of the unknown character of the future; and ambiguity (or intersubjective ambiguity as I have labeled it in the past) is a kind of indeterminacy produced by the necessity of interpreting and communicating our knowledge of the world around us. While we often try to conceptualize ambiguity through the tidier categories of uncertainty and risk, those efforts tend to fail precisely because of the challenges of interpretation.

of the indeterminacies involved in securities markets, it is not at all clear that financial markets will have the capacity or the interest in making effective use of that information. The failure of the major post-Asian financial crisis strategy, the standards and codes initiative, to gain the interest of the financial markets raises significant questions regarding current assumptions about the potential stabilising role of better informed financial markets.

In order to develop these two central arguments about the limits of the current transparency-focused response to the subprime mortgage crisis, I will first examine the response to the Asian financial crisis, focusing in particular on the assumptions about information and transparency underlying the development of the standards and codes initiative. I will then look at the continued expansion and evolution of securitisation in the aftermath of the Asian crisis and examine the informational problems posed by that expansion. Finally, I will consider the responses to the current subprime crisis, focusing again on the assumptions about information implicit in the current proposals and the tensions and limits that they are likely to face. I will conclude by considering the real lessons that the subprime crisis and the limits of the standards and codes initiative should teach us—lessons that are far more sobering about the possibility of treating the current volatility as an isolated event and that pose substantial challenges for the future of global financial governance.

After the Asian financial crisis

Although countless different organisations and individuals weighed in with opinions on the causes of and responses to the Asian financial crisis, the G7 Finance Ministers

summed up the dominant sentiment most succinctly in their 1998 report leading up to the Birmingham Summit (G7 1998). The principal theme of their statement was the importance of transparency, which they defined primarily in terms of ensuring that governments provide better and more timely information about their policies and the economic conditions in their respective states. This same report also argued for the importance of helping emerging economies integrate into the global economy and for strengthening their domestic financial systems. As the quote at the beginning of this article suggests, the G7 Ministers were quite clear about what they saw as the principal causes of the crisis: the poor policies adopted by Asian governments, their weak financial systems and a profound lack of financial information.

The Americans were even less circumspect in laying the blame for the crisis squarely on the shoulders of emerging market governments themselves. Federal Reserve Chairman Alan Greenspan and Treasury Secretary Lawrence Summers both emphasised the inherent limits of the Asian model of capitalism, raising questions about the extent to which it had actually contributed to the region's phenomenal growth, and suggesting that the countries' pursuit of industrial policy played a part in enabling the crisis (Greenspan 1998a; Summers 1998). Summers went so far as to argue for

Not just an end to government-directed lending, but wholesale market opening and deregulation to increase the power of market incentives and reduce the scope for official rent-seeking and corruption – to build a system, in short, which rewards hard work not hard graft, and settles disputes in the courts not the palace (Summers 1998).

Although they did not use quite such colourful language to get their point across, United Kingdom Chancellor Gordon Brown and IMF Managing Director Michel Camdessus also emphasised the weaknesses of the emerging economies and argued for the importance of

increasing institutional transparency (Brown 1998; Camdessus 1999b).⁴ While there was some genuine concern expressed about the failures by creditors to adequately assess the risks of their investments and some talk about ‘bailing in’ the private sector by encouraging firms to take greater responsibility for their risks, the actual policies that emerged in the aftermath of the crisis focused squarely on emerging market economies and emphasised the importance of domestic economic and political reforms.

The centrepiece of the ‘new financial architecture’ that was to emerge after the Asian crisis was the standards and codes initiative.⁵ This initiative actually emerged in a rather piecemeal fashion, beginning as a set of standards for the production and dissemination of financial data that were created by the IMF in the aftermath of the Mexican crisis in 1994.⁶ The rationale underlying this policy was the belief that ‘Comprehensive economic and financial data are essential for the transparency of macroeconomic policy and performance’ (IMF 1996). Once the Asian financial crisis hit, however, this limited set of standards was quickly expanded to include first a ‘Code of Good Practices on Fiscal Transparency’, then a similar code on financial and monetary transparency, and finally a

⁴ See also the Bank for International Settlements’ 1998 annual report for a standard analysis of the causes of the Asian crisis (BIS, 1998).

⁵ It was initially only one of three key pillars of this new architecture, the other two of which were the Sovereign Debt Restructuring Mechanism (SDRM), designed to create global bankruptcy court of sorts, and the Contingent Credit Line, which enabled states to prequalify for assistance by meeting tough standards before facing a financial crisis (an earlier version of the recently introduced Flexible Credit Line). In the end, both of these initiatives failed and the standards and codes initiative remained the only significant reform to the system. For an excellent discussion of the politics behind the SDRM’s failure, see: (Helleiner, 2008).

⁶ At the Halifax Summit in June of 1995, the G7 leaders called for the IMF to ‘establish benchmarks for the timely publication of key economic and financial data’ (G7 1995). The IMF created the Special Data Dissemination Standard (SDDS) in order to encourage member countries to commit to publishing statistics on their economies in a standardized form and in a timely manner (IMF 1996). Shortly after creating the SDDS, which was designed for countries that were able to borrow from international financial markets, the Fund created a second General Data Dissemination Standard (GDDS), which was aimed primarily at those states whose statistical capabilities were much weaker.

full set of twelve different codes covering everything from accounting to money laundering. Finance ministers at the 1998 G7 summit were already focusing on these emerging codes as central to a longer-term response to the crisis.

