ISSUE 2015/03 MARCH 2015

# THE FINANCIAL STABILITY RISKS OF ULTRA-LOOSE MONETARY POLICY

GRÉGORY CLAEYS AND ZSOLT DARVAS

# Highlights

- Ultra-loose monetary policies, such as very low or even negative interest rates, large-scale asset purchases, long-maturity lending to banks and forward guidance in central bank communication, aim to increase inflation and output, to the benefit of financial stability. But at the same time, these measures pose various risks and might create challenges for financial institutions.
- By assessing the theoretical literature and developments in the United States, United Kingdom and Japan, where very expansionary monetary policies were adopted during the past six years, and by examining the euro-area situation, we conclude that the risks to financial stability of ultra-loose monetary policy in the euro area could be low. However, vigilance is needed.
- While monetary policy should focus on its primary mandate of area-wide price stability, other policies should be deployed whenever the financial cycle deviates from the economic cycle or when heterogeneous financial developments in the euro area require financial tightening in some but not all countries. These policies include micro-prudential supervision, macro-prudential oversight, fiscal policy and regulation of sectors that pose risks to financial stability, such as construction.

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- a broad consensus has emerged on the need to address financial stability issues  $\it ex\ ante.$
- There is no consensus on the role of monetary policy in supporting financial stability. In our view, monetary policy is not well suited to tame financial excesses when the financial cycle deviates from the economic cycle or when financial cycles in euro-area countries differ. Monetary policy should focus on its primary mandate of area-wide price stability.

1. Full employment is usually defined as a situation in which the unemployment rate is low and only people who are changing jobs are jobless, but no-one is forced to be unemployed because of the weak economic situation. Price stability is generally defined as



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Impact through improved general economic conditions





The right panel of Figure 2 shows the same data for the four largest euro-area countries. While the

fore we do not see an immediate danger to financial stability should credit conditions be eased.

# Increasing leverage

# Conceptual issues

High leverage is a major source of vulnerability for the financial sector. Two main mechanisms suggest that ultra-loose monetary policy might lead to increased leverage in the financial sector.

First, as argued by Chodorow-Reich (2014), a decline in the safe interest rate reduces the cost of holding reserves or collateral. For banks with binding collateral constraints, a decline in opportunity cost can lead to larger portfolios and higher leverage.

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US and Japan, the expansionary monetary policies of recent years did not lead to excessive equity prices. In the UK, banks' market-to-book









For the United Kingdom, which experienced a major housing bubble before the crisis, Bean et al (2010) estimated that additional increases in the Bank of England's main rate by several percentage points would have been needed to stabilise house prices. Such interest rate increases would have reduced inflation to levels significantly below the Bank of England's 2 percent target, and would have had significant negative effects on output.

A further problem in targeting financial stability with monetary tools is that monetary policy tightening might not actually have the desired effect of reducing financial imbalances. As pointed out by Svensson (2014), Swedish monetary policy at the beginning of the 2010s provides a bad example of a central bank trying to implement an aggressive "leaning against the wind" policy to address some financial stability issues, which led to high costs in terms of economic activity and a major undershooting of its inflation target. Faced with a rising household debt-to-income ratio, the Riksbank increased its policy rate from 0.25 percent in July 2010 to 2 percent in July 2011. As a result, inflation fell quickly and was around zero for more than two years, well below the 2 percent target, ultimately forcing the central bank to reverse its actions7. However, although the Riksbank initially aimed to ward off the threat to financial stability from household over-indebtedness, the household debt-to-income ratio was not affected by the 2010-11 policy of tightening and in fact the ratio continued to increase in real terms because of the very low or even negative inflation rates.

Monetary tightening for reasons of financial instability may have other unintended effects, especially in open economies. An increase in capital inflows because of higher interest rates can partially offset the dampening effect on credit of higher rates. Higher interest rates might also lead to a currency appreciation. Both capital inflows and/or currency appreciation could accentuate the shift from the tradable to the non-tradable sector that often takes place when there is a realestate boom. Or, as shown by Nelson et al (2015), a monetary tightening can also cause a migration of activity from the regulated banking sector to the shadow-banking sector.

To summarise, the various issues we have reviewed show that the main monetary policy instrument, the interest rate, is too broad an instrument, and ultimately quite ineffective in dealing with the build-up of financial imbalances. More generally, it makes little sense to assign the same instrument to two objectives: price and financial stability. Sometimes the implications of these two objectives coincide, but a trade-off between them emerges when business and financial cycles are desynchronised. As shown by Drehmann et al (2012), this could often be the case given that financial cycles are much longer than traditional business cycles. Moreover, in the case of a monetary union like the euro-area, a "leaning against the wind" monetary policy could be even more difficult to put in place because financial cycles in different countries are often desynchronised, as argued by Darvas and Merler (2013) and more recently by Merler (2015).

## Policies to foster financial stability

More targeted and suitable measures should be used to deal with financial-stability risks. We list four specific policies.

