# Jens Weidmann: Financial market integration from a central banking perspective 

Speech by Dr Jens Weidmann, President of the Deutsche Bundesbank, at the Eurobörsentag 2015, Frankfurt am Main, 23 July 2015.

## 1. Introduction

Dear Mr Döring, ladies and gentlemen
Thank you very much for the invitation. I am delighted to have the opportunity to speak to you today about financial integration from a central banking perspective.

Around three weeks ago, on the first of July to be precise, we commemorated the 25th anniversary of the signing of Treaty on Monetary, Economic and Social Union between the Federal Republic of Germany and the German Democratic Republic.
But 1 July 1990 is also a significant date in the timeline of European integration. It was on this day that the first stage of European economic and monetary union began. Its purpose was to align the national economic and monetary policies of the members of the European Community more strongly to the exigencies of price stability and budgetary discipline, thereby transforming the European Community into a community of stability.
And, at the same time, capital movements were to be fully liberalised - one of the four basic freedoms of the single European market.

It was hoped that, if not beforehand, the launch of the euro would eliminate not only the institutional barriers to the integration of the European financial markets but also the largest economic obstacle to comprehensive integration: exchange rate risk.
Free movement of capital and the euro have indeed brought the European financial markets closer together. The degree of financial openness, defined as the sum of cross-border assets and liabilities over gross domestic product (GDP), more than doubled in Germany between 1990 and 2000. Similar developments were observed in the other euro-area countries, too.
But since the outbreak of the financial crisis, and especially the collapse of Lehman Brothers, Europe's financial fabric has been placed under serious strain. In some places, it has proven resilient, but in others it has frayed. Some threads have even unravelled altogether. As a result, between the end of 2007 and the end of 2008, the degree of financial openness fell by $16 \%$ in Germany, 18\% in Italy and 21\% in France.

European financial market integration is therefore back on the European economic policy agenda. From a central banker's perspective, it is clear that a single monetary policy requires integrated financial markets. Only then can monetary policy stimuli reach all parts of the euro area quickly and safely.
But it is also clear that a single monetary policy does not mean that interest rates have to be the same everywhere. As the first economist, Aristotle, said: "equals should be treated equally and unequals unequally." Using monetary policy to equalise the unequal risks allocative distortion. And the euro-area crisis, in particular, has highlighted the negative longterm economic impact of capital misallocation.

It is also clear that central banks influence the financial markets with their instruments, whether through refinancing operations, securities transactions or other measures.
But what does that mean for the integration of the European financial markets? In other words, what role do central banks play for financial market integration? And what impact will closer integration ultimately have on monetary policy?

I would like to explore these questions in the next 20 minutes. In doing so, I will look at the different financial market segments individually: the money market, the bank loan market, the bond market and the capital markets.

## 2. The money market

Let me start with the area of the financial market that is especially relevant to monetary policy - the money market, and more specifically the interbank market.

It is via this market that monetary policy stimuli are traditionally transmitted to the banks and, from there, to the other areas of the financial markets, finally reaching the real economy, which is how monetary policy influences price developments.

The introduction of the euro resulted in the comprehensive integration of the European interbank market. This was reflected by a sharp increase in cross-border interbank transactions, small differences between policy rates and interbank rates as well as a lean central bank balance sheet. Only a small number of refinancing operations was necessary in order to transmit monetary policy stimuli. The interbank market made sure that central bank liquidity was passed on to the institutions that needed it.

The outbreak of the financial crisis changed this in one fell swoop. Mistrust between the private money market players began to take hold and the spread between the risk premiums for secured and unsecured money market transactions skyrocketed, the volume of money market transactions fell and the number of participants in monetary policy operations soared.

The Governing Council of the ECB reacted swiftly and decisively by switching its refinancing operations to tenders with full allotment. As long as banks were able to pledge adequate collateral, they received unlimited amounts of liquidity from the Eurosystem. In practice, this allowed them to bypass the strained interbank market. The Governing Council also offered additional longer-term refinancing operations including, naturally, the three-year refinancing operations at the end of 2011 and the beginning of 2012 in particular.
In this way, the Eurosystem took over a major part of the money market's role as an intermediary. The closer involvement of the Eurosystem is, of course, associated with risks. However, it can reduce the danger of a widespread bank run, which is good news for the economy as a whole.

