Ladies and Gentlemen,

The financial and sovereign crises have markedly changed our understanding of financial interactions in the Economic and Monetary Union. We have experienced how quickly apparent integration among Member States can unravel and how it can pose a threat to economic activity, job creation and price stability.

The degree of retrenchment was particularly seen in the cross-border financing of banks and sovereigns. At the height of the crisis, banks which relied on cross-border wholesale markets saw their funding dry up and sovereign debt holdings retrenched behind national borders. The implications for the real economy were highly damaging. Not only cross-border financing for investments dried up, but lending to the domestic real economy broke down. Without fully developed cross-border capital markets, and with fiscal policy unable to provide full insurance, the euro area was left without risk-sharing arrangements.

The free flow of capital should not be restrained beforehand, even though it does permit the fast unravelling in times of crisis. After all, free capital flow is a pre-condition for financial integration. Instead, the conclusion is rather to promote initiatives that enhance risk-sharing across member states, such as the Banking Union and the Capital Markets Union, and at the same time improve the overall regulatory and policy framework to reduce the incidence of crises.

With the experience of this financial and sovereign crisis, we have improved our understanding of financial interlinkages, our datasets and ultimately also improved the regulatory and policy framework. In addition, an important change to the framework was the operational start of the SSM on 4 November 2014, when macro-prudential responsibilities were also attributed to the ECB.

In the following section I will dwell on the importance of these macro-prudential powers for promoting financial integration. I will share first-hand experience in the implementation of macro-prudential measures and give my views on the requisites for a genuine Capital Markets Union. I will finally conclude by outlining a path for strengthening the overall macro-prudential framework.

Financial integration and macro-prudential policies

Macro-prudential policy is geared to promote financial stability through two key mechanisms: first, by raising the resilience of the financial system to systemic shocks and, second, by curbing the financial cycle to reduce the build-up of imbalances and excessive risk-taking.

The current framework already effectively addresses a number of risks emerging at national level. Yet, it is biased in selecting instruments to counter vulnerabilities at the national level.
while having a tendency to disregard cross-border implications\(^1\) such as leakages, which may weaken the overall macro-prudential stance.\(^2\)

Un-coordinated and potentially inconsistent macro-prudential policies in euro area countries are particularly prone to negative spillovers and would counteract the intended objective to promote financial stability. For the EU, negative spillovers from national measures imply that the aggregate macro-prudential stance is weaker than the sum of the individual measures. Ultimately, it implies that financial integration based exclusively on national financial policies cannot ensure financial stability. This is because the joint pursuit of financial integration and stability exceeds the remit of national policies. The crisis has also demonstrated how national boundaries are of limited relevance to regulate the activities and resolution of banks in a monetary union.

A first response to ensure financial stability and promote financial integration is the co-ordination of macro-prudential policies. This is especially relevant for Europe given the important interconnections and dependencies of the different national economies and their financial systems.\(^3\) Let me therefore illustrate how the ECB operates within the European macro-prudential framework.

**The ECB in the European macro-prudential framework**

The ECB and national authorities have a series of macro-prudential instruments available. Some of these tools in the CRR/CRDIV, like the Systemic Risk Buffer and measures under Article 458 have been available for more than a year now, while others, such as the O-SII or G-SII\(^4\) buffers, will gradually become available over the next years.

However, not all macro-prudential tools have been harmonised at EU level. National authorities – also within the SSM – have retained direct responsibilities for some instruments, especially for borrower-based measures in the real estate sector, such as caps on loan-to-value ratios (LTVs) and debt-service-to-income ratios (DSTIs).\(^5\)

The national focus bears the risk that these measures, which have been found in recent research to be quite effective\(^6\) are applied, neglecting their cross-border spillovers. In fact, if

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2. For a discussion of and research about cross-border spillovers in macro-prudential policy, see for example, ECB (2014), Results from the Macro-prudential Research Network (MaRs), Frankfurt am Main, June, pp. 42f, as well as Aiyar, S., C. Calomiris , J. Hooley , E. Korniyenko, and T. Wieladek (2014), "The international transmission of bank capital requirements: Evidence from the UK", *Journal of Financial Economics* 113, pp. 368–382.


