Can Global Financial Regulation Save Us From

Future Crises?

A Public Lecture by Gordon Thiessen

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One of the success stories in the wake of the financial crisis was the prompt response of the leaders of the G20 countries. Right after the financial market meltdown in October 2008, the G20 leaders were invited to Washington for a meeting just one month later. At that meeting they agreed to issue an Action Plan to deal with the fallout from the crisis. They coordinated an important macroeconomic response to the crisis and to the impending severe recession.

But what may be more important in the longer run was their undertaking to reform financial regulation on an internationally coordinated basis. They set out a plan with objectives, assigned responsibilities, generally to finance ministers and central bank governors, and imposed dates for meeting those objectives. All in all, the speed of their response was not something I had seen before in international meetings. Since then there have been numerous meetings of finance and central bank officials, with progress reported to the semi-annual meetings of G20 leaders.

But why should we care about internationally coordinated improvements in financial regulation in countries like New Zealand and Canada where our financial systems coped reasonably well with the crisis and our regulatory arrangements look sound? To some extent we were lucky; for Canada at least, I would say there is still room for regulatory improvement. However, the more important problem is the spill-over effects of ineffective and, in some cases, poorly conceived regulation in other countries. We are perhaps particularly sensitive to this in Canada given our close relationship with the United States. Our well functioning financial system did not save us from an economic recession as we were sideswiped by the problems in the U.S. and elsewhere.

Moreover, in today's globalised economy, we will in the future continue to be subject to shocks that may originate outside our borders but reverberate throughout international markets. By the same token, financial institutions operate across borders and tend to be highly interconnected, readily causing contagion when problems arise. So, I strongly believe that good financial regulation on an international basis is a benefit to us all.

Four trends that contributed to the crisis

You may already have had your fill of people purporting to explain the real cause of the 2007/09 financial crisis and then laying blame. Typically they are not persuasive because there is no simple explanation. The origins of the crisis are undoubtedly multiple, and it is not easy to explain why they all came together in that "perfect storm". In any event, as Premier Chou En-Lai of China famously, but probably apocryphally, said when asked about the impact of the French Revolution on western civilisation—"it's too soon to tell". We similarly need the perspective of time and the benefit of hindsight to really understand the crisis. So I am not proposing to try to explain the root causes of the crisis.

I do however want to mention to you four trends that I believe contributed to the problems and help to explain the vulnerabilities in the financial system that were exposed by the crisis and which financial regulatory initiatives now seek to repair. The sad irony of these trends is that they began as remarkably positive developments in the world economy.

1. <u>The economic revolution after the fall of the Soviet Empire</u>

In response to the failure of the soviet model of a highly regimented and managed national economy, many developing countries turned to embrace capitalism more fully and opened up to global markets. The result was a major economic success. Of course, the most important outcomes were the phenomenal rise of China and India as they began to participate more actively in world markets. China in particular brought about a huge increase in the supply of labour devoted to the production of internationally traded goods. For consumers in the rest of the world, this meant downward pressure on the prices of a wide range of goods. This also contributed to lower inflation rates that were expected to stay low, thereby eliminating some of the residual inflation concerns that had contributed to higher interest rates in some countries.

2. <u>The increase in savings in developing countries</u>

The increased production and trade in developing countries, China in particular, brought about rising incomes in these countries and a reduction in poverty. However, the uncertainties in the minds of their citizens about the sustainability of their increased incomes and the absence of a social safety net, led them to become large savers. And the Chinese government, remembering the Asian Financial Crisis of 1997-98, chose to resist the upward pressure on its exchange rate coming from its export successes and to build up large trade surpluses and currency reserves for protection should things go wrong again. All this put downward pressure on real interest rates (by that I mean interest rates adjusted for inflation) and made funds readily available to borrowers around the world.

3. The widening application of computer/communications technologies

As these technologies became cheaper, more convenient and more widespread, they transformed operations in the financial industry. This meant that more sophisticated calculations of risk could be made, more customized and more complex financial transactions and instruments could be undertaken at attractive prices, and it was possible for financial institutions to handle of a much wider array of customers, transactions and instruments. As a result, savers and investors came to be offered a wider choice of instruments. On the lending side, it became possible to better assess and price the risk of lending to less than prime borrowers, and thus to make funds more readily available to this group. Among the major beneficiaries were lower-income, potential homebuyers, who had access to mortgage credit for the first time.

4. Increased policy scope for pushing the limits of growth in developed countries

The increased net supply of goods from developing countries and the resulting low inflation rates around the world encouraged central banks to test the capacity limits of their economies to see if it was possible to grow faster and to lower unemployment rates without pressing too hard on those capacity limits and contributing to inflation. And indeed, stronger economic expansion and lower unemployment followed.

