

# Ten questions about the subprime crisis

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*The ongoing credit crunch represents the first crisis of the age of mass securitization. One conclusion sometimes drawn is that the costs of securitization, in the form of risks to financial stability, exceed the benefits. The implication is that we should return to the simpler days when commercial banks originate loans to households and firms and hold them on their balance sheets, rather than slicing them, dicing them and selling them off. But this back-to-the-future formula ignores economic realities. Securitization is bound up with the broader deregulation of financial markets and with the information-technology revolution. Policy makers cannot eliminate this process short of reimposing the kind of restrictive regulation to which banking and financial systems were subject half a century ago.*

*In any case, turning back the clock would not be desirable because the constellation of financial innovations referred to as securitization has real benefits for the economy. Those innovations have allowed the financial system to repackage and spread risk. They have reduced the amount of equity capital that this system requires to absorb that risk. The result has been to lower funding costs for both firms and homeowners as a class.*

*In the aftermath of the Great Securitization Crisis of 2007-8, would-be reformers will surely say that financial regulators need to rethink speed limits and rules of the road. In my view, policy makers should focus on the banking system. Banks still play a unique role. They are at the center of the information-impacted segments of the financial system. Their key role and their vulnerability are recognized by the protection they receive via the financial safety net. Re-thinking should start with the role of Basel II, and within Basel II of the role of internal models and bond ratings.*

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The subprime crisis is widely regarded as the first financial crisis of the age of mass securitization, although the turbulence precipitated by the all-but-failure of Long-Term Capital Management (LTCM) in 1998 also has a reasonable claim to the mantle. Of the two episodes, the subprime crisis is more likely to result in far-reaching changes in the structure and regulation of securities markets. Where the LTCM crisis encouraged an ongoing assessment of the adequacy of prudential oversight of the hedge-fund industry and its counterparties, the subprime crisis has unleashed a far-reaching reassessment of the very foundations of securitized finance. Commentators now question the efficacy of the business model of originate-and-distribute. They predict a shift away from complex derivatives with difficult-to-understand performance characteristics back toward "plain-vanilla" securities that are more easily priced. They acknowledge new doubts about the adequacy of a revised Basel Accord that relies on dubious internal models and credit ratings for gauging the adequacy of bank capital.

The theme unifying these responses would appear to be wistfulness for the simpler financial era now past. But the reality is that there is no turning back the clock. Securitization and the other new technologies of financial intermediation are here to stay. As in the case of nuclear weapons, the world would be simpler if the new technology could just be forgotten. But this is not realistic. The task for regulators is not to suppress all knowledge of the new technology but to channel it in productive directions –as with nuclear power– and to prevent it from getting into the wrong hands.

Doing so is not easy, either in the case of nuclear technology or financial technology. But those seeking a nuclear nonproliferation treaty have at least one advantage over their financial counterparts: they have been at work on their problem for decades. In contrast, the subprime crisis is, in an important sense, unprecedented. Many of the challenges it poses are unfamiliar.

Understandably in this light, financial regulators are still at the stage of forming the relevant questions rather than offering conclusive answers. Likewise, what follow are necessarily less recommendations than they are questions for policy. Questions without answers do not provide closure, but they at least offer food for thought, as well as road maps for scholars

who wish to sharpen political debate about how public officials might usefully respond to the crisis in credit markets.

## 1 | QUESTIONS ABOUT ORIGINATE AND DISTRIBUTE

Over the past twenty years, large banks have refined strategies of securitizing credit –that is, they originate loans or purchase them from specialized brokers and transfer them to a special purpose vehicle, which then packages them into collateralized debt obligations (CDOs) for sale to other investors. Some commentators have argued that this business model has simply set the stage for financial crisis. Securitization, they argue, weakens the incentive for the originator to assess the credit quality of those loans, relative to the once-upon-a-time world in which banks held their loans on their balance sheets. As a result, the stability of the credit markets has come to hinge on the acumen of investors, who lack the specialized expertise needed to undertake such scrutiny of creditworthiness. Thus, while securitization spreads risk, it also has a tendency to raise it (creating more risk to be spread and ultimately borne by someone).

