



Cross-border capital flows and capital markets union: Quo vadis Europe?

This discussion paper gathers together the contributions made at a seminar on cross-border capital flows and capital markets union organised by and held at the ESM in December 2017. The contributions reflect the state of affairs at the time of the event.

Coordination by the European Stability Mechanism

with contributions from:

**Rolf Strauch, Saioa Armendáriz, Angel Gavilán,
and Ricardo Sousa, ESM;**

John Berrigan, European Commission;

**Dirk Schoenmaker, Rotterdam School of Management, Erasmus
University and Bruegel;**

Rick Watson, Association for Financial Markets in Europe

Paul Richards, International Capital Market Association;

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Foreword



ROLF STRAUCH
Chief economist

Capital flows may contain information about the build-up of economic imbalances and thereby serve as an early warning signal of an upcoming crisis, as the last crisis illustrated. Cross-border flows both drive and reflect the degree of economic and financial integration across countries. Since deep and integrated financial markets are key to smoothing economic cycles and the effective transmission of monetary policy, understanding capital flow dynamics is of paramount importance for the European Stability Mechanism (ESM) in pursuing its mission to safeguard euro area stability.

Much of the euro area's current reform agenda centres on building more efficient market infrastructures to increase risk sharing through further financial integration. For the time being, however, European capital markets' financial integration remains limited and the euro area lies well behind the United States in economic risk sharing.

This discussion paper gathers the contributions presented at the "Cross-Border Capital Flows and Capital Markets Union" workshop organised by the ESM and held at its premises on 8 December 2017. The workshop analysed recent euro area capital flow dynamics, and discussed how to make the region more shock resistant by enhancing efficient cross-border flows and deepening market integration. The debate benefitted from the different perspectives of closely involved policy makers, academics, and financial industry representatives.

We would like to thank John Berrigan, Philipp Hartmann, Paul Richards, Dirk Schoenmaker, and Rick Watson for their work on this joint project.

Executive summary

The euro area has emerged from the crisis strengthened.

The euro area has come out of the crisis stronger and is now on a much more solid footing than only a few years ago. Large macroeconomic imbalances and institutional weaknesses that gave rise to the crisis have been overcome. On the financial side, after a significant restructuring process, banks are now better capitalised, provisioned, and supervised at a European level. The creation of the ESM and progress towards banking union considerably strengthened the euro area's institutional infrastructure.

Still, financial integration remains limited.

Despite these improvements, the degree of financial integration in the euro area remains limited, even 10 years after the global crisis. This is evidenced, for instance, by the large fragmentation of retail credit markets, subdued cross-border private risk sharing, and persistent home bias in portfolio allocations. These factors weigh on financial stability, the transmission of monetary policy, and the capacity to smooth asymmetric shocks in the euro area.

The ESM held a workshop on accelerating financial integration.

The ESM therefore organised the capital flows workshop to discuss how to accelerate financial integration and make the euro area more resilient. Policy makers, academics, and market practitioners debated recent capital flow dynamics, international risk sharing, home bias, and the main challenges to the euro area's current reform agenda, particularly on capital markets union.

Enhancing financial integration and risk sharing are seen as key to the euro area's future and the ESM's mission.

Klaus Regling (ESM, Managing Director) opened the discussion by highlighting that increasing financial integration and risk sharing are key to the future of the euro area and the ESM mission. In his view, less fragmented financial markets in the region would mean more risks could be shared through private channels. There would thus be less chance that fiscal means, such as those available at the ESM, would be needed. To achieve this greater integration, Mr Regling argued that completing banking union and further reducing risks in the financial sector are of the utmost importance. On the fiscal side, he stressed that a full fiscal union is neither politically feasible at present nor economically necessary. He advocated instead a facility that, without requiring permanent transfers across countries or debt mutualisation, could help manage asymmetric shocks in the euro area.

Following Mr Regling, Angel Galiván (ESM, Deputy Head of Economic and Market Analysis) and Martin Hillebrand (ESM, Senior Quantitative Analyst – Funding) summarised the main lessons from the last capital flows' boom-bust cycle in the euro area. They also presented quantitative evidence that financial markets have recently become more resilient, for example, when looking at the muted market reaction to the UK referendum and the presidential elections in the US and France. This relative calm may, however, be temporary. John Berrigan (European Commission, Deputy Director General at DG FISMA) described two key European Commission initiatives designed to catalyse financial integration in the EU: banking union and capital markets union. On the latter, he laid out the rationale, the specific measures pursued, and the main implementation challenges.

The second session centred on international risk sharing and home bias. Philipp Hartmann (ECB, Deputy Director General Research) provided a quantitative assessment of the state of risk sharing in the euro area and of the channels through which this works. He proposed various avenues to strengthen the capital markets channel, including reforms to pension systems and insolvency frameworks. Dirk Schoemaker (Erasmus University Rotterdam, Bruegel and CEPR) presented different measures of home bias. He showed strong empirical support for the hypothesis that the larger the assets managed by institutional investors and the lower the restrictions on foreign investments of pension funds, the smaller the home bias and the greater the scope for risk sharing. He concluded that a stronger role for the European Securities and Markets Authority (ESMA) could help in fostering the integration of EU capital markets.

The third session focused on the practical implementation of a European capital markets union. Rick Watson (AFME, Head of Capital Markets) underlined the shortfall of all forms of risk finance in the European Union (EU), which particularly affects small and mid-size high-growth businesses. Since Member States are not following a homogenous strategy to address this lack, Mr Watson stressed that ensuring high-growth companies were able to finance themselves in a coherent single market should be a core EU objective. Paul Richards (ICMA, Head of Market Practice and Regulatory Policy) further elaborated on the various ways to increase financial integration across the EU, and discussed the pros and cons of developing a European safe asset. He also exposed the practical implications of Brexit for both the functioning of European capital markets and the success of the capital markets union initiative.

The fourth session consisted of a policy panel moderated by Thomas Wieser (President of the Eurogroup Working Group). The panel, made up of Kalin Anev Janse (ESM, Secretary General), John Berrigan, Philipp Hartmann, Paul Richards, Dirk Schoemaker and Rick Watson, strongly agreed that fostering financial integration in the euro area was critical to increasing its resilience to future shocks, diversifying the funding sources for corporates, unlocking idle capital for investment purposes, and promoting risk sharing. They also acknowledged, however, that any progress towards this high-priority target was likely to take considerable time and resources, especially given the many diverging vested interests at stake.

Rolf Strauch (ESM, Chief Economist) closed the workshop by emphasising that despite the recent improvements in the euro area economic and institutional scenario and the clear reform agenda ahead, there was a need to remain alert. In his view, factors such as Brexit, monetary policy normalisation, and the rapid growth of Fin-tech could still lead to significant market and macroeconomic disruptions, requiring, therefore, continuous and comprehensive monitoring of capital flow dynamics.

1. Lessons from the last euro area capital flows boom-bust cycle¹

S. Armendáriz, A. Gavilán, and R. Sousa, European Stability Mechanism

¹ We would like to thank Juan Rojas, Rolf Strauch, and participants in the ESM Workshop on 'Cross-Border Capital Flows and Capital Markets Union' for their useful comments. We also appreciate the excellent research assistance from Belén Rodríguez Moro and Christoph Schwarze.

Introduction

Capital flows are closely intertwined with the globalisation process and contribute to financial integration. They help better allocate resources, promote international risk sharing, and smooth consumption. However, when capital flows do not respond to fundamentals or mask crucial vulnerabilities, capital flow reversals and unpredictable contagion effects may disrupt both economic activity and financial stability.

