# The way back to financial integration

**Speech by Benoît Cœuré, Member of the Executive Board of the ECB,**
**International financial integration and fragmentation: Drivers and policy responses.**
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Dear Governor Linde, Ladies and Gentlemen, [1]

I would like to start by thanking the Banco de España for having invited me to speak at this conference. It is a great pleasure for me to be here in Madrid.

In my speech I would like to discuss the reasons for the current state of fragmentation of the euro area and ways to remedy this situation, including through the completion of the banking union. The point I will make is that financial integration is desirable for an efficient allocation of resources in our economy, but that it will have to assume a different form to also ensure stability is delivered. To this end, I will elaborate on two interrelated issues.

First, I will consider past and current developments in the degree of financial *integration* in the euro area. The Financial Integration Reports of the ECB have documented quite clearly that financial integration had steadily improved until the financial crisis erupted. The degree of financial integration then decreased in a number of market segments, although there have been signs of improvement recently.

In the second part of my speech, I will discuss how progress in financial *regulation* and *supervision* can also benefit financial integration in Europe, in addition to making the financial system more resilient. I will also argue that a less volatile cross-border source of finance, and hence a different *quality* of financial integration, could have avoided the considerable decline in the degree of financial integration during the crisis. For instance, a more integrated retail banking system could have mitigated the sudden stops in cross-border funding flows during the crisis, and could have enhanced risk sharing when it was most needed. The building blocks of the banking union could potentially not only reverse the trend of financial "de-integration" in the euro area but also increase the quality of integration. I will finally suggest that, in addition to bank funding, arm's length financing through capital markets will have a stabilising role.

## 1. Integration vs. convergence, and rationales for broad financial integration in Europe

Before commenting on current developments, let me first explain what I understand by financial integration, and how integration is different from mere convergence in asset prices or yields. In the Eurosystem, we define financial integration as a situation whereby there are no frictions that discriminate between economic agents in their access to – and their investment of – capital, particularly on the basis of their location. This means that financial integration is achieved when there is equal market access, *de facto* and *de jure*. In such a setting one would also expect to see significant cross-border holdings of financial assets, along with a convergence of asset prices and yields across borders. The latter follows from the law of one price, provided that these assets have similar cash flows and are affected by similar risk factors. This means that, when we observe a differentiation of yields across borders, this observation, in itself, is not sufficient evidence of market fragmentation. It may just mean that markets are pricing different risks. Similarly, different interest rates on loans to SMEs located in different countries can reflect different productivities. [2] Conversely, the well-known convergence of sovereign yields across countries in the euro area to very low levels before the financial crisis did not, in itself, imply market integration. The bottom line is that convergence of prices does not necessarily mean integration; it is a necessary but not a sufficient condition. In my discussion today, I will therefore refer both to price-based indicators and quantity-based indicators of cross-border holdings.

Surely, most economists would agree that international financial integration is by and large beneficial [3]. This is for several reasons. First, stable, integrated and adequately supervised markets facilitate an efficient allocation of resources both over time and across national borders, enabling investors to fund profitable investment opportunities whenever and wherever they arise. Second, financial integration allows the inter-temporal smoothing of consumption in response to occasional income shocks, and the diversification of households' financial assets, protecting their revenue against shocks to their labour income. This second reason is of special importance in a monetary union, where the stability of the single currency requires adequate risk-sharing mechanisms through goods, labour and capital markets. Third, a higher degree of financial integration enhances competition among financial institutions as well as among financial market infrastructures and reduces the costs of financial intermediation.

While international financial integration is beneficial, it is vital in the case of the euro area. A highly integrated financial system is necessary to ensure that the impulses coming from our monetary policy diffuse homogeneously through financial markets across the euro area as a whole.

The financial crisis made clear, however, that unchecked financial integration also poses risks to financial stability. It increases financial complexity, the risk of cross-border contagion and the risk of sudden stops in capital flows. These risks are particularly pronounced in the absence of a strong institutional framework. [4] Such risks have been illustrated both internationally and within the euro area in the recent years of crisis.