One key assumption underpinning the development of these new standards and codes was the belief that a lack of information was a central cause of the recent crises and that better information would therefore help in preventing future ones. Greenspan put the economic logic behind this assumption about the value of transparency succinctly when he suggested, ‘Blinded by faulty signals, a competitive free-market system cannot reach a firm balance except by chance’ (Greenspan 1998b). A second assumption underpinning the initiative was the belief that clearer, more universal rules were necessary for global financial stability. Gordon Brown articulated this idea most clearly when he suggested that ‘it is in the interests of stability . . . that we seek a new rules-based system: a reformed system of economic government under which each country, rich and poor, adopts agreed codes and standards of fiscal and monetary policy and for corporate governance’ (Brown 2001a).

These two assumptions—about the importance of information and the value of standardised economic rules—were to be mutually reinforcing. Part of the innovative character of these standards and codes was the fact that they were voluntary.⁷ How then was the international system to encourage their adoption? It was believed that market forces would play the crucial role in pushing states to adopt the standards by rewarding compliance and punishing failures to meet them. For them to do so, however, they would

⁷ This was in spite of pressure by the UK and the G7 to be stricter about ensuring compliance. (Brown, 2001a; G7 1998).

need information about which states were following the rules. The Reports on Standards and Codes (ROSCs) were ultimately created in order to provide that information to the public and, above all, to markets: states were encouraged to publish these reports, which assessed their progress in meeting the standards and codes in different issue areas. Publicising compliance thus became the central mechanism for ensuring that better information ultimately produced more standardised economic practices. As Gordon Brown put it, ‘The codes of conduct will only work if the private sector is aware of them and the information they provide’—for only then would the markets play their disciplinary role effectively (Brown 2001b). Over time, the IMF’s researchers sought to demonstrate that compliance with the standards reduced countries’ borrowing costs by improving their credit rating and reducing market spreads (Cady 2004; Christofides, Mulder, and Tiffin 2003). The central response to the Asian crisis thus placed enormous emphasis on the importance of information and great faith in the ability of markets to use that information effectively to discipline states.

Securitisation and the limits of risk management

If the reforms introduced after the Asian financial crisis were designed to foster greater transparency and market stability, then why have we found ourselves now floating in an alphabet soup of opaque financial instruments? Why are international financial officials crying out for more transparency once again? To answer these questions, we must first consider what the responses to the Asian crisis did not adequately recognise and address: the severity of the problems in risk assessment and the potential for similar kinds of financial crises in the west. As the G7 quote at the

beginning of the article indicates, there was some discussion of the failure of western creditors to adequately assess the increasingly risky nature of their investments in the Asian economies. The 1999 G7 finance ministers' report, for example, pointed to the need for better risk assessment and management in industrialised countries, emphasising the role of the Basel Committee in developing a more nuanced approach to risk in its determination of capital adequacy standards for banks (G7 1999). Yet, as we will see below, both the original Basel standards and Basel II have proved to understate risk in important ways and to have further perverse incentives for financial institutions. There was, moreover, a general belief that while there were some problems with current risk assessment models, the basic limits of the models were understood and were in the process of being overcome (Greenspan 1998b).

Because of the emphasis on the cause of the crisis lying primarily in Asian economies' particular financial systems, it was also generally assumed that a crisis of that magnitude would not hit western economies. Greenspan provided an excellent example of this kind of assumption when he argued that the high levels of leverage in developed countries' banks did not pose the same problem as in emerging markets, since they were subject to adequate supervision (Greenspan 1998c). After all, it was the West, with its 'advanced economies' that served as the model for the new standards and codes of good financial practice. Ironically, although some Asian economies did rather slowly and grudgingly adopt some of the new standards and codes, the more important effect of the IMF's response to the crisis was Asian countries' massive increase in their foreign reserves, in an effort to avoid ever having to come back to the Fund again (Best 2007;

Mosely 2009). This increase in Asian savings translated into the purchase of US bonds and thus fueled the unsustainable expansion of Western debt and consumption.

These oversights in the responses to the Asian crisis go some ways to explaining how we have found ourselves in the current crisis, yet they are more errors of omission than of commission. To really understand the sources of the current crisis, we need to consider what this narrow set of institutional responses allowed to develop and spread unchecked—the increasingly complex processes of securitisation. When banks securitise a mortgage or a commercial loan, they transform a relatively illiquid asset (the stream of income that they receive from interest payments) into a security that can be bought and sold to those interested in diversifying their portfolios away from more traditional equities and bonds. The financial institution that originates the loan thus does not need to keep it on its books, but can instead sell it off to others. Over time, banks and other financial institutions became increasingly sophisticated in structuring securities that would appeal to different buyers by dividing up loans into different risk categories and packaging them with other assets to obtain the kinds of investment quality credit ratings that institutional investors such as pensions funds needed in order to invest in them (Dodd 2007; Dodd and Mills 2008).

