DeNederlandscheBank

EUROSYSTEEM

"Easy Money, Uneasy Finance"

On the relationship between monetary policy and financial stability

Speech by Klaas Knot at the Peterson Institute for International Economics

Washington, 24 September 2018

In his speech at the Peterson Institute in Washington, Klaas Knot states that a sound financial system makes life much easier for central bankers. But the reverse is also true: a weak financial system can cost monetary policymakers many sleepless nights. And secondly, he points out the need for further improvements in the regulatory framework in the coming years.

1. Introduction

Ten years ago, the global financial system was on the brink of collapse.
Within just a couple of weeks, well-known and systemically important financial institutions either failed or teetered on the abyss.
Activity in several key financial markets ground to a complete halt. Soon after, the global economy would enter a very deep recession.

To remind you of the extreme circumstances of that time, let me show you the front page of the Financial Times from ten years ago on 24 September 2008. The headlines were dominated by the frenzied efforts of the US government and the Fed to deal with the fallout from the Lehman Brothers collapse.

We all remember the unimaginable developments that happened in those weeks. And we all remember the pain of the Great Recession that hit the global economy in the following years.

However, I also remember the global commitment and co-operation among policymakers. Deep uncertainty was plaguing the authorities.

But a combination of extraordinary measures, including interventions, capital support and liquidity injections, eventually succeeded in restoring financial stability.[1] And an unprecedented monetary stimulus was provided through a range of conventional and unconventional tools.

Ten years later, we now stand at a vital crossroads. The supervisory reform program has made important progress. Monetary policies are now being normalized.

This afternoon I want to take stock of the current challenges. I would particularly like to focus on the importance of a robust financial system for conducting monetary policy.

I want to convey two main messages.

First, a sound financial system makes life much easier for central bankers. It limits the effects of financial shocks on the real economy;
it strengthens monetary transmission channels; and it reduces unintended consequences of monetary policy actions. But the reverse is also true: a weak financial system can cost monetary policymakers many sleepless nights.

Second, against the background of a monetary environment that is likely to remain accommodative for some time, we therefore need to further strengthen the global financial system. And to do that, we need to further improve the regulatory framework in the coming years. I will argue that the financial system is in much better shape than a decade ago, but important risks still remain.

I will argue that international regulatory authorities firstly need to maintain strict micro- and macroprudential regulation; secondly, must seek further improvements in policy implementation; and thirdly, should adapt to risks shifted outside their perimeter.

2. Causes of the crisis and policy responses

Let me briefly recall the financial, economic and policy circumstances which allowed the global financial crisis to develop.

Causes of the crisis
In the decades before the crisis, the global financial system changed profoundly. This was the result of deregulation, increasing competitive pressures on banks and increasing financial globalization. These trends have led to a greater role for market finance and a stronger interconnectedness within the financial system.

During the same period, the macroeconomic environment underwent important structural changes. This happened on the back of accelerating globalization, the emergence of new players like China, and technological progress. Against this background, large global flows of savings and investments

[1] See B. Bernanke (2009). Reflections on a Year of Crisis. Speech at the Federal Reserve Bank of Kansas City's Annual Economic Symposium, Jackson Hole, Wyoming. 21 August. The same remarks were delivered at the Brookings Institution, on 15 September 2009.

pushed down long-term interest rates, in the United States and other advanced economies.[2] Accommodative monetary policies further allowed for financial risk-taking. It has been argued that the "Great Moderation" allowed a leverage build-up that ultimately threatened financial stability and hence macroeconomic stability.[3]

In the regulatory policy sphere, a widespread trend towards deregulation loosened the reins on risk-taking in the financial sector. Microprudential supervision was not well equipped to address this increased risk-taking.
In addition, macroprudential orientation of regulatory policy addressing systemic risk was almost completely absent at that time.

In this environment, misaligned incentives prompted widespread risk-taking in the financial system. In combination with high economic growth, important imbalances developed. When the crisis erupted, banks did not have sufficient capital to absorb losses and authorities were not adequately prepared to handle failing banks. The imbalances spread almost instantaneously across the global financial system, as a result of the interconnectedness of financial institutions and markets.

