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Monetary Policy and the Risk-Taking Channel

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Monetary Policy and the Risk-Taking Channel

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Before the 2007 crisis, the trade-off between output and inflation played a leading role in the discussion of monetary policy. Instead, issues relating to financial stability played a less pronounced role in shaping the stance of monetary policy and were limited to asset price dynamics. This Roundup argues that the great interest that emerged after the 2007 crisis in the effects of monetary policy on financial stability reflects the shift in attention from asset price dynamics to risk-taking incentives of financial intermediaries. The Roundup reviews the economic literature that contributed to this shift in the interpretation of the main trade-offs faced by central banks in setting interest rates.

Interpreting public statements by central bankers

Public statements by central bankers can be typically interpreted in terms of a trade-off between output and inflation. The line of thought can be summarized as follows. A monetary stimulus can potentially boost the economic activity, but its effects do not last in the long run. Instead, a monetary stimulus can potentially generate inflationary pressures, which *do* last in the long run if they feed into the private sector's inflation expectations. The central bank's task can then be interpreted as the skillful art of assessing where the economy stands along this trade-off. An example of the role of this trade-off in the decision making by central banks can be found in the introductory statement to the press conference by [Mario Draghi](#) on April 15, 2015:

"[O]n 9 March we started purchasing euro-denominated public sector securities as part of our expanded asset purchase programme [...]. Purchases are intended to run until the end of September 2016 and, in any case, until we see a sustained adjustment in the path of inflation that is consistent with our aim of achieving inflation rates below, but close to, 2% over the medium term. When carrying out its assessment, the Governing Council will follow its monetary policy strategy and concentrate on trends in inflation, looking through unexpected outcomes in measured inflation in either direction if judged to be transient and to have no implication for the medium-term outlook for price stability."

Yet, the general consensus about the possible costs associated with a monetary expansion is changing, and it is more and more common to read statements in which central bankers discuss possible risks associated to financial stability. An example can be found in another statement by Mr [Draghi](#), the introductory statement before the Hearing at the Committee on Economic and Monetary Affairs of the European Parliament, 23 March 2015:

"Our monetary policy measures are necessary to achieve our primary objective of maintaining price stability. But we are nevertheless aware that they may have unintended side effects on the financial system. For example, asset prices may increase

to levels that are not justified by fundamentals, while periods of low yields and volatility may invite excessive risk taking by financial investors. In turn, such developments can act as an amplifying mechanism for any eventual financial instability.

[...]

We are monitoring closely any potential risks to euro area financial stability, including those from excessive risk taking. Currently these risks are contained.”

The increasing role played by financial concerns in such statements reflects the evolution of the understanding of how the transmission mechanism of monetary policy works. As discussed below, it reflects the increasing role played by risk-taking concerns in shaping the assessment of the effects of monetary policy on the economy.

Monetary policy and asset price bubbles

Until the 2007 crisis, the discussion of possible effects of monetary policy on financial stability was mainly limited to the analysis of asset price bubbles.

The possibility that a monetary expansion can increase asset prices and potentially contribute to the build-up of asset price bubbles was already acknowledged before the 2007 crisis. Yet, the general consensus, known as the “Jackson Hole Consensus” ([Greenspan 2002](#) and [Blinder & Reis 2005](#)), was that monetary policy should have a role only *after* the bubble. The reasoning behind this conclusion relied on two considerations:

- 1) central banks do not have sufficient information to timely assess whether an increase in asset price qualifies as a bubble or not; and
- 2) only very large variations in the interest rate can affect asset prices, so stabilizing the dynamics in asset prices might have strong destabilizing effects on the economy.

The general consensus took the name of “mob-up strategy”: the central bank should wait until the burst of the crisis and then expand monetary policy to prevent an outright recession. It followed that financial stability concerns played a very limited role in the discussion of the monetary policy stance in normal times, i.e. when excluding periods that followed the burst of a bubble.

Monetary policy and risk taking

The first authors to challenge the view that the interconnection between monetary policy and financial stability took place mainly through asset price dynamics were [Rajan 2005](#) and [Borio & Zhu 2008](#). They suggested that the transmission mechanism of monetary policy deserved exploration along a new dimension, namely, the risk taking dimension. The argument was that a monetary expansion might generate not only a possible increase in asset prices that feeds into bubbles, but also a risk taking behavior by lenders, a behaviour that potentially contributes to the build-up of aggregate instability.