In principle, even banks that transfer loans off balance sheet will pay a price in reputational damage if they fail to adequately monitor those loans or systematically overstate their quality. Those who buy the nonperforming CDOs will blame the bank that set up the special purpose vehicle. But it is evident that this reputational mechanism is insufficient to ensure adequate monitoring, as acknowledged by Bernanke (2007a). Some would say that this situation reflects problems of incentive alignment within financial institutions: the employment relationship creates incentives for decision makers to gamble with the firm's reputation. Investment analysts and financial engineers change jobs and employers. They thus have an incentive to take risks with the firm's reputation, since a good outcome means larger bonuses while a bad outcome tarnishes the reputation of an institution with whom they will no longer have a relationship. One can make similar arguments about the incentives provided by the structure of compensation within corporate America. A CEO who encourages risky behavior will be paid handsomely

if the bet pays off and will be paid less than zero if it does not (in other words, the distribution of returns is asymmetric).

Observations like these have led some observers to recommend that originators should be required to hold a specific minimum share of the securities on their own balance sheets. Banks might be required to hold, say, 20 per cent of each CDO (or 20 per cent of each CDO tranche). This proposal would, at least in part, restore the traditional financial incentive of a bank that held the loans it originated to carefully scrutinize their credit quality.

By design, such a reform would be a step back in the direction of good-old-fashioned banking, in which institutions making loans would have less scope for diversifying their risks.<sup>1</sup> One should recall, therefore, that the old model had limitations. It left banks vulnerable to housing-market downturns, in turn rendering them more cautious about extending housing finance and raising the price of the latter. Reforms along these lines would thus solve problems in securities markets at the cost of heightening risk in the banking system and raising costs to consumers.

One can also question whether regulation of this form would be effective. In particular, one would expect banks to seek ways of hedging the additional exposure that regulators were attempting to force them to hold. They could take offsetting short positions in other assets whose returns were correlated with their own CDOs, use credit derivatives markets, or have their own financial engineers design and sell instruments tailored to offset the associated risks. To the extent they succeeded, incentives would not differ very much from the current situation.

## 2 | QUESTIONS ABOUT BASEL II

By applying minimum capital requirements to bank balance sheets and requiring more capital protection of riskier assets, the 1988 Basel Accord encouraged banks to shift risky activities off balance sheet. The growth of structured investment vehicles (SIVs) and conduits was not exactly a coincidence, in other words.

<sup>1</sup> The "good-old-fashioned banking" line is from Alastair Darling (see below).

<sup>2</sup> Note the tension with the previous subsection, where I discussed Chairman Bernanke's suggestion that reputational factors may not be enough to induce responsible behavior by originators. The tension dissolves in cases like that of Citigroup, which inserted put options into many of the CDOs backed by subprime mortgages that it sold to customers. Those puts allowed buyers who ran into financing problems to sell them back to the originator at original value – something that was not accounted for on the bank's balance sheet. See Wray (2007) and the references therein.

By design, the creation of these off-balance sheet entities allowed banks to reduce the capital associated with a given risk profile. In addition, it reduced the transparency of risky activities and hid them from regulatory scrutiny. Unsurprisingly, these innovations encouraged excessive risk taking, inadequate transparency, and weak regulatory scrutiny.

Basel II, which international banking authorities have designed to correct some of these deficiencies, came into operation at the beginning of this year. Under Basel II, regulators will take into account the riskiness of a bank's overall portfolio, including contingencies, when establishing capital requirements. The new approach requires banks to use portfolio models to assess the riskiness of the portfolio; where circumstances do not allow such modeling, banks must calculate their capital requirements from the credit ratings assigned to the bond portfolio. This accounting regime should reduce the incentive for shifting risky activities to a special purpose vehicle or conduit, insofar as the probability that the position will come back onto the bank's balance sheet is part of the modeling exercise.