These patterns are not specific to the global financial crisis, as economic historians have documented.[4] Typically, financial crises are preceded by booms where factors like high growth, innovation and increased risk taking interact.
In a very recent paper Ben Bernanke introduces yet another element:
the excessive reliance of financial institutions on short-term wholesale funding.[5] This new element explains why the global financial crisis was more extreme, and why it had more severe effects on the real economy.

Policy responses
When the crisis erupted we needed new policy toolkits.
In the last ten years, therefore, a comprehensive reform program has been developed, under the leadership of the G20, the Financial Stability Board, and the Basel Committee of Banking Supervision.

The reforms have made financial institutions better equipped to deal with future shocks. Thanks to these reforms, banks hold significantly more capital, which is more readily and easily available to absorb losses. Banks also have stronger liquidity positions and have strengthened their governance and risk management. Prudential policies increasingly include a macroprudential orientation with a

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[2] For a recent analysis of this mechanism, see B. Bernanke (2015) Why are interest rates so low, part 3: The global savings glut. Wednesday. Brookings Blog, 1 April 2015.
[3] See e.g. G. Stevens (2012) Challenges for central banking. Address to the Bank of Thailand's 70th Anniversary and 3rd Policy Forum, Bangkok, 12 December; C. Borio (2014) Monetary policy and financial stability: what role in prevention and recovery? BIS Working Papers No 440.
[4] See e.g. Ò. Jordà, M. Schularick, A.M. Taylor and F. Ward (2018) Global Financial Cycles and Risk Premiums. NBER Working Paper No. 24677. For an analysis of these elements in the first financial crisis of the modern era, see R. Frehen, W. Goetzmann, and G. Rouwenhorst. (2009) New Evidence on the First Financial Bubble. NBER Working Paper No. 15332.
[5] B. Bernanke (2018) The real effects of the financial crisis. BPEA Conference Draft, Fall.

stronger focus on financial stability. Risks originating in the shadow banking sector are better appreciated, and over-the-counter markets have become more robust and transparent. In addition, resolution management has emerged as a new toolkit to reduce too-big-to-fail distortions.

And it became clear that traditional monetary policy responses were not sufficient to deal with the Great Recession. As policy rates were cut to their effective lower bound, further monetary accommodation was achieved through unconventional tools such as forward guidance, longer-term refinancing operations and asset purchases.

With the help of these new tools, monetary policy contributed to fixing a dysfunctional monetary transmission mechanism, supporting the recovery and averting deflation risk.[6]

3. A framework for assessing monetary policy and financial stability

Today, the financial system is more resilient and the global economy is enjoying a period of strong economic growth. However, important challenges remain for both monetary and regulatory policymakers.

A framework I consider very useful for guiding policy actions is based on the following three key elements[7]:

Firstly, the necessity of policies. Do circumstances require action by authorities?
Secondly, the effectiveness of the instrument. Can the proposed policies achieve the intended objectives?
And thirdly, the possible unintended consequences of interventions.

In my view, both monetary and regulatory policies need to be based on such criteria as guideposts for policymaking.

4. Financial stability and the monetary policy triangle

Let me apply this framework to monetary policy first, and focus on the interplay with financial stability. My main point here is that a sound financial system makes life easier for monetary policymakers.

Let me elaborate.

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[6] See e.g. J. Yellen (2017). The Goals of Monetary Policy and How We Pursue Them. Remarks at the Commonwealth Club, San Francisco, California, 18 January; M. Draghi (2017). Accompanying the economic recovery. Introductory speech at the ECB Forum on Central Banking, Sintra, 27 June; K. Knot (2017) Modesty in times of uncertainty. Speech at the Business Economists' Annual Dinner, London, 29 November 2017.
[7] For a lucid analysis along these lines, see W. Dudley (2013) Why Financial Stability is a Necessary Prerequisite for an Effective Monetary Policy. Remarks at the Andrew Crockett Memorial Lecture, Bank for International Settlements 2013 Annual General Meeting, Basel, Switzerland, 23 June 2013.

Necessity
First, a sound and stable financial system will reduce the need for monetary policy actions aimed at macroeconomic stabilization.

The global financial crisis and the ensuing Great Recession have shown that shocks emanating from the financial system can have a devastating impact on the real economy. Similarly, a financial system experiencing stress amplifies the effect of shocks originating in the real economy.