The euro's adoption boosted intra-euro area capital flows. Yet in the run-up to the 2008–2009 financial crisis, the boom in capital flows was largely a global phenomenon, rather than a euro area-specific event. Despite this, euro area capital flows suffered a more severe adjustment and have since somewhat diverged from global trends. This reflects the need for a more pronounced economic adjustment and an unparalleled retrenchment in bank lending flows.

Three key lessons can be drawn from the last boom-bust cycle:

1. During the boom, euro area aggregates were misleading and masked large country-specific imbalances. The lack of sufficiently flexible mechanisms to absorb these imbalances contributed to a long adjustment in the weakest regions. Globalisation also led to the rise of large international financial centres located in the euro area and a substantial decoupling between real and financial flows.
2. The size of capital flows matters, but also their composition. In the boom, capital flows were concentrated on volatile instruments, such as portfolio debt flows and cross-border wholesale lending. When these flows reversed in the bust and financing constraints became acute, large-scale euro-system liquidity operations and EU/IMF bailout loans had to be deployed to smooth out their impact.
3. The euro area financial sector remained largely segmented during the boom and the drop in home bias was mostly an illusion. Cross-border lending flows to firms and households remained residual throughout the boom-bust cycle, and the bank-sovereign links intensified after the bust. These features imply low risk sharing and difficult monetary policy transmission. They also favour the impairment of financial intermediation in times of stress.

Looking forward, developing EU capital markets union and completing banking union are crucial. Together, these initiatives should enhance private risk sharing, eliminate bank-sovereign feedback loops, improve overall financial stability, and boost investment. Even if the return of sovereign yield convergence in the euro area reflects monetary and economic improvements, the prevailing 'low for long' interest rate scenario may prompt excessive risk-taking and lead to potential market over-reactions that need close monitoring.

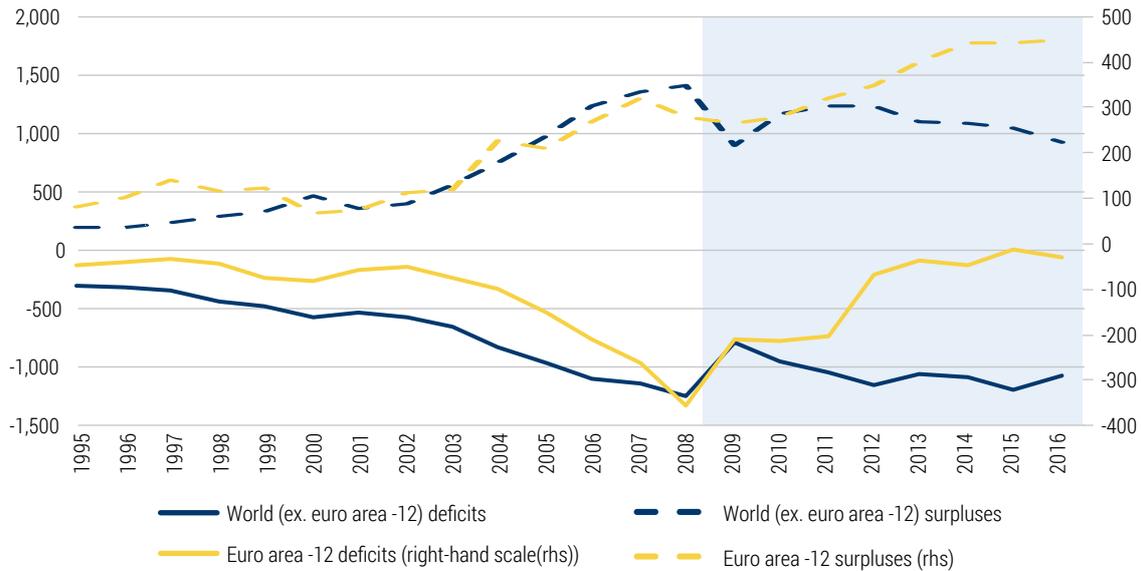
Capital flows' boom-bust cycle: global and euro area trends

Capital flows reduce inefficiencies in the allocation of resources, promote international risk sharing, and broaden consumption-smoothing opportunities. Nonetheless, risks for real economic activity, financial stability, and monetary policy transmission arise when capital flows, especially those with a volatile composition or not justified by fundamentals, accelerate excessively, or reverse sharply. More financially integrated areas are naturally more exposed to these risks via more intense cross-border spillover and greater financial interconnectedness.

The rapid expansion of cross-border gross capital flows in the run-up to the 2008–2009 financial crisis was a worldwide phenomenon largely associated with the remarkable development of global value chains and financial market innovations. The

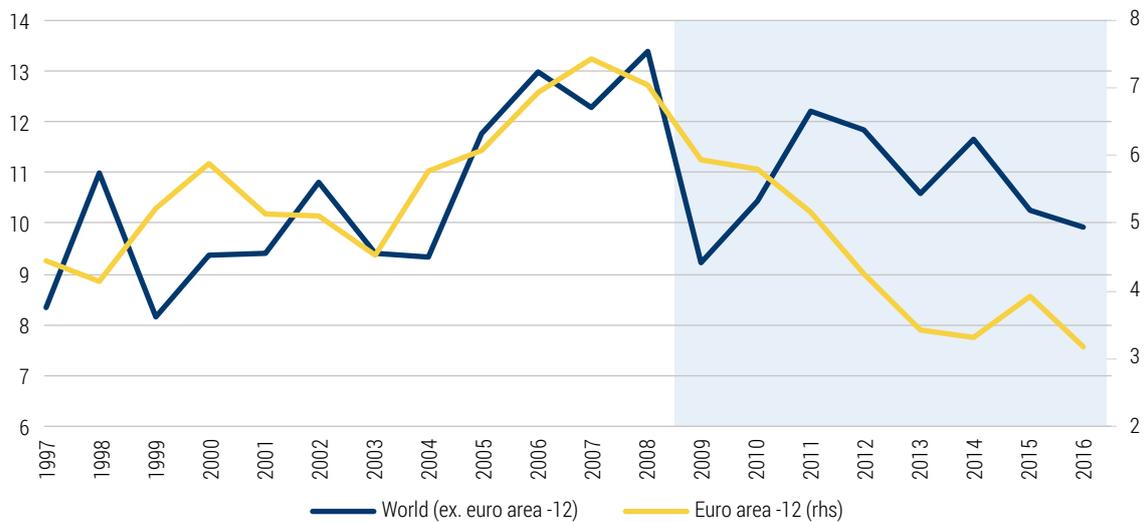
elimination of intra-euro area currency risk also boosted capital flows in the region in the first decade after the euro's adoption (Lane and Milesi-Ferretti, 2008; Strauch et al., 2016). As a result, external sector imbalances mounted in this period, following a similar pattern in the euro area and in the rest of the world (Figure 1.1). At the same time, the dispersion in current account balances widened in the euro area and elsewhere in a similar fashion (Figure 1.2).