The recent massive growth in securitisation was enabled by the intersection of American and international regulatory changes. In the US, this transformation was made possible by the erosion of the Glass-Steagall Act of 1933, which had constrained the kinds of activities that banks could engage in, separating brokerage firms from deposit-taking banks and preventing the major commercial banks from underwriting securities. Over time, the Federal Reserve Board reinterpreted and relaxed the rules, allowing the first

securitised investment vehicle to be created in 1988 (Kregel 2008: 11). In the end, the 1999 US Financial Services Modernization Act effectively allowed banks to engage in almost any type of financial activity. Banks quickly took advantage of the loosening of the regulations and relied more and more on generating profits through fee and commission income rather than on lending and deposits; they also began to pursue increasingly complex forms of securitisation. International institutional responses in the aftermath of the Asian financial crisis not only failed to pay attention to the potential risks involved in this change in the structure of banking, but actually actively encouraged it. Basel I, a set of international guidelines that established capital adequacy standards for banks, had the effect of encouraging banks to move these complex instruments off of their balance sheets and into affiliated institutions, thus speeding the development of ever more complex securitised investment vehicles (Kregel 2008: 11). Basel II, parts of which were adopted early by some institutions, further intensified these pressures by placing greater confidence in large banks' own internal risk assessment models, as well as on market signals (BIS 2004).

All of this was viewed by many as a largely benign and even as an actively positive development in the financial system. Although the enthusiasm for securitisation has waned somewhat in the context of the current crisis, just about every major financial voice has at some point in time sought to remind us all of the purported benefits of the process (FSF 2008; IMF 2008a: xiii; Treasury 2008: 6). Securitisation was supposed to diversify the risk of loans and other investments and to disperse it among a wider range of investors rather than concentrating it in the originating banks and other institutions. At the same time, since securities could be packaged in a multitude of ways to meet the

investment desires of a wide range of different investors, the process of securitisation also had the effect of broadening the pool of credit. This in turn made credit cheaper and available to a wider range of people—including many who might not have been able to afford a mortgage in the past. Although all three of these positive dynamics may have lasted during the boom, they have all collapsed since then: it has turned out that the risks were not as diversified as had been hoped; credit has shrunk considerably; and many of those who thought they could afford a mortgage have discovered that without large increases in the values of their homes, they cannot in fact make their payments.

Why have these benefits not been sustained? The answer lies at least in part in the opacities and ambiguities that the securitisation process produced. The reforms introduced in the aftermath of the Asian crisis were supposed to increase transparency and ensure better risk assessment and management. Yet little attention was paid to the serious limits to the risk assessment techniques that underpinned the securitisation process. The entire edifice of securitised finance was based on a rather naïve assessment of the kinds of uncertainty and risk that the financial system is likely to face. These presumptions about risk took three different forms: an assumption that the complexities of the economy were amenable to certain forms of *calculation*; a *fragmentation* of the economy into seemingly manageable risks; and an *abstraction* of the evaluation of risks from the concrete relationships that underpin economic confidence.

The reliance on transparency and standards as the basis for financial regulation depended in large measure on the capacity of key market actors to accurately calculate the risks that they faced; yet in spite of the increasing complexity of the models used, they continued to oversimplify economic relations. Complex securitisations are

particularly vulnerable to ‘tail risk’, or the possibility of an unlikely but extremely damaging financial event (Kroszner 2008). Yet, the models that were used to predict the risks in the products tended to assume away fat tails and long tails, forcing the probability of default and other problems into a standard distribution, thus significantly understating the risks of a serious crisis. One of the weakest links in the risk assessment chain was the ‘value at risk’ (VAR) method, which was designed to measure the maximum amount that an institution could lose. VAR assessments are based primarily on the last three or four years experience; this means that VAR models automatically tend to predict lower risk after several years of stable growth—a sign that could also easily signal the presence of an unsustainable bubble (2008: 11). It has also become clear recently that VAR also has another rather nasty effect on the system: once the bubble bursts and the VAR increases significantly, it can actually amplify the resulting volatility by triggering further sell-offs, which force the VAR higher, creating a vicious cycle.

VAR models are not the only ones that have this pro-cyclical and self-fulfilling dynamic. In fact, it has become clear that the very process of valuing securities has contributed to the severity of the current crisis (and likely to the bubble that preceded it). International Financial Reporting Standards as well as US Generally Accepted Accounting Principles have both come to rely on fair value accounting, in which financial firms must value their structured securities at their current market prices (rather than their original purchase price, for example) (IOSCO 2008: 16). In order to determine this value, firms generally attempt to ‘mark to market’, by assigning securities a value equivalent to what they are currently selling for in an open market. The pro-cyclical bias of this approach is obvious: while markets are on the upswing firms’ balance sheets will

look increasingly positive, encouraging them to borrow and buy more; once market conditions start to worsen, however, those same balance sheets will also begin to lose value, potentially forcing firms to sell off further assets, further lowering prices.