## 2. Financial integration in Europe: salient facts and figures

Let me now turn to financial integration in Europe.

Overall, the degree of financial integration has progressively increased in the euro area since the introduction of the euro. However, the financial crisis of 2007 to 2010 and the subsequent euro area sovereign debt crisis reversed this trend to some degree. [5] For the reason I gave earlier, these developments have been particularly problematic for the Eurosystem. I will refer to these developments when discussing the effects that the banking union should have on more and better financial integration. Let me show you some indicators.

### Slide 1: Euribor money market rates

An integrated money market is important to ensure a balanced transmission of the ECB's monetary policy stance. It is also the market segment in which the financial crisis first began in August 2007. The money market has become increasingly impaired, especially across borders. The standard deviation of EURIBOR rates across countries within the euro area has moved consistently above the corresponding standard deviation within domestic borders. This is a sign that market participants are demanding an extra premium to lend to counterparties located in other countries. This premium rises when market conditions are tense. During the crisis, this was the case for both one-month rates and 12-month rates. As a consequence of the interbank market stress, the ECB had to step up its intermediation role, reacting with non-standard monetary policy measures, such as a fixed-rate full-allotment liquidity policy.

**Slide 2: EONIA and repo money market rates**

There is a similar phenomenon in the overnight unsecured money market and the secured money market. The latter is usually more resilient in times of crisis. A significant rise in price differentiation in repo markets has occurred as market participants have increasingly taken “correlation risks” into account: the pricing of risk has become much more dependent on the geographic origin of both the counterparty and the collateral, in particular when these are from the same country. An additional sign of risk aversion is that market participants have shifted from the unsecured to the secured market.

**Slide 3: Cross-border bank loans to firms**

Let me now address cross-border lending by banks. Looking at price-based indicators, we see two different phases; first, until 2007, a gradual convergence across countries of the rates that banks charged for new loans to non-financial corporations. And then, from 2008 onwards, a considerable reversal of that trend. Cross-sectional variation is particularly pronounced for smaller loans up to €1 million. Of course, higher credit risk in lending to firms from some countries in recession explains some of the observed cross-country variation, and higher rates on smaller loans may also be an indication of higher risk and of the agency cost of monitoring smaller projects.

Quantity-based indicators point to a relatively slower pace of financial integration in the retail banking sector before the crisis. Overall, outstanding cross-border loans to the non-financial sector in other euro area countries increased by only a few percentage points over the last decade. For sure, the process of financial integration in retail banking – though steady and significant – was particularly slow. On the positive side, the reversal of that trend during the crisis has also been more muted than in other market segments. The evidence points towards a slow erosion of the earlier slow progress toward financial integration.

**Slide 4: Differentiation in sovereign bond yields**

In 2010, at the outset of the sovereign debt crisis, only three relatively small countries were strongly affected. Later on, however, the bond yields of larger countries also came under pressure. A stark differentiation across sovereign bond yields is clearly visible from the chart. Does such stark differentiation imply market fragmentation, or are markets merely pricing different quantities of risk? To answer that question, it helps to get a complementary perspective from quantity-based indicators.

**Slide 5: Renationalisation of bond holdings**

Cross-border holdings of government bonds by euro area monetary and financial institutions, as a ratio to their total holdings of securities, have been on a declining trend since 2006. The ratio has now returned to the levels observed before the beginning of the third stage of Economic and Monetary Union. The reason for the initial decline in 2006 in the share of government bond holdings was portfolio reallocation to corporate bonds and probably to international assets as well. The decline later on during the crisis was most likely due to an increased propensity of banks to hold domestic government bonds. This is problematic, because it reflects an increased risk link between the sovereign and the domestic banking system. We also see that European investment funds held less European debt as the debt crisis intensified.