Both mechanisms then lead to larger deviations of output from potential, and inflation from target, compared to an environment in which the financial system had remained stable. In turn, this would call for more monetary policy interventions to stabilize output and inflation.

Effectiveness
Second, monetary policy is more effective when the financial system is sound.

Standard monetary policy determines marginal financing conditions in the short-term money market. Its macroeconomic effects depend on several channels through which financial intermediaries pass on these policy rate decisions to the real economy. Especially on my side of the Atlantic, during the European debt crisis, these transmission channels became impaired.[8]

This severely restricted the ability of policy rate cuts that central banks had implemented to stabilize the real economy. Central banks ultimately had to resort to unconventional monetary policy tools, to restore the pass-through of lower policy rates to firms and households.[9]

A sound financial sector therefore enhances the effectiveness of monetary policy by improving the functioning of the monetary transmission mechanism. It helps monetary policy achieve its objectives with less effort, and reduces the likelihood that the effective lower bound is reached.

Unintended consequences

Third, the more sound a financial system, the less likely it is that monetary policy will have unintended consequences. Conversely, the weaker a financial system, the more likely it is that monetary policy actions will create unintended consequences.

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[8] A recent research paper by DNB economists illustrates this mechanism and shows that recapitalizing banks more quickly (as it was done e.g. in the United States) strengthens the monetary transmission mechanism (M. Mink and S. Pool (2018) Credit supply and monetary transmission after a banking crisis. Mimeo, DNB).
[9] For an early theoretical analysis of this mechanism, see e.g. V. Cúrdia and M. Woodford (2011) The central-bank balance sheet as an instrument of monetary policy. Journal of Monetary Economics, 58 (1). An overview of theoretical and empirical research on how the GFC was transmitted to the real sector, the nature of financial frictions and their impact on the transmission of monetary policy decisions can be found in M. Gertler and S. Gilchrist (2018). What Happened: Financial Factors in the Great Recession, Journal of Economic Perspectives, 32(3).

These unintended consequences of monetary policy for financial stability can occur through different channels.

A first and much debated mechanism is the risk-taking channel of monetary transmission. According to this, monetary policy has a systematic impact on ex-ante risk-taking in the financial sector, by setting the universal price of leverage[10], affecting financial conditions and ultimately the real economy.[11] A prolonged period of loose monetary policy can contribute to the build-up of financial imbalances. In this sense, persistently low interest rates since the turn of the century have been perceived as contributing to the global financial crisis as well.[12]

A second mechanism through which persistently low rates affect financial soundness relates to the reduced incentives for balance sheet repair. The more so if macro- and microprudential regulation are insufficiently developed.[13]

This is most evident in a crisis situation, such as the one from which we have recently emerged in the euro area, or the crisis in Japan in the 1990s. Monetary stimulus through conventional and unconventional instruments, may help to avoid a collapse of the banking sector.

But it can come at the expense of reduced incentives for balance sheet repair by individual banks. It can promote the evergreening of non-performing loans and even regulatory forbearance. In this context, unconventional policy instruments are more intrusive than conventional monetary policy. And they can create deeper market distortions that aggravate the risk of a misallocation of resources and financial instability.

It is often argued that prudential and not monetary policies should be geared towards financial stability risks. But I tend to agree with Charles Bean that “there are important qualifications to this somewhat Panglossian view of the ability to maintain both price stability and financial stability by assigning monetary policy to the former and macroprudential policy to the latter.” [14]

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[10] See C. Borio and M. Drehmann (2011) Financial instability and macroeconomics: bridging the Gulf. Financial instability and macroeconomics: bridging the gulf. In A, Demigüç-Kunt, D. Evanoff and G. Kaufman (eds.) The international financial crisis: Have the rules of finance changed?, Singapore: World Scientific Publishing.

[11] See Borio, C., and H. Zhu (2012). Capital Regulation, Risk-Taking and Monetary Policy: A Missing Link in the Transmission Mechanism. Journal of Financial Stability; F. Smets (2014) Financial stability and monetary policy: How closely interlinked?https://www.ijcb.org/journal/ijcb14q2a11.htm International Journal of Central Banking.

