



Conference of the Chair BdF/PSE, Paris School of Economics

Current Challenges of Monetary Policy

September 24, 2019

Speechⁱ by François Villeroy de Galhau,

Governor of the Banque de France

Press contact: Mark Deen (mark.deen@banque-france.fr).

Ladies and Gentlemen,

It is a particular pleasure to welcome you on the occasion of the 10th anniversary of the Chair Banque de France/PSE. All anniversaries are worthy of celebration, but the continued partnership of Banque de France with the Paris School of Economics is a particular reason for cheer. Over the past ten years, it has been a testimony of how academic research and economic policy making can reinforce each other.

In the past ten years, thanks to their interaction, much has been done to make our financial environment more capable of reining in financial excesses. Thanks to both, we have introduced many new unconventional tools to implement monetary policy. But these changes have also brought new questions and new uncertainties, on which more academic research is needed. Hence, I would like to elaborate on two present challenges: the conduct of monetary policy in our current economic environment, and the interaction between monetary policy and financial stability.

**

1. Monetary Policy in the Face of New Challenges

1.1. A New Environment Calling for New Responses

These new uncertainties arise at a time when the global economic environment has itself become increasingly uncertain. In the short term, many of the uncertainties obstructing the economic outlook – and especially the manufacturing sector – are man-made – and even one-man made. Contingencies that not so long ago appeared as tail risks, such as the possibility of an escalation of trade tensions or a disorderly Brexit, have become looming threats.

But uncertainty also pertains to long-term structural trends. Over the past decade, the world economy has steadily recovered from the global financial

crisis. But it has not returned to its pre-crisis normal. Interest rates remain at historical lows, due to a historically low level of the natural rate of interest R^{*ii} .

In the short run, this analysis – uncertainty as the first trigger of the present slowdown – should guide our ranking of policy answers. Monetary policy plays its role, but it should not – less than ever – be the only game in town. It should not even be the first game in town. The first response would be for government-driven uncertainties to be addressed directly by governments, by removing the self-induced threats to world growth.

Failing that, a second answer is for fiscal policy to step in. Fiscal stimulus from countries with fiscal space would both stimulate aggregate demand, and, with targeted, quality investment, increase long-term growth.ⁱⁱⁱ Wage increases in countries that have long relied on wage moderation could also help in bolstering aggregate demand and inflation. And pro-growth reforms would raise R^* .

Monetary policy provides a third response. For the past ten years, there is little doubt that ECB monetary policy under Mario Draghi's Presidency has made a decisive contribution not only to safeguarding the euro in 2012, but also to the significant recovery of the euro area since 2013. Over this period, more than 10 million jobs have been created. Our unconventional measures are estimated to add almost 2 percentage points of growth and of inflation between 2016 and 2020. Since I am talking to an audience of researchers I should of course emphasise that such numbers are subject to uncertainty.

However, the most recent monetary policy decisions of the Governing Council have given rise to many comments. My rule of conduct has been to not add mine in the heat of the moment. Two weeks later, let me only say that I supported many elements of the package, including the strengthening of the state-dependent forward guidance and the welcome introduction of a tiering system, similar to those in all other jurisdictions with negative interest rates. But I was not in favour of the resumption of net asset purchases at this time, because I thought that further purchases are unnecessary **right now**, given

the very low levels of both long-term interest rates and term premia, which have continued to decrease significantly since we stopped net purchases last December. The main purpose of QE is to extract more duration risk from the bond market; indeed, term premia have already been successfully compressed – the term premium on a 10-year OIS is estimated to be significantly negative at around -60 to -100 bp. I also think that the significant strengthening of our forward guidance, the consequent prolongation of the reinvestment period for the very important stock of QE assets – 2600 billion euros –, and the DFR cut, were already a powerful and consistent combination. The forward guidance now states that we expect rates to remain at their present levels, or lower, until the inflation outlook robustly converges to a level sufficiently close to, but below, 2%, and this convergence has been consistently reflected in underlying inflation dynamics: our forward guidance is now strongly “state based”, reflecting our enhanced commitment to reach our objective. This is significant progress that has been overshadowed by the arguments over QE.