In all, the period from the early 1990s through to the beginning of 2007, despite some significant ups and downs, was on balance was a remarkably positive time because of the influence of these four developments. We were seeing economic success in a number of developing countries. World markets were more open, and increased trade is typically the main source of any improvement in overall economic wellbeing in the world.

After the difficult high inflation period of the 1970s and 1980s, inflation was low around most of the world, making economies operate more efficiently and reducing interest rates. Both savers and borrowers were benefiting from improved financial products, and potential homebuyers in particular had better access to the most important investment that most individuals will make in their lifetimes.

And finally, after years of fighting inflation, central banks found themselves on the other side, responding to low inflation by testing the limits of economic growth and seeing unemployment rates fall. It seemed that we were in the most economically successful period in many decades. Ben Bernanke, the Chairman of the U.S. Federal Reserve, popularised the term, "the Great Moderation", as the description of this period.

So why did things go wrong?

As these positive developments persisted, there was a building up of larger and larger trade surpluses in developing countries and corresponding deficits in the developed world. These implied huge net savings coming out of developing countries and looking for a place to invest. The resulting downward pressure on world interest rates was exacerbated by monetary policy in some countries that became too easy.

So more generally, what went wrong was that interest rates around the world moved to very low levels and there seemed to be an inexhaustible supply of funds looking for a place to invest. While this made borrowers content, investors were unhappy and began an increasingly careless search for higher returns. Many investors moved into more complex and riskier instruments without fully understanding the risks. Moreover, this demand for higher yielding instruments pushed risk premiums charged to less than prime borrowers to inappropriately low levels. And then subsequently, when more risk was still not sufficient to get much additional yield, there was the classic resort by investors to leverage to boost returns. The suppliers of financial instruments became more and more inventive but they also became increasingly careless as some of the eye-opening stories of instruments based on sub-prime mortgage collateral make disturbingly clear. The net result was a boom in markets for financial assets and the invention of some very clever, but ultimately dysfunctional, instruments designed to profit from the boom.

It is in the U.S. mortgage market that all this cheap and readily available money moved most dramatically from a positive development to a disaster of worldwide proportions. Lending to sub-prime mortgage borrowers was initially highly successful and profitable. There was so much demand for mortgages, given the rising price of houses, that banks and other mortgage originators increasingly turned to securitizing their mortgage loans—that is, to using them as collateral for bond issues rather than keeping them on their books.

The result was a rapid expansion of increasingly risky real estate credit and housing bubbles, especially in the U.S. and the U.K., but also elsewhere. The presumption was that house prices would continue to rise, and thus there was no real risk in residential mortgage lending. Once housing prices reached completely unaffordable levels and started to decline, the mortgage-related losses began to rise rapidly. But even then, the initial calculations of the impact were that it would be significant and painful but manageable. What was not clear initially was that the financial system, not only in the U.S. but also internationally, had become more interconnected and vulnerable during the Great Moderation. In fact, there was widespread investment by institutions in other countries in U.S. sub-prime mortgages, particularly in the form of mortgage-backed securities and other related instruments.

Because the housing and mortgage markets are typically very local markets and local information is crucial, it was surprising just how international these investments had become.

Once mortgage losses started to accumulate, the speed of the spreading run-for-cover during the latter half of 2007 was shocking. And suddenly everyone was examining their investment portfolios to see what was there only to find out that it was not clear what exposures they had. There was a huge increase in the momentum of concern when, in the autumn of 2007, some large banks had to announce major losses on their exposures to sub-prime mortgage paper. Given the increased perception of risk, the interbank markets began to dry up, and all banks started worrying about their exposure to other banks and to other counterparties.

Things just went from bad to worse after that and then to much worse.

Financial sector vulnerabilities

So what were the vulnerabilities in the financial system that were so brutally exposed by the crisis and that the G20 and others have identified as particularly needing repair?

First of all there were the weak risk assessment processes in many financial institutions. In the United States, mortgages with no down payments, teaser interest rates and a lack of documentation on borrowers, which inhibited credit assessment, come quickly to mind as examples. Moreover, the securitization of mortgages and other loans reduced incentives for thorough initial credit assessment and ongoing monitoring of credit risk by banks. More broadly, as financial instruments became more and more complex and opaque, the risk management processes at financial institutions did not keep up. And supervisory oversight by regulators did not keep up either.

