



Is the post-crisis financial system more resilient? What remains to be done?

This summer, it will be 10 years since the first phase of the global financial crisis started in August 2007.

I have looked through reports from early 2007. In April 2007, the *International Monetary Fund (IMF)* reported that “*favourable global economic prospects continue to serve as a strong foundation for global financial stability*”. However, the report did include a scenario analysis concerning subprime mortgages and financial stability.

When discussing risks to the global economy in June 2007, the *Bank for International Settlements (BIS)* noted that “*at least four sets of concerns can be raised, even if our capacity to calculate both their probability and possible interdependence remains limited.*” Later on BIS has been commended for issuing risk reminders on a regular basis ahead of the crisis. But overall, neither the world nor economists were in a crisis mode back then as these examples show.

The global financial crisis has had a profound impact on a range of issues. Financial market regulation has been stepped up in the advanced economies. Economics as a science has engaged in some serious introspection. We recognise today that macroeconomic models should be designed so as to better capture severe financial market disruptions and their consequences for the real economy.

The financial crisis has served as a reminder of the great losses of economic growth suffered during severe financial market disruptions. The stable functioning of the financial system is a precondition for sustainable economic growth. This should be borne in mind now amid all the criticism over the regulatory reforms.

Let us recollect the key causes and lessons of the financial crisis. They will help us appreciate the value for national economies of the regulatory reforms.

1 Causes and lessons of the global financial crisis: a synthesis

The causes of the financial crisis can be divided into three closely entangled categories: 1) underlying macroeconomic factors, 2) deficient monetary and macroprudential policies in the years leading up to the crisis and 3) problems of financial market development, regulation and supervision.

First explanation: Underlying macroeconomic factors

A key macroeconomic factor behind the crisis was the current account imbalances, especially between the United States and China. The abundant supply of external capital pushed U.S. long-term interest rates down.

In the environment of falling yields, pressure was put on developing new high-yield investment instruments, including subprime loans, which also enjoyed political momentum in the United States.



Another macroeconomic factor underlying the crisis was the time of the so called “Great Moderation”. This was largely ascribed to modern monetary policy.

Ever since the stock market crash of 1987, we had also become used to the central banks stepping in with liquidity injections, where necessary, to restore stability on the markets.

Although positive as such, these developments came with the downside of a false sense of security and a lower awareness of risk.

Second explanation: Non-existent macroprudential policies and deficient monetary policies

The second explanation for the financial crisis relates to the non-existent macroprudential policies but, in hindsight, also to deficient monetary policies in the years leading up to the crisis.

U.S. monetary policy had been relaxed in response to the September 11 attacks and other millennium shocks. The accommodative stance of monetary policy was sustained by concerns over deflationary trends. Housing markets showed signs of overheating, but when the series of interest rate hikes began, this did not, in retrospect, seem to be effective enough.

Should more determined measures of monetary policy have been adopted



to burst the U.S. housing market bubble? According to Jan Tinbergen’s famous principle, a certain number of policy targets requires an equal number of policy instruments.

The challenge was that monetary policy had one tool to offer, but there were two objectives to meet, i.e. price stability and financial stability. There were no macroprudential tools in place for ensuring financial stability.

Banking regulation tools were, in principle, available, but decision-making was impaired by the fragmentation of the U.S. regulatory framework. Ben Bernanke, Greenspan’s successor, also addresses this issue in his memoirs.

As Finnish Parliamentarians met with Bernanke during his last week in office in Washington in January 2014, we asked him what was surprising or new about this crisis. His answer was that they knew that speedy interest rate cuts had to be made and a strong economic stimulus introduced. But they had not anticipated the complexity of international financial institutions.

Third explanation: Imbalances in financial market developments

The third explanation for the financial crisis thus relates to the liberalisation of the global financial system, and problems relating to financial innovations and regulation.

The liberalisation of the global financial markets and deregulation intensified in the 1980s. This was partly a natural consequence of developments in information technology and the management of financial risks. An underlying factor was also the growing emphasis on the virtues of free markets in all areas of economic activity.

At the end of the 1990s, the Glass-Steagall Act was repealed in the United States. The Act had separated investment and commercial banking activities.

Moreover, the large Wall Street investment banks that had traditionally operated as partnerships were converted into limited companies one after the other.

More research on the role of these regulatory and structural changes in the development of the financial crisis would still be welcome, but it is quite likely that they increased risk taking.

As is now well-known, one of the changes that took place in banking in the pre-crisis decade was the increasingly widespread use of the “originate and distribute” business model.

This was justified by more efficient diversification of credit risks of bank loans. Unfortunately, it also broke the traditional link between borrower and lender, which led to a loosening of lending criteria.