The possible channels through which risk-taking could occur can be broadly divided into two effects: effects on the *assets* and effects on the *liabilities* of the balance sheet of financial intermediaries. On the asset side, low nominal interest rates might give the incentives to search for yields in order to ensure high returns, as argued by [Rajan 2005](#). Similarly, as pointed out by [Borio & Zhu 2008](#), low interest rates might

improve the expectations of private agents and make them less risk-averse. Both arguments suggest that financial intermediaries intentionally take on more risk in an environment of low interest rates. On the liability side, [Adrian & Shin 2009](#) argued that since lower interest rates decrease the cost of debt, financial intermediaries might find it profitable to increase their leverage ratio and take on more debt. Accordingly, the risk taking effect is strengthened by the fact that risk can be taken under the limited-liability protection implicit in the use of debt instead of equity.

There is an extensive empirical evidence that supports the hypothesis that a risk-taking channel is in place in the transmission mechanism of monetary policy. A key reference on this is the contribution by [Jiménez et al. 2009](#), who find that a monetary expansion decreases the default probability on loans that have been issued before the monetary intervention, but it increases the default probability on loans that will be issued after the monetary intervention. Their analysis is limited to the case of Spain, but their results have been shown to hold also for Bolivia and Colombia. Another empirical contribution in the literature of monetary policy and risk taking is [Maddaloni & Peydrò 2011](#). Using survey data on the issuance of new credit by banks, they find that a monetary expansion tends to be associated with a subsequent loosening of credit standards by banks. The analysis holds both for the US and the Euro area. In addition, [Altunbas, Gambacorta & Marquez-Ibanez 2014](#) study the probability of defaults of US banks and find that it tends to increase after periods in which the policy rate remains below the level prescribed by a Taylor rule. Other related contributions are well review in the paper by [Afanasyeva & Güntner 2014](#).

Yet, what remains unknown is to what extent the risk taking incentives documented empirically affect the macroeconomy as a whole. In fact, the effects discussed above are *microeconomic* effects, because they relate to an incentive that banks face in response to a decrease in interest rates. This incentive is studied “other things equal”, i.e. without considering if it dominates in an environment in which the monetary expansion generates also other effects. There are several kinds of other possible effects. For example, a profit channel might be in place, because a monetary expansion is likely to increase firms’ profits by boosting aggregate consumption and investments. Similarly, a monetary expansion might improve the expectations of the economy because agents might expect even further monetary stimulus, or expect the positive effects associated with the monetary expansion. These and potentially other effects can be referred to as *macroeconomic* effects, because they relate to the general equilibrium implications of the monetary expansion instead of to specific incentives generated upon agents. Do such general equilibrium effects offset or amplify the effects with the risk-taking incentives? Does the risk-taking effect dominate when considering that the monetary expansion is also likely to generate effects beyond the risk taking effects?

The literature has not reached a consensus on this point. [Buch, Eickmeier & Prieto 2011](#) find that the risk taking effect documented by [Maddaloni & Peydrò 2011](#) becomes statistically insignificant when accounting for general equilibrium effects generated by the decrease in interest rates. Similarly, [Piffer 2015](#) finds that default probabilities do not increase after a monetary expansion when firms’ and banks’ profits are allowed to change in response to the monetary intervention. On the contrary, [Afanasyeva & Güntner 2014](#) find that the risk taking effects remain in place also when accounting for the additional effects of the monetary expansion on the economy. Overall, while there is a general consensus that banks face a risk-taking incentive in response to a monetary expansion, it is not yet fully understood what the macroeconomic implications are.

Conclusions

Financial stability concerns used to play a limited role in interpreting the costs associated to an expansive monetary policy stance. After the 2007 crisis, the debate on the risk taking channel of monetary policy led policymakers to reconsider the possible effects of monetary policy to financial stability, and address financial stability issues not only in the aftermath of an asset price bubble, but also in anticipation of risk taking behaviours. This evolution of the understanding of the effects of monetary policy on financial stability helps to interpret the increasing role of financial stability concerns in several statements by central bankers, including the ones quoted at the beginning of this Round-Up. More research is needed to assess the ultimate macroeconomic implications of the risk taking channel of monetary policy.

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