The problem is that banks will still have an incentive to make convenient assumptions about when the loans they originate and distribute will come back onto the balance sheet, and it is not clear that supervisors will be in a position to correct them. Typically banks can assume that a loan, once sold, is gone for good. In practice, however, originators may feel compelled to repurchase securities that they previously sold for reputational reasons.<sup>2</sup> David Dodge, the now former governor of the Bank of Canada, has argued that bank capital requirements should be raised across the board to compensate for this bias (Dodge, 2007).

Prevailing accounting standards continue to allow banks to use their own internal models in making this assessment, and one can question their incentive to give proper weight to downside risks. Even state-of-the-art models have a tendency of underestimating the probability of extreme outcomes. (Of late, once-in-a-thousand-year events have a habit of happening every ten years.) They underestimate the correlation of returns on different assets in periods of high volatility. Financial engineers are

familiar with distributions with fat tails, but the tails may be even fatter than they think.

Raising questions about Basel II is easy –not so identifying effective reforms. One option would be to go back to Basel I, under which regulators put different assets into different risk buckets and assigned capital requirements accordingly. Or one could go back to Basel 1.5, a variant of Basel I in which regulators paid closer attention to contingent and off-balance-sheet assets and liabilities and provisioned accordingly. This alternative would, however, place an even greater premium on dealing with another set of problems associated with the commercial credit ratings that provided the basis for placing credits in risk buckets. At the other extreme, regulators might acknowledge the impossibility of fixing these problems and jettison capital requirements for market discipline. They could require banks to issue subordinated debt in the hope that debt holders would exercise strong oversight of banks' investment and management decisions, as recommended by Calomiris (2007).

### 3| QUESTIONS ABOUT STRESS TESTING

Financial institutions and their supervisors do extensive stress testing of portfolios. The question is whether the scenarios they simulate are extreme enough. These are based on estimates derived from finance-theoretic models of the distribution of returns and of how returns on different assets co-vary in more and less volatile periods. The experience of the last decade suggests that these models may systematically underestimate the likelihood of extreme returns and the increase in covariances when volatility spikes. Thus, stress tests based on these estimates produce a maximum loss in portfolio value that is only a fraction of actual losses when things go bad. A case in point is Northern Rock, the British building and loan society that has become a prominent casualty of the current crisis. Northern Rock reportedly carried out –and passed– all the stress testing exercises to which it and the UK Financial Services Authority (FSA) agreed in the first half of 2007. Evidently, the possibility that of the bank's funding sources all could dry up at the same time was not one of these scenarios.

Better models of financial market dynamics may eventually allow for more effective stress testing and systems simulation. But if the shortcomings of existing models are severe and mainly work in one direction, one can reasonably ask whether supervisory and regulatory practice should be based on such flawed frameworks.

### 4| QUESTIONS ABOUT LIQUIDITY

The distinguishing characteristics of many CDOs and made-to-measure mortgage-backed securities are their complexity, opacity, and specialized clientele. These characteristics meant that when significant doubts arose in the summer of 2007 about the performance of these securities, market liquidity dried up. Investors all lined up on one side of the market, as the imperfectly informed attempted to infer underlying conditions from the actions of others. Potential buyers of last resort were unable to fund their operations by borrowing from banks reluctant to lend against uncertain collateral. There was a spike in interbank rates and worries about gridlock in the interbank market as banks reluctant to lend to other banks were forced to take complex structures back onto their balance sheets.

In light of these worrisome events, some economists have argued that banks and other financial entities should be subject to liquidity requirements so that when some institutions are forced by deteriorating market conditions to sell CDOs others are in a position to buy, obviating liquidity problems. These observers similarly suggest that regulation should be used to prevent banks like Northern Rock, which possess liquid liabilities and illiquid assets, from pursuing such a risky business model; in short, regulators should require such banks to keep a proportion of their investments in liquid assets, where that portion is a function of their funding strategy. (This assumes, of course, that supervisors can reliably determine what assets are liquid. Given that some normally liquid assets can become illiquid abruptly, as the subprime crisis reminds us and as numerous past financial crises demonstrate, one would presumably want a narrow definition of the category.) Champions of the Basel Accord defend its lack of specified liquidity requirements on the grounds that the Accord is concerned with capital adequacy, not

liquidity. But this argument, critics insist, ignores the extent to which the Accord's approach encouraged regulators to neglect the importance of liquidity in their supervisory activities.