For me, it is not a question of a shifting balance between hawks and doves – I have never found ornithological categorisation to be of much help in designing monetary policy. It is a question of pragmatic and objective economic analysis, which takes market expectations as useful indicators but is not dependent on them.

But whatever the debate in the Governing Council has been, let us now look forward and stress one simple message that has unanimous agreement: monetary policy has, once more, done its duty. It is now up to other policy makers to do theirs, starting with the fiscal authorities. As Mario Draghi pointed out yesterday in front of the European parliament, “We need a coherent economic strategy in the euro area that complements and enhances the effectiveness of monetary policy”.

1.2 Specific Challenges for Monetary Policy

This is not however a call for self-congratulation: we have to do our homework on some renewed research questions, where we cannot live with our old metrics and our present lack of knowledge. For that, we need more than ever your research and our dialogue.

First, the measurement of key structural determinants remains surrounded with uncertainty. I mentioned the uncertainty surrounding the trend in R^* . But similar uncertainty pertains to the measurement of potential output and the natural level of unemployment U^{*iv} . We should also intensively work on the economic effects of climate change as a long-term but significant shock, and its interaction with monetary policy.

How to best measure inflation expectations is a second key issue. We know that expectations are key determinants of inflation, but it remains unclear what the most relevant measures of inflation expectations are. Expectations of professional forecasters (at 1,7 %) and market-based measures (at 1,3 %) have received most of the attention until now, but the expectations of firms as well as households – which can be significantly higher – matter at least as much for aggregate demand and price-setting. As Benoît Coeuré rightly stressed last July, more research is needed on what their expectations are, and how they form them.^v

Third, there is still much we do not know about how firms and households form expectations on future interest rates, and on how these expectations affect their spending decisions. We know that standard DSGE models tend to assume too much foresight from private agents. How to incorporate more realistic behavior is a central issue, especially when forecasting the effects of our new instruments such as forward guidance^{vi}. To be sure, some uncertainty over the response of the economy to our policies will always remain, especially when firms and households are themselves still learning how our new measures affect the economy, and how to live with very low or negative interest rates.^{vii}

A last topic deserves, I believe, particular attention: the possible side-effects of our monetary tools on financial stability, especially the effects of unconventional monetary policies.

2. Monetary Policy and Financial Stability

2.1 Prudential Policies and Monetary Policy are Complements not Substitutes

To address concerns over financial stability, regulation and supervision, both microprudential and macroprudential, are of course available and essential. On financial regulation, ten years after the financial crisis, we must resist the temptation to unpick what has been done, and the complacency to believe that *“this time is different”*.

Macroprudential policy is essential to foster financial stability. However, macroprudential policies have their limits. To start with, as of today, our toolkit is very much **bank-centric**. We are making some progress to extend macroprudential policy beyond the banking sector. But we should acknowledge that we are not there yet and that this is becoming a pressing issue as the non-banking sector is developing in reaction to the macrofinancial environment and changes in the regulation framework.

In addition, as our macroprudential arsenal is still rather new and untested, uncertainty remains on the quantitative magnitude of the effects of our interventions^{viii}. Experience will teach us how to adapt and adjust our policies over time, but uncertainty will remain a feature of real-world policy-making.

Finally, we should refrain from hubris: over time, we will design a more comprehensive macroprudential toolkit and learn to make the best use of it. But while macroprudential policies can certainly contribute a lot, some root causes of financial crises will remain out of their reach and macroprudential policies alone would fall short of achieving financial stability.

