

Jens Weidmann: Monetary policy after the crisis

Text of the IMFS Distinguished Lecture by Dr Jens Weidmann, President of the Deutsche Bundesbank and Chairman of the Board of Directors of the Bank for International Settlements, Frankfurt am Main, 14 September 2017.

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1. Introduction

Dear Volker Wieland

Ladies and gentlemen

It was on this day exactly ten years ago – 14 September 2007 – that savers lined the street in front of the UK bank Northern Rock in order to rescue their savings. They had lost confidence in their bank upon hearing the news that it had applied for an emergency loan from the Bank of England.

This financial assistance was the last hope for Northern Rock, which by that time was unable to obtain funding from the markets. Given the prospect of loan losses, the institution was no longer able to find any takers for its piles of mortgage-backed securities (MBS), which in the past had been a key source of funding for the bank. This was the first run on a UK bank in 150 years.

As we now know, Northern Rock would not be the only bank to run into trouble owing to the financial crisis and subsequent economic crisis.

The financial market turmoil caused the sharpest drop in GDP in post-war history. The severity of the contraction caught not only the general public, but also economists, off guard. As recently as 2003, Nobel Prize winner Robert Lucas¹ had declared the central problem of depression prevention to have been solved.

A year later, Ben Bernanke,² then a Governor at the US Federal Reserve, delivered a speech in which he laid out what he regarded as the most striking economic development in the past 20 years: the extreme economic stability in the industrial countries.

Much like Francis Fukuyama, in his influential book *The End of History and the Last Man*, hoped that the end of the Cold War would put an end once and for all to the clash between the major ideologies, so, too, did many economists think the end of major economic crises was within reach.

This assessment rested on the observation that, since the mid-1980s, inflation and GDP had been moving with an unprecedented degree of synchronicity. This is why Ben Bernanke's speech was entitled, fittingly, "The Great Moderation".

He attributed the increasingly stable pattern of economic development primarily to better monetary policy: in the 1960s and 1970s, economic and central banks were still beholden to the idea that monetary policy could exploit a permanent trade-off between inflation and unemployment, where, by accepting a little more inflation, policymakers could keep unemployment down for good.

As Ben Bernanke outlined in his speech, this idea turned out to be wrong. Higher inflation is NOT able to keep unemployment down in the long run as, once inflation has gone up, labour, and the unions, form expectations that this expansionary monetary policy – and thus higher inflation – will persist in the future as well. They therefore demand higher nominal wages to offset the attendant real purchasing power losses. Which counteracts the creation of jobs. It is a phenomenon which

economists call the time inconsistency problem.

Monetary policy which is geared towards short-term employment growth or which even attempts to push unemployment below its structural level will only end up delivering higher inflation rates. This is what transpired in the 1970s and early 1980s, when inflation in the major industrial countries averaged roughly 8½%. Decisive factors included not only energy-related price rises but also central banks' increasing tilt towards employment-driven monetary policy and the absence of central bank independence in many quarters.

A monetary policy that is focused on safeguarding monetary stability, on the other hand, will tend to lessen volatility in economic activity. If a central bank's efforts to fight inflation are credible, wage moderation will also ensue. This, in turn, will have a stabilising impact on economic activity.

In his remarks, Bernanke expressed the hope that monetary policymakers would not forget the lessons of the period of skyrocketing inflation in the 1970s and early 1980s and that the era of macroeconomic stability would persist for a long time to come.

However, as we all know, even at that time risks to financial stability were beginning to appear on the horizon which would later unleash massive turmoil in the financial system and trigger a severe economic crisis.

Central banks around the world responded to the financial crisis – and to the sovereign debt crisis that struck the euro area later on – by resorting to measures hitherto deemed inconceivable: by reducing interest rates to zero or even below that, by providing more or less unlimited liquidity, and by purchasing assets on a large scale.

But did that mark the advent of a new monetary policy paradigm – or has the monetary policy approach remained unchanged, on the whole? I would like to focus in my lecture today on how I believe liquidity should be made available in the future, whether government bond purchases should be a fixture of central banks' policy toolkits, and what role monetary policy should play in financial system stability. Not all of these questions can be answered once and for all today. But look on the bright side: monetary policy debates will maintain their excitement in the future.

2. Liquidity policy

Ladies and gentlemen

I would like to begin by presenting what is arguably one of the most distinct symptoms of the recent financial crisis: the sudden rise in the provision of liquidity by central banks. As a case in point, excess liquidity in the euro area surged from €1.2bn in July 2007 to €230bn at the end of 2008. That may not seem like very much, compared to today's figure of €1,668bn in excess liquidity, which is being expanded ever further thanks to the Eurosystem's asset purchase programme (APP), yet at that time it was a noteworthy increase.