By definition, liquidity requirements raise the cost of doing business and the price of housing finance, as well as other forms of lending. Banks have always been in the liquidity transformation business, and the more that the regulatory framework requires them to hold liquid assets, the more expensive their liquidity transformation services will become. And even if banks and other institutional investors had more liquidity on hand, it by no means follows that they would wish to deploy it under the conditions anticipated by the advocates of more restrictive reserve policies. The problem in 2007 was not that the banks as a group had no liquidity to deploy but that they had no wish to deploy it, given the pervasive lack of information about the underlying economic condition of potential counterparties.

## 5 | QUESTIONS ABOUT RATING AGENCIES

The role of modern credit rating agencies is to provide specialized intelligence, in the form of publicly-available ratings, for use by investors seeking to price opaque securities. The subprime crisis suggests that the rating agencies' execution of this function was subpar. They failed adequately to distinguish between the riskiness of different securities. They were too generous in providing AAA ratings. They failed to downgrade mortgage-backed securities as the housing market and hence the value of the underlying mortgage obligations deteriorated. They then aggravated the crisis by reacting with wholesale downgrades once the market collapsed.

One explanation for this dismal performance lies with the imperfect models used by the rating agencies to value residential-mortgage-backed securities (RMBSs) and the associated derivatives. Their methods emanate from long experience (in two cases, more than a century's worth) of rating corporate bonds. Mason and Rosner (2007) point to a number of reasons why the application of valuation models for corporate bonds to securities backed by claims on the residential mortgage market may be misleading.

For example, the performance of a corporate bond depends on both the condition of the issuing firm and the condition of the macroeconomy. By comparison, debt securities backed by baskets of mortgage loans depend more heavily on the macroeconomic cycle and therefore are more highly correlated. Similarly, in building their estimates of default probabilities on historical evidence, the rating agencies used data from both good and bad times for corporate bonds but only data from good times for newer assets (since these novel products had never previously experienced serious market turbulence).

A second set of problems, as Calomiris (2007) notes, stems from the use of ratings by bank regulators. Basel II directs regulators to use bond ratings to determine the range of permissible bank investments and, for (smaller) banks lacking their own internal models, weighted capital requirements. Unsurprisingly, banks have responded to this delegation of public authority by applying subtle pressure on the rating agencies to elevate the entire spectrum of bonds a couple of notches, without necessarily disguising information about relative risks, in order to widen their investment choices and lower their capital costs. This dynamic works to heighten banking-sector risk and subverts the intent of regulators' use of bond ratings.

A related source of problems concerns the agencies' conflicts of interest. Rating agencies first earn fees from advising on how to structure bonds and derivatives so that these receive the desired rating. They then have a not-so-subtle incentive to rate those issues in the promised manner. All of these patterns were apparent in earlier emerging market crises. But now that the problem has hit home –now that it has hit the United States, in other words– perhaps policy-makers will take the question of how to constrain the ratings process more seriously.

The rating agencies' conflicts could be addressed by Glass-Steagall-style legislation that prevents them from both acting as advisors and issuing ratings. Since the problem of uniformly optimistic ratings has probably been exacerbated by the oligopolistic nature of the rating industry, Congress might also seek to foster more competition, since the better rating agencies will presumably out-compete the bad ones over time. The Credit Agency Reform Act of 2006 (implemented by the Securities and Exchange Commission –SEC– in 2007) has the goal of increasing

competition by making it easier for potential entrants to obtain preferred status from SEC staff, so that regulators and banks can use their ratings in setting capital requirements (and so that they can thus get business). But to date there has been little real progress in this direction. Potential entrants continue to complain about insurmountable regulatory hurdles. Until entry and real competition are possible and, as a result, rating agencies incur the standard market penalty for being wrong –namely, loss of business or even franchise– significant improvements in their performance are unlikely.