If prudential policies have limitations, it is legitimate to ask whether **monetary policy** should take into account financial stability concerns or even assist prudential policies. To be sure, monetary policy has drawbacks as an instrument to foster financial stability. In particular, it cannot target specific risks. But as Jeremy Stein noted, the bluntness of the tool is also its strength: it affects all financial players.^{ix}

Let me take a step back. Central banks have an operational independence but they do not decide their own mandate. The mandate given to the Eurosystem is clear: our primary objective is price stability. However, our mandate states that we “*shall contribute to the smooth conduct of policies pursued by the competent authorities relating to the prudential supervision of credit institutions and the stability of the financial system*”^x.

Careful attention to the dynamics of the indebtedness of households, firms, and financial intermediaries would also be in line with the intellectual tradition of the Eurosystem. Since its inception, the ECB has always given special attention to broad financial aggregates in setting the course of monetary policy. It was emphasised by its monetary pillar and is now emphasised by its monetary analysis. Restricting attention to measures of liquid liabilities such as M3 has probably little justification today in view of the little direct relevance of monetary aggregates for price developments. But the relevance of broader and more varied credit aggregates is beyond question for both price and financial stability concerns. Together with asset prices, they could constitute the base of a revised *credit and financial pillar*.^{xi}

2.2 The Separation Principle becomes less relevant with a multifaceted monetary policy

The link between monetary policy and financial stability raises two questions. First, what are the quantitative effects of monetary policy instruments on financial stability? We have enough evidence by now that interest rate policies can have effects on indebtedness, risk-taking (through maturity transformation,

search for yield, or other channels) and the profitability of financial actors. It would therefore be short-sighted to ignore the side effects of monetary policy on financial stability. Second, are these effects large enough to make it possible to preserve financial stability without compromising price stability? At this point, the precise terms of a possible trade-off are still being debated.^{xii} The issues are complex: as Nuno Coimbra here at PSE emphasises in a paper with H el ene Rey, a decrease in interest rates can encourage risk-taking when interest rates are low, but discourage it when interest rates are high.^{xiii} We need more work on this important issue.

Let me just suggest two thoughts on this open issue.

a/ Incorporating Financial Stability Concerns with an Extended Monetary Toolkit

First, the binary opposition between the traditional separation principle and “*leaning against the wind*” makes less sense when monetary policy has itself several instruments at its disposal. A median way, which we could call “coordinated” or “integrated” is possible. Indeed, that several instruments can allow to pursue several objectives is just what the old Tinbergen rule asserts.

This is particularly relevant **within** monetary policy in our current context. Over the past years we have brought innovations to our operational framework, and we have considerably extended our toolkit with balance-sheet policies such as quantitative easing and (T)LTROs. Like our time-honed interest-rate policy, these balance-sheet policies were introduced with price-stability objectives in mind. But now that our extended toolkit has brought us new degrees of freedom, it is valuable to think of how this new flexibility could be used in the long-run to minimise financial stability risks without compromise to price stability.

Let me illustrate it with the example of tiering. The tiering system we have decided upon will allow our interest rate policy to deliver price stability without trading it off against financial stability. Far from entering into conflict with price stability, tiering will actually also ensure that our policies have their intended

effect on price stability, by alleviating the risk of a reduced pass-through of our policies to the financing cost of the private sector. And it may enhance the monetary policy stance by mitigating the side effects of keeping rates lower for longer.

There is no reason to commit one particular monetary instrument to the financial stability objective. Instead, a parallel with public finance can prove useful. It is customary in public finance to see the problem of choosing tax rates as one of minimising the distortions created by various tax instruments, in order to raise a given amount of revenues. Similarly, it is possible to approach our monetary policy decisions as one of choosing the combination of instruments that minimise risks to financial stability, in order to deliver the policy stance called for by our price-stability mandate.