Here is a simplified explanation of the monetary transmission mechanism in the euro area as it was seen prior to the financial crisis: the central bank changes interest rates on its short-term, largely risk-free refinancing operations, which then impacts on the interbank market. Banks then "transmit" the monetary policy stimulus to the rest of the financial market and then from there to the real sector. This is how monetary policy "feeds into" prices.

Once the crisis broke out, however, the monetary transmission process faced the danger of being halted abruptly.

Banks had doubts about the soundness of their counterparties. Risk spreads between secured and unsecured money market exposures skyrocketed, the volume of money market transactions declined, and the drying-up of the money markets forced banks to tap monetary policy operations

for funding. The number of banks participating in monetary policy operations therefore rose sharply.

The Governing Council of the ECB reacted by switching its refinancing operations to tenders with full allotment. As long as banks were able to post sufficient collateral, they could thus obtain unlimited amounts of liquidity from the Eurosystem. In practice, this allowed them to bypass the strained interbank market.

The Governing Council also offered additional longer-term refinancing operations including, naturally, the three-year refinancing operations at the end of 2011 and the beginning of 2012 in particular. It also reduced the rating threshold for certain types of monetary policy collateral, thereby giving banks greater scope for taking out Eurosystem refinancing loans.

The central banks of the Eurosystem – like those elsewhere in the world – thus took on, to a major extent, the money market's role as an intermediary during the crisis. By acting as a lender of last resort to banks, they were able to contain the threat of massive bank runs.

This approach becomes a problem, however, once the ample provision of central bank money goes from being used to bridge temporary liquidity shortfalls to helping keep banks without a sustainable business model afloat permanently.

Those institutions will then tend to prolong their loans to legacy customers so as not to have to take a potential financial loss. However, they will subsequently also grant fewer new loans. This means that funding remains with less productive firms instead of being channelled towards more innovative firms. The situation in Japan should serve as a warning in this respect.³

Weak banks therefore tend to foster weak firms – and the attendant inefficient distribution of funding will dampen an economy's innovativeness and dynamism.

Studies by the OECD⁴ confirm that a non-negligible percentage of firms can be classified as “zombie firms”. For instance, in 2013 28% of capital resources in Greece, 19% in Italy and 16% in Spain were sunk in firms that were unable to cover their cost of capital.

Economists Fabiano Schivardi, Enrico Sette and Guido Tabellini⁵ show how the health of the banking system influences capital allocation. They estimate that credit misallocation in Italy reduced annual GDP growth by between 0.2 and 0.35 percentage point in the 2008 to 2013 period.

What we see, therefore, is that providing liquidity is a balancing act for central banks. Not providing enough liquidity could cause a spark to turn into a fire, while providing too much liquidity, and thus keeping “zombie banks” on life support, could cause the foundation of our competitive economic system to become brittle and shaky.

This dilemma cannot be resolved by monetary policy on its own. It is therefore important for banks to be sufficiently capitalised so as, for instance, to be able to cope with credit losses. For that reason, it is a good thing that banks now need to hold more and better-quality capital. They are also required to continue to shrink their holdings of non-performing loans.

This is ultimately all about, in particular, giving banks greater incentive to be more risk-aware in their decision-making processes than they were prior to the outbreak of the crisis. For that to work, it has to be ensured that institutions with riskier business models also pay higher risk premiums.

This, however, also requires investors to be correspondingly aware of risk in their own actions. And a decisive factor here is that banks, in a pinch, need to be permitted to fail – without bringing the financial system to its knees – and that investors and creditors, and not the tax payer, need to

be first in line to pick up the tab for banks' losses.

These factors are what make the new European rules for bank resolution, and their rigorous application, so important. Amidst all the contentious debate, recent events have shown, at least, that banks are now able to exit the market without jeopardising the functional viability of the financial system.

But in order not to thwart these rules, the Eurosystem has to return, over the long term, to a way of providing liquidity that is more in line with market conditions. The pre-crisis monetary policy framework had some merits in that respect. Banks obtained liquidity from the Eurosystem on terms that were not significantly more favourable than those on the interbank market. If central bank loans, which are not priced according to the credit institutions' financial standing, are significantly more favourable than funding via the money market, the banks will have few incentives to lower their risk premiums by means of an appropriate risk management.