Another weakness was the increasing lack of transparency with respect to the complex products I just mentioned, which also undermined the effective functioning of financial markets. This was especially true of derivative instruments, many of which were highly customized and transacted over-the-counter rather than through an exchange. Think of collateralized debt obligations (CDOs) secured by sub-prime mortgages without adequate documentation on borrowers. Then there were CDOs squared that consisted of existing CDOs being used as collateral for new CDOs. Imagine how difficult it was to track the exposures and risks in potential transactions in these circumstances. Markets, particularly when they are under stress, do not work well without transparency.

Another market vulnerability was the inability of crucial bank funding markets at the core of the financial system to function effectively once the extent of the sub-prime problems were identified. This was a problem of financial institutions not knowing enough about their counterparties. In the less globally interconnected financial markets of the past, institutions were smaller and it was more likely that institutions knew with whom they were dealing and felt they could make reasonable judgements of the risks involved.

In global markets that is no longer true. As the sub-prime problems emerged in 2007, financial institutions began to worry about their counterparty risks and reduced their willingness to transact with one another even in very short-term money markets. Central banks had to provide massive amounts of liquidity support to keep things afloat through 2007-08. We did not fully appreciate the extent of the reliance by large institutions on these very short-term funding markets until they became increasingly unstable and in some cases almost froze completely because of counterparty concerns.

Given the problems of assessing risk, including that of counterparties, in a complex and less transparent financial sector, and given the heavy reliance on short-term funding markets, a consequent serious vulnerability was that the capital and liquidity buffers held by many large financial institutions were far too small and their overall leverage was much too high. Thus when difficulties arose, there was not enough capital and liquidity in many institutions to withstand the severe stresses brought about during the crisis.

Another weakness as the crisis became more severe and confidence in financial institutions was undermined, and especially after the failure of Lehman Brothers, was that it became evident that it was not possible to let other major banks fail. They could not be closed and wound up without causing a disastrous impact on the rest of the financial system. We also learned how difficult confidence was to repair once undermined. Massive amounts of capital support and guarantees were needed from governments to prevent a major financial breakdown in October 2008. Not only were taxpayers on the hook for this support but it contributed to moral hazard—the problem that if banks are always expected to be bailed out, there is no market discipline on them to moderate their risk-taking.

The final vulnerability of the system that I want to draw to your attention, with the benefit of hindsight, was the fact that in most countries no one was monitoring the build-up of system-wide financial risks that might not look as worrisome on an institution by institution basis. The rapid expansion of U.S. mortgage lending and the housing bubbles in a number of countries and the growth of collateralized debt obligations and credit default swaps are examples of system-wide risk build ups that were not being monitored. There was also a lack of perception of the broader impacts of the interaction of capital requirements and mark-to-market accounting on exacerbating credit cycles. By leading to reductions in capital ratios in banks in good times and to requirements to maintain, and even add, capital in bad times, this interaction adds to economic booms and worsens recessions.

What regulatory progress has the G20 made so far?

Perhaps the most important initiative taken by the G20 so far has been the restructuring of a previous organization into the Financial Stability Board (FSB) with all G20 countries as members. This Board, largely made up of banking regulators, central banks and treasuries, has been given a mandate by the G20 to initiate and coordinate financial reforms at the international level, and has been asked to seek cooperative arrangements with other countries. The FSB is crucial to the success of internationally coordinated financial regulation, and it will be important that it receives ongoing strong support not only from the G20 countries but from other financially sophisticated countries as well.

Among the reforms organized by the FSB and supported by the G20, the revised and strengthened capital, liquidity and leverage requirements on banks that were recently announced in Seoul are the core of the new international regulatory agreements. In general required capital ratios have been substantially increased and the quality of capital has been improved so that it must now be largely common equity. These capital requirements will be bolstered by new minimum liquidity standards and a maximum leverage ratio. All in, the levels of the new requirements strike me as sensible, although the phase-in periods being allowed are too long and too delayed—from 2013 to 2019. The important point is that had standards such as these been in place before 2007, a good many of the difficulties that caused the crisis to grow and spread would have been moderated and perhaps avoided for a number of important financial institutions.

G20 regulatory reform also seeks to make financial markets more robust and less likely to contribute to economic booms and busts. This involves improving transparency and market infrastructure and altering rules and procedures that now make markets procyclical. So far, much of the effort and the progress have been focused on moving as many over-the-counter derivatives as possible into exchanges and organizing central counterparty arrangements, which will provide more transparency and reduce the risk of counterparty concerns freezing up markets.

Two areas where internationally coordinated reform has been going more slowly are the too-big-to-fail issue and the need to deal with systemic risk.

Perhaps the most challenging area has been the too-big-to-fail issue. This problem is much more politically sensitive because of the huge costs of taxpayer-financed bailouts in a number of countries. However, work has been done to set up "supervisory colleges" for "systemically important financial institutions". These are arrangements to ensure that globally active large financial institutions are supervised in a more internationally coordinated manner.