Likewise, some of our new instruments could be more efficient to address financial stability concerns. For instance, under some dimensions, balance-sheet policies differ markedly from interest-rate policies. By providing valuable safe assets to banks – central bank reserves – a high level of central bank reserves can support their smooth functioning. Even more importantly, it can mitigate the risk that banks will try to supply the demand for safe assets by engineering them themselves. Privately issued safe assets are poor substitutes for public safe assets.^{xiv}

b/ Keeping the purchase of private assets to a minimum

In any case – and this is my second remark – the purchase of private assets by the central bank should be kept to a minimum. Indeed, the asset-side of the balance-sheet – what assets the central bank buys with the reserves it issues – matters a lot. Buying an excessive amount of private assets such as corporate bonds could run the risk of distorting the signal that asset prices convey on the assets' riskiness. The present compression of risk premia and credit spreads might already increase risks to financial stability.

Conclusion

I have restricted my remarks on financial stability to the policies that fall, at least in part, within the realm of a central bank. However, as I have emphasized earlier, monetary and prudential policies are not the only policies available. Due to the present economic environment, fiscal policies and structural reforms can and should be more and more part of the policy mix. But it also follows from the guiding principle that I have highlighted today: the more tools available, the easier it is to combine them to minimise the trade-offs between price and financial stabilities.

Fiscal policy can help monetary policy in fostering financial stability in several ways. First, it can of course help by taking away some of the burden of policy accommodation. But fiscal policy can also directly assist monetary policy in fostering financial stability. It can help monetary policy to provide the safe assets necessary to a resilient financial system, if possible including in the form of a euro area-wide safe asset. On the tax side, it should reduce all excessive incentives towards real-estate investment, and foster a more neutral allocation of savings according to a sound reward of risk. Let me end with one question: what will monetary policy be like in ten years? We clearly can't be certain of anything, but we can at least share a conviction: the more progress we have made together on these issues I mentioned, the better our monetary policy will be. Thank you for your attention and your cooperation.

References:

-Adrian Liang (2018), Monetary Policy, Financial Conditions, and Financial Stability, International Journal of Central Banking

-Aiyar Voigts (2019), The Negative Mean Output Gap, IMF Working Paper 19/183

-Ajello Laubach Lopez-Salido Nakata (2019), Financial Stability and Optimal Interest Rate Policy, International Journal of Central Banking

- Bernanke Kiley Roberts (2019), Monetary Policy Strategies for a Low-Rate Environment, Finance and Economics Discussion Series 2019-009
- Blanchard (2019), Public Debt and Low Interest Rates, American Economic Association Presidential Lecture
- Brand, Bielecki, Penalver (2018), The natural rate of interest: estimates, drivers, and challenges to monetary policy, ECB Occasional Paper Series n°217
- Cerra Saxena (2008), Growth Dynamics: The Myth of Economic Recovery, American Economic Review, Vol. 98 No. 1
- Coibion, Gorodnichenko, Kumar (2018), How Do Firms Form Their Expectations? New Survey Evidence, American Economic Review 108, p. 2671-2713
- Coibion, Gorodnichenko, Ropele (2018), Inflation Expectations and Firm Decisions: New Causal Evidence, NBER Working Paper No. 25412
- Coibion Gorodnichenko Ulate (2019), The Cyclical Sensitivity in Estimates of Potential Output, NBER Working Paper No. 23580
- Coimbra and Rey (2019), Financial Cycles with Heterogeneous Intermediaries, NBER Working Paper No. 23245
- Del Negro Giannoni Patterson (2012), The forward guidance puzzle, Federal Reserve Bank of New York Staff Report No. 574
- Gabaix (2019), A Behavioral New Keynesian Model, NBER Working Paper No. 22954
- Gourio Kashyap Sim (2018), The Trade offs in Leaning Against the Wind, IMF Economic Review, 66:70–115
- Greenwood Hanson Stein (2015), A Comparative-Advantage Approach to Government Debt Maturity, The Journal of Finance, VOL. LXX, NO. 4
- Greenwood Hanson Stein (2016), The Federal Reserve's Balance Sheet as a Financial-Stability Tool, Jackson Hole Symposium
- Hamilton Harris Hatzius West (2019), The Equilibrium Real Funds Rate: Past, Present, and Future, IMF Economic Review Vol. 64, No. 4
- Hartmann Smets (2018), The first twenty years of the European Central Bank: monetary policy, ECB Working Paper Series
- Holsten Laubach Williams (2017), Measuring the natural rate of interest: International trends and determinants, Journal of International Economics 108, S59–S75