**Slide 6: Renationalisation of central bank collateral**

The renationalisation of government bond holdings and, more generally, of safe financial assets is also reflected in the Eurosystem collateral that is posted by the Eurosystem's counterparties. Counterparties increasingly tend to post collateral from their home country. This creates the risk of negative feedback loops at country level, with a higher perceived credit risk causing a drop in asset valuation and strains in the funding of local banks.

Allow me to summarise the discussion so far. We have seen pronounced financial de-integration in the interbank market, in cross-border banking activity, and a renationalisation of bond holdings during the crisis. All of these developments are problematic from the perspective of the Eurosystem, not the least because they exhibit strong pro-cyclical features at local level in euro area countries. Once unleashed, financial de-integration can be self-reinforcing. If left to its own devices, as we saw in the first half of 2012, *de*-integration can lead to expectations of *dis*integration – a euro break-up, which the ECB had to counteract by announcing the Outright Monetary Transactions (OMTs).

There have been signs of receding financial fragmentation since the summer of 2012, following the announcement of OMTs, visible signs of adjustment in euro area economies and government commitments to a stronger euro area governance. This can be seen in a number of important market segments. The median absolute deviation of the spread between the ten-year government bond yield and the corresponding swap spread declined by about one-third between July 2012 and February 2013. Euro area banks received a cumulated €164 billion capital inflow from non-euro area investors between August 2012 and end-January 2013, in sharp contrast with the €21 billion cumulated outflow between January and July 2012. As a rough measure of the fragmentation of bank funding markets across the euro area, Target2 balances have declined by about €200 billion since their peak in mid-2012. To give but one example, the Target2 balance of the Banco de España has declined by about one-quarter since August 2012. On the lending side, the dispersion of lending rates to non-financial corporations (NFCs) also declined, but by considerably less than the dispersion of monetary financial institutions' (MFI) funding rates. For example, the median absolute deviation of NFC lending rates has fallen from 5.6% in the first seven months of 2012 to 4.4% since then. This provides ample evidence of receding financial fragmentation. But there is no room for complacency, as the overall level of fragmentation remains high, and the disconnect between the dispersion of MFI funding and lending rates reveals a persistent difficulty in monetary policy transmission.

During the financial crisis, it also became painfully apparent that cross-border capital flows are subject to sudden stops, in particular in the interbank market. As soon as counterparty risk emerged, banks became reluctant to lend one to another. Sudden stops would not have materialised in that extreme way if integration had occurred in different market segments that are less sensitive to information and counterparty credit risk [6]. In particular, cross-border retail banking was relatively limited before the crisis, both in terms of extending credit lines through bank branches, and in terms of building cross-border bank-client relationships. Had such retail banking activity been more spread out, banks would have found it more difficult to suddenly withdraw funding from jurisdictions under stress. As a consequence, there would have been less retrenchment to national jurisdictions, a higher degree of risk sharing during times of crisis, and hence a lesser need for the Eurosystem to take an intermediation role.

## 3. The banking union and what it can do for financial integration

In the second part of my speech, I would like to assess how to invert the trend of financial de-integration. I will argue that the banking union will help us move towards an environment of more and better financial integration.

It is clear to us that a strong and independent supranational supervisor will contribute significantly to the smooth functioning of the monetary union and to restoring confidence in the banking sector. Regaining such confidence, in turn, is also key to reversing financial fragmentation and restarting fully functioning cross-border markets.

The main objective of the banking union is to build an integrated framework that safeguards financial stability and minimises the cost of bank failures. Indeed, the banking union, together with the new regulatory standards, will help to mitigate the financial stability risks which arise when markets become more integrated and which the previous regulatory and supervisory framework failed to avert in the period leading to the crisis.

A complete banking union requires four building blocks.

The first building block is the establishment of a single rulebook. Such a single rulebook now exists with the agreement reached on the Capital Requirements Directive IV. The single rulebook sets guidelines for capital, liquidity and compensation policies, and contributes significantly to creating a level playing field for financial institutions across borders.