There are also initiatives to require these institutions to develop "living wills", which document how they would be wound up if they became insolvent. I must confess that I have problems with all the solutions in this area that involve officially identifying financial institutions that are believed to be too big to fail. This just perpetuates the moral hazard problem by making it clear that since such institutions would not be allowed to fail, there is no risk in placing funds with them. This allows these financial institutions to attract funds at lower cost and to take more risks in lending, thereby raising the possibility of taxpayer bailouts being necessary in the future.

That being said, and I know this will sound inconsistent, we need to accept that some institutions are indeed too big and too interconnected to be allowed to fail and to be wound up. So we have to find ways of recapitalizing them if and when they get into difficulty so they can survive—or at least so they can continue in operation until they can be sold off.

Last November, the Financial Stability Board reported to the Seoul G20 Summit that there was broad agreement on some potential solutions that were promising and merited investigation. These included the issue of contingent debt instruments by banks, which would be shifted into equity when a bank's capital ratio fell below a minimum level. Along the same lines is the proposal to change bankruptcy arrangements and debt indenture clauses to permit banking regulators to recapitalize a large institution at risk of failing by forcing holders of the bank's debt and preferred shares to take equity instead.

These proposals accept that some banks are indeed too big and too interconnected to fail, but the serious disadvantages of government bail-outs (i.e., unfairness to taxpayers and moral hazard) are avoided by shifting the burden of rehabilitating the bank to private debt holders and providing those debt holders with a strong incentive to monitor the bank's risk taking. However, a good deal of work remains to make these proposals practical and to reach agreement on them at the FSB and G20.

The final important area of regulatory improvement where much remains to be done is to assign agencies in each important country to monitor and deal with system-wide risks. This is usually called by the ugly term "macro-prudential regulation". When you look back at the events leading up to the crisis, you cannot help but conclude that an agency or committee with responsibility for identifying and responding to the build-up of systemic risks would have been valuable in focusing attention on some of the more egregious accumulations of such risks and perhaps being able to moderate them.

The international coordination needed here is different in that there is not so much a regulatory standard that needs agreement, but rather that each major country should agree to set up arrangements designed to moderate the build-up of system-wide risks in its financial sector and cooperate to limit the likelihood of problems spilling over to the financial systems in other countries.

From past experience, the most important areas of system-wide risk that a macro-prudential regulator needs to monitor and respond to would be the rapid growth in mortgage lending and a resulting real estate price bubble and excessive growth of bank credit more generally in the economy. Identifying when the accumulation of risks become systemic is never going to be easy and the instruments likely to be used are so far largely untried. So I cannot argue that this is a miracle solution to eliminating crises. But it surely is an important area of potential regulatory improvement.

The tricky question in many countries is to decide how to organize this macro-prudential responsibility. Central banks are probably the agencies with the most background and understanding of financial stability issues. But there are potential concerns that have to be resolved if the central bank is going to take on this responsibility. Independent central banks with clear inflation control mandates (as originally set out by New Zealand in 1989-90 and Canada in 1991) have served us very well indeed. Such mandates have provided the basis for the accountability to Parliament and the public that independent central banks should have in a democratic system. Financial stability objectives are not going to be as clear and straightforward as a CPI inflation target, which will make accountability of central banks for their macro-prudential stability responsibilities more difficult, raising potential risks to their credibility and to their public support. We need to go carefully here.

Conclusion

I believe that the work of the G20 and the Financial Stability Board have been a success story so far. But more remains to be done. We need to resolve the regulatory issues that are left in the four main areas I described and do so in an internationally coordinated fashion. If we manage that, we will have laid the foundation for a much more robust international financial system.

Unfortunately the G20 leaders are increasingly shifting their focus to issues other than regulation. And all too often, as memories of the global nature of the crisis fade, individual countries are proposing regulatory change without cross-border consultations. We need all the G20 countries to renew their commitment to coordinated regulatory reform and give their finance ministers and central bank governors and the Financial Stability Board a strong mandate and a limited time frame to complete this work. And they need to press ahead with efforts to engage non-G20 countries and persuade them to commit to common regulatory practices as well.

So will global financial regulation save us from future crises? While that was the advertised title of this lecture, which was designed to persuade you to come, it is not the right question to ask. Crises are typically not predictable because they take different forms and thus will never be completely preventable. The better, albeit mushier, question is whether new internationally coordinated financial regulation can help to reduce the frequency, incidence and severity of financial crises in the future. On the basis of what has been accomplished so far, I believe the answer to that question is "yes". But we do need a renewed commitment to finish the job.