Figure 1.1
Sum of current account deficits and surpluses
 (in USD billion)



Note: Shaded region denotes post-crisis period.
 Source: ESM calculations based on International Monetary Fund's (IMF) World Economic Outlook (WEO)

Figure 1.2
Standard deviation of current account balances
 (% of GDP)



Note: Shaded region denotes post-crisis period.
 Source: ESM calculations based on IMF's WEO

Trends in capital flows sharply reversed with the global financial crisis, but their retrenchment was more pronounced and persistent in the euro area than in the rest of the world. In particular, euro area external positions improved more and its current account balances became significantly less dispersed compared to elsewhere (Figures 1.1 and 1.2), meaning a considerable decoupling between euro area and global dynamics. There are two main reasons for this:

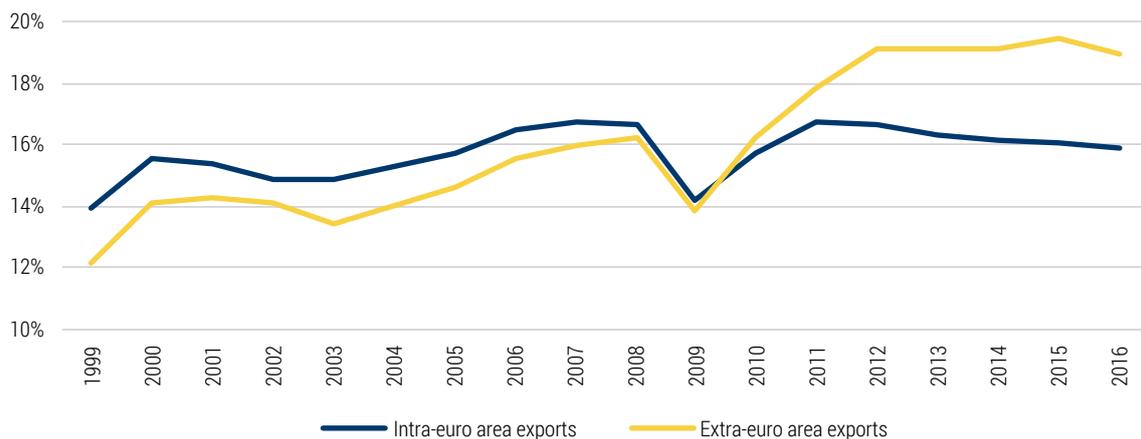
1. The euro area required a more intense macroeconomic adjustment after the crisis.

This is evidenced by trade dynamics, which capture the “real dimension” of capital flows and show a large outperformance of extra-euro area exports relative to intra-euro area ones since 2009 (Figure 1.3). Even if both types of exports were similarly hit by the crisis, those outside the euro area quickly regained their pre-crisis trend. This shows that, in light of the more severe slowdown of domestic economic activity in the euro area, member countries relied on the rest of the world as a way of re-engineering growth.

2. The strong role of the European banking sector in channelling capital flows.

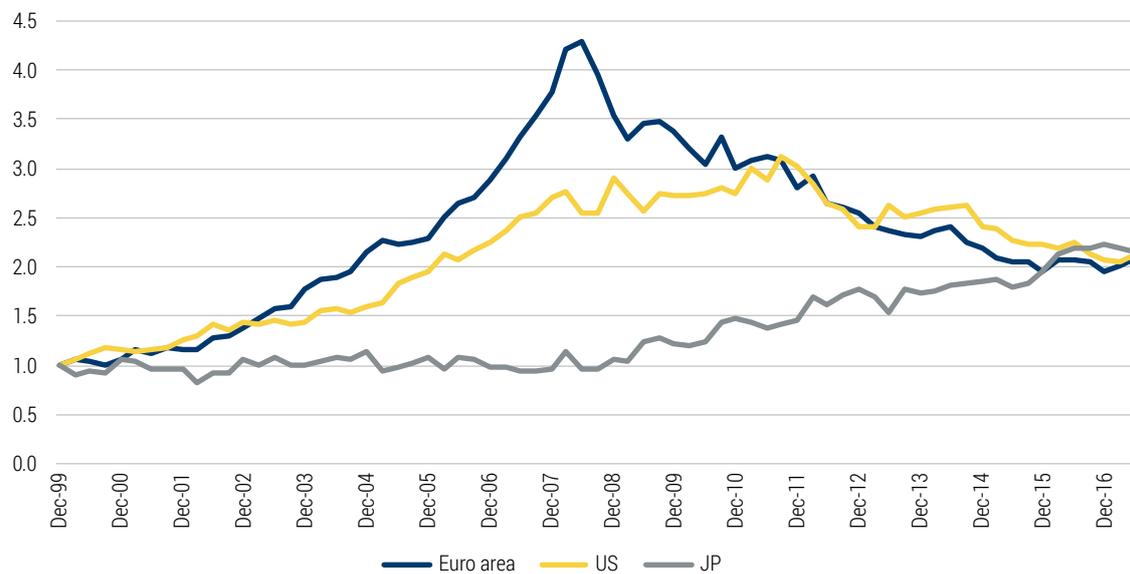
The banking sector was the main intermediary for international capital flows during the boom, particularly in the euro area where the introduction of the euro boosted cross-border transactions (BIS, 2015). Specifically, at the onset of the crisis in 2008, claims on euro area banks were more than four times larger than when the euro was adopted in 1999. This represents a much higher rise than that observed in US or Japanese banks (Figure 1.4). Accordingly, when the global financial turmoil erupted, the capital flows retrenchment was more intense for European banks, while claims on US banks barely declined and those on Japanese banks actually increased. Thus, the crisis revealed that some banks’ portfolio diversification by geography exacerbated risks, with vulnerabilities owing to the short-term nature of funding and the ‘too big to fail’ moral hazard (CGFS, 2010; Lane, 2013).

Figure 1.3
Intra- and extra-euro area exports
(% of GDP)



Source: ESM calculations based on Eurostat data

Figure 1.4
Cross-border bank claims versus banks
 (1999 = 1)



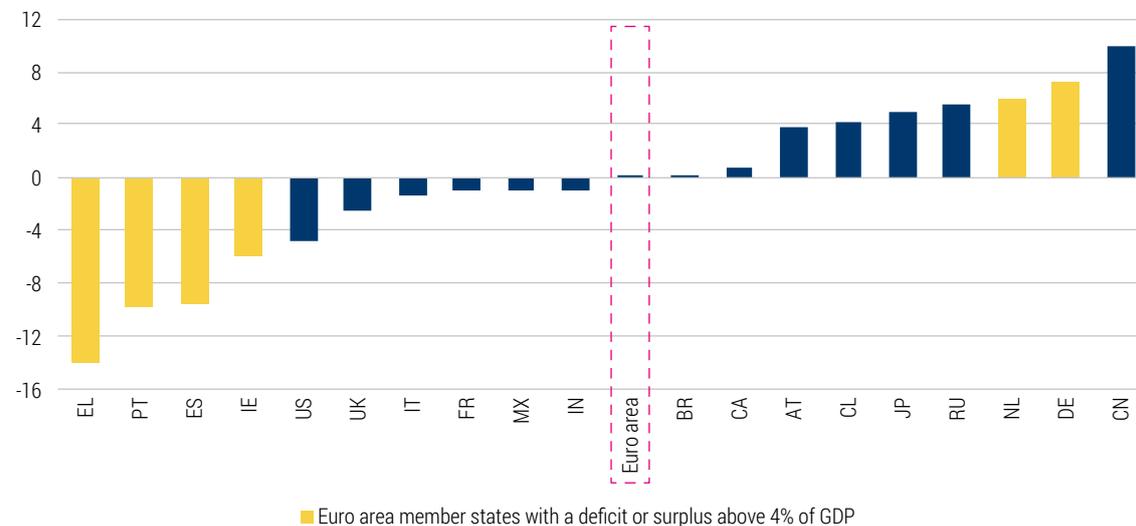
Source: ESM calculations based on BIS locational banking statistics

Euro area aggregates masked cross-country heterogeneity

The last boom-bust cycle taught several important lessons for the further strengthening of the euro area’s economic, financial, and institutional set-up. The first is that euro area aggregate indicators can be highly misleading and mask large underlying imbalances affecting individual member states.

A good example is the current account balance. In 2007, the euro area had a perfectly balanced external position vis-à-vis the rest of the world, suggesting a more solid position than other developed economies such as the UK or the US (Figure 1.5).