## 6 | QUESTIONS ABOUT SIVS AND CONDUITS

Structured investment vehicles and other mechanisms for using short-term bank funding to invest in long-term derivative securities pose some of the most striking if obscure dilemmas of the current crisis. Few market participants had even heard of SIVs and conduits before the summer of 2007. At that point they abruptly discovered that their own financial prospects and the stability of the US financial system turned on their condition.

The best way of understanding the role of these programs is by distinguishing those with and without a formal commercial bank connection. Consider self-standing SIVs. These investment funds issue asset-backed commercial paper, typically of three months maturity, to fund investments in CDOs and other long-term securities. When a CDO portfolio comprises senior or super-senior (AAA) rated securities, its managers fund as much as 90 per cent of the vehicle by issuing asset-backed commercial paper. In practice, commercial banks are among the main purchasers of that paper, but typically on an arm's-length basis –that is, they have no ongoing business relationship with the SIV issuing the paper.<sup>3</sup>

These SIVs are essentially hedge funds by another name. They invest in risky and sometimes illiquid

assets; they use significant amounts of leverage and credit in their operations; and they are not transparent. If their investment practices require significant regulatory responses, then those responses should be broadly similar to those applied to hedge funds as a class.<sup>4</sup> Investors in such funds are well-capitalized, savvy individuals, firms, and mutual funds; it is not at all obvious that state intervention into their affairs is required on consumer-protection grounds. These funds remain outside the financial safety net; in the event of difficulties, their principals can choose to restructure them or close them down.

The banks extending credit to SIVs, by contrast, do not reside outside the financial safety net and frequently are too big to fail. Regulators therefore need to be sure that the banks extending back-up credit lines engage in realistic assessments of the likelihood that associated SIVs will draw on those lines; banks, in other words, must not simply assume that, because SIVs had no need to draw on credit lines in the past, they will be not do so in the future. As the events in the latter half of 2007 make clear, stress testing by banks and supervisors should include the possibility of wholesale disruption of the asset-backed commercial paper market.

Some SIVs are wholly owned and operated by a commercial or investment bank, with bank employees running the portfolio and the same bank providing the credit line.<sup>5</sup> In such cases, financial engineers simply disguise and repackage traditional banking, and the distinction between the bank protected by the safety net and the SIV left to its fate becomes artificial. Among other things, banks are in the business of maturity transformation (they use short-term funding to make long-lived long-term investments). Here the maturity transformation by which banks use short-term funding to make long-lived term investments occurs through the off-balance sheet arm, outside the purview of regulators.

It follows that banks that own and operate SIVs should bring them onto their balance sheets, and those SIVs should be subject to regulatory scrutiny. To the extent that regulatory and tax arbitrage explains

<sup>3</sup> In addition, a SIV may contract for a back-up line of credit with a bank or a syndicate as a precaution against disruptions in access to the commercial paper market.

<sup>4</sup> Requiring hedge funds to periodically release more information about their investments would make little difference for market transparency, since these firms can turn their portfolios upside down in a single trading day. Requiring them to hold more capital, use less leverage or divulge more information runs the risk of simply facilitating physical and virtual relocation, whether to London or a post-office box in the Cayman Islands. Regulators generally agree that the main way of addressing the risks posed by hedge funds is by encouraging the banks providing them with credit to more carefully and regularly monitor the positions of their clients. In other words, the solution lies not in more intense regulation of hedge funds but in more intense regulation of the bank counterparties providing them with credit.

<sup>5</sup> This was essentially the case of Rhineland Funding, the conduit operated by the German Bank IKB, whose difficulties ignited the crisis in August.

the creation of many of these bank-sponsored SIVs, then Congress and regulatory agencies need to tighten the relevant provisions.

## 7 | QUESTIONS

### ABOUT TRANSPARENCY

Numerous commentators on the subprime crisis maintain that it was aggravated by the opacity of mortgage-related derivative securities. With one layer of derivatives built one on another, even specialists incompletely grasped the risks of the structured products they had bought. Because holders rarely traded these securities, their market value was elusive at best; often holders relied on their own complex economic models, with all of their limitations, to assign a value.

