Vítor Constâncio: Strengthening macroprudential policy in Europe

Speech by Mr Vítor Constâncio, Vice-President of the European Central Bank, at the Conference on "The macroprudential toolkit in Europe and credit flow restrictions", organised by the Bank of Lithuania, Vilnius, 3 July 2015.

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The current euro area environment, with policy rates required to stay low for a prolonged period of time and an apparent disconnect between the business and financial cycle, clearly points to a situation where monetary policy cannot deviate from price stability objectives to influence the financial cycle. This is the task of macroprudential policy. While acknowledged in principle, this fact has not yet been fully reflected in our policy frameworks.

Two major moves are required. First, macroprudential policy must place greater emphasis on preventing large fluctuations in the financial cycle, rather than simply increasing resilience to shocks when they occur. In addition to the bank-side capital based measures enhancing banks' resilience, borrower-based instruments (such as LTVs or DSTIs), which have proved to be more effective in curtailing excessive credit growth, and are also applicable in a time-varying fashion, should gain more prominence. In particular, borrower-based measures should be properly embedded in European legislation, which is not the case at present. Second, a broader macroprudential toolkit is needed to address risks stemming from the shadow banking sector due to its increasing role in credit intermediation. This could involve measures such as redemption gates and loading fees to provide additional safeguards. Guided stress tests can provide comparable assessments of the health of individual institutions and of the resilience of the financial system as a whole. Appropriate policy responses to mitigate growing risks need however to be calibrated, in order to ensure a contained impact on credit supply to the real economy.

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Ladies and gentlemen,

For seven years now, policy interest rates around the world have been at historic lows as central banks have responded to the debilitating effects of a major financial crisis. While some major central banks are now signalling their intention to begin a tightening cycle, there remains some uncertainty about how much interest rates can be expected to normalise. This is related to the so-called "secular stagnation" hypothesis and the possibility that long-term real equilibrium interest rates have fallen to very low levels, exerting continued downward pressure on interest rates even as the recovery strengthens. All this implies that, insofar as disconnections emerge between business and financial cycles in advanced economies, monetary policy is not available to address financial stability concerns.

This also applies to the euro area. In our case, however, the issue is made more acute by the fact that cyclical conditions are also diverging across countries. We have signalled clearly that our monetary policy is continuing its easing phase. Our main policy rates will stay low for a prolonged period of time, as indicated by our forward guidance, and our balance sheet will keep expanding until we see a sustained adjustment in the path of inflation. Managing the business cycle and ensuring price stability will be the central focus of monetary policy over the medium-term, as our mandate demands.

In this environment, monetary policy needs a complement, and that complement is macroprudential policy. This is hardly a new statement, but in my view it is still not receiving sufficient international attention. Developing the macroprudential toolkit is a real need for advanced economies. Moreover, some key aspects of the situation we face today are yet to be fully reflected in our policy frameworks. There are two points in particular that I would like to underline.

The first is that macroprudential policy must place greater emphasis on preventing large fluctuations in the financial cycle, rather than simply increasing resilience to shocks when they occur. This means making full use of instruments that can effectively restrain excessive leverage and credit growth, and deploying them in a time-varying way that is sensitive to movements in the financial cycle. In my view, this can only be achieved by broadening the toolkit available to policymakers at the European level to include borrower-based measures, which are the measures thought to have the strongest impact on credit and real estate developments.

The second point is the need for this broader toolkit to also cover the shadow banking sector. The CRR/CRDIV legal framework covers mainly the banking sector, yet financial activity and the financing of the euro area economy have increasingly shifted to non-banks.[1] Since 2009, shadow banking entities have increased their share in total assets of the financial sector from 33% to 37%, while credit institutions have seen their share of intermediation shrink from 55% to 49%. In this context, a macroprudential framework focused solely on banks will be "blind in one eye" – it will have only a partial perspective on intermediation patterns and the forces driving the financial cycle. It will also be highly prone to regulatory leakages.

In the remainder of my remarks I will expand on these two points in some more detail.