## 3. The banking system

However, if the abundant injections of central bank money are used not only to bridge temporary liquidity shortfalls but, in extremis, to keep insolvent banks on long-term life support, matters could get tricky.

The more the central bank safeguards banks against risks and promises them central bank funding even in dubious situations, the more incentive they will have to take on excessive risks, of course. Former IMF Chief Economist and current Governor of the Reserve Bank of India, Raghuram Rajan, as well as last year's winner of the Nobel Prize in economic sciences, Jean Tirole, ${ }^{1,2}$ amongst others, provide evidence in recent studies that the implicit promise of a central bank to step in by lowering interest rates and injecting liquidity when banks default whets banks' appetite for risk.

[^0]This also shows that, in this respect too, a balancing act is required when selecting an appropriate strategy for liquidity provision. Being too restrictive in granting liquidity can cause a spark to turn into a fire. Granting liquidity too liberally, on the other hand, and propping up institutions without sustainable business models, may also mean that the water used to extinguish the fire ends up causing more damage than the fire itself.
In the words of the American economist Allan Meltzer: "Capitalism without failure is like religion without sin. It doesn't work." Banks also need to be able to fail - without bringing the entire financial system to its knees. Or put differently: no bank should ever become so entangled in the rest of the financial system that its collapse would pull the whole web apart banks should not be "too big to fail".

It is clear that the incentive problems l've just described would continue to exist if bail-outs were simply to be transferred from the central bank to fiscal policymakers. An example would be rescuing banks using taxpayers' money even though resolving them would be the wiser course of action.

We cannot have governments providing free insurance, as such an implicit government subsidy makes banks too big and too risky. Systemically important banks, in particular, therefore need to play a role in protecting themselves against default by increasing their equity capital and ensuring a minimum total loss-absorbing capacity (TLAC) for their liabilities.

By having banks bear the costs of their own protection, incentives are set for risk-conscious activities. Banks simultaneously become more resilient, and the contagion effects are reduced should a bank run into difficulties all the same.

We have seen some progress already with regard to equity capital. Basel III significantly strengthened the requirements for both the quantity and the quality of equity capital. However, to date, the binding rules have been based exclusively on risk-weighted capital.
The risk weighting is supposed to prevent banks from investing too heavily in high-risk assets. During the financial crisis, however, we found out the hard way that the risk weighting does not always reflect the actual risk of an investment. Therefore, in my opinion, a capital regime that is also geared to total assets is absolutely necessary. Hence, the leverage ratio is to become part of Pillar 1 of Basel III and thus binding from 2018.

Stricter capital requirements will help to increase the internal capital adequacy of banks. But capital does not come for free. This means that stricter requirements may also reduce the banks' readiness to take on any risks at all; that is, to lend. But that would slow economic momentum. Ultimately, this is also a balancing act.
However, it seems clear that additional efforts to expand banks' capital base would be advisable, especially for systemically important banks and those that will just barely meet the Basel III requirements.
But even stricter capital requirements cannot entirely prevent individual banks from collapsing. And this is okay. After all, the possibility of failure is essential in a market economy.

This is why functioning resolution regimes are crucial for the financial system reform in Europe. With the introduction of the banking union and the adoption of the BRRD and the SRM, important steps have already been taken in the right direction.
However, one critical step is still missing: the establishment of standards for loss-absorbing liabilities, ie debt that can be bailed in. The German government recently submitted a draft act to promote the accumulation of liabilities eligible for bail-in. While this is to be welcomed, more needs to happen.
Although Europe already has a bail-in standard in the form of the minimum requirement for eligible liabilities (MREL), this has so far allowed banks to hold bail-in liabilities of other banks
without additional conditions. In a crisis situation, this, of course, increases the risk of contagion. Hence, a bank should, as a minimum, completely back other banks' bail-in-able liabilities with equity capital.