Thus, when the market for mortgage-backed derivatives soured and some investors headed for the exits, other investors concluded that their holdings were riskier than previously thought, leading to panicked attempts to liquidate. Financial institutions worldwide recalibrated their valuation models, which in turn generated alarming balance-sheet revisions. Liquidity problems spilled over to other markets as investors refused to accept residential-mortgage-backed securities as collateral for issuing asset-backed commercial paper. This latter day version of a cascading crisis of economic confidence suggests how a sharp shock to a limited segment of the US housing market could ultimately come to threaten the entire financial system.

Concocting ever more complex derivatives is the bread and butter of financial engineers. There is a market for their products because they allow economic agents to efficiently identify, isolate, and resell risks during periods of low volatility. (What happens in periods of high volatility is another matter.) Thus, to the extent that regulators are inclined to push for greater simplicity and transparency in the design of financial securities, they will be swimming against a powerful tide.

One way to tackle the financial rip currents would be to apply higher capital requirements to more complex derivative securities. This approach would involve going back to something resembling Basel I, in which

accountants placed different kinds of securities into different risk buckets, with banks then adjusting capital requirements accordingly. Unfortunately, such a tack would obviate a key feature of Basel II –that regulators and banks should take into account the correlation of returns on different kinds of assets when assessing risk.

Another strategy would be for central banks to announce that they were prepared to accept relatively simple, transparent instruments when providing collateral, but not complex ones. This reform would in turn reduce the attractiveness of holding relatively complex securities. The problem is that this policy might ultimately come into conflict with the authorities' responsibility for financial stability, limiting their capacity to act as liquidity provider of last resort to the markets most in need.

## 8 | QUESTIONS

### ABOUT A SECURITIES EXCHANGE

One explanation for the severity of the current crisis stresses that brokers trade CDOs and RMBSs over the counter (traditionally by telephone but now electronically) rather than through an organized exchange. An exchange would require participants to hold margin in order to maintain positions. It would subject nonbank participants to the equivalent of capital requirements. It would encourage instrument standardization, enhancing transparency and the liquidity of the market for distress sales.

As evidence that exchange-based trading would function more smoothly, Cecchetti (2007) cites the contrasting reactions to news of the difficulties of Long-Term Capital Management in 1998 and of Amaranth Advisors in 2006. LTCM held its positions mainly in swaps traded over the counter, while Amaranth dealt in natural gas futures contracts through an organized exchange. Because the exchange required Amaranth to put up margin, it could stretch its distress sales over time rather than having to make them in bunches. And because the existence of exchange-based trading encouraged the standardization of futures contracts, the relevant economic parties had a much clearer sense of the situation than was the case with LTCM. The argument for an exchange follows directly.

What then explains the continuing domination of over the counter trading of these assets? Cecchetti has speculated that there might be tax or regulatory incentives that encourage over the counter trading, but without specifying them. Or this situation may simply be a case of path dependency, where history matters. It may be equally efficient to organize trading of a security on a centralized exchange or over the counter, but whichever venue starts first attracts the bulk of the business and thus offers superior liquidity and lower transactions costs. The initial disinclination to rely on exchanges may have partly reflected fee-seeking behavior by banks, since as originators of the relevant securities they also receive fees when they trade them over the counter, but are less likely to receive fee income from trading on an exchange. If it is the case that trading can be organized as efficiently over the counter or on an exchange, and that the latter has external social benefits, then regulations requiring exchange-based trading would have few if any costs to market participants, aside from the changeover costs –and, by the preceding arguments, significant social benefits.

## 9| QUESTIONS ABOUT CONSOLIDATED BANK SUPERVISION

The credit crisis of 2007, and specifically the response of the Bank of England to the liquidity squeeze at Northern Rock, raises several questions about consolidated bank supervision. Throughout the industrialized world, financial regulators are increasingly separating bank supervision from monetary policy and delegating the former to an agency independent from the central bank –preferably a single agency, to facilitate the centralization of information about different financial institutions linked together through the interbank market. This model has been adopted not only by the UK, where since 1997 prudential supervision has been the responsibility of the FSA, but also by a growing number of other countries.