5. According to an unpublished survey by the European Systemic Risk Board summarised in Hartmann (2014), op. cit., p. 77, however, not all countries have the legislation or regulations in place for actively using LTVs or DSTIs. Moreover, even less allocate them to prudential authorities.

borrower-based measures curtail the demand for loans in one country, cross-border banks will adjust their lending to other countries.\footnote{For empirical evidence see Ongena, S., A. Popov and G.F. Udell (2013), “When the cat’s away the mice will play: does regulation at home affect bank risk taking abroad?”, \textit{Journal of Financial Economics}, Vol. 108(3), pp. 727–750.}

The ECB, besides having the competence to top-up the measures taken at national level foreseen in the CRD IV/CRR, also has the role of ensuring a consistent implementation within the euro area accounting for potential spillovers. This implies fostering a common understanding of risks, a joint development of analytical tools and, ultimately, a consistent application of macro-prudential policies. For this purpose, the ECB directly interacts with national central banks and supervisors of each SSM country.

At the technical level, it is the ECB’s Financial Stability Committee with its analysis and policy group that provides the platform for these interactions. The experience so far has led to a better understanding of data availability across countries, a more consistent use of early warning indicators and to more harmonised modelling approaches across euro area countries.

But advances are not limited to the assessments of risks and policy measures. We have also developed the decision-making process to adequately take into account macro-prudential considerations through internal procedures and to ensure that the intentions for policy measures are adequately shared early on among the institutions involved.

A consistent macro-prudential approach provides the platform for financial integration whilst the co-ordinating role of the ECB facilitates and ensures a consistent implementation.

\textbf{The new ECB powers and financial integration}

The ultimate purpose of a consistent implementation is to ensure that a high level of financial integration in the monetary union does not pose a threat to financial stability. By taming the financial cycle and by curtailing excessive risk-taking we reduce the misallocation of capital and bring the financial system to perform its main function: the efficient and prudent intermediation from savers to investors – including cross-border intermediation.

Evidence indicates that cross-border flows are highly pro-cyclical.\footnote{See “Banks and cross-border capital flows: Policy challenges and regulatory responses” (2012) by the Committee on International Economic Policy and Reform.} They thus make an important contribution to the build-up of imbalances also in local markets, such as the real estate.\footnote{See P. Gete (2014), “Housing Markets and Current Account Dynamics”, mimeo.} By taming the financial cycle, macro-prudential policy reduces the short-term and volatile financing. It fosters instead sustainable financial integration in the monetary union in order to withstand common and asymmetric shocks.

To be fully capable to influence the financial cycle, a robust regulatory and macro-prudential framework requires that national supervisors recognise or reciprocate the regulatory and policy measures of the other countries. If reciprocity is applied only selectively, the level playing field is at risk and regulatory arbitrage will generate unintended negative spillovers. I imagine that a wide range of macro-prudential measures would benefit from automatic and mandatory reciprocity. Within the euro area, we have up until now only seen a single reciprocity arrangement on a voluntary basis. This was the application of higher risk weights for Belgian mortgage lending by Dutch authorities.

I understand that a framework for analysing cross-country spillovers and the application of reciprocity is currently also being developed in an Expert Group within the ESRB chaired by the European Commission. I am looking forward to specific recommendations that safeguard...
the Single Market and simultaneously provide for a lenient and transparent application of reciprocity to promote financial stability in Europe.

**Capital Markets Union**

Let me now turn to the next key project in the financial field, namely the creation of a Capital Markets Union (CMU). But firstly, I would like to focus on risk-sharing in the EU based on a survey on estimates of risk sharing effects in the US and latest estimates for Europe.

Income and consumption smoothing between countries, also known as risk-sharing, can increase welfare by making income growth in a country less sensitive to output growth in that country. For countries in a monetary union, risk-sharing is particularly important because monetary policy is unable to address asymmetric shocks, whereby some countries are in a recession and others are booming. It is understood that the high degree of effective risk-sharing in the United States is essential in making the U.S. a successful monetary union.10

There are three main mechanisms whereby risk-sharing can take place between member states in a political and economic area. First, countries can share risk via cross-ownership of productive assets, a mechanism facilitated by developed capital markets. Second, a system of taxes and transfers can serve as a vehicle for further income smoothing. Third, member states can smooth consumption by adjusting their asset portfolios, for example, by lending and borrowing in international credit markets.