[12] For an analysis of the role of low short-term interest rates in the GFC through their impact on risk-taking incentives, see J. Stein (2013) Overheating in Credit Markets: Origins, Measurement, and Policy Responses. Speech at the Federal Reserve Bank of St. Louis research symposium on “Restoring Household Financial Stability after the Great Recession: Why Household Balance Sheets Matter”, 7 February. For a careful discussion of the channels through which a low-for-long scenario could still engender material risks to financial stability, see Committee on the Global Financial System (2018) Financial stability implications of a prolonged period of low interest rates. CGFS Papers No 61.

[13] The idea that low capitalization can induce risk shifting in response to shocks hitting bank balance sheets was developed in a seminal study by M. Dewatripont and J. Tirole (1994) The Prudential Regulation of Banks, MIT Press. See also J. Tirole (1994) On Banking and Intermediation. Joseph Schumpeter Lecture. European Economic Review.

[14] C. Bean (2014). The future of monetary policy. Speech at the London School of Economics, London, 20 May 2014.

This implies that an effective prudential policy is a necessary but not a sufficient condition for monetary policy to be effective in the medium to long run. Central banks must be conscious of unintended consequences of a monetary strategy that keeps policy rates low for a long time.

Translating this to the current context, my main takeaway is that as long as inflation remains subdued, central banks are likely to maintain an ample degree of monetary accommodation. But the longer this accommodation is maintained, the more pressure will mount on financial regulators and supervisors to be able to preserve financial stability.

5. Financial stability and the regulatory policy triangle

So what would this mean in practice, and how does it relate to the international regulatory agenda?

My key point here is that in an environment in which monetary policy is likely to remain accommodative for some time, it is important that the agenda for regulatory reforms is pushed ahead, along several dimensions.

Let me also elaborate here by referring to the same three elements: necessity, effectiveness and possible unintended consequences.

Necessity

The first question is whether the regulatory reforms that have been adopted are still necessary. My short answer here is Absolutely. And we actually need to strengthen our regulatory toolkit even further.

As I mentioned before, the global financial crisis could develop in an environment with high growth and increasing risk appetite, with low interest rates and abundant liquidity on the one hand, and on the other hand the emergence of new risks, due to technological developments or innovation that were not adequately captured by microprudential and macroprudential regulation.

The regulatory reforms taken in response to the crisis were thus needed to restore the balance in a previously under-regulated sector. As of today, vulnerabilities in bank intermediation are much smaller and bank resilience is stronger. However, some of the drivers of the crisis are still present.[15] The total debt of households, firms and governments is now higher than ten years ago. Short and long-term rates are still very low. And financial institutions and markets remain strongly interconnected.

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[15] See e.g. H.S. Shin (2018) Reflections on the Lehman collapse, 10 years later. Translation of an article in the Frankfurter Allgemeine Zeitung, 15 September 2018.

In this context, we should be wary of recent indications of diminishing momentum for regulation. And there are even industry calls for rolling back some of the agreed reforms, to which I clearly would not subscribe.

On top of that, I would like to highlight the need to further develop the macroprudential toolkit. The current macroprudential tools are incomplete and – by design - limited in scope and impact.[16] Almost all jurisdictions have established a macroprudential authority.

But there is still some difficulty to identify – and/or reluctance to actively develop - macroprudential policies to address risks to the financial system as a whole.

Effectiveness

The second question is whether the regulatory reforms carried out thus far were effective.

Although the early signs of much stronger resilience in the core financial system are encouraging, it is still relatively early to judge whether this has been enough. Too-big-to-fail incentives have surely been reduced, but few would argue they have actually been eliminated.

The new rules in response to the crisis were also designed in a short time frame and many reforms progressed in parallel. It is therefore a natural process that, after the initial implementation of such a comprehensive set of reforms, policymakers now shift their focus to the phase of policy evaluation. International standard setting bodies like the FSB have to continuously assess the design and implementation of reforms to see whether regulation meets the objectives while minimizing distortions. And this is what we are actually doing. It goes without saying that such analyses should be evidence rather than sentiment based, and focused on better rather than less regulation.