Figure 1.5
Current account balance in 2007
 (% of GDP)



Source: ESM calculations based on Bloomberg data

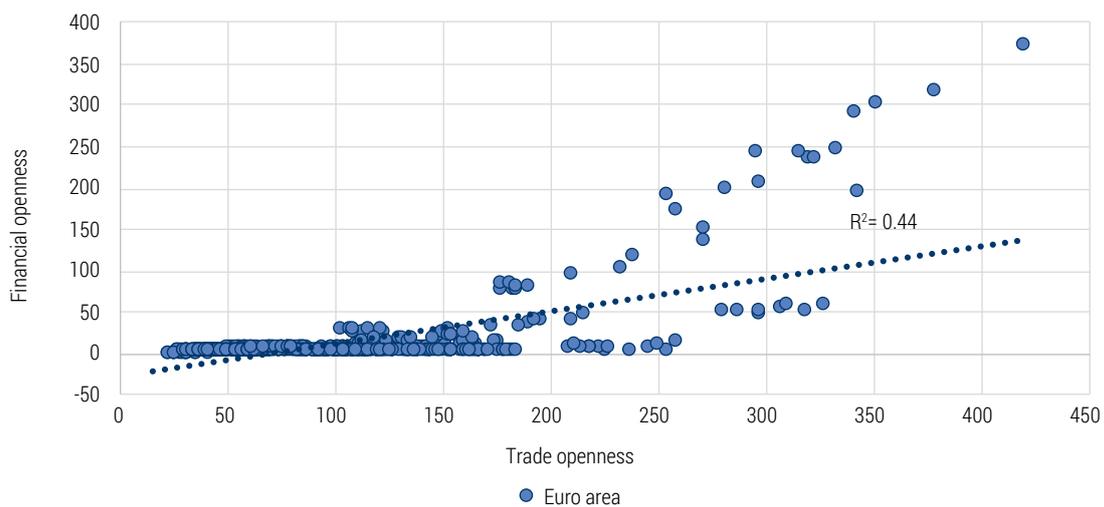
However, this apparently healthy position hid the presence of large outliers within the euro area. Peripheral countries, such as Ireland (6%), Greece (-14%), Portugal and Spain (both, -10%), recorded large current account deficits. By contrast, some core countries, such as Germany (7%) and the Netherlands (6%), registered large current account surpluses.

Mounting current and capital account imbalances before the financial crisis largely reflected problems with the economic structure of some of these countries. As such, they should have served as “early signals” of potential distress (Frankel and Saravelos, 2011), especially in an environment where immediate corrective mechanisms were absent.

Another example concerns the intricate linkages between trade and financial openness. Trade is facilitated by credit and international payments, and it creates financial links, such as the accumulation of international assets and liabilities (BIS, 2017). Therefore, international trade and financial openness tend to move in tandem and countries that are more open to trade are also more open financially (Figure 1.6).

However, over recent decades, ‘gross’ foreign asset and liability positions have been growing faster than ‘net’ positions, because most of these links are established solely for the active financial management of trade-induced balance sheet positions. This quick expansion of financial innovation,² the so called ‘third wave of globalisation’ (BIS, 2017), further intensified the decoupling between the real and financial dimensions of capital flows. This phenomenon is particularly visible in the emergence of large financial centres (Figure 1.7), with globally active institutions engaging not only in cross-border financial transactions, but also in domestic credit activity in offshore markets.³

Figure 1.6
Financial openness and trade openness
(% of GDP)



Note: Financial openness = (foreign assets + liabilities) / GDP; trade openness = (exports + imports) / GDP x 100. Trade openness is re-scaled to improve readability.

Sources: ESM calculations based on Lane and Milesi-Ferretti (2017), and World Bank data

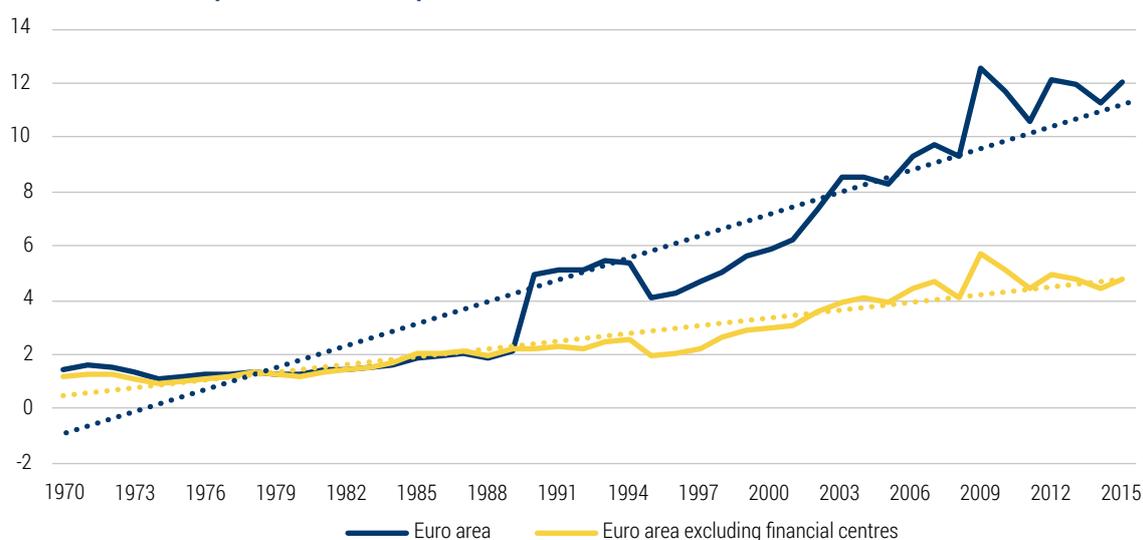
² Both the demand for and supply of more sophisticated financial products is positively correlated with wealth.

³ These transactions are not classified as international in the balance of payments (BoP) accounting framework. Consequently, standard financial openness measures underestimate the actual strength of global interconnectedness.

These diverging trends between the financial and real sectors are not necessarily growth-enhancing. Some argue that financial development is good only up to a point, after which it reduces real growth (Cecchetti and Kharroubi, 2012). For instance, an exogenous finance increase may reduce total factor productivity growth by disproportionately benefiting high collateral/low productivity sectors (e.g., construction) at the expense of financially dependent and R&D-intensive industries (Cecchetti and Kharroubi, 2015). Also, the detrimental effect of labour reallocation occurring during economic booms and/or expansions is stronger when followed by crises (Borio et al., 2015).

Figure 1.7

Ratio of financial openness to trade openness



Note: Financial openness = (foreign assets + liabilities) / GDP; trade openness = (exports + imports) / GDP. Financial centres include economies with sizable financial centre activity: Cyprus, Ireland, Luxembourg and the Netherlands.

Source: ESM calculations based on Lane and Milesi-Ferretti (2017), and World Bank data

The size of capital flows matters, but also their composition

A second lesson from the last boom-bust cycle is that both the *size and the composition* of capital flows are important in assessing a country's vulnerability and its exposure to potential sudden-stops.

There are many types of capital flows. The functional categories in the Financial Account of the Balance of Payments include foreign direct investment (FDI), portfolio debt, portfolio equity, other investment, financial derivatives and reserves.⁴ Each has different characteristics and degrees of volatility. FDI involves equity and debt investments that cover relationships involving at least a 10% ownership – thus, control and influence. Portfolio equity (debt) flows consist of investments in equity (debt) securities not included in FDI. Financial derivatives typically cover derivatives and employee stock options. Capital flows not included in previous categories (e.g., currency and deposits, insurance and pensions, and loans) are labelled as other investment. Finally, reserves account for central banks' external assets, such as foreign currency, gold, or special drawing right allocations.

A vast empirical literature analyses how the impact of capital flows on GDP growth or productivity may vary according to the type of flow considered (Reisen and Soto,

⁴See IMF BPM6 (2009).