### Micro-prudential policy

The goal of micro-prudential policy is to ensure the soundness and to prevent the failure of financial institutions. There are several market failures that can lead to the underestimation of risk at the bank level, which is a reason for strict regulation and supervision. Market failures include asymmetries of information, negative externalities for the wider economy that result from the failure of a financial institution and which are often not internalised, or even moral hazard problems arising from the 'too big to fail' problem or the existence of other public policies such as deposit insurance or the lender-of-last-resort policy of central banks.

Micro-prudential regulation and supervision were insufficient to prevent the build-up of financial vulnerabilities in the pre-crisis period. As a consequence, regulation of financial activities was tightened globally, including in the EU. In particular, new regulations<sup>8</sup> require higher and better quality capital ratios commensurate with the risks to which banks are exposed, more conservative

7. The Riksbank has not just cut its deposit rate to a deeply negative value (-1 percent), but also cut its repo rate (at which banks can borrow funds from the Riksbank for a period of seven days) to a negative value, -0.25 percent, in March 2015.

8. Various legislative packages (such as the Capital Requirements Directive IV and the Capital Requirements Regulation) were adopted to transpose Basel III recommendations into EU law.



liquidity ratios, such as the Liquidity Coverage Ratio and the Net Stable Funding Ratio, and limits on leverage.

Various new authorities9 have been set up, but the most significant EU institutional development was the set-up of the Banking Union. In the euro area (and countries outside the euro area wishing to join) the Single Supervisory Mechanism (SSM) will enable the ECB to supervise large financial institutions in order to ensure a uniform regime that is less subject to political capture, and to avoid cross-border externalities previously caused by national supervision. Since November 2014, the ECB has supervised significant credit institutions and is therefore responsible for various tasks aimed at fostering a stable financial framework. Such tasks include authorising banks to operate and assessing their assets and liabilities to ensure compliance with the regulations on exposure limits, leverage, liquidity, transparency of information, risk management processes, internal control mechanisms and remuneration practices.

### Macro-prudential policy

Healthy individual financial institutions are a necessary but not sufficient condition to ensure stability of the financial system. Indeed, another market failure needs to be corrected: the underestimation of system-wide risk arising from the interconnections between institutions that is not internalised by them. These interconnections

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pean Systemic Risk Board (ESRB) in 2010 and the delegation of some macro-prudential authority to the ECB by the Single Supervisory Mechanism (SSM) regulation<sup>13</sup> was beneficial, in our view. However, possibly because of diverging national interests, macro-prudential supervision is shared between the ECB and national authorities. As argued by Darvas and Merler (2013), the ECB can only apply those tools in order to seek to influence lenders' behaviour, as categorised by Blanchard et al (2013), but cannot apply tools aimed at controlling borrowers' behaviour, such as LTV and DTI ratios. The ECB's limited remit might well be the weakness of the institutional arrangement, but the practice of macro-prudential policies will show if this limitation is severe or if cooperation between the ECB and national authorities, under the watch of the ESRB, ensures the proper implementation of the various macro-prudential tools.

# Fiscal policy and regulation of bubble-prone sectors

Certain national policies can amplify financial instability and thereby weaken the impact of improved micro-prudential supervision and the new macro-prudential frameworks. For example, subsidies and favourable tax treatment of housing, including mortgages, can foster credit and housing booms. Therefore, fiscal authorities should cooperate with the authorities responsible for financial stability and design a joint action plan to tame financial excesses. For instance, Posen (2009) proposes to add to the financial stability toolkit a countercyclical real estate tax that would not have significant implications for tax revenue over the cycle, but that could potentially be effective in dealing with price swings in the housing sector. In their empirical study Kuttner and Shim (2013) also show that changes in housing-related taxes had significant impacts on house-price appreciation.

Another possible measure is the regulation of bubble-prone sectors, such as construction. Excessive construction booms (which are characterised by a sizeable expansion of this sector) tend to end in painful correction. Certain limitations on the construction industry, like curtailing



### REFERENCES

Bean, C., Paustian, M., Penalver, A. and Tim, T. (2010) 'Monetary policy after the fall', speech to Federal Reserve Bank of Kansas City Annual Conference, Jackson Hole, Wyoming, 28 August

Berg, T. (2015) 'Quicksilver Markets', *Brief Series* 15-02, Office of Financial Research, available at http://financialresearch.gov/briefs/files/0FRbr-2015-02-quicksilver-markets.pdf

Blanchard, O., Dell'Ariccia, G. and Mauro, P. (2013) 'Rethinking macro policy II: getting granular', *Staff Discussion Note*, International Monetary Fund

Borio, C. and Lowe, P. (2002) 'Asset prices, financial and monetary stability: exploring the nexus', *Working Papers* No 114, Bank for International Settlements

Borio, C. and Shim, I. (2007) 'What can (macro-) prudential policy do to support monetary policy?' Working Papers No 242, Bank for International Settlements

Brunnermeier, M. and Sannikov, Y. (2014a) 'The I theory of money', *Working Paper*, Princeton University