The global financial crisis has also shown that international co-operation is key in developing effective regulatory policies. The global financial sector is closely integrated, and national or regional developments create external effects that directly and indirectly affect financial stability in other jurisdictions.[17]
Developing a common approach creates a level playing field between jurisdictions which prevents regulatory arbitrage. The post-crisis reform agenda, but also the creation of a single supervisory mechanism in Europe are important examples of successful international cooperation after the crisis.

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[16] E. Cerutti, S. Claessens and L. Laeven (2017) The use and effectiveness of macroprudential policies: New evidence. Journal of Financial Stability.
[17] For a discussion of how regulatory arbitrage results from the increasing international integration of banking systems, see O. Jeanne and A. Korinek (2014) Macroprudential policy beyond banking regulation. Financial Stability Review, Banque de France, 18., Empirical evidence on this type of regulatory arbitrage is reviewed in G. Galati and R. Moessner (2018) What do we know about the effectiveness of macroprudential policy. *Economica.*

Unintended consequences

The third question relates to unintended consequences of regulatory reforms.

A main concern here is the potential of shifting risks outside the regulated sector as new rules come in. As Charles Goodhart forcefully argued, prudential policy faces a "boundary problem":
…effective regulation can penalize financial intermediaries within the regulated sector compared to those just outside, leading to substitution flows towards the unregulated.[18]

For example, when it comes to what we now call non-bank financial intermediation (formerly known as shadow banking) the growth of total assets in recent years has been higher than in traditional banking. It is true that since the crisis, efforts by the G20 and the FSB have resulted in better insight into non-bank intermediation.

Yet there are still important questions about potential systemic risks originating from the unregulated sector and how these risks could interact with those emanating from the regulated sectors.

6. Conclusion

Let me conclude.
The global financial crisis was a sobering experience that presented an existential threat to financial stability. The potential disruptive effects to the financial sector and the economy at large called for exceptional measures.

In those turbulent times, the monetary, regulatory and supervisory response essentially followed three guideposts. Firstly, authorities did what was needed. Secondly, they implemented policies that were effective. And thirdly, they tried to mitigate unintended consequences.

We have come a long way. Financial stability has been restored and the financial system is now more robust than a decade ago. However, the next ten years will undoubtedly present new challenges.

History teaches that new vulnerabilities will emerge and the next financial crisis will eventually occur. We cannot assume that financial regulation will always be able to fully prevent the next crisis, because regulatory coverage is never complete and new risks can emerge from other segments of the economy or its financial sector. Technological innovation will continue to change the business models of banks and how they operate within the financial sector. New businesses will emerge along the chain of value creation.

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[18] C. Goodhart (2008) The boundary problem in financial regulation. National Institute Economic Review, 206; and M. Brunnermeier, A. Crockett, C. Goodhart, A. Persaud and H.S. Shin (2009) The fundamental principles of Financial Regulation. Geneva Reports on the World Economy, Centre for Economic Policy, London. One of the few studies that provides evidence on the substitution from bank-based financial intermediation to non-banking intermediation in response to macroprudential measures is J. Cizel, J. Frost, A. Houben an P. Wierts (2016) Effective macroprudential policy: Cross-sector substitution from price and quantity measures, IMF Working Paper No. 16/94.

These fundamental changes can lead to disruptive innovation and new operational risks, such as cybercrime. Such risks are outside the natural domain of regulatory authorities, but will become increasingly important to financial stability.

Financial supervisors should therefore continue to expand their knowledge and enhance their risk monitoring activities in those areas.

This underlines why we have to remain vigilant and continue to adhere to our strategy of pursuing a sound financial system. It would support and enhance current monetary policies and contribute to containing the unintended consequences. In addition, a well-regulated financial sector would provide us with a much better starting point than prior to the global financial crisis.
Little I said is entirely new – yet I feel that these words should now be heard again. Let me illustrate that with a 2001 quote from the late Andrew Crockett, whom we all know as one of the founding fathers of the FSB:
"achieving the elusive twin goals of financial and monetary stability will require mutually reinforcing anchors to be put in place in the two spheres. Moreover, it will require an enhanced appreciation of the interdependence of policies in the two areas."[19]

And perhaps, instead of everything I have said today, these words alone would have sufficed.

[19] A. Crockett (2001) Monetary policy and financial stability. Speech at the Fourth HKMA Distinguished Lecture, held in. Hong Kong, 13 February.