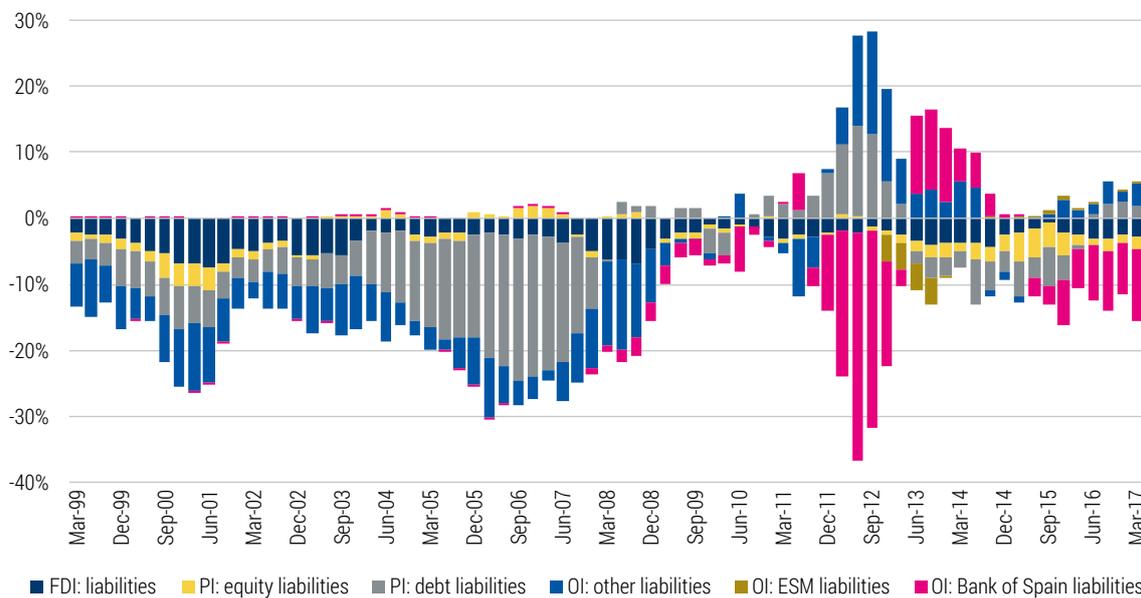
2001; Aizenman et al., 2013; Igan et al., 2016).⁵ For instance, Igan et al. (2016) show that output growth fuelled by debt inflows is stronger than when financed by equity inflows. However, output volatility is lower in the latter case. Meanwhile, Kalemli-Ozcan (2016) finds that those firms that accumulated more debt relative to other sources of financing (namely, equity and retained earnings) in the pre-crisis period exhibited a stronger decline in investment when the crisis hit. In the euro area, small- and medium-sized enterprises in peripheral countries were more exposed to debt in the form of short-term bank loans at the time of the bust, whereas large firms in core countries held a larger proportion of long-term debt. These cross-country differences in the maturity structure of firms' liabilities meant that the former became more vulnerable to changes in financial conditions and faced larger debt rollover risks than the latter.

The capital flows boom-bust cycle in Spain very clearly illustrates how the various types of capital flows exhibit different cyclical behaviours. In particular, even at the peak of the financial turmoil of 2008–2009 and the subsequent euro area sovereign debt crisis, FDI and portfolio equity investment still meant foreign *inflows* into Spain, not *outflows*⁶ (Figure 1.8). In contrast to these relatively stable sources of financing, large swings in portfolio debt and other investment liabilities (namely, bank-related liabilities) drove most of the Spanish *boom-bust* dynamics. The operation of Euro-system liquidity flows, which led to large Target 2 imbalances, and the ESM programme, avoided a complete sudden-stop.

Figure 1.8

Breakdown of liability flows in Spain

(Flows accumulated over four quarters, % of GDP)



Note: Positive (negative) flows denote capital outflows (inflows) from (to) the domestic economy. PI stands for portfolio investment and OI stands for other investment.

Source: ESM calculations based on Bank of Spain and Spanish National Statistics Institute (INE) data

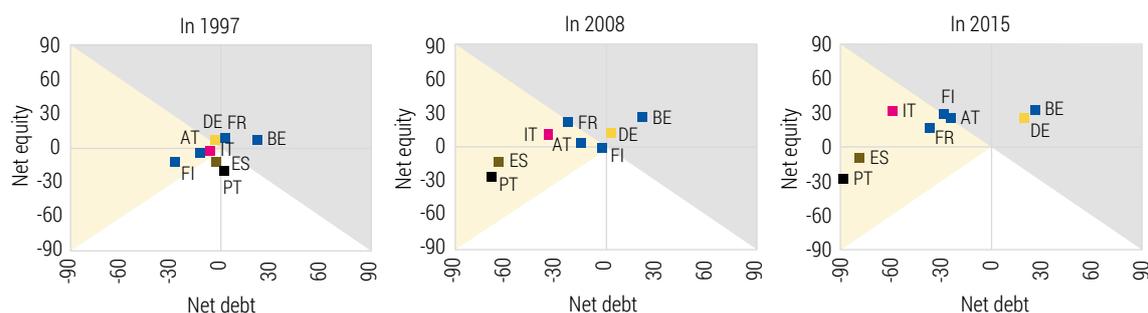
⁵ Some authors emphasise the benefits of capital flows in relaxing credit constraints (Harrison et al., 2004), providing credit and technical knowledge to host countries (Tong and Wei, 2011) and improving capital efficiency (Ahmed and Zlate, 2014). In contrast, other studies highlight some negative effects due to the reallocation of resources away from the tradable (manufacturing) sector and towards the non-tradable (non-manufacturing) sector (Benigno and Fornaro, 2014) or the higher likelihood of sudden-stops (Gourinchas and Obstfeld, 2012; Benigno et al., 2015).

⁶ Here we refer to net liability flows, and not net FDI and portfolio equity assets (Spanish investment abroad).

Looking into stocks, shifts in the *composition* of capital flows over time and across countries naturally affect the structure of net foreign assets, as Figure 9 illustrates. Abstracting from valuation effects, countries in the grey area hold creditor positions versus the rest of the world. In contrast, countries falling in the yellow and white areas are debtors vis-à-vis the rest of the world. Nonetheless, considering that negative debt positions tend to be less resilient than negative equity positions, countries in the yellow area hold a more vulnerable position than those in the white region.

Figure 1.9

Breakdown of net foreign assets: debt versus equity (% of GDP)



Source: ESM calculations based on Lane and Milesi-Ferretti (2017)

Just before the adoption of the euro, net foreign asset positions were similar and broadly balanced across euro area member states (Figure 1.9, left panel). At the onset of the crisis in 2008, however, Portugal and Spain already displayed very weak net debt (-68% and -64% of GDP, respectively) and equity (-26% and -13% of GDP, respectively) positions (Figure 1.9, centre panel). These vulnerabilities intensified in subsequent years (Figure 1.9, right panel). Over this period, even France and Italy, which recorded positive net equity assets (17% and 31% of GDP, respectively), moved into the more vulnerable yellow area as their net debt asset positions became largely negative (-37% and -59% of GDP, respectively).

These flow and stock dynamics reflect developments in progressively more complex financial markets and call for a more thoughtful analysis. For instance, FDI debt flows include growing intra-group flows, such as offshore debt issuance. This implies that the dynamics of FDI debt flows are becoming increasingly similar to the dynamics of (volatile and more vulnerable) portfolio debt flows than to those of (resilient and more stable) FDI equity flows. The added complexity in the financial structure of large multinational companies is also contributing to the rise in non-bank other investments (BIS, 2017). The majority of FDI claims and liabilities in large financial centres refers to special purpose entities, for instance, which are legal entities used to raise capital or hold assets/liabilities but which typically do not produce goods or provide services. Their importance is growing (Lane and Milesi-Ferretti, 2017). Additionally, multinational corporations are increasingly redomiciling to financial centres from countries where they have large production facilities. Consequently, given that firms' underlying shareholders are the same, the counterpart to a rise in FDI assets is a rise in foreign portfolio equity liabilities.