That also applies to longer-term refinancing operations. Interest rates for longer-term refinancing not being set by the market weakens banks' inherent responsibility for their own liquidity and credit risk management. Furthermore, it distorts competition because institutions that do not have a sustainable business model can obtain funding from the Eurosystem over the long term irrespective of the risk involved – and do so, moreover, with collateral of lower quality than collateral on the interbank market.

3. Government bond purchases

Ladies and gentlemen

In the crisis, not only did the Eurosystem switch to full allotment of liquidity as well as expanding the collateral framework, it also launched purchase programmes for government bonds.

As early as May 2010, Greek sovereign bonds were being purchased under the Securities Markets Programme. To these were later added bonds from Ireland, Portugal, Spain and Italy – countries with a low credit rating.

In the summer of 2012, this programme was replaced, as you know, by the Outright Monetary Transactions (OMT) programme which – even though it never led to any purchases – has still had a perceptible impact on the capital markets.

And since 2015 the Eurosystem has been making large-scale purchases of sovereign debt under the public sector purchase programme.

In saying that, it is undisputed that such purchases have an effect on the monetary policy objective. Bundesbank analyses, too, show that government bond purchases have an expansionary effect on aggregate demand and inflation. There is, nevertheless, a large amount of estimation uncertainty, and different model approaches lead to very different assessments with regard to the effectiveness of such purchases.⁶

At the same time, government bond purchases also have some inherent unintended side effects. An analysis by the economists Viral Acharya, Tim Eisert, Christian Eufinger and Christian Hirsch.⁷ for example, shows that the Eurosystem's OMT programme has impaired credit allocation in the euro area. The authors argue that the announcement of possible purchases of financially distressed governments' bonds has stabilised the prices of such bonds and thus also the assets side of bank balance sheets. The authors say that the banks that have been shored up in this way have granted loans to less productive firms, thus adding to an inefficient allocation of credit.

But that is not the only respect in which government bond purchases targeted at individual

countries' risk premiums raise problems in the euro area. There is a hidden danger that using the central bank balance sheet to communitise fiscal risks will undermine the principle – enshrined in the Maastricht Treaty – of member states being individually responsible for their own finances. The possibility of passing on government liabilities to the European level reduces incentives for embracing fiscal prudence.

In order to mitigate this problem, the bonds of member states purchased by the national central banks under the present PSPP are also not subject to distribution of losses within the Eurosystem.

The bonds are, furthermore, being purchased in proportion to the ECB capital key. In that way, too, the Eurosystem is trying to avoid the moral hazard that could arise as a result of purchasing a disproportionately large amount of bonds issued by highly indebted governments.

In addition to that, purchases are restricted to a maximum of 33% per country and bond series. This limit was set so that the Eurosystem does not have to get into the awkward situation of having to prevent any restructuring of sovereign debt that may be deemed necessary. If the Eurosystem were to acquire too many bonds, it would have a blocking minority in any vote on a haircut. And it would have to make use of its blocking minority in order not to violate the prohibition of monetary financing.

But even below that threshold, the purchases have made the Eurosystem the member states' largest creditor. What is more, in the context of asset purchases, changes in monetary policy impact much more directly on governments' funding costs than interest rate moves do. This has additionally blurred the line between monetary policy and fiscal policy. Ultimately, if a return to monetary policy normality were called for, this could lead to the central bank coming under greater political pressure to keep funding costs at a low level – even if this were to the detriment of the objective of price stability.

Since, moreover, governments pay largely the same rate of interest on that part of their debt held by the central banks, for that part the disciplining effect of the capital markets is undermined, too.

Given the large number of problems, I regard government bond purchases purely as an instrument of last resort, say, when it comes to staving off a dangerous deflationary downward spiral of declining prices and wages. But I've said in the past that the fears of deflation are exaggerated. Now they have very largely disappeared.

Indeed, the economic recovery in the euro area is gaining further momentum and is broadly based. That is also evidenced by the upward revision of the ECB staff's growth projection. The projection has also shown, however, that inflationary pressure remains rather subdued. The domestic price pressures identified in the projection are, however, quite consistent with a path towards our definition of price stability.

That fact that it's taking a little longer to achieve our monetary policy objectives also has to do with enterprises and households in many euro-area countries still being occupied with reducing their high levels of debt in some cases.

And a number of crisis-affected countries have succeeded in strengthening their competitiveness and transforming current account deficits into surpluses. But improving price competitiveness through wage moderation is, naturally enough, also dampening domestic price pressures.

Given subdued inflationary pressure, an accommodative monetary policy stance remains appropriate in the euro area. Opinions can, admittedly, differ with regard to how much we should step on the pedal in terms of monetary policy and what instruments ought to be used for that.