The current crisis has also revealed a more profound tension in fair value accounting. For a firm to mark their securities to market, there must in fact be an active market in that particular asset. In the case of many structured products, they are traded ‘over the counter’ (OTC) rather than through an exchange, and after often individually tailored for a specific client. Firms must therefore ‘mark to matrix’ rather than to market, comparing the value of their particular securities to equivalents that are being regularly traded. During the recent credit crunch, even these related markets tended to dry up, making it almost impossible to develop reasonable comparisons; investment firms were forced to ‘mark to model’, arriving at values through statistical inference (Dodd 2007; Singh and Saiyid 2008). Without much in the way of a market at all and with credit rating agencies devaluing many securities by multiple grades at a time, many of such valuations were guesses at best. As the Financial Stability Forum indicates in its report on the crisis, ‘The use of these techniques has underlined the fact that most valuation methods . . . result in an inevitable measure of uncertainty attached to the point estimates of valuations’ (FSF 2008: 27). Risk assessment models and valuation techniques were thus far too optimistic in assuming that the uncertainties of market movements and the ambiguities of valuation could be easily quantified and calculated, and thus managed.

The second major weakness in financial management techniques was their tendency to fragment their conception of the economy and thus ignore its holistic character. Financial models often segmented the measurement of risk into various narrow categories

(such as credit risk, counterparty risk, market risk and liquidity risk) without recognising the ways in which these different kinds of risk can be mutually reinforcing. For example, mortgages that a bank thought it could securitise and sell were seen as being primarily subject to market risk, because there was some uncertainty about the price they would sell for; once the crisis erupted, these mortgages became difficult or impossible to sell, remaining on banks' balance sheets as credit risks with an increasing likelihood of default; as the number of illiquid assets on financial institutions books grew, moreover, not only liquidity but also counterparty risk rose, as the complex relationships among institutions increased their vulnerability to one another's difficulties. Many financial institutions ignored the interconnected logic of risks, fragmenting their risk management strategy through an institutional structure in which different individuals and departments took responsibility for one kind of risk or focused on one aspect of the business (Economist 2008b: 12). This is an approach to risk that seriously underestimates the complexities of the financial system, treating potentially profound uncertainties as easily defined and dealt with. Yet, as financial leaders were stating clearly after the last major crisis, the financial system is increasingly integrated; moreover as the firewalls between different kinds of banking and investment activity have been brought down through deregulation, once problems begin in one part of the market they can spread like wildfire throughout the system and ultimately around the world.

Together these logics of simplistic calculation and fragmentation worked to deny the social and intersubjective character of the financial system. As Paul Langley has pointed out, few efforts were made to consider the impact of a widespread economic downturn on the creditworthiness of borrowers (Langley 2008). Little attention was paid to the inter-

linkages between the real and the financial economies and the many ways that difficulties in one could cause problems in the other. Nor was there much focus on the possible role of rumour, the fragility of reputations and the dangerous effects of panic on the sustainability of financial institutions—all of which have since posed massive challenges for the banking system.

Confidence is at the heart of the financial system. That confidence takes large-scale and abstract forms when it sustains broad-based market sentiment. It also takes small-scale everyday forms when it underpins a banker's decision to lend money to a prospective homeowner. Those everyday lending decisions must always be based on a certain degree of judgment of the borrower's ability to repay. Yet that relationship has been profoundly changed by the shift to securitisation, in which lenders are merely intermediaries, passing on the risks of the loans to others who are willing to take it on in return for the interest income. As the loans have been subdivided and recombined into increasingly complex securities, that link has become very tenuous indeed. This tendency to abstract financial transactions from the concrete relationships that they were once embedded in makes up the third key weakness in the current system of financial risk management. *The Economist* put this shift in characteristically irreverent terms when they suggested,

Old-fashioned mortgage lending is like a marriage: both bank and borrower have an incentive to make things work. Securitisation, at least in this market, was more orgiastic, involving lots of participants and more fleeting relationships (Economist 2008a: 7).⁸

⁸ These metaphors of course cry out for a broader feminist analysis. For some interesting discussions of the gendered character of finance and financial scholarship, see: (de Goede, 2005: Ch. 2; Bedford, 2009).

Not only did these more fleeting financial relationships make acquiring and transmitting the necessary information on credit-worthiness more difficult, it also altered the incentives for doing so. Since the intermediary was not going to carry the risks, they had few incentives to do the due diligence required to determine the likelihood of default, and even fewer to communicate potentially bad news on to those who were taking on those risks in the form of structured securities (Buiter 2007).

In short, the decade following the Asian financial crisis has witnessed a massive explosion in financial innovations that were based on short-sighted, over-optimistic, and fragmented assumptions about the kinds of risks, uncertainties and ambiguities involved. The models used to determine risk assumed that the financial system was far more orderly and calculable than it is; moreover, this faith in the calculable character of the system ultimately deepened the crisis, creating vicious cycles through the VAR and fair value accounting processes and further aggravating market panic as successive attempts to determine accurate values turned out to be flawed. These limits in efforts to calculate risk were compounded by the failure of financial actors to view of the economy holistically, ignoring the links between different forms of risk and between real and financial sectors. Moreover, as the relationships that underpinned in the financial system became increasingly distant, fleeting and abstract, the mechanisms for judging and communicating risks broke down.