Second, the Single Supervisory Mechanism (SSM) will enforce supervision consistently across the participating Member States. The SSM will be a mechanism composed of national competent authorities and the ECB, with the possibility of non-euro area Member States also taking part. The process of establishing the SSM is under way, with the Council's proposal forming the basis for the current discussion at the European Parliament.

A third element of the banking union will be the establishment of a Single Resolution Mechanism (SRM) and a Single Resolution Authority (SRA). The Single Resolution Mechanism would build on the harmonised resolution framework, as provided for in the draft Bank Resolution and Recovery Directive, and on the existence of a single resolution fund financed by the industry. It would enable prompt and coordinated resolution action, specifically where cross-border banks are concerned. For there to be a complete banking union there has to be a credible fiscal backstop. Any call on this backstop should be compensated *ex post* by levies on the financial industry. Indeed, the SRM is not about bailing out banks with public money. Instead, it is about minimising the use of public money. A credible backstop will be very important in respect of one goal of the banking union project in particular: mitigating the negative feedback loop between banks and sovereigns.

Looking further ahead, the fourth element of the banking union should be the establishment of a common system of deposit protection. This framework should enable the national deposit guarantee schemes, built on common EU standards, to interact with the SRM. A European deposit guarantee will undoubtedly be important in the future to ensure depositor confidence in the robustness of all European banks.

I see at least four main ways in which the European banking union, when fully implemented, can support broad and stable financial integration in Europe.

First, achieving both financial stability and financial market integration may not be possible under national financial policies, or at least much more difficult. This is the so-called "financial trilemma" of Schoenmaker (2011) [7], which states that policy-makers can only choose two out of the following three objectives: financial stability, financial integration and national financial policies, such as bank supervision and resolution. One of these has to give way. National financial policies fail to recognise the externality generated by cross-border banks in difficulty. As a result, they generate under-provision of supervision, then of capital for troubled banks with a cross-border and/or systemic component. In addition, national supervisors may more easily be subject to regulatory capture. Both facts undermine financial stability. By setting the incentives correctly, a fully-fledged banking union permits an internalisation of this externality, making sure that banks strengthen their capital and liquidity on sunny days and can continue to lend on rainy days.

Second, the Single Supervisory Mechanism can address cross-border externalities typically neglected by national supervisors and thus contribute to reversing the retrenchment and market fragmentation. Since the start of the sovereign crisis, countries with sound fundamentals have been accumulating savings rather than channelling funds to countries under stress through inter-bank or intra-bank capital markets. During crises, supervisors acting within their national mandates may encourage domestic banks with subsidiaries abroad to repatriate capital and liquidity, if a subsidiary is located in a country under stress. Conversely, they may encourage the domestic subsidiaries of foreign banks not to send funds to their parent banks located in countries with high-risk premia. [8] In the context of a strictly national supervisory system, this is rational behaviour, given that the objective of the national supervisory authorities is the stability of the domestic financial system. That does not mean it is an optimal behaviour, as it is not conducive to the stability of the euro area system as a whole and ignores the possibility of adverse feedback from instability elsewhere. An authority acting within a European mandate, however, would not penalise cross-border lending in that way, leading to less financial retrenchment and renationalisation of funding.

Third, the financial crisis has shown that sovereign credit risk and the health of the financial system are closely related. In some countries, weak sovereign finances have fed into the domestic financial system, while in others the reverse has been the case. The introduction of a Single Supervisory Mechanism and a Single Resolution Mechanism will help to break this deadly embrace. Severing the risk link between the sovereign and its banking system is key to maintaining financial integration in times of crisis, to limiting pro-cyclicality and to counteracting the re-nationalisation of bond holdings.