The question is whether this structure actually impeded the flow of information about the condition of at least one major financial institution to the central bank, causing it not to appreciate the gravity of the unfolding problem and thus delaying its response. If so, and if such problems are commonplace, there

is an argument for either returning supervisory responsibility to the central bank or giving the financial supervisor an unlimited credit line at the central bank so that it can provide lender of last resort services when needed.

At this juncture, the severity of this problem remains unclear. Mervyn King, the governor of the Bank of England, has described how deputies from the Bank, the FSA and the Treasury met on August 14<sup>th</sup>, 2007, when the FSA relayed to the two other institutions its judgment that Northern Rock had serious problems (see Telegraph 2007). The key question is whether the FSA already had a glimmering of those problems some days earlier but did not communicate them.

In principle, nothing prevents a country's financial supervisor from picking up the phone and sharing its latest information about the condition of the banking system with central bankers. In theory, information can flow as freely between two agencies as between two departments of the same agency. But one suspects that different bureaucratic incentives would lead to different behavior in the two circumstances. When two agencies have different objectives or when they are simply jockeying for influence, they may have an incentive to strategically withhold information. But when the same individual oversees the two entities (when the central bank governor appoints and can demand the resignation of key supervisory staff as well as sitting on the monetary policy committee), the scope for strategic behavior almost surely diminishes –since the sanctions in the event that it occurs are greater.

An American recommending that countries avoid separating the lender of last resort function from the financial-supervision function will likely encounter accusations of parochialism. But advocates of such regulatory separation should encounter accusations that they are courting excessive risk.

## 10| QUESTIONS ABOUT THE FUTURE

The ongoing credit crunch represents the first crisis of the age of mass securitization. One conclusion sometimes drawn is that the costs of securitization, in the form of risks to financial stability, exceed the benefits. The implication is that we should return to the



simpler days of "good-old-fashioned banking" in which commercial banks originate loans to households and firms and hold them on their balance sheets, rather than slicing them, dicing them and selling them off.<sup>6</sup>

This back-to-the-1960s formula ignores economic realities –there is no turning back the clock on financial technology and, more fundamentally, on advances in information and communications. Securitization is bound up with the broader deregulation of financial markets and with the information-technology revolution. Policy makers cannot eliminate this process short of reimposing the kind of restrictive regulation to which banking and financial systems were subject half a century ago. Even then, regulatory institutions may well fail to suppress securitization, given the ease with which financial institutions can move their activities offshore in the age of broadband and low-cost communications.

In any case, turning back the clock would not be desirable because the constellation of financial innovations referred to as securitization has real benefits for the economy. Those innovations have allowed the financial system to repackage and spread risk. They have reduced the amount of equity capital that this system requires to absorb that risk. The result has been to lower funding costs for both firms and homeowners as a class.

Regulatory dilemmas not uncommonly arise in the course of the diffusion of a technology or financial innovation, a pattern to which financial securitization offers no exception. Some early adopters lack the training and capacity to safely operate the new machinery. Like a novice driver given the keys to a more powerful car, they manifest a troubling tendency to run off the road– or to collide with other vehicles. This problem was compounded, in the case of the automobile, by the mismatch between the design of the roads and traffic regulations and the capabilities of the new generation of engines.

In the aftermath of the Great Securitization Crisis of 2007-8, would-be reformers will surely say that financial regulators should repave and re-grade, rethinking speed limits and the rules of the road generally. But identifying specific changes to financial traffic rules is not so easy. In my view, policy makers should focus on the banking system. Banks still play a unique role. They are at the center of the information-impacted segments of the financial system. Their key role and their vulnerability are recognized by the protection they receive *via* the financial safety net. Re-thinking should start with the role of Basel II, and within Basel II of the role of internal models and bond ratings. To where it will proceed from there remains, at this early stage, anyone's guess.

6 To quote Alastair Darling in a speech from mid-September (International Business Times, 2007).

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