The United States have traditionally been characterised by a very high degree of income and consumption smoothing across states that has only been increasing over time. The available evidence suggests that about 75% of income shocks in individual states are smoothed, with 13% smoothed by the federal tax-transfer and grant system, 39% smoothed by insurance or cross-ownership of productive assets, and 23% smoothed by borrowing or lending. In other words, 62% of state-specific shocks in the U.S. are smoothed through market transactions, almost five times the contribution of the federal government to income smoothing.11

With comparatively less developed financial markets and more rigid labour markets, with low mobility of labour, and an absent federal system of taxes and transfers similar to that in the United States, pre-euro Europe exhibited much lower levels of risk-sharing. The existing literature estimated that only between 40% and 43% of country-specific GDP shocks were smoothed among European countries before 1998, with roughly half of this smoothing achieved through national government budget deficits and half achieved by corporate saving patterns.12 These low levels of risk-sharing contrasted with very high levels within individual European countries; for example, in pre-unification Germany, 91% of shocks to per capita state gross product was smoothed, with the bulk (54%) smoothed through the federal tax-transfer and grant system.13

It was believed that the creation of the common currency might in itself enhance income and consumption smoothing, by reducing the costs of trading and information gathering, thereby

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leading to higher cross-ownership of financial assets. Larger holdings of foreign assets are associated with more international risk sharing and so is the integration of banking markets. It was also believed that the euro would improve risk-sharing by promoting financial integration among EU member states.

Indeed, risk-sharing among euro area member states seems to have increased after the introduction of the euro. Available estimates suggest that in 2008–2009, 57% of shocks to state gross product per capita were smoothed. In terms of the mechanisms responsible, smoothing resulting from international cross-ownership of assets increased in the EMU after being negligible in the past, but remained at low levels. Conversely, smoothing of consumption through government counter-cyclical saving declined sharply for the groups of EMU countries, but remained at high levels. However, in 2010 risk-sharing declined significantly in most EU countries and essentially collapsed in countries under fiscal stress.

The overall evidence suggests that savings during booms and spending during busts remains the primary mechanism by which European countries achieve the smoothing of income shocks. The contribution of credit markets and of capital markets is still limited, and it tends to further decline during recessions. For countries with a history of large public deficits including in good times, and with a legacy of high public debt, the constraints on fiscal deficits imposed by the Stability and Growth Pact clearly limit governments’ capacity to smoothen large shocks via borrowing. Therefore, some have advocated the introduction of a supranational fiscal risk-sharing mechanism at the euro area level which would provide greater international insurance through a common stabilisation fund. A recent proposal was made in an IMF working paper. In the same vein, a similar idea was mentioned in the previous “Four Presidents’ Report”, to create an additional budget for the EMU countries to possibly be used as an unemployment support mechanism.

Another approach, and one that is currently high on the policy makers’ agenda, is the promotion of more integrated and deeper capital markets in Europe. CMU is a welcome initiative as it has the potential to reinforce the internal market for capital, complement the Banking Union, strengthen the Economic and Monetary Union and thus, support the smooth and homogeneous transmission of monetary policy. CMU is essentially about regulatory and non-regulatory actions to remove internal barriers to a Single Market for capital (including the harmonisation of key legal acts and policies related to financial products). Through developing and integrating the EU financial markets, CMU entails a strong potential to support growth and competitiveness in the long run.

While the EC Green Paper has set the right overall objectives of CMU and identified useful priorities for early action, CMU should be ambitious in order to achieve greater capital markets development and deeper financial integration. In our view, a genuine CMU would

mean achieving a high level of financial integration in order to complete the Single Market in this area. Full integration is reached if all market participants, with the same relevant characteristics: (i) face a single set of rules when they decide to deal with financial instruments and/or services; (ii) have equal access to a set of financial instruments and/or services; and (iii) are equally treated when they are active in the market. This level-playing field would contribute to stimulate cross-border risk-taking between EU Member States. In the last two decades, European financial markets have increased their role in financing the economy and became more integrated in terms of cross-border holdings of financial instruments. However, the crisis impacted this tendency. In fact, the crisis revealed that part of this integration was driven by debt-based wholesale banking flows which were prone to sudden reversals in the face of shocks.

In this context, let me make the following three points: first, the main benefits of CMU, entail the development of risk capital and the creation of a market based risk-sharing mechanism across countries as well as the promotion of access to new sources of financing. Both these goals require a truly integrated European equity market which is of crucial importance in the CMU project. Notably, an increased role for venture capital initiatives would depend on a mature equity market that could provide significant returns in successful IPOs, offsetting losses in failing risky projects.

Second, these benefits of CMU will only materialise if the Commission strives towards a high level of integration with its CMU agenda. This requires a high degree of ambition and decisive legislative action to create the conditions for capital markets to develop and integrate. These actions are often in politically controversial fields such as in the areas of financial product taxation and insolvency laws.