Proposed solutions

As the current crisis runs its course, financial institutions, international organisations, finance ministers and pundits have once again been busy analysing the source of the

credit crunch and proposing reforms to prevent them reoccurring. When one examines the responses to date by the major international financial leaders and institutions, two things are notable: the consistency of their continued support for the basic securitisation or ‘originate to distribute’ (OTD) model, and their continued emphasis on better risk management as the key to financial reform at both global and domestic levels.⁹ At the time of writing, considerable attention was being paid to the differences between European Union and United Kingdom leaders, who have emphasised the need for stronger global standards, and the United States Administration (under first George W. Bush and then Barack Obama), which has focused more on coordinated stimulus spending and domestic regulatory reforms. Underlying these differences in emphasis, however, both sets of proposals retain significant similarities to those put forward after the Asian crisis: they insist on transparency, risk management and the development of global standards. Moreover, in spite of growing recognition of the need for some re-regulation, many of the forms of regulation being proposed continue to rely on the accuracy of risk management, the effectiveness of delegating authority to market actors, and the power of transparency. In spite of differences in emphasis, political financial leaders as well as organisations like the Financial Stability Forum, the International Monetary Fund, the Bank for International Settlements and the International Organization of Security Commissions are more or less on the same page when it comes to articulating global solutions to the current crisis.

⁹ There are, of course, more radical proposals by critical scholars and non-governmental organizations. Dani Rodrik has argued for the importance of capital controls; Jeffrey Sachs has suggested that a Tobin tax on currency transactions is necessary; and various civil society organizations have been arguing for a more radical transformation of the global financial system. (Bretton Woods Project, 2008; Rodrik and Subrahmanian, 2008; Sachs, 2008).

The Financial Stability Forum's (FSF) 2008 report on the crisis best sums up this perspective, arguing that 'it is not the OTD model or securitisation per se that are problematic;' instead, problems in risk management, a lack of transparency and misaligned incentives were ultimately to blame for weakening the OTD model and precipitating the current crisis (FSF 2008: 10). The IMF's April 2008 Global Financial Stability Report similarly argues that 'securitization per se was not the problem' (IMF 2008a: xiii), while the October 2008 report retains a relatively minimalist approach to financial reform (IMF 2008b). By April of 2009, the IMF's Financial Stability Report had begun to recognize the importance of some re-regulation, chiefly at the systemic level.¹⁰ While the report's authors note the desirability of market-based regulation where possible, they also recognize that individual actors cannot always recognize such systemic risks. Their solution to this newly identified problem is remarkably familiar: what is needed, they suggest, is better, more sophisticated mechanisms for measuring this more complex form of risk as well as more information with which to make these new risk calculations (IMF 2009a: xviii-xx, Chs 2 & 3).

American, British and European political leaders have also waded in with their views on the need for global and domestic financial reform (Bernanke 2008; Kroszner 2008; Paulson 2008; Treasury 2008). Here again, however, many of the proposed reforms to the financial system are strikingly familiar. The British Chancellor, Alistair Darling, has been particularly forceful in calling for an international response to the current crisis, with a central role for the IMF and the FSF in creating an early warning system (Darling 2008). The first of Gordon Brown's principles for financial reform is transparency, while

¹⁰ Some of the most recent scholarship on the financial crisis has noted this new emphasis on macro-prudential and systemic-level regulation. See, for example: (Germain 2009; Helleiner 2009)

the third emphasises firms' responsibility for better risk management (Brown 2008). In fact, Brown makes explicit the link with his proposals after the Asian crisis, noting:

Almost exactly 10 years ago in a speech at Harvard University I made detailed proposals to reshape the international financial system for the new world, but then found it hard to persuade other countries that this was the time to adopt these changes (Brown 2008).

The European Commission's stance on global reforms also places significant emphasis on regulatory standardization and coordination among supervisors, with two of its central principles being transparency and efficiency, in order to avoid "excessive intrusion" by regulators (EC 2008). In the United States, Treasury Secretary Timothy Geithner has also called for tougher global standards and a stronger IMF and Financial Stability Forum (Geithner 2009).¹¹

As the crisis has progressed and translated into a global recession, there has been some movement towards re-regulation. Yet even here, the character of that regulation has tended to rely on the logics of risk management, standardization and transparency. The US move to start regulating the "shadow" financial system, particularly derivatives, has relied primarily on moving contracts into clearinghouses, where they will not only require collateral, but will also be more transparent to both market actors and regulators (Helleiner 2009; Labaton and Calmes 2009). The G20 has committed to a similar process at the global level, in order to standardize derivatives markets (G-20 2009). Geithner has also proposed a systemic risk regulator at the domestic level, paralleling the emphasis by the IMF, FSF and G20's emphasis on global systemic risk (McKenna 2009).

¹¹ In fact one of the major outcomes of the April 2009 G20 meeting was the beefing up of the FSF and its renaming as the Financial Stability Board. While the new FSB does now include greater representation from emerging market states, it also still includes private standards setting agencies among its members, continuing the institution's character as an example of hybrid public-private global governance.