One monetary union, many financial sectors?

The third main lesson from the last boom-bust cycle is that, while euro area member states have been sharing a single currency, their domestic financial sectors have never fully merged into a single euro area financial sector. This lack of integration

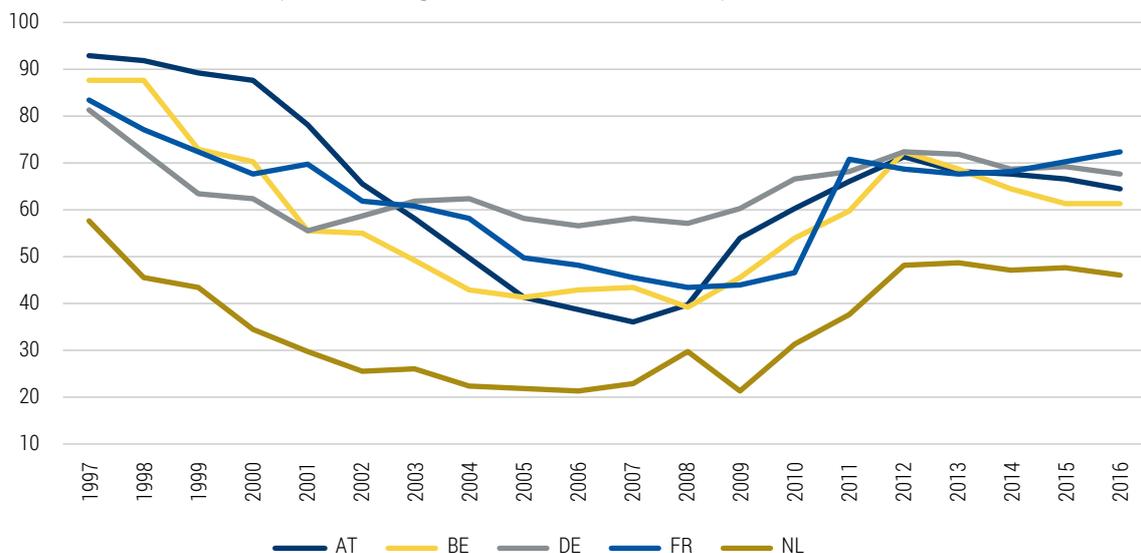
led to harmful bank-sovereign linkages, which became more visible when the crisis hit and financial fragmentation increased in the region.

The financial and sovereign debt crises made evident that the bank-sovereign nexus is prone to negative feedback loops (Acharya et al., 2014). On the one hand, financial vulnerabilities led to debt sustainability concerns for sovereigns that bailed out their domestic banks or were expected to do so. The size of the banking sector, the soundness of the sovereign's fiscal position, its approach to corrective fiscal consolidation measures, and the nature of the banking crisis determine the intensity of the interdependence between the financial and the public sector (Leonello, 2017). Public guarantees, for example, can be relatively costless in preventing crises ignited by panic about banks' perceived illiquidity, but they are less effective when bank failures reflect a deterioration in economic fundamentals.

On the other hand, banks' excessive exposure to domestic sovereign debt meant that fiscal problems contributed to the deterioration in banks' credibility and balance sheets, hindering their ability to trade in the (cross-border) interbank market (González-Páramo, 2011). Indeed, the increased diversification in euro area banks' portfolios during the boom was illusory and quickly reverted when the crisis hit (Figures 1.10 and 1.11).

Figure 1.10

Banking sector's holdings of debt securities issued by domestic general government
(% total holdings of euro area debt securities)

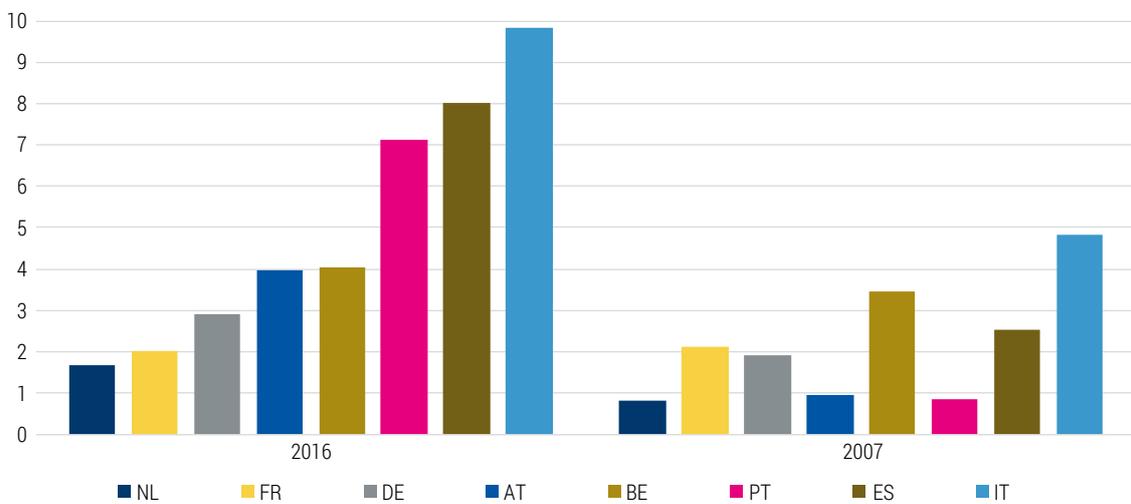


Source: ESM calculations based on European Central Bank (ECB) data

Figure 1.11

Banking sector's holdings of debt securities issued by domestic general government

(% total assets)



Source: ESM calculations based on ECB data

Market moves may be sensible, but 'over-reactions' do occur

Euro area sovereign bond yield spreads relative to Germany have gone through four distinct phases over the last 20 years (Figure 1.12). In the first phase, immediately before the euro's adoption, spreads experienced the so-called 'Great Compression' as part of a process of strong nominal convergence in the region. In the second phase, which ran until Lehman Brothers' collapse in 2008, sovereign bond markets essentially disregarded the possibility of any sovereign default in the euro area and spreads rarely moved far from zero.

Figure 1.12

10-year sovereign bond yield spreads versus Germany

(in basis points)



Note: Shaded region denotes post-crisis period.
Source: ESM calculations based on Bloomberg data

The global financial crisis and the euro area sovereign debt crises marked the beginning of the 'spread decoupling' – i.e. the third phase – where investors sharply re-assessed country risk, the survival of the euro was questioned, and financial market fragmentation intensified. Towards the end of this period, spreads peaked at more than 500 basis points for Spain and Italy, and these thresholds were amply surpassed in smaller peripheral economies like Ireland, Greece, and Portugal. ECB President Mario Draghi's 'whatever it takes' speech in July 2012 and the announcement of the Outright Monetary Transactions programme ushered in the fourth and final phase for euro area spreads. Since then, spreads have converged considerably and approached pre-crisis levels again, driven in part by ESM programme countries' financial and structural reforms (Strauch et al., 2016; Corsetti et al., 2017).

At this point, the main question is what the new normal in this market should be and how low spreads can go. On the one hand, the highly expansionary and unconventional monetary policy deployed by the ECB over the last few years helped to repair financial intermediation and credit provision to the real economy, and has largely removed currency redenomination risks in the region (ECB, 2010, 2011). On the other hand, such unprecedented liquidity support and market presence revived concerns about asset price misalignments like those seen during the boom. In this regard, the current 'low for long' interest rate scenario may be inducing excessive risk-taking and under-pricing of risk (ECB, 2017a). Although asset price misalignments are difficult to detect, large deviations from fundamental values usually signal unsustainable dynamics that may quickly morph into market over-reactions (Malmendier and Tate, 2005; Marciukaityte et al., 2005).