Third, despite positive effects on financial stability stemming from greater financial diversification and market-based finance, more integration can also entail financial stability risks. It can exacerbate the size and speed of contagion. In addition, the ‘push’ towards market-based financing may lead to the build-up of risks in this part of the economy, typically less regulated and lacking information.

This brings me back to the importance of an effective macro-prudential supervision and regulation, i.e. one that considers all systemically important financial entities and activities.

**Improving the macro-prudential framework**

In order to make CMU a success with stronger capital markets and deeper cross-border financial integration in bank- and market-based financing, we need to further strengthen the European macro-prudential framework. The current framework focuses on the banking sector.

With regard to the bank-based tools, our experience at the Financial Stability Committee revealed that even the instruments in the CRR/CRDIV framework are not homogeneously implemented at the EU level.21

Some of the shortcomings can be addressed through the continuous exchange between national authorities and the ECB, but other aspects require legal changes in the SSM Regulation and in the CRR/CRDIV framework. These legal changes also involve complementing the toolkit available at the European level with additional instruments. Limits to the loan-to-value (LTV) or debt service-to-income (DTI) ratios – currently under national

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21 For example, the relative sequencing of capital requirements between Pillar 1 and Pillar 2 measures is not always consistently reflected in the legal texts. In some cases such as for Art 133 CRD IV, Art 458 CRR, the sequencing of the measures implies the requirement to consider the implementation of Pillar 2 ahead of Pillar 1 measures. Some overlaps also exist between instruments, especially between the systemic risk buffer and the one for other systemically important institutions (O-SII).
legislation – do have cross-border implications and their effectiveness would be strengthened if made available to the ECB. If applied incoherently, they can distort the Single Market, obstruct financial integration and weaken financial stability.

Progress on these issues will be made once the European Commission Report on the revision of the macro-prudential regulatory framework for consultation is available.

However, to safeguard financial stability in a financially integrated monetary union, the instruments for the banking sector are not enough. In fact, as I explained, CMU will ease the flow of capital among euro area countries. Providing macro-prudential authorities with the tools to deal with systemic risks in market-based entities and activities is therefore of utmost importance.

Currently, the ECB can only indirectly limit some of the risks from the non-bank sector by imposing certain macro-prudential tools on banks.

I see the need for strengthening and extending the perimeter of macro-prudential policies in two broad ways to increase resilience, reduce contagion between banks and non-banks and promote financial integration.

First, it is necessary to intensify the supervision of systemically important non-bank institutions. We need to curtail risks from these systemic players and raise their resilience through the financial cycle. A first step in this direction is the work done by the Financial Stability Board (FSB) that develops a common methodology to identify systemically significant non-bank and non-insurers. The FSB is currently also working on the systemic risks in the asset management industry.

Macro-prudential policy needs to monitor and eventually counter these systemic risks by extending its toolkit. Specifically, additional liquidity requirements, guided stress tests, minimum and time-varying load, and redemption fees should be part of the macro-prudential toolbox. Also, well defined limits to leverage, especially synthetic leverage built-up with derivatives, should also be introduced.

Other measures concern activities or instruments used in the market-based financial sector. In particular, I have in mind minimum and countercyclical haircuts for Securities Financing Transactions (SFT). Countercyclical haircuts would limit volatility and leverage in financial markets more effectively than the minimum haircut requirements recently recommended by the FSB. These countercyclical requirements could be complemented by countercyclical margin requirements applied to Central Counterparties. Another important FSB workstream focuses on re-hypothecation and re-use of securities in the repo market. These create chains of inside liquidity that enhance the “illusion of liquidity”, which tend to disappear in times of stress.

I would encourage further work in order to understand the effects of these tools and how best to apply them in practice.

Conclusion
Let me conclude. Financial markets play a crucial role in promoting risk-sharing in a monetary union with strict budgetary rules and with conventional monetary policy unable to

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address asymmetric shocks. Furthering financial integration, namely with an ambitiously implemented Capital Markets Union, would facilitate capital flows across sectors and countries, ultimately improving risk-sharing across countries. But reaping the benefits from integration without raising financial stability concerns requires adjustments to the macro-prudential toolkit.

The current bank-centred framework has its limits. Improvements require a more harmonised legal framework involving the review of the CRR/CRDIV framework and an extension of the toolkit to the non-banking sector and to market-based instruments. This will be a gradual process, but we need to address it already now while designing the Capital Markets Union, in order to ensure a successful and sustainable financial integration in Europe.