Although the specific recommendations proposed by these various actors vary, they are remarkably consistent in their broad outlines. They all place significant emphasis on the importance of improving risk management techniques, whether through improved models, the inclusion of different forms of risk (above all systemic-level risk), or greater use of stress-testing to plan for potential large-scale problems. These financial leaders and institutions also argue for the importance of realigning the incentives facing various market participants, including the credit rating agencies, the originators, the distributors and the investors themselves. Finally and most importantly, they emphasise the importance of disclosure and transparency—about the risks underlying the securities and about the degree of exposure that financial institutions have to them.

How should these remedies be pursued? Again most major financial actors are consistent in their emphasis on a ‘market-led’ solution to current problems (Darling 2008) and on the importance of re-establishing ‘market discipline’ (IMF 2009b; Ryan 2008), while at the same time recognising a role for regulators to ‘monitor [market-driven adjustments] and add discipline where needed’ (FSF 2008). Although there is some recognition that the market failed at self-regulation, there is still a pretty consistent opposition to what the IMF has called a ‘rush to regulate’ (IMF 2008a: xiii), on the basis that this will impose additional costs to economic growth and may even deepen the current crisis. Shying away from more profound regulatory reforms, international and national actors are once again faced with a dilemma: how to achieve the necessary reforms without resorting to significant formal regulation or coercion? As in the case of the standards and codes initiative discussed above, the answer that has been proposed to that question is to supplement some more regulation with better information and greater

transparency. It is hoped that better risk management practices at systemic as well as firm levels will provide more accurate information about the genuine risks involved in securitised products. At the same time, greater disclosure by firms and regulators of these risks should reduce excessive risk-taking by investors. Once again, the belief is that more accurate calculations and better information should ensure that market discipline functions as it should.

And their limits

There are two key problems with this proposed information-centred solution to the current crisis. The first involves the limits of achieving the kind of accurate information that would allow for market self-regulation and obviate the need for further government intervention. The second concerns the ability of markets to effectively use such information even if it were available.

The call for better and more accurate measurement and disclosure of financial risks assumes that these risks are in fact capable of being fully, or at least adequately calculated. In one sense, this is not an unreasonable assumption: a risk by definition is something that can be calculated using statistical probability (Dean 1999). Risks are human inventions, historically linked to the development of statistical and actuarial methods that allowed us to designate the probability of certain complex events occurring (Ewald 1991). Over time, we have come to understand increasing areas of our lives in terms of risks—to the point where sociologist Ulrich Beck has famously declared us to be living in a ‘risk society’ (Beck 1992; Beck 2006). Yet the fact that we seek to define various kinds of uncertainty and ambiguity as risks does not necessarily make them fully

amenable to calculation (Best 2008). As my discussion of the informational dilemmas posed by securitisation demonstrated, the process of securitisation continually exceeded institutional efforts to calculate the risks involved, in large measure because the factors that could affect the ultimate value of a security or the dangers involved in holding it were so vast, complex and dependent on intersubjective perception. Efforts to make such indeterminacies calculable depended on financial firms' ability to abstract investment decisions from complex human relationships, to fragment different aspects of indeterminacy and remove them from the context of the wider economy and to model risk based on a static and unrealistic picture of likely events.

Is risk assessment genuinely possible without such dangerous oversimplifications? Even as they argue that better risk assessment is necessary, many of the major responses to the current crisis also admit, however unwillingly, that there are problems with this assumption. *The Economist* cites one of the architects of the Value at Risk measure as admitting, 'VAR leads to the illusion that you can quantify all risks and therefore regulate them' (Economist 2008a: 11). The magazine goes on to suggest, 'there is now likely to be more emphasis on non-statistical ways of thinking about risk'. There are other signs that there is more recognition of the limits of financial calculation. Both the FSF and the UK Treasury have argued that given the inherent uncertainty of valuation techniques (whether fair value or other forms), firms will need to be more open about the residual uncertainties in their own calculations (FSF 2008: 27; IMF 2008b: xii; Treasury 2008: 10). The UK Financial Services Authority's Turner Report goes even further, noting the potential for irrationality within markets and raising concerns about the role of a "misplaced reliance on sophisticated maths" in precipitating the crisis (FSA 2009).

As *The Economist* suggested, there has also been more discussion of various non-statistical forms of risk assessment, including a call by the UK among others for greater attention to stress-testing, in which the effects of potentially devastating events are modeled in an effort to determine what the effects would be and ultimately to decide what would be needed to respond effectively (Treasury 2008). Yet, similar calls for more sophisticated stress testing were made after the Asian financial crisis, and it was believed that progress on that front was being made; Alan Greenspan, for example, argued in 1998 that ‘firms now appreciate more fully the importance of the tails of the probability distributions of the shocks and of the assumptions about the covariance of price changes. Use of stress tests, which address the implications of extreme scenarios, has properly increased’ (Greenspan 1998b). In fact, as late as in April of 2007, the IMF noted that ‘stress tests conducted by investment banks show that, even under scenarios of nationwide house price declines that are historically unprecedented, most investors with exposure to subprime mortgages through securitised structures will not face losses’ (IMF 2007: 7).