Brunnermeier, M. and Sannikov, Y. (2014b) 'Monetary Analysis: Price And Financial Stability', ECB Forum On Central Banking. Sintra, Portugal, 26 May, available at

http://scholar.princeton.edu/sites/default/files/05c%20ECB%20Sintra%20BruSan\_0.pdf

Brunnermeier, M. and Sannikov, Y. (2014c) 'A Macroeconomic Model with a Financial Sector', *American Economic Review* 104(2), pp 379-421

Cerutti, E., Claessens, S. and Laeven, L. (2015) 'The Use and Effectiveness of Macroprudential Policies: New Evidence', *Working Paper* No. 15/61, International Monetary Fund

Chodorow-Reich, G. (2014) 'Effects of Unconventional Monetary Policy on Financial Institutions', Brookings Papers on Economic Activity, Spring, pp 155-204, available at

http://www.brookings.edu/~/media/projects/bpea/spring-2014/2014a\_chodorowreich.pdf Claeys, G., Leandro, A. and Mandra, A. (2015) 'European Central Bank quantitative easing: the detailed manual', *Policy Contribution* 2015/02, Bruegel, available at http://www.bruegel.org/publications/publication-detail/publication/872-european-central-bank-quantitative-easing-the-detailed-manual/

Claeys, G., Darvas, Z., Merler, S. and Wolff, G. (2014) 'Addressing weak inflation: The European Central Bank's shopping list', *Policy Contribution* 2014/05, Bruegel, available at http://www.bruegel.org/publications/publication-detail/publication/826-addressing-weak-inflation-the-european-central-banks-shopping-list/

Crockett, A. (2000) 'Marrying the Micro- and Macro-prudential Dimensions of Financial Stability', speech to Eleventh International Conference of Banking Supervisors, Basel, 20-21 September

Darvas, Z. and Pisani-Ferry, J. (2010) 'The threat of "currency wars": A European perspective', *Policy Contribution* 2010/12, Bruegel, available at: http://www.bruegel.org/publications/publication-detail/publication/461-the-threat-of-currency-wars-a-european-perspective/

Darvas, Z. and Merler, S. (2013) 'The European Central Bank in the age of banking union',



Identifying the Bank Balance-Sheet Channel with Loan Applications', *American Economic Review*, Volume 102(5), pp 2301-26

Jiménez, G., Ongena, S., Peydró, J.-L. and Saurina, J. (2014) 'Hazardous Times for Monetary Policy: What Do Twenty-Three Million Bank Loans Say about the Effects of Monetary Policy on Credit Risk-Taking?' *Econometrica*, vol. 82(2), pp 463-505

Kuttner, K. and Shim, I. (2013) 'Can Non-Interest Rate Policies Stabilize Housing Markets? Evidence from a Panel of 57 Economies', *Working Paper* No. 433, Bank for International Settlements Lim, C., Columba, F., Costa, A., Kongsamut, P., Otani, A., Saiyid, M., Wezel, T. and Wu, X. (2011) 'Macroprudential Policy: What Instruments and How to Use Them? Lessons from Country Experiences', *Working Paper* 11/238, International Monetary Fund

Lucas, D. (2014) 'Comments on Gabriel Chodorow-Reich's article "Effects of Unconventional Monetary Policy on Financial Institutions", *Brookings Papers on Economic Activity*, Spring, pp 205-209, available at http://www.brookings.edu/~/media/projects/bpea/spring-2014/2014a\_chodorowreich.pdf

Merler, S. (2015) 'Credit cycles, capital flows and macro prudential policy in the Euro area', *Warking* 

Merler, S. (2015) 'Credit cycles, capital flows and macro prudential policy in the Euro area', *Working Paper*, Bruegel, forthcoming

Moody's (2015a) 'European insurers face credit-negative quantitative easing program', Sector comment, Moody's Investors Service, 26 January

Moody's (2015b) 'Life outlook remains negative as low interest rates weaken the sector; P&C stable', *Outlook*, Moody's Investors Service, 4 February

Nelson, B., Pinter, G. and Theodoridis, K. (2015) 'Do contractionary monetary policy shocks expand shadow banking?' *Working Paper* No. 521, Bank of England

Posen, A. (2009) 'Finding the right tool for dealing with asset price booms', speech to MPR Monetary Policy and Markets Conference, London

Smets, F. (2014) 'Financial Stability and Monetary Policy: How Closely Interlinked?', *International Journal of Central Banking*, June

Standard and Poor's (2014a) 'Euro money market funds are well-positioned to retain assets despite negative yields', *Ratingsdirect*, Standard & Poor's Ratings Services, 16 October

Standard and Poor's (2014b) 'European insurance credit outlook 2015: As Solvency II looms, low interest rates increase the heat', *Ratingsdirect*, Standard & Poor's Ratings Services, 10 December Standard and Poor's (2015) 'How will Europe's bank weather subzero rates?' *Ratingsdirect*, Standard & Poor's Ratings Services, 12 March

Stein, J. (2012) 'Monetary Policy as Financial Stability Regulation', Quarterly Journal of Economics,