Fourth, large banks that grow bigger and expand across borders could also be inclined to take on more risk, due to the moral hazard ensuing from the "too-big-to-fail" issue. The possibility of being resolved – which may not be perceived as credible at national level, but which may be possible at supranational level within the SRM – would contribute to containing such moral hazard, and hence in addition decrease the risk of an adverse loop between sovereign debt and the banking system. Together with the special treatment of systemically important financial institutions in the new regulatory framework, the Single Resolution Authority and the Single Resolution Mechanism are therefore important when it comes to containing the contagion risk and systemic risk that naturally increases within a more integrated banking system.

Finally, further development of cross-border retail lending prompted by the banking union would reduce vulnerability to sudden stops in wholesale funding markets. The creation of truly pan-European banks should be driven by business decisions, but it will be encouraged by the establishment of the single rulebook and of the Single Supervisory Mechanism, and later on, of a common system of deposit protection. It should then be accepted that the location of banking activities within the euro area will be determined only on the basis of efficiency arguments, not of industrial policy. Then, and only then, will the link between banks and sovereigns be irreversibly severed.

## 4. The need for a balanced financing mix

My remarks have so far addressed the re-integration of bank lending flows. While re-starting integrated inter-bank and intra-bank capital markets is clearly indispensable, significant financial intermediation does not occur through traditional financial institutions. The role of arm's length finance, i.e. intermediation through financial markets, is not to be neglected, and the integration of the respective markets matters. Let me give two examples.

First, a more integrated European market for corporate bonds may help firms to raise financing when banks are in deleveraging mode. Indeed, recent evidence from the euro area and the US suggests that corporate bond financing was an important substitute for bank financing during the financial crisis, when banks were unwilling or unable to lend [9], but such substitution has not been operating uniformly in all countries. The development and interconnection of European corporate bond markets is particularly beneficial from this perspective.

Second, equity financing across borders, such as FDI flows and equity portfolio investment, is generally considered to be, relatively speaking, a more stable source of financing. [10] The experience of the crisis has cast serious doubt on the role of debt as a solution to moral hazard. The value of equity is sensitive to the underlying quality of assets, whereas debt is only sensitive to the risk of bankruptcy. Equity holders balance upside and downside risk equally and equity can therefore be fairly priced even in an environment where little is known about the risk of firms [11], and where company risk and country risk prove difficult to disentangle. In addition, cross-border flows of short-term debt are not always conducive to efficient risk sharing and have a greater destabilising potential than equity flows. [12] Finally, given the critical need to elevate their growth potential, euro area countries crucially need to promote innovation and the entry of new participants into markets, which can be supported by financial instruments such as venture capital. [13] A more integrated market for equity financing would support rebalancing and growth in euro area economies.

What I am suggesting is not that Europe should abandon its intermediated model of financing but that it complements it more – in the context of a structural deleveraging of the banking system – with alternative sources of finance. The financing of SMEs, which will be at the heart of Europe's effort to increase its productivity, because they are a source of innovation, can be usefully supported by a more vibrant securitisation market. Still, SME financing will continue to crucially rely on bank lending. Europe needs a healthy, competitive and prudent banking sector. Therefore, banks should continue to adjust their balance sheets and strengthen their capital to recreate a capacity to take risk and lend to companies and households, within and beyond national borders. Removing credit risk from the banks' balance sheet, as was done at an early stage in the US, can speed up this process – provided that governments are willing and able to take this risk, individually or jointly.

Let me raise a final point. A better quality of financial integration would also mean providing a framework in which cross-border capital flows go towards their most productive uses. This has not always been the case in the euro area. Since the introduction of the euro, we have seen euro area capital flows go from "healthier" (core) countries to "weaker" (or poorer, peripheral) countries. This is superficially in line with what economic theory would suggest: capital flows go from richer to poorer countries, where it earns a higher return owing to lower levels of capital per worker. Indeed, capital was flowing "downhill", and there is no "Lucas paradox" in the euro area as there is in the global economy. [14] However, in many instances, capital flows went into the very inappropriate sectors, fuelling asset or housing price bubbles instead of going to more productive uses. It is my hope, at least, that improved financial supervision, in particular supervision with a macro-prudential and systemic focus, together with a stringent enforcement of the Macroeconomic Imbalance Procedure [15], can help to alleviate such cross-border misallocations in the future.