Conclusions and policy implications

Highly integrated financial markets and efficient cross-border capital flows are crucial for financial stability and monetary policy transmission. They are also of paramount importance for cross-country risk sharing and business cycle smoothing. Yet the global financial crisis has halted European capital markets' integration, which remains limited (ECB, 2017b). The large fragmentation of retail credit markets and the persistent home bias in banks' portfolio allocations bear witness to the persisting segmentation.

The creation of a European capital markets union and the completion of banking union can help by increasing the efficiency of current market structures, broadening the sources of market financing, and unlocking capital for investment.

To complete banking union, which is crucial both to reducing market fragmentation and breaking the sovereign-bank nexus, both risk reduction and risk sharing are needed. The establishment of a European Deposit Insurance Scheme may foster financial integration by promoting cross-border banking operations and improving the resilience of capital flows. The Bank Recovery and Resolution Directive, the Capital Requirement Directive and Regulation, and the Single Resolution Mechanism Regulation should also facilitate financial integration by improving regulatory harmonisation in EU legislation and enhancing the macro-prudential toolkit. Expanding the mandate of the ESM to provide a backstop for the Single Resolution Fund would also strengthen euro area resilience.

Capital markets union can pave the way to cross-border barrier removals, private risk-sharing enhancements, and more diversified long-term financing for investment projects. Insolvency rules' harmonisation, legislation striking the right balance between reviving (high-quality) securitisation markets and increasing the use of credit guarantees (EIB, 2015, 2016), and a macro-prudential framework that tackles private and public sector indebtedness and the growth of non-bank financial intermediaries and technology-driven innovation in financial services (BCBS, 2017; CGFS, 2018) could let the capital market union flourish in an environment that safeguards financial stability.

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2. Enhancing financial integration and stability in the EU: the evolving rationale for a Capital Markets Union

John Berrigan, Deputy Director General at the Directorate-General for Financial Stability, Financial Services and Capital Markets Union, European Commission

Introduction

In response to the financial crisis, the European Commission has pursued a number of initiatives to create a more efficient and safer financial sector for the single market.

A well-functioning and integrated financial system is essential for an effective and stable Economic and Monetary Union (EMU) and is a prerequisite for delivering jobs and growth in the EU. It is needed to provide efficient and effective conditions to channel funding across the economy and to optimise the flow of financial resources from those who have an excess of funds (investors and savers) to those who need financing (borrowers) to finance investment.

To catalyse financial integration in the EU the Commission has launched two key initiatives – Banking Union and Capital Markets Union (CMU).

Banking Union

Europe needs its banks to function in a robust and resilient environment. Following the financial crisis and its devastating effects, the Commission has taken several measures to strengthen the prudential requirements for banks and their supervision, to improve the protection of depositors, and to harmonise the rules for resolving failing banks. In turn, in addition to the single rulebook for all financial actors in the 28 Member States, a single supervisory mechanism and a single resolution mechanism have been created for the euro area banking system. While these two first pillars of the Banking Union are now in place, two elements are still missing in this new architecture. A common system for deposit protection has not yet been established, nor has the backstop to the Single Resolution Fund. The Commission has repeatedly urged for the adoption of these missing parts of the Banking Union's architecture. Today, 10 years after the financial crisis erupted, banks now have much more solid capital and liquidity positions. While the total revenue of the sector has shrunk substantially, its composition is much healthier and more sustainable.

Capital Markets Union

CMU aims at strengthening market-based finance in the EU. It is a cornerstone of the Investment Plan of European Commission President Jean-Claude Juncker to boost jobs, growth and investment. The EU needs to be an attractive place for private investment without undue barriers that stop money in one country being invested in another.

Europe's capital markets are still relatively small and fragmented. The European economy is as big as the US one but Europe's equity markets are less than half the size and its debt markets less than a third. Compared to the US, European small and medium-sized enterprises (SMEs) receive five times less funding from the capital markets. While it is true that Europe needs its banks, an economy that almost entirely depends on bank credit puts at risk its financial stability.

CMU aims to help provide more diversified sources of funding for business. As such, CMU will increase risk-sharing via the private sector and the overall resilience of the financial sector. It thereby also contributes to the broader macro-financial stability of the economy in case of economic shocks.

CMU aims at offering EU businesses more choices of funding at different stages of their development from start-ups and scale-ups to well-established multinationals, overcoming the barriers that exist at each stage of the funding escalator. To complement bank financing, an increasing variety of non-banking financing options have also emerged. These range from businesses trading their invoices, to crowdfunding platforms, or support from business angels and venture capital funds.

Capital markets and banks are rather closely interconnected as parts of the wider financial system. The Banking Union and the CMU are two mutually reinforcing initiatives that can bring the Single Market for financial services to the next level. Developing EU capital markets alongside a strong banking sector remains a key priority. Various CMU agenda points seek to help banks generate space for more lending to the real economy. This is the case for example of the securitisation package. Also, amongst the CMU priorities are measures to support secondary markets for non-performing loans (NPLs) and to avoid the accumulation of NPLs on banks' balance sheets in the future.

Achieving CMU is more relevant than ever

The CMU Action Plan (September 2015) presented a blueprint for developing market-based finance in Europe. The Commission has already made big strides in implementing this Action Plan, delivering most of the 33 measures foreseen in the original Action Plan.

However, **building Europe's capital markets needs constant application and a capacity to find new answers to ever-changing challenges.**

A telling example is Europe's broken initial public offering (IPO) pipeline for high-growth SMEs. EU public markets for high-growth SMEs are currently facing huge challenges. The number of SME IPOs has sharply declined in the aftermath of the crisis (to €2.8 billion per year in the period 2008–2015 from an average of €11 billion per year in the period 2005–2007). IPOs are moreover predominantly concentrated in two single junior markets, i.e. the London Stock Exchange's Alternative Investments Market (AIM) and to a lesser extent, Nasdaq's First North, especially in Sweden.

The impending departure of Europe's largest financial centre leaving the single market makes the task of reviving the public capital markets in Europe more challenging but all the more pressing. It is necessary to re-assess how to ensure that EU businesses and investors have access to strong, dynamic, and more integrated capital markets.

Financial technology (Fintech) is also transforming capital markets by bringing in new market players, more efficient solutions, increasing competition, and lowering costs for businesses and investors. Examples of financial innovations that can make the EU capital markets broader and deeper include crowdfunding, supply chain finance, robo-advice, or online shareholder voting.

There is also an increasing and pressing need to make our economic growth models and financial systems more sustainable. Both the United Nations' 2030 Agenda for Sustainable Development and the Paris agreement make it clear that reform of the financial system is central to putting European economies on a sustainable growth path. Long-term investment decisions should integrate wider risks and returns including those linked to environmental or other social externalities.

New challenges, new CMU measures

In the **CMU Mid-term Review (June 2017)**, the Commission addresses evolving challenges through new priority measures and raised its level of ambition substantially. It presented several legislative proposals in key areas of capital markets, notably for covered bonds, personal pension products, collective investment funds, investment firms, to name a few. To revive the public markets for SMEs and high-growth companies, the Commission proposed, in May 2018, targeted amendments in existing legislation to foster a proportionate regulatory environment for SME listings.