## 4. Government bond markets

## Ladies and gentlemen

The role of a central bank in providing liquidity can prove problematic if this activity sets incentives to lend recklessly and turn a blind eye to the possibility of failure.
The problems associated with intervention in the government bond markets are even more diverse and serious, which is also why central banks should steer clear of lending to sovereigns. It is for this reason that Article 123 places strict constraints on the Eurosystem by banning the monetary financing of governments.
A look at European history shows that, whenever monetary policymakers have signalled a benign willingness to rescue a country from insolvency, this has put them at risk of neglecting their price control mandate. Monetary policy is compromised if it tries to serve two masters simultaneously.
Moreover, a recent study ${ }^{3}$ indicates that it is both difficult and expensive to restore confidence in policymakers' ability to combat inflation once that confidence has dissolved. Therefore, it is important not just to consider the price-tag of inflation itself but also the costs associated with efforts to steer an economy back to a position where prices are stable. Put simply, trust is hard to gain but easy to forfeit.
In addition, where a central bank takes on the task of lending to governments it neutralises the disciplining effect of the capital markets. Bad fiscal policy is not penalised while good fiscal policy is not rewarded through lower financing costs. This poses a particular problem in a currency union, as the price of unsound budgetary policies may to some extent be passed on to all the other member states.
Conversely, there are economists like Paul de Grauwe ${ }^{4}$ who argue that there was no such disciplinary effect ahead of the sovereign debt crisis. Furthermore, a sovereign that is in fact solvent but suddenly falls prey to the sceptical gaze of the market can actually be driven into insolvency by the rising interest burden. Downgraded market perceptions can amount to a self-fulfilling prophecy, a phenomenon which economists refer to as markets with multiple equilibria.
They argue that in such cases it is vital for a central bank to come to a country's aid, the rationale being that, just as its role in ensuring comprehensive liquidity provision or in acting as "lender of last resort" serves to safeguard financial stability, central bank intervention in the government bond market could fulfil the same purpose.
However, I beg to differ for a number of reasons.
First, it is at times hard to determine the "correct" risk premium ex ante. Hence, it is not always evident to a central bank whether a government is merely illiquid or truly insolvent. Here, we need only look as far as purchases of Greek sovereign bonds under the Securities Markets Programme. The debate we have seen over the past few days and weeks bears witness to the fact that market perceptions of Greece's solvency were not entirely off the

[^1]mark. Consequently, not all developments can be attributed to self-fulfilling prophecies and multiple equilibria.

Second, where a central bank steps into the breach another equilibrium may also come into play as well, namely the forces of fiscal dominance which I alluded to earlier. If a central bank's monetary policy is subjugated to fiscal policy, market players will sooner or later grow accustomed to this stance and expect a higher rate of inflation. This will then actually culminate in higher inflation.

Governments, too, are exposed to the problem of moral hazard, which can cause them to become greedy and dampen their efforts to reform. The dramatic waning of enthusiasm for reform on the part of the Berlusconi government following SMP purchases of Italian government bonds shows how quickly a country's will to reform can evaporate when budget constraints are eased.

Third, the Eurosystem lacks the legitimacy to redistribute fiscal risks between member states. This should remain within the remit of parliaments and governments in the various euro-area countries. But then such redistribution is precisely what would ensue if, say, the Eurosystem were to grant loans to individual euro-area countries.
To prevent a de facto "back-door" implementation of broad-based communitisation of sovereign debts via the central bank balance sheet, the Governing Council of the ECB thankfully acted to broadly rule out this kind of risk distribution when ushering in its latest government bond-buying programme, about which I personally had my doubts.

Besides, the euro-area countries already have a lender of last resort to which they can turn: the European Stability Mechanism (ESM). Nevertheless, even then there remains the difficulty of distinguishing ex ante between illiquidity and insolvency. Experience has taught us that the key factor here is time.
But this matter is also of vital importance to the ESM, as the act of granting loans to member states that later prove to be insolvent is unlikely to be easily reconcilable with the no-bail-out clause, not least when a haircut actually becomes necessary and private creditors find that they have been substituted by other, public-sector creditors prior to that step being taken. This, too, is clear from the ongoing discussion surrounding Greece.

So how exactly can bridging payments via the ESM be safeguarded in turbulent times without absolving existing creditors from their liability?