Perhaps recognising (even if not admitting) such past failures, the IMF has recently gone one step further, as its Deputy Managing Director has called on financial leaders to ‘think the unthinkable’ in an effort to come to terms with what he calls ‘contingent risks’ (Lipsky 2008). These are both interestingly paradoxical phrases that appear to call for the impossible: how do we think the unthinkable, and can we ever calculate contingency? These are in fact important questions to be asking. Yet to even begin to formulate an answer requires a quantum leap from a world in which uncertainties are ultimately resolvable into carefully calculated risks into one in which ambiguity, interpretation and

intersubjectivity are recognised as inescapable. Thinking the unthinkable requires imagination and imagination is inherently subjective and ambiguous (De Goede 2008; Salter 2008). Imagination is art rather than science, interpretation rather than explanation. While financial actors could certainly do with a bit more imagination, such exercises do come with additional responsibilities. As we move further from the realm of careful measurement and objective fact (assuming that we were ever in it), then judgment becomes all the more important. What contingent risks are considered important? What nightmare scenarios are deemed serious enough to insure against (and who pays the bill)? In an ambiguous world, defining risks is an act of considerable power.¹²

Where does this leave the current proposals for relying on information, standards and transparency as the linchpins of the reformed financial system? Although the impossibility of accurately calculating risks does not undermine the value of greater openness, it does reveal the practical and political limits of such a solution. On the one hand, if transparency means the development and communication of easily quantifiable and universally applicable measures of security risk, then it is a mirage. If, on the other hand, the objective is to find ways of imagining and communicating the full range of contingencies that might arise in a securitised system, then it is unrealistic to assume that the markets will be able to digest and respond to this information effectively.

¹² The politics of risk definition have become particularly evident in the context of the current crisis, as certain kinds of catastrophic risks such as the failing of an investment bank, are deemed to be unacceptable enough to socialize the costs of preventing them, while other everyday risks, such as the risk to individuals of relying on the markets to provide for a reasonable retirement income, have been seen as acceptable. Yet, as the recent crisis has shown, the accumulation of these individual smaller-scale risks can contribute significantly to the kind of large-scale risk that prompts the bailing out of major investment firms.

Why do I have so little faith in the capacity of the markets to effectively use such complex information? Because they have shown little evidence of their ability to do so in the past. In their report on the Asian financial crisis, the Bank for International

Settlements noted:

In spite of the ready availability of BIS data showing the increasing vulnerability of some of these countries to a sudden withdrawal of short-term international bank loans, the volume of these loans simply kept on rising. Other evident problems, such as growing current account deficits and declining rates of return of investments, were similarly ignored.

They conclude by suggesting that ‘the use made of information is every bit as important as its mere availability’ (BIS 1998: 8). Why did the financial markets fail to use the information available to them in the months leading up to the Asian crisis? As I and others suggested in the aftermath of the crisis, John Maynard Keynes’ insights into the conventional and intersubjective character of market sentiment goes a long ways towards explaining the tendency of investors to ignore data that does not fit with their simplified assumptions about economic conditions (Best 2003; Hall 2003; Widmaier 2003).¹³

Since then, there has been further evidence to support and deepen these arguments about the limited capacity of financial markets to adequately make use of complex information. In fact, the IMF’s own review of their standards and codes initiative reveals that financial market actors have once again paid very little attention to the IFIs’ efforts to provide them with better information. As I discussed above, the standards and codes initiative was premised on the assumption that greater transparency on the part of

¹³ Keynes’ classic analogy for the investors’ strategy was a newspaper competition in which contestants were successful if their selection of the six prettiest faces from a hundred photographs was closest to the average: ‘We have reached the third degree where we devote our intelligences to anticipating what average opinion expects the average opinion to be’. He concluded that such conventional judgments were fickle and vulnerable to self-fulfilling patterns of excessive optimism and despair (Keynes 1964: 156).

governments about their compliance with international best practices would give markets the information that they needed to make more informed investment decisions. Over time, as market actors made use of the published reports (ROSCs) on state progress, it was believed that they would reward good behaviour and discipline those who either made little progress or opted out of the standards initiative. Yet apparently this has not occurred. The IMF surveyed various market actors to find out whether they found the ROSCs useful, and discovered that ‘Direct use of ROSCs by market participants remains low’ and ‘does not appear to have increased in recent years (IMF and Bank 2005: 24). While there was some indirect use of the ROSCs, it was through intermediaries such as credit ratings agencies (CRAs), who integrated the ROSCs into their evaluations, and private sector ‘user-friendly’ simplifications of the reports into quantitative scores (IMF and Bank 2005: 47).¹⁴

The Fund staff further noted that ‘Market participants called for substantial changes to make the ROSCs more useful to them’: they wanted the Fund to publish simplified, quantitative measures of compliance and to update their reports annually (IMF and Bank 2005: 24). In short, they wanted the IFIs to simplify their reports. Yet, both IMF and the World Bank Executive Boards have argued that it is important that the ‘ROSCs do not resemble ratings or make use of pass-fail judgments’ (IMF and Bank 2005: 10). While the reports indicate weaknesses as well as progress made in achieving the standards, they do so in qualitative terms, recognising the complexity of such assessments and the particularity of each case. IMF staff conclude in their review that it may not be realistic to try to get more market participants to use the reports. They also note that although there