## 5. Conclusion

Let me conclude. Although still preliminary, the recent signs of financial re-integration across several financial market segments have the potential to be self-reinforcing and unleash virtuous dynamics. The creation of a fully-fledged banking union can set incentives for more and better financial integration, in a way that will make the euro area banking sector less vulnerable to fragmentation along national borders and reduce pro-cyclicality in euro area economies. On top of being conducive to a more stable financial system, it will thereby be conducive to a more efficient allocation of resources. For once, there is no trade-off between efficiency and stability.

[1] I would like to thank Bernd Schwaab, Simone Manganelli and Lorenzo Cappiello for their contributions to this speech. I remain solely responsible for the opinions expressed herein.

[2] See G. Moëc (2013), "The trouble with SMEs – no quick fix", Deutsche Bank research note, 8 March.

[3] In non-OECD countries, the welfare gains of international capital mobility are however found to be much smaller than those of a take-off in domestic productivity, see P.O. Gourinchas (2006), "The Elusive Gains from International Financial Integration", Review of Economic Studies, 73(3), 715-741.

[4] See Fecht, F., Grüner, H. P, and P. Hartmann (2007), "Welfare Effects of Financial Integration", CEPR discussion paper No. 6311, 1-35, and Fecht, F., Grüner, H. P., and P. Hartmann (2012), "Financial integration, Specialization, and Systemic Risk", Journal of International Economics, Vol. 88(1), 150-165.

[5] See the ECB's Financial Integration Report (2012).

[6] See, for example, F. Heider, M. Hoerova, and C. Holthausen (2009), “Liquidity hoarding and interbank market spreads: The role of counterparty risk”, ECB Working Paper, 1126.

[7] See D. Schoenmaker (2011), “The Financial Trilemma”, Economic Letters, Vol. 111 (1).

[8] See D. Gros (2012), “The Single European Market in banking in decline – ECB to the rescue?”, in Banking union for Europe: Risk and Challenges, VoxEU.org, 12 April 2012.

[9] See F. De Fiore and H. Uhlig (2011), “Bank finance versus bond finance”, *Journal of Money, Credit and Banking*, 43(7), 1399-1421, and Adrian, Colla, and Shin (2012), “Which financial frictions? Parsing the evidence of the financial crisis of 2007-09“, *in NBER Macroeconomics Annual 2012*.

[10] See Hausmann, R., and E. Fernández-Arias (2001), “Foreign Direct Investment: Good Cholesterol?”, in “Foreign Direct Investments versus other flows to Latin America, edited by de Macedo, J. B., and E. V. Iglesias.

[11] See N. Halov and F. Heider (2011), “Capital Structure, Risk, and Asymmetric Information”, *Quarterly Journal of Finance*, 1, 767-809.

[12] See Committee on International Economic Policy and Reform (2012). “Banks and Cross-border Capital Flows: Policy Challenges and Regulatory Responses“, published online at http://www.brookings.edu/research/reports/2012/09/ciepr-banks-capital-flows.

[13] See A. Popov, “Does private equity investment spur innovation? Evidence from Europe”, ECB Working Paper, 1063, and “On the real effects of private equity investment: Evidence from new business creation”, ECB Working Paper, 1078.

[14] See R. Lucas (1990), “Why Doesn’t Capital Flow from Rich to Poor Countries?”, *American Economic Review*, 80, 92-96, and P.O. Gourinchas and O. Jeanne (2007), “Capital Flows to Developing Countries: The Allocation Puzzle”, NBER Working Paper, 13602.

[15] See online: European Commission > Economic and Financial Affairs > EU economic governance > Macroeconomic Imbalance Procedure.

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