One suggestion put forward by the Bundesbank envisages, for example, an automatic threeyear maturity extension for all bonds. This would be activated the moment a government applies for an ESM programme. Such a mechanism would dramatically reduce the level of funding required for any ESM programme, which would then only be needed in order to spread the fiscal adjustment over a longer period, thus simplifying this procedure while avoiding any repayment of legacy debt.
However, if a sovereign has completed a three-year programme but still finds itself locked out of the market and must therefore be presumed to be trapped in a state of deep insolvency, bonds issued on the market would be restructured so as to restore that government's long-term solvency.

The key factor here is that any resultant losses can also be borne by the bondholders without causing the financial system to collapse. In the Eurosystem, these bondholders are frequently banks. If the sovereign-bank nexus is to be broken, the current preferential regulatory treatment of sovereign bonds should be ended at the earliest possible opportunity. Not until banks have begun to hold sufficient capital against government bonds and the size of individual exposures has been made subject to limits will banks be able to effectively cope with the process of restructuring sovereign debt. And only then is there likely to be any concrete political will to take such action.

## 5. Risk sharing

Economists like Peter Kenen ${ }^{5}$ pointed out more than 40 years ago that a functioning monetary union was predicated on risk sharing between its constituent entities.
The calls which I discussed just now for a lender of last resort to be introduced for sovereigns can be seen as just as much of a manifestation of these thoughts as the notion of introducing in the euro area a common unemployment insurance scheme, or, taken to the extreme, mutual liability in the form of euro bonds.

But besides the problems I mentioned earlier which such a risk-sharing arrangement would cause in a monetary union and the question of striking the necessary balance between liability and control, I believe it would also be short-sighted to confine the risk-sharing debate to just the fiscal dimension.
In the United States, for instance, researchers ${ }^{6}$ have found that fiscal policy absorbs just $10 \%$ to $20 \%$ of economic shocks and thus prevents a local income shock from sparking a drop in consumption on the same scale.
Private forms of risk sharing play a much greater role. Integrated capital markets smooth out cyclical fluctuations between the US states to a much greater extent - especially integrated equity markets, which cushion something like $40 \%$ of volatility. If a business's shareholder base is spread across many different states, so, too, will potential losses caused by a shock in that business's home state ripple out beyond the confines of that particular region.

Hence, economic divergence between the individual US states is kept in check. In much the same way, the broad group of shareholders benefit from economic developments elsewhere in the United States when the economy is booming because their investment portfolios are more diversified. So business cycle divergence is kept in check in this direction, too.
Private risk sharing also manifests itself through loans taken out during a downturn to smooth out consumption. $25 \%$ of an economic shock is absorbed by the credit markets in the United States.

All in all, something like $80 \%$ of an economic shock in the United States is absorbed before it can take its toll on consumption. Research in Canada produces similar findings. ${ }^{7}$
Things look different in Europe, however. Here, it is mainly the credit markets which absorb economic shocks - and not particularly effectively at that. All told, only around $40 \%$ of a given shock is cushioned before it impacts on consumption. ${ }^{8}$
Boosting the role played by the equity markets and their cross-border integration would thus contribute to improving risk sharing in Europe. And it would cushion precisely those regional shocks to which a single monetary policy simply has no response.

## 6. Capital markets union

And that, ladies and gentlemen, is why the capital markets union is so important for monetary policy, too.

[^2]A comparison with the United States shows that Europe still has plenty of upside potential when it comes to capital market integration. The US equity market is $50 \%$ bigger than its European counterpart, the venture capital market is five times the size of that in Europe, and the US securitisation market is larger still than the European market.
I'm not saying that Europe's financial system will resemble its US counterpart any time soon. After all, the structure of the financial system reflects the corporate make-up of an economy and in an economy like Europe's, which has a relatively high share of SMEs, banks are likely to remain the main source of financing - and that's something we should welcome.
Yet there are opportunities aplenty for pushing ahead with capital market integration, and the European Commission touches upon a number of them in its green paper, entitled "Building a Capital Markets Union". One is the market for high-quality securitisation; other priority areas include private placements, crowdfunding and harmonising the prospectus regime.

Dismantling barriers in these areas would represent a step towards greater prosperity in Europe, so the Commission's initiative merits our support.
But looking further into the future, we need to go one step further. Creating a European level playing field in insolvency law, for instance, would also improve the integration of the capital markets, particularly those for venture capital.