The macroprudential toolkit and credit flow restrictions

Starting with the issue of tempering the financial cycle, the first challenge is of course to identify more accurately which variables policy should aim to lean against. In this context quite some conceptual work has been done by the BIS, and also taken up at the ECB.[2] At the ECB we include equity, interest rate, housing and credit markets in our preferred measure of the financial cycle, and aim to account for correlations between sectors.[3] The key finding from our work, however, is in line with that of other studies: the most important driver of the financial cycle is credit flows into real estate. The correlation between mortgage credit flows and house prices is strongly self-reinforcing.[4]

Therefore, if macroprudential policy is to effectively curb the financial cycle having the tools to address this credit-real estate nexus is fundamental. In principle, there are two ways this can be achieved. The first is on the *bank side* by imposing restrictions on lending institutions – so-called capital-based measures. In this context the toolkit at the European level based on CRR/CRDIV already includes such measures as the Countercyclical Capital Buffer, the Systemic Risk Buffer and capital add-ons for systemically important institutions. It also includes large exposure limits and sectoral risk weights which can be applied to banks' exposures to the residential and commercial property sectors.[5]

In the euro area, the Netherlands was one of the frontrunners in introducing systemic risk buffers in July 2014[6]. Since then similar measures have been adopted in Estonia, Denmark

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[1] For a description of the shadow banking activities see Pozsar, Z., T. Adrian, A. Ashcraft and H. Boesky (2013): "Shadow Banking", *FRBNY Economic Policy Review*, December.

[2] The early work by Drehmann, M., C. Borio and K. Tsatsaronis (2012), "Characterising the financial cycle: don't lose sight of the medium term!" *BIS Working Papers No. 380*, has been updated by Hanno Stremmel (2015): "Capturing the financial cycle in Europe", *ECB Working Paper No. 1811*.

[3] Schüler, Y., P. Hiebert, and T. Peltonen (2015), "Characterizing Financial Cycles Across Europe: One Size Does Not Fit All", *ECB Working Paper* (forthcoming).

[4] Favara, G., and J. Imbs, (2015), "Credit supply and the price of housing," *The American Economic Review*, *105(3), pp. 958–992*.

[5] For a full overview of the macroprudential toolkit in Europe see ESRB (2014) "The ESRB Handbook on Operationalising Macroprudential Policy in the Banking Sector".

[6] Phasing in the SRB between January 2016 and January 2019 http://www.esrb.europa.eu/pub/html/index.en.html?skey=29/04/2014%20Notification.

and Sweden. The latest country to announce measures was Austria, applying the systemic risk buffer to a total of 12 banks. Since then similar measures have been adopted in Estonia, Denmark and Sweden. The latest country to announce measures was Austria, applying the systemic risk buffer to a total of 12 banks.[7]

There are however several well-known problems with relying on such instruments to smooth the financial cycle. For one, aside from the counter-cyclical capital buffer, capital-based measures tend to be focused on building resilience and are hence applied in a static way. This is the case for the implementation of the systemic risk buffers in various countries that I just described. Moreover, the evidence suggests that, even if applied in a more time-varying way, such measures have more indirect and possibly limited effects on cyclical adjustments and the costs of loans.[8] This may make them less effective in restraining excessive credit demand in an environment of exuberant expectations of house price appreciation.[9]

The second way in which the boom-bust cycles can be tempered is on the *borrower side* – that is, by limiting households' or non-financial corporations' leverage. Borrower-based instruments, such as loan-to-value (LTV), loan-to-income (LTI) or debt service-to-income (DSTI) limits, are on the whole thought to be among the most effective macroprudential instruments in curtailing excessive credit growth.[10] It should be highlighted that using indicators related to income is preferable to taking housing values in the denominator of such indicators. In an undesirable boom, the value of houses goes up and the Loan-to-Value may provide a misleading indication of what is happening. In any case, an increasing number of euro area countries are introducing such measures to address the impact of low interest rates on housing market developments.

For example, Estonia has introduced limits on LTV, DSTI and maturity restriction requirements for commercial banks issuing housing loans. Ireland has taken the decision to place ceilings on the proportion of mortgage lending with a high LTV and LTI ratios. The Netherlands has introduced a gradual tightening of its LTV caps, decreasing by 1 percentage point each year until the LTV reaches 90% in 2028. Slovakia has progressively tightened share of loans with LTV ratios and introduced recommendation on maximum maturity and requirement for income verification and internal borrower repayment assessment for banks. And Lithuania, as you know, has been implementing its Responsible Lending Regulation since autumn 2011.