¹⁴ For a discussion of the limits of market participants’ use of the ROSCs, see also (Mosely 2009).

have been a number of econometric studies completed that seem to suggest some economic benefits for countries that adopt the standards, 'these studies should be interpreted with caution' and that 'the findings may not be robust' (IMF and Bank 2005: 19). This is rather a remarkable turnabout given that the initial justification for the standards and codes initiative relied crucially on the importance of providing information to financial markets on the assumption that markets would provide economic rewards to those who performed well. It appears that investors are not actually interested in having a realistic picture of the strengths and weaknesses of different economies, preferring easily calculable simplifications instead.

Conclusion

The failures of the international response to the Asian financial crisis thus continue to haunt the current crisis. That initial faith in the healing powers of transparency and the informational sophistication of the financial markets has proven to be misplaced. If markets were unable to make effective use of the additional information provided to them after the Asian crisis because they found it too complex, then why should we assume that they will be able to effectively interpret the implications of the kinds of 'contingent risks' and 'unthinkable' possibilities that financial leaders now argue must become a part of investment decisions. Will markets take seriously the admissions about the uncertainties that remain in institutions' efforts to value certain kinds of securities, or will they ignore them as too difficult to calculate? Perhaps they will simply try to find new ways of simplifying such complexities, as they did by relying on the credit rating agencies' use of

the ROSCs; yet it was precisely this kind of lazy faith in the simplified ratings of the CRAs that fostered the excessive risk taking leading up to the current subprime crisis.

If my assessment of the limited capacity for financial markets to process sophisticated information holds true, then we will need rather more substantial kind of regulatory response to the current crisis than the one currently proposed. We will indeed have to be creative in imagining the possible future paths of the financial system. But we cannot leave so much of the responsibility for such imaginings, or their interpretation, to the markets. As I noted earlier, defining what counts as a risk can be an act of great power. Not only are the markets ill equipped to deal with such ambiguous forms of economic knowledge, but they are also inadequately accountable for the political implications of such decisions.

As I have argued elsewhere, the best response to an ambiguous financial system is not to deny its ambiguity or seek to erase it, but to work to integrate constructive ambiguities into our policy responses—by making them flexible, self-reflexive and politically negotiable (Best 2005). We need a flexible response that supports a diversity of different national economic strategies and values rather than seeking to impose an economic monoculture. Any observer of the current crisis must be relieved that not every state adopted the same western-inspired financial “best practices” that were touted as essential after the Asian crisis. Yet so many are now calling for a new and improved set of global financial standards: the IMF has gone so far as to call for a new “binding code of conduct” (Davis 2009). While some kind of standards will remain a part of the financial system, reifying them in this way only repeats past hubristic claims that we now have the

definitive answer to the challenges of financial regulation ('really, we promise, this time we finally got it right').

We also need self-reflexive policy making, by which I mean a kind of regulation that recognizes both the intersubjective character of the market and the constitutive effects of economic theory and policy. As Donald MacKenzie has aptly demonstrated, the ways in which we conceptualize and act on the market do not simply represent the economy but also transform it (MacKenzie 2006; MacKenzie, Muniesa, and Siu 2007). The recent emphasis on risk as a way of conceptualizing and managing global finance altered how people perceived and acted in the economy, helping to create the bubble by creating a false sense of security about our capacity to calculate the unknown. A shift to conceptualizing risk in systemic terms may mitigate some of the problems of earlier more fragmented approaches, but it still continues to ignore the complex social character of financial practices and assumes that accurate calculation is possible. A more reflexive kind of financial policy would place less emphasis on risk and would draw more on contingency, ambiguity and other conceptions of indeterminacy in their efforts grasp the full complexity of economic life.

Finally and most importantly, any solution to the current crisis must tackle the political dimensions of the global financial system. A more democratic response to the financial crisis would of course reduce the role of markets in their own regulation and rely less on market discipline.¹⁵ Yet the limits of risk management and calculation also pose significant challenges to regulators, for it means that there are no easy technical

¹⁵ Ilene Grabel provides a very thoughtful discussion of a more democratic alternative to credibility-driven financial policies in: (Grabel 2000)

solutions to current or future financial problems. There can be no easy return to the technocratic solutions of the 1950s and 1960s in which it was regulators who devised and applied elegant mathematical models to manage the economy. Any solutions will have to be messy and will involve difficult political decisions. Public regulation at both global and national levels must therefore become more democratically accountable.

This may seem more like a fragile lean-to of reason than a solid blueprint for financial reconstruction, but that kind of open-endedness may be precisely what we need in these uncertain times.¹⁶ Keynes, after all, was a master of adaptation and invention. This crisis has taught us that if we are to place our hope anywhere, it must be in the possibility of a more inventive and politically accountable strategy for both imagining and governing the global financial system.

¹⁶ I am borrowing the phrase “lean-to of reason” from: (Tyler 2005)

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