## 7. Unequal treatment of debt and equity capital

Alongside the existing barriers, another factor which is generally hampering growth in equity capital markets is what The Economist recently called "the great distortion at the heart of the world's economy" - the preferential tax treatment afforded to debt over equity capital.
Interest payments can be deducted from taxable income; equity costs cannot. Eliminating this distortion would encourage businesses to bolster their equity base.
That isn't just important for the development of equity capital markets, with all the positive side-effects l've already mentioned - it would also dampen pro-cyclicality in financial markets and promote risk sharing.

A strengthening of the equity base would naturally also have a positive impact on those businesses for which it has been most hotly debated and called for in recent years - the banks. Eliminating the debt bias in the corporate taxation regime would give banks a business case for shifting their funding structures more towards equity capital. A paper ${ }^{9}$ drawn up by a team of IMF economists indicates that banks' average unweighted equity capital would climb by between 2.2 and 4.2 percentage points - which, on average, would equate to no less than a doubling of the leverage ratio.
Though the authors caution that the impact will probably be less substantial for the largest banks, these numbers are nonetheless remarkable, especially when one considers the $3 \%$ leverage ratio proposed under the Basel III regime.

And no less remarkable would be the potential savings that sovereigns could reap from having to pay less to bail out ailing banks. Economists at the European Commission ${ }^{10}$ have found that doing away with the entire preferential tax treatment of debt would slash the losses which the public sector would suffer if a fresh crisis were to occur on a similar scale.

[^3]Putting an end to the debt bias in the corporate taxation regime, then, could also prove to be a major pillar safeguarding financial stability - one that could potentially provide lasting relief for the public sector.

## 8. Conclusion

Ladies and gentlemen
Europe's financial fabric has become much more tightly woven over the last 25 years. And yet a single torn thread can cause the entire fabric to unravel - this is where the new resolution regime, which is there to prevent torn threads from causing greater damage, comes into play.
Other parts of the fabric, meanwhile, are still pretty threadbare, if not to say worn through altogether. The capital markets union addresses this very issue and is capable of contributing to closer integration.
And the entire fabric could be made more durable still if a stronger thread were used in the future - equity capital.
So you could say that the fabric of Europe's financial system can become both a safety net and a trampoline for the continent's economy - thus making life a great deal easier for monetary policy, too.

Thank you very much for your attention.


[^0]:    1 D Diamond and R Rajan (2012), Illiquid Banks, Financial Stability, and Interest Rate Policy, Journal of Political Economy, Vol 120, Issue 3, pp 552-591.
    ${ }^{2}$ E Farhi and J Tirole (2012), Collective Moral Hazard, Maturity Mismatch, and Systemic Bailouts, American Economic Review, Vol 102, Issue 1, pp 60-93.

[^1]:    ${ }^{3}$ J Hollmayr and C Matthes (2015) Tales of Transition Paths: Policy Uncertainty and Random Walks, Bundesbank Discussion Paper 14/2015.

    4 P De Grauwe and Y Ji (2012), "Mispricing of Sovereign Risk and Multiple Equilibria in the Eurozone", CEPS Working Documents.

[^2]:    5 P Kenen (1969). The Theory of Optimum Currency Areas: An Eclectic View, in R Mundell and A Swoboda (eds), Monetary Problems of the International Economy, The University of Chicago Press.
    ${ }^{6}$ P Asdrubali, B Sørensen and O Yosha (1996). Channels of Interstate Risk Sharing: US 1963-1990, in: Quarterly Journal of Economics, 111(4), pp 1081-1110.

    7 F S Balli, S Kalemli-Ozcan and B E Sørensen (2012). Risk Sharing Through Capital Gains, in: Canadian Journal of Economics, vol 45(2), pp 472-492.

    8 A Afonso and D Furceri (2007). Business Cycle Synchronization and Insurance Mechanisms in the EU, ECB Working Paper, No 844.

[^3]:    9 R A De Mooij, M Keen and M Orihara (2013), Taxation, Bank Leverage, and Financial Crises, IMF Working Paper No 13/48.

    10 S Langedijk, G Nicodeme, A Pagano and A Rossi (2015) "Debt bias in corporate income taxation and the costs of banking crises", CEPR Discussion Paper 10616.