- Monnet (2014), Monetary Policy without Interest Rates: Evidence from France's Golden Age (1948 to 1973) Using a Narrative Approach, *American Economic Journal: Macroeconomics*, Vol. 6, No. 4 (October 2014), pp. 137-169
- Monnet and Vari (2019), Liquidity Ratios as Monetary Policy Tools: Some Historical Lessons for Macroprudential Policy, IMF Working Paper 19/175
- Nakamura Steinsson McKay (2016), The Power of Forward Guidance Revisited, *American Economic Review*, Vol. 106, No. 10
- Orphanides van Norden (2002), The Unreliability of Output-Gap Estimates in Real Time, *Review of Economics and Statistics* 84(4), p. 569-583
- Rostagno et al. (2019), A Tale of Two Decades: the ECB's Monetary Policy at 20, forthcoming
- Stein (2012), Monetary Policy as Financial-Stability Regulation," *Quarterly Journal of Economics*, 127, pp. 57-95.
- Stein (2013), Overheating in Credit Markets: Origins, Measurement, and Policy Responses, Speech
- Svensson (2017), Cost-benefit analysis of leaning against the wind," *Journal of Monetary Economics*, vol. 90(C), pages 193-213.
- Woodford (2016), Quantitative easing and financial stability, *Journal Economía Chilena (The Chilean Economy)*, Central Bank of Chile, vol. 19(2), pages 04-77
- Woodford (2018), Monetary Policy Analysis when Planning Horizons are Finite, NBER Working Paper No. 24692

ⁱ I would particularly like to thank Matthieu Bussière, Stéphane Dupraz, Mark Deen, and Olivier Garnier for their help in preparing this speech.

ⁱⁱ On the measurement of the natural rate of interest and the uncertainty surrounding its long-term component, see e.g. Holsten, Laubach and Williams (2017), Hamilton et al. (2019), and Brand, Bielecki and Penalver (2018).

ⁱⁱⁱ On the opportunity of relying on fiscal policy in a low-rate environment, see e.g. Blanchard (2019).

^{iv} On the issues surrounding the measurement of potential output and natural unemployment, see e.g. Orphanides and van Norden (2002), Coibion, Gorodnichenko and Ulate (2019) and Aiyar and Voigts (2019).

^v For early research on firms' expectations, see e.g. Coibion, Gorodnichenko and Kumar (2018) and Coibion, Gorodnichenko and Ropele (2018).

^{vi} On the forward-guidance puzzle and possible solutions to it, see e.g. Del Negro, Giannoni and Patterson (2012), Nakamura, Steinsson and McKay (2016), Gabaix (2019), and Woodford (2018).

^{vii} See e.g. Bernanke, Kiley and Roberts (2019).

^{viii} Monnet (2014) and Monnet and Vari (2019), among others of his work.

^{ix} Stein (2013).

^x Protocol on the Statute of the Eurosystem and the ECB, Article 3.3.

^{xi} For recent historical accounts of the ECB's monetary policy in general, and monetary pillar in particular, see Hartmann and Smets (2018) and Rostagno et al. (2019).

^{xii} See Svensson (2017) and Ajello et al. (2019) for studies that find that the impact of monetary policy on financial stability is too small to make it worth the cost on price stability. See Adrian and Liang (2018) and Gourio et al. (2018) for more nuanced discussions of the key assumptions that matter to the desirability of leaning against the wind.

^{xiii} Coimbra and Rey (2019).

^{xiv} See e.g. Greenwood, Hanson and Stein (2015, 2016) for the role of publicly issued safe assets in preventing the creation of privately issued safe assets, and Stein (2012) for a formal model of the impact of safe assets on the severity of fire sales. See Woodford (2016) for a comparison of the fire-sales risks of balance-sheet policies and interest-rate policies.