To effectively temper the financial cycle, however, a time-varying dimension is crucial in the design of such instruments – that is, the relevant ratios must be able to be adjusted over the cycle. Otherwise, especially in the case of LTV, there is a risk of pro-cyclicality due to the fact that leverage constraints decrease as asset prices rise. In order to adjust the LTV or DSTI ratios in this way, borrower stress tests either against future changes in interest rates or in house prices should, in my view, become a common standard.

In this context I note that Lithuania has recently made its DSTI legislation more sensitive to the financial cycle by requiring credit institutions to check whether customers would be financially able to withstand future increases in interest rates, while also reducing the maximum maturity of credit. This is a good example of using macroprudential policy in a preventive way. However, not all countries in Europe can follow this rule in similar

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7 http://www.fmsg.at/en/publications/press-releases/forth-meeting.html.

8 Basel Committee on Banking Supervision (2010), "An assessment of the long-term economic impact of stronger capital and liquidity requirements".

9 See Constâncio, V. (2014), "The ECB and Macroprudential policy: from research to implementation", speech at the Third Conference of the Macroprudential Research Network, Frankfurt am Main, 23 June 2014.

10 Cerutti, E. S Claessens, and L. Laeven (2015), "The Use and Effectiveness of Macroprudential Policies: New Evidence", *IMF Working paper 15/61*.

circumstances, given more limited legal possibilities. It also relies wholly on the foresight of the national competent authorities. The fact that borrower-based instruments do not fall under European legislation means that there is little coordination in how and when they are used across countries. This in turn means that their implementation mode varies strongly across individual countries.[11]

For example, in some countries, such as here in Lithuania, borrower-based measures are codified in the context of financial stability, while in others they fall under consumer protection law, as for the Netherlands and Latvia. The range of lending institutions covered by borrower-based measures also varies according to the national legal basis. Hungary, for example, is one of the few countries where loan-to-value limits are implemented by the central bank for financial stability purposes with coverage by *activity*, which implies that any institution extending credit for house purchases needs to comply with the imposed LTV limit.[12]

Heterogeneity also extends to the competent authorities for implementing the measures. In some countries it is the central government, in others it is the central bank, and in still others authority is in the hands of a committee that involves different national bodies (cross-institutional committee). This requires coordination among different types of institutions with different mandates and time horizons, and given the high political and social sensitivity of implementing borrower-based measures, can lead to an inaction bias. We see this today in several European countries. The result is that, insofar as such measures are deployed, the crucial time-varying dimension is often lost.

These implementation issues have clear area-wide consequences. First, they raise the risk of regulatory leakages – be they between countries or between banks and other financial institutions, especially relevant also for the commercial real estate sector. Second, they blunt the effectiveness of what is one of the key instruments to address the systemic risks for the Union as a whole emanating from excessive credit flows and house price bubbles. Indeed, what we confront in the euro area is a somewhat paradoxical situation where the instruments that could most effectively address the risks of a low interest rate environment are the ones governed by the weakest common framework.

There is some capacity to use the current framework more effectively, but it is limited within the existing legal setup. To promote consistent implementation of borrower-based instruments across the EU, the ESRB can issue recommendations that are to operate through a comply-or-explain mechanism. Up until today, no such recommendation exists for the real estate market. When it comes to the implementation of borrower-based instruments in euro area/SSM countries, the ECB can play a key coordinating role for SSM countries. Interaction between national authorities, represented by national central banks and supervisors, takes place within the Financial Stability Committee (FSC). It is our duty to make best use of this forum to encourage a consistent application of instruments. Yet it may not be sufficient given that the competent institution for deciding on borrower-based instruments is not always represented in the FSC.

In my view, therefore, we have to give serious consideration to strengthening the legal basis of the macroprudential framework for borrow-based instruments, especially within the SSM area. The potential risks from the housing market are too important, and play too pivotal a role for a number of financial markets and for the European financial cycle, to be addressed in such an uncoordinated way. We need the relevant instruments to be based on European

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[11] Hartmann, P. (2015), "Real Estate Markets and Macroprudential Policy in Europe", *Journal of Money, Credit and Banking*.