In saying that, it is obvious that, even after the net purchases under the asset purchase programme have been discontinued, euro-area monetary policy will remain extremely accommodative. First, what is crucial for the degree of expansion in monetary policy is not so much the amount of monthly purchases but, above all, the total outstanding volume of sovereign bonds on our books.

And the amount held by the Eurosystem will remain at a very high level even when net purchases have been discontinued. After all, the Governing Council of the ECB has taken a decision to reinvest the proceeds from the maturing bonds.

Second, the Governing Council has decided not to raise interest rates until after the net purchases have ended. Speaking metaphorically, that means we're not talking about slamming on the brakes but rather about no longer constantly putting our foot down on the accelerator.

With that in mind, too, the Governing Council of the ECB has to make sure it doesn't miss the right moment for a return to normal in monetary policy. Precisely because the monetary conditions will continue to support economic activity for a long time to come, the question arises as to how much room for manoeuvre monetary policymakers will still have when the next downturn comes.

4. Monetary policy and financial stability

Ladies and gentlemen

Economics owes its name to the Greek philosopher Aristotle. He understood economics as a broad social science which had to be built upon a sound moral foundation.

To Aristotle, the concept of moderation was central in every way. According to this view, a true "Great Moderation" would surely not only mean a moderation of inflation and economic fluctuations, it would also involve avoiding excesses in the financial system.

So what does the new division of labour in macroeconomics look like? What role should monetary policy have in securing financial stability? This is, incidentally, a major focus of the Bundesbank's research. The Bundesbank has formed what is known as the Trinity research network with Sweden's Riksbank, the Bank of Canada and the Federal Reserve Bank of New York to investigate the questions this raises.

One thing does seem obvious to me, however: monetary policy influences economic agents' propensity to take risks. One of the aims of monetary policy today, of course, is to make riskier financial assets comparatively more attractive through very low risk-free interest rates – monetary policymakers are pinning their hopes on what is known as the portfolio rebalancing channel.

The figures bear this out: even the Germans, who tend to be very conservative in their investment decisions, are currently putting more money into potentially more profitable, but also riskier financial assets such as shares and mutual funds. And the exuberance on several asset markets in the euro area at the moment is certainly related to the low-interest-rate environment.

Monetary policy can therefore affect financial players' willingness to take risks. And it also influences banks' propensity to run risks in another, unintentional way: the more a central bank protects banks against potential risks and leads them to believe that they will receive central bank funding if the worst comes to the worst, the less wary they will be of taking on excessive risk.

Studies, amongst others by former IMF Chief Economist and Governor of the Reserve Bank of India, Raghuram Rajan, as well as Nobel Prize winner Jean Tirole provide compelling evidence that the implicit promise of a central bank to step in by lowering interest rates and providing

liquidity in a crisis increases banks' appetite for risk.⁸⁹

In other words, monetary policy affects financial stability. But does that mean that monetary policymakers should make financial stability an explicit objective, maybe even on a par with the objective of price stability?

That would be dangerous, in my opinion. The more objectives monetary policymakers pursue, the more likely that they will get mired in a conflict of objectives and be forced to weigh up one objective against the other. That could not only put monetary policy under greater political pressure, it might also give the impression of monetary policy arbitrariness.

This problem is especially pronounced when it comes to financial stability. After all, the concept of financial stability is much harder to grasp than that of price stability. Price stability can be depicted using a single indicator, the consumer price index. There is no one such indicator for financial stability. Financial stability is therefore often defined, very broadly, as a state in which the financial system performs all of its macroeconomic functions properly.

But the absence of a clear indicator with which to measure whether a monetary policy objective has been achieved can damage the credibility of monetary policy.

Moreover, a potential conflict of objectives between price stability and financial stability arises from the fact that monetary policy may not only help prevent financial imbalances. It can also mitigate their consequences after the event – by producing inflation, which reduces the real level of debt. There is, consequently, a short-term trade-off between the objective of price stability and that of financial stability, which can result in higher inflation in the long term.

Ladies and gentlemen

As always, the world is not just black or white: rejecting financial stability as an additional objective for monetary policymakers alongside the objective of price stability does not mean that central banks should shun responsibility for ensuring financial stability. After all, central banks generally possess a high level of expertise in analysing risks to financial stability.

However, the method of choice for combatting these risks is not monetary policy, it is macroprudential policy. Macroprudential instruments can be employed in a much more targeted way than monetary policy. In the case of the euro area, in particular, one of the key advantages of macroprudential policy is that it can be used to counteract, in a targeted manner, problematic national developments that cannot be addressed by the single monetary policy.