This business model made use of the so called “off-balance sheet channel” which also had another motive: it enabled lower capital requirements, within the regulatory rules in force at that time, even though risks had remained virtually unchanged.

Tim Geithner, the first Treasury Secretary in Barack Obama’s administration, argues in his memoirs that the key cause for the crisis was the business model applied by investment and commercial banks, a model which was a combination of a low level of equity and very short-term market funding.

Regulation also allowed banks to use low-quality capital to fulfil part of the capital requirements, which did not provide a buffer against losses. This turned out to be a key mistake.

There is a broad consensus on Geithner’s views on both sides of the Atlantic. But what were the underlying factors that led to banks’ excessive leverage and an increase in short-term market funding?

According to one explanation, this was a case of the typical euphoria that

occasionally sweeps the financial markets. The euphoria was also fuelled by the aforementioned, seemingly benign macroeconomic environment that prevailed before the crisis.

The overheating was also fuelled by confidence in the ability and incentives of the major financial institutions to manage their risks.

I witnessed an historic debate on the matter in *Jackson Hole* in 2005, as the then Chief Economist of the IMF, *Professor Raghuram Rajan*, questioned the faith in self-regulating financial markets.

Professor Rajan analysed three problems: front-loaded bonuses gave incentives for higher risk-taking, too much confidence was placed in risk diversification, and it was believed that there would be an endless amount of liquidity available. He concluded that these developments have not made the global financial system safer; they have made it even riskier. He was criticised strongly, even called a Luddite. History has proven Professor Rajan right.

Finally, there was the problem of “too-big-to-fail”: financial institutions that had become too large and complex, with potentially excessive risk-taking incentives.

What has been done to prevent the recurrence of the problems?

2 Major changes in financial regulation and supervision

At least four reforms in particular deserve closer attention.

- First, banks’ loss-absorption capacity has been significantly strengthened.
- Second, banks’ ability to withstand liquidity crises has also been strengthened. The global financial crisis began as a liquidity crisis when banks lost their confidence in one another. Banks have also been required to reduce the share of short-term funding in their funding profile.

- Third, no bank can be regarded as “too-big-to-fail” any more. Supervision and capital requirements have been strengthened the most for banks that are systemically important. Authorities have been granted new powers to resolve banks efficiently. In relation to that, requirements on banks’ total loss absorbing capacity have been introduced, especially in the form of debt that can be “bailed-in”.
- Fourth, the global financial crisis demonstrated that price stability-oriented monetary policy and supervision that controls individual financial institutions’ capital adequacy and risk-taking do not automatically safeguard financial stability. Authorities needed a stronger mandate to ensure the stability of the financial system as a whole.

Identification of risks alone is insufficient to prevent financial crises. The authorities also need macroprudential tools to react to financial system imbalances. Examples of these tools include counter-cyclical capital buffers and loan-to-value constraints.

Banking Union strengthens supervision and crisis resolution in Europe

Although the seeds of the global financial crisis were sown in the United States, many European countries seriously suffered from the financial crisis and from the euro area sovereign debt crisis that came to a head thereafter.

Experiences from the financial crisis revealed that it was unsustainable to have integrated European banking and financial markets, on one hand, but nationally fragmented banking supervision and crisis resolution, on the other. If large financial institutions are engaged in significant cross-border activities, their supervision and crisis resolution must also be based on a broader framework.

As a result of the establishment of the Banking Union, today we have the Single Supervisory Mechanism (SSM) that has the mandate to ensure rigorous and consistent supervision of cross-border banks. At the same time, it draws on the local expertise of national financial supervisors. Secondly, the common crisis resolution framework aims to ensure coordinated and orderly restructuring of failing multinational banks.

There is some evidence that implicit government guarantees have recently declined. This means that markets have begun to take governments’ goals seriously.

However, the third element of the Banking Union, the common deposit guarantee scheme, is still incomplete. I will return to that at the end of the presentation.

3 Outlook for the future risks are changing

Have the regulatory reforms been effective? There are good reasons to believe that global financial system has become more stable and safer post-crisis.

Even so, the risks threatening stability are like constantly mutating viruses. They often become more virulent when reacting to medication developed for earlier diseases.

Expressed in ice hockey terminology, the challenge of financial market supervision is ‘to skate in the direction where the puck will go next, not where it is now’.

Central banks have in recent years kept their policy rates at exceptionally low levels. Expansionary monetary policy has been indispensable in a world slowly recovering from the crisis.

As a side effect, low interest rates can increase incentives for risk-taking and feed the elevation of asset prices. Lending in some countries has begun to grow at a potentially excessive pace.

This is when macroprudential tools need to be deployed.

The financial industry is also undergoing change. The boundaries between banking and other corporate activity are blurring.