[12] See Box 2 Magyar Nemzeti Bank (2014), "Report on financial stability", November. http://english.mnb.hu/Root/Dokumentumtar/ENMNB/Kiadvanyok/mnben_stabil/stabilmnben_stab_jel_201411/Financial_Stability_Report_November_2014.pdf.

law. I therefore strongly support initiatives to establish a consistent minimum set of borrower-based instruments in the European macroprudential framework. Indeed, the review of the CRR/CRDIV legal framework should be seen as an opportunity to achieve this.

Systemic risks in the shadow banking sector

This discussion so far has dealt predominantly with bank credit. As I indicated earlier, however, financial activity and the financing of the economy in the euro area has been shifting to non-banks. We are seeing an ever greater involvement of insurance companies and pension funds in mortgage and private placement markets and investment funds in equity markets. To give just one figure, non-money market investment funds' holdings of non-financial corporate bonds have risen from 14% of the outstanding volume in 2008 to 27% by the first quarter of this year.[13] This shift has undoubtedly been beneficial by acting as a buffer for the real economy while bank credit has been contracting.

However, as the sector continues to expand and increase its role in lending to the real economy, as its interlinkages with the wider financial sector deepen, and as the footprint of large institutions grows, non-banks will only gain in systemic importance. Moreover, the more policymakers are effective in using macroprudential tools to constrain excessive credit growth in the banking sector, the more likely it becomes that there will be excessive adjustments in the non-bank sector through leakages. For these reasons, the coverage of the macroprudential framework needs to start being extended to the shadow banking sector.

In this context there are four issues in particular that I would like to highlight.

First, there is the need to improve the information available to policymakers on the build-up of leverage within the shadow banking sector. Typically the issue of leverage has been seen as less relevant for shadow banks than for banks, as they receive the bulk of their funding by issuing shares. As a result, the aggregate ratio of assets to equity for euro area investment funds is only 1.1, over ten times smaller than that of euro area credit institutions. However, this figure is misleading as most of the equity in investment funds is demandable, meaning it can be withdrawn at any time by investors.

In addition, derivatives positions in particular can embed sizeable leverage, potentially adding to deleveraging pressures when financial stress emerges.[14] Such "synthetic leverage" can stem from derivative instruments or securities financing transactions that create exposures contingent on the future value of an underlying asset.[15] For example, taking the financial reporting of a large alternative fund, and calculating leverage using a gross measure that includes the above underlying exposures, it can be found that leverage goes up to a level of 700% of NAV. At the same time, the fund's prospectus indicates that it could go up to 900%. When using the *commitment approach*, however – i.e. taking into account netting and hedges – leverage could be expected to reach a maximum level of 170% of NAV. In other words, "synthetic leverage" can be many multiples higher than the leverage suggested by headline ratios.

Data availability however still limits the ability of authorities to monitor synthetic leverage from a financial stability perspective, i.e. taking into account both on-balance-sheet and off-balance-sheet exposures. The European Securities and Markets Authority (ESMA), which is tasked with harmonising reporting practices, can request access to supervisory data from national authorities. But for various reasons statistical data on synthetic leverage are not

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[13] See "Euro area non-bank entities" in *Financial Stability Review*, ECB, May 2015.

[14] See "Synthetic leverage in the investment fund sector" *ECB Financial Stability Review*, May 2015.

[15] The methodology for measuring synthetic leverage builds on cash-equivalent portfolios, see Breuer, P., "Measuring off-balance-sheet leverage", *Journal of Banking and Finance, Vol. 26 (2-3), 2002, pp. 223–242*.

systematically collected at the European level. In my view this needs to be addressed. In time, I also see a need to develop dedicated instruments to address leverage in the shadow banking sector that adequately account for derivative positions.

Second, our framework for managing non-bank leverage needs to encompass not only intermediaries, but also securities financing transactions through haircuts or margins.[16] Important work is being done here at the international level. For repurchase agreements, for example, the FSB has developed minimum haircuts for OTC transactions for not centrally settled transactions.[17] I see scope however for further reflection in this area. For instance, these minima do not yet apply across the board. And as has been shown in the past, market imposed haircuts during crisis times are many times higher than any of the static haircuts that are currently discussed, which could mean that margining practices remain procyclical if they cannot be changed in a time-varying way. I see scope however for further reflection in this area. For instance, these minima do not yet apply across the board. And as has been shown in the past, market imposed haircuts during crisis times are many times higher than any of the static haircuts that are currently discussed, which could mean that margining practices remain procyclical if they cannot be changed in a time-varying way.