Macroprudential instruments include measures such as countercyclical capital buffers and measures that target the demand for credit, say actions aimed at containing exaggerations on the real estate markets. Caps on the loan-to-value or loan-to-income ratios are examples.

So where monetary policy is the hammer in a central bank's toolkit in relation to financial stability, macroprudential instruments are the scalpel. Macroprudential instruments need not necessarily be used by central banks. In Germany, it is politicians who decide on the use of macroprudential measures, not the Bundesbank, and for good reason. Many of these instruments can have a fairly large impact on the way citizens lead their lives and therefore require democratic legitimacy.

And while I am on the subject of macroprudential measures: if anything can be said to be a winner of the crisis, it would probably be the word "macroprudential".

However, it goes without saying that banking supervisory measures are still necessary to ensure the soundness of individual institutions. The global turmoil of the financial crisis did, however, also show that the resilience of the financial system needs strengthening overall.

On this, we have made good progress since the crisis, thanks to Basel III. Mario Draghi, in his speech in Jackson Hole a few weeks ago, also stressed how important what has been achieved is for the stability of the global financial system.

Rolling back the reforms would therefore be extremely problematic, in my view. Of course, that does not mean that we should not evaluate the measures agreed upon and how they interact in order to achieve the objective of financial stability as efficiently as possible. The German G20 presidency has therefore launched a process on the Financial Stability Board to examine the cost-benefit ratio of individual regulations.

Does the existence of macroprudential instruments mean that monetary policy should stand idly by as financial imbalances build?

After the experiences of the crisis, that would be difficult to reconcile with the mandate of price stability. It may be advisable, even for a monetary policy that focuses exclusively on the objective of price stability, to heed developments on the financial markets.

As we have recently witnessed, financial crises have a considerable impact on the monetary policy transmission process and monetary policymakers' ability to guarantee price stability. And yet financial crises almost always originate in excessively loose bank lending.¹⁰ The last crisis was no exception. In the euro area, M3 growth rose from 5½% in 2004 to more than 11% in 2007. And loans to the private non-financial sector grew at a similar clip over this period. Monetary and credit aggregates are, therefore, good indicators of financial imbalances.

The second, monetary pillar of the Eurosystem's monetary policy strategy has therefore lost none of its importance. This is particularly true as monetary developments can provide valuable additional information for the economic analysis of the Eurosystem, as demonstrated, for instance, by the work of Volker Wieland¹¹ and of course by the Bundesbank's experiences.

The longer-term outlook provided by monetary analysis is important for another reason, too: macroeconomic variables such as the output gap are fraught with major estimation uncertainty. Uncertainty also surrounds the speed and intensity with which monetary policy impulses are implemented. Taking a slightly longer-term perspective can therefore help prevent monetary policy from succumbing to the illusion that it can micro-manage everything.

Incidentally, Claudio Borio, Chief Economist at the BIS, points out that the more you concentrate on the long-term perspective [in monetary policy], the more price stability and financial stability complement each other and no longer contradict each other.

5. Conclusion

Ladies and gentlemen

Monetary policy serves society best if it concentrates on safeguarding stable prices. This lesson of the "Great Moderation" remains true today.

Equally, it is also true that permanent macroeconomic stability cannot be achieved without financial stability. Here, macroprudential instruments are the method of first choice to ensure the financial system, too, finds a golden mean. If, however, financial stability risks build up and, for instance, excessive credit growth jeopardises longer-term price stability, monetary policy must not look on idly.

My personal contribution to finding the golden mean is that I will conclude at this point. I look forward to a lively debate!

¹ Robert Lucas (2003), Macroeconomic priorities, *American Economic Review*, 2003, Vol 93, issue 1, 1-14.

- [2](#) Ben Bernanke, "The Great Moderation", speech delivered on 20 February 2004 at the meetings of the Eastern Economic Association, Washington, DC.
- [3](#) Caballero, R J, T Hoshi, and AK Kashyap (2008), "Zombie Lending and Depressed Restructuring in Japan," *American Economic Review* 98: 1943–77.
- [4](#) Müge Adalet McGowan, Dan Andrews and Valentine Millot (2017), "The Walking Dead? Zombie Firms and Productivity Performance in OECD Countries", OECD Working Paper 1372.
- [5](#) Schivardi, Fabiano, Enrico Sette, and Guido Tabellini (2017), "Credit Misallocation During the European Financial Crisis", CEPR Discussion Paper No. 11901
- [6](#) See Deutsche Bundesbank, The macroeconomic impact of quantitative easing in the euro area, Monthly Report, June 2016, pp 29–53.
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