In addition, banks are being challenged by new market participants harnessing the latest technology. Digitalisation will bring benefits. Benefits also include new risks, some of which are still hard to identify.

On the other hand, in recent years, international financial activity has also become simpler in a sound way. A few examples: (i) Banks are engaged in short-term securities trading to a lesser extent than in earlier years. (ii) Many large international financial conglomerates have streamlined and simplified their structures. (iii) The use of complex, artificial financial instruments producing no real added value has declined. (iv) The markets for financial derivatives are more transparent.

Many of these changes have gone a long way in the direction suggested in the High-Level Expert Group’s report on banks’ structural reform, but not all the way.

Too much of a good thing?

The following question has also been raised: have post-financial crisis regulatory reforms gone too far in the sense that they have become an impediment to economic growth?

A recent study argues that the recovery of bank stock valuations following the global financial crisis and the European sovereign debt crisis has been slow compared with previous crises (in spite of the recent development). The study suggests that the reason for this could be regulation.¹

The regulatory reforms have been considerable, but time has also been granted for adapting to them. Meanwhile, the low interest rate environment may have presented challenges for profitability of some banks, depending on the interest rate linkages of their assets and the composition of their own funding.

However, it is essential that banks’ profitability cannot any longer be based on their own funding being supported by public safety nets, which enables high leverage and, through that channel, a seeming improvement in profitability.

Owners and investors need to be prepared for bearing the risks: both profits and losses. The new bank recovery and resolution legislation offers tools for a genuine transfer of risks to bank owners and investors in bank debt markets.

This may lead to bank owners and investors requiring higher risk premia in the future. There is, however, no return to times of ineffective regulation and the practice of taxpayers ultimately bearing the risks involved.

“Shadow banking”

An important question in the assessment of post-crisis regulation is whether revised bank regulation drives banking and its risks increasingly to “shadow banks”. These are businesses that offer financial services and are engaged in activities resembling banking, but are subject to more relaxed regulation.

Shadow banks had a significant role to play in the build-up of the financial crisis, as part of banks’ actual risks did not appear on their own balance sheets, being hidden as off-balance-sheet items.

Various views on the management of risks in the shadow banking sector have been put forward since the crisis. Significant regulation of shadow banks

¹ Chousakos, K. and G. Gorton. 2017. *Bank Health Post-Crisis. Paper prepared for the Banque de France Financial Stability Review.*

has not been introduced so far. Instead, banks' links with the shadow banking sector are regulated more effectively.

This helps transform shadow banking into “resilient market-based finance”² that can stand on its own, and will not transmit excessive risks to the banking sector via either direct financial links or the fire sales-induced balance sheet channel.

In the United States, the Dodd-Frank legislation adopted following the financial crisis allows authorities to put under supervision a shadow bank that has become a system-level threat. This possibility does not exist in Europe for the time being.

SUERF and Suomen Pankki organise in September this year a conference on shadow banks; this provides a forum for discussing the theme more closely.

4 Finalising the Banking Union

A key remaining task for Europe is finalising the Banking Union. As I already discussed above, two pillars of the Banking Union, single banking supervision and the bank recovery and resolution framework, have largely been implemented, but the third, single deposit protection, is unfinished.

A single deposit guarantee scheme has been a controversial issue, but I share the view that an insurance-type deposit protection implemented in an appropriate manner is a consistent element of Banking Union.³ Most benefit

would accrue to small and concentrated banking systems with correlated banking risks among different actors.

The European financial system is highly bank-based with a relatively limited role for market-based financing. This structural feature adds to the fragility of the European financial system. For this reason, it is also important to implement the Capital Markets Union, which complements the Banking Union.

There are already signs of a recovery in risk capital investments in Europe. It is vital that we continue work to ensure that the expansion of promising new businesses do not face unnecessary barriers created by bottlenecks in financing.

5 Concluding remarks

The financial regulation and market infrastructure reform agenda, initiated by G20 in the aftermath of the financial crisis has been a great achievement. We must not let regulatory “fatigue” bring it to a premature end. I share the view of Mario Draghi from January when he emphasized commitment to the completion of Basel III, in his capacity as the chairman of The Group of Central Bank Governors and Heads of Supervision.⁴ At the same time, we need to be clear, to the extent possible, as regards what remains to be done, in order to facilitate existing and new financial institutions' planning for their future investments.

I thank you for your attention.



² See M. Carney. 2017. *What a difference a decade makes. Bank of England speech.*

³ See e. g. the report by a working group chaired by Dr. Antti Suvanto. *Improving the resilience of Europe's Economic and Monetary Union. Ministry of Finance Publications – 37b/2015. Finland.*

⁴ *Finalising Basel III reforms, Press release 3 January 2017. Basel Committee on Banking Supervision. www.bis.org/press/p170103.htm.*