Third, liquidity stress poses an equally important source of systemic risk for the non-bank financial system and requires appropriate macroprudential tools. Liquidity spirals can be triggered if funds are confronted with strong redemptions or increased margin requirements which force them to sell into markets with low liquidity. This amplifies asset price adjustments and triggers further redemptions and margin calls. Key to countering such liquidity risks is to develop and apply liquidity buffers to the shadow banking sector, in the spirit of the Liquidity Coverage Ratio for the banking system. This would serve as a first backstop should liquidity shocks curtail funding liquidity temporarily.

However, liquidity risk is a somewhat more complicated phenomenon for non-banks than for banks, as simply comparing the maturity of the asset side with the term funding on the liability side does not give an accurate picture of maturity mismatch. That is because, as already mentioned, their larger share of equity funding is itself redeemable, which gives non-bank equity a fire-sale property. Therefore, addressing liquidity risk would also have to involve countering such risks from capital. This could involve measures such as redemption gates and loading fees to provide additional safeguards.

Fourth, if we are to deploy macroprudential tools more effectively in the shadow banking sector, regulators need a clearer picture of the resilience of individual institutions and the system as a whole to shocks. In this context I would support developing guided stress-tests designed by regulators themselves, which can shed light on the true loss absorption capacity of non-bank institutions. Such stress-tests – which would need to fully incorporate the derivative positions of institutions and their exposure to liquidity shocks – would offer a more comparable assessment of the health of individual institutions and, when considering feedback loops within the financial system and the economy, of the resilience of the system as a whole.

Remember that the risk of spillovers from non-banks to the real economy is not only via their direct role in credit intermediation and capital markets. Since almost all large asset management companies in the euro area are owned by banks or bank holding companies,

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[16] The risks arising from pro-cyclicality in margining and haircut practices are described in detail in "The role of margin requirements and haircuts in procyclicality", *CGFS Papers, No. 36*, Committee on the Global Financial System, March 2010.

[17] See "Strengthening Oversight and Regulation of Shadow Banking – Regulatory framework for haircuts on non-centrally cleared securities financing transactions", Financial Stability Board, 14 October 2014. http://www.financialstabilityboard.org/wp-content/uploads/r_141013a.pdf.

reputational problems in the asset management arm could spill over to the parent company, or vice versa.

New macroprudential tools, be they leverage limits, guided stress tests, or redemption gates, would need to be placed in the hands of the regulators to be effectively deployed. And just as for the banking sector, to be successful in countering the build-up of systemic risks over the cycle they would need to be applied in a time-varying fashion. However, it is important to stress that, when determining the appropriate policy responses to mitigate growing risks in the sector, consideration should be given to its growing role in credit intermediation. We need to ensure that the impact on supply of credit to the real economy is limited.

There is of course much we still have to learn about the design and implementation of such instruments; indeed, we are still only beginning to discover the mechanisms through which macroprudential policy works in the banking sector. Still, I am convinced that these additional instruments are essential – and starting work on them is urgent – if we are to have a holistic view on systemic risk and financial stability.

Conclusion

Let me conclude.

What I have argued today is that we are entering into an environment where monetary policy cannot be responsible for managing the financial cycle. And this fact, while acknowledged in principle, has not yet been fully reflected in our policy frameworks in practice.

A comprehensive approach to macroprudential policy means two things.

First, making efficient use of macroprudential tools that can constrain excessive credit growth towards the real estate sector, which is the main driver of the financial cycle. Borrower-based measures therefore come to the forefront. Given their importance, they deserve to be properly embedded in European legislation and effectively coordinated within European institutions.

Second, broadening the coverage of the macroprudential toolkit to reflect changing patterns of intermediation – i.e. to the shadow banking sector. It may be the case, as Jeremy Stein famously argued, that monetary policy is the best tool to “get in all the cracks” of the financial system. But as that option may not be available to us for some time, it is incumbent on policymakers to put more attention into developing instruments that can reach into all the corners of the financial system.

I trust that our conference today will provide many useful insights on how we can proceed with this agenda.