Institutional investors have traditionally been long-term equity investors in capital markets. However, over the past 15 years EU insurance companies have reduced their equity investments to around 5–10% of their current total portfolio. Equity investments by pension funds have remained more significant, but these funds invest either predominantly on their home market or, if abroad, outside of the euro area. The Commission is assessing the economic **drivers of equity investments by insurance companies and pension funds** and the potential impact of regulatory constraints at EU and national level and other factors.

The review of the European Supervisory Authorities (ESAs) proposed by the Commission aims at increasing the efficiency of the EU supervisory framework.

This will contribute to accelerating market integration and eliminating barriers to cross-border investment, which are key elements for a successful CMU. In particular, the ESAs will define supervisory strategies for the entire Single Market and oversee their implementation, carry out independent reviews of supervisory work and review certain supervisory decisions that could allow firms to do forum shopping when setting up establishments in the EU. The ESA package presents first steps to strengthen capital market supervision in Europe, as announced in the EMU Reflection Paper, by reviewing the toolset of the European Securities and Markets Authority (ESMA) in certain key areas. An enhanced coordination role could also allow ESMA to build more experience in day-to-day supervision from an EU perspective.

As part of a comprehensive approach to enable FinTech, the Commission published its **Action Plan for Financial Technology** in March 2018 and presented a legislative proposal for an EU framework in crowdfunding.

Financing the transition to a low-carbon economy is becoming an increasingly important issue in the Commission's work given the stakes involved, including the potential implications on financial stability. The Commission set up a high-level expert group comprising 20 experts representing a variety of stakeholders – including insurers, pension funds, assets managers, banks, academics, and civil society representatives. They released their final report with policy recommendations in January 2018. Taking these recommendations into consideration, the Commission adopted a comprehensive strategy on sustainable finance, with deliverables and timelines, in its Sustainable Finance Action Plan in March 2018. The objective is a reformed EU financial policy framework that will allow better alignment of capital flows with sustainable investment and finance needs. The **Sustainable Finance Action Plan was followed up by a set of legislative proposals in May 2018**, including a proposal for a sustainable finance taxonomy, i.e. for uniform criteria whether an economic activity is environmentally sustainable, and on investors' duties and disclosure obligations regarding economic, social and governance factors, which should allow them to allocate capital more efficiently.

Conclusion

CMU is an opportunity to strengthen the euro currency, but it is a significant change. The European Commission is delivering some 70 actions to put in place the building blocks of the CMU by 2019. **To succeed, the commitment of the European Parliament, the Council and all stakeholders is indispensable.** Regulatory reform is only one aspect of the changes needed to create a new financial eco-system that is truly integrated and less dependent on bank financing. Building a CMU is a process requiring the full involvement of all parties, including businesses, investors, and supervisors.

The European Commission is under no illusion about the timescales for this work to deliver results. This is a medium-term project, which requires building new financial circuits and intermediary ecosystems – often from a very low base. **The task now is to make a determined start and to influence market dynamics in a positive direction.**

3. Declining home bias fosters capital market integration

Dirk Schoenmaker, Rotterdam School of Management,
Erasmus University, and Bruegel

Introduction

Capital market integration is often approached in a top-down way, with a regulatory agenda to break down barriers as the main tool. By contrast, this paper takes a structural approach. There are structural forces at work in the European financial system which may bring about further capital market integration. The first force is the decline in banking and rise of institutional investment, fuelled by increasing pension savings. The second force is the subsequent development of capital markets, as institutional investors prefer to invest in marketable securities. The third force is the declining home bias in equity and bond portfolios brought about by professional institutional investment. A declining home bias improves risk sharing and fosters capital market integration. These forces are analysed in the next three sections, followed by a short policy section.

From banking to institutional investment

In the aftermath of the global financial crisis, there is growing recognition that Europe is overbanked (Langfield and Pagano, 2016). The overbanking does not only consist of too many small players (in particular Germany, Austria, and Italy have multiple very small banks), but also the relative role of the banking sector in the overall financial system. At the time of the global financial crisis, European banks made up about 80% of the European financial system (see Figure 3.3). The European financial system is defined here as the banking sector and the institutional investment sector comprising investment funds, insurance companies, and pension funds.

A concern is that bank financing (e.g. bank loans) was less stable during the global financial crisis than market financing (e.g. corporate bonds). When banks deleveraged, several firms lost access to credit, culminating in a credit crunch and exacerbating the great recession. Firms have learnt that they can better diversify their funding mix by a combination of bank credit (i.e. bank loans and credit lines) and market financing (i.e. corporate bonds and private placements like *Schuldschein*). This driver for institutional investment comes from the supply side: firms issuing corporate bonds or *Schuldschein* to replace bank loans. Figures 3.1 and 3.2 confirm that banking remains flat, while institutional investment is on the rise in the euro area.

Another driver for institutional investment comes from the demand side. Employees are preparing for old age by setting aside part of their current income as pension savings. They can do so collectively through pension funds (a type of large institutional investor) or privately through private pension savings schemes managed by a professional asset manager, such as an investment fund or insurance company (other types of institutional investor). Demographics, in the form of ageing, are amplifying this pension savings trend. Part of consumer savings is thus moving from deposits at banks to claims managed by institutional investors (Schoenmaker, 2015).

Pensions across the euro area

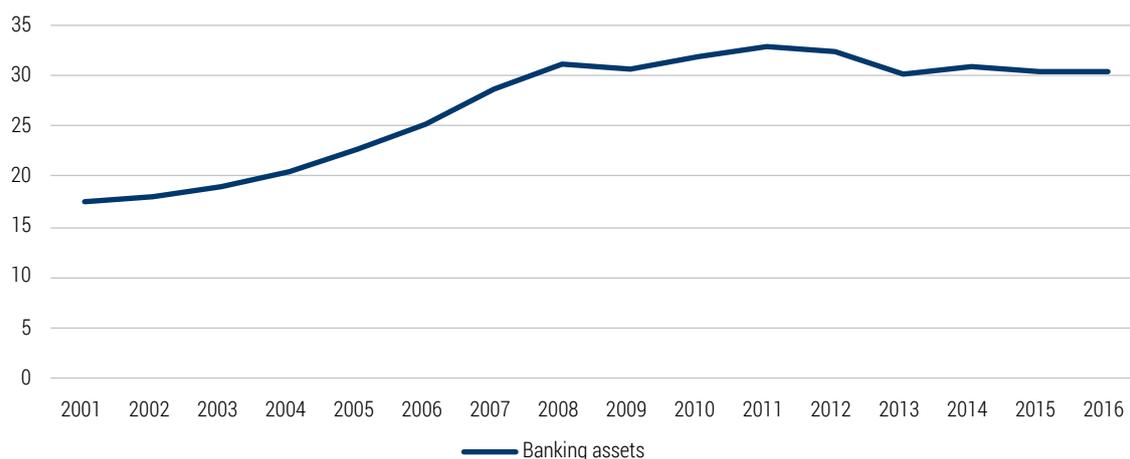
The picture on pension savings (second or third pillar funded pension schemes) is very diverse across the euro area. Some countries, like the Netherlands, have very high pension savings, up to 170% of GDP. By contrast, other countries, like Germany, have almost no pension savings (less than 5% of GDP). Most of the private pension commitments in Germany are still on the balance sheet of companies. That is risky for both the (future) pensioners and the companies. In case of a company failure, pensioners may lose (part of) their pension entitlement. Next, the International Financial Reporting Standards require companies to carry the commitments at market value on the balance sheet (i.e. discounting at market interest rates), which complicates profit and bal-

ance sheet management for the CFO. It is thus in the interest of both companies and workers/pensioners to put pension commitments in a separate pension fund vehicle.

With such a move to separate pension funds, companies need to refinance themselves, which could be done through bank loans, *Schuldschein* and/or corporate bonds. At the same time, the new pension funds need assets to invest in. The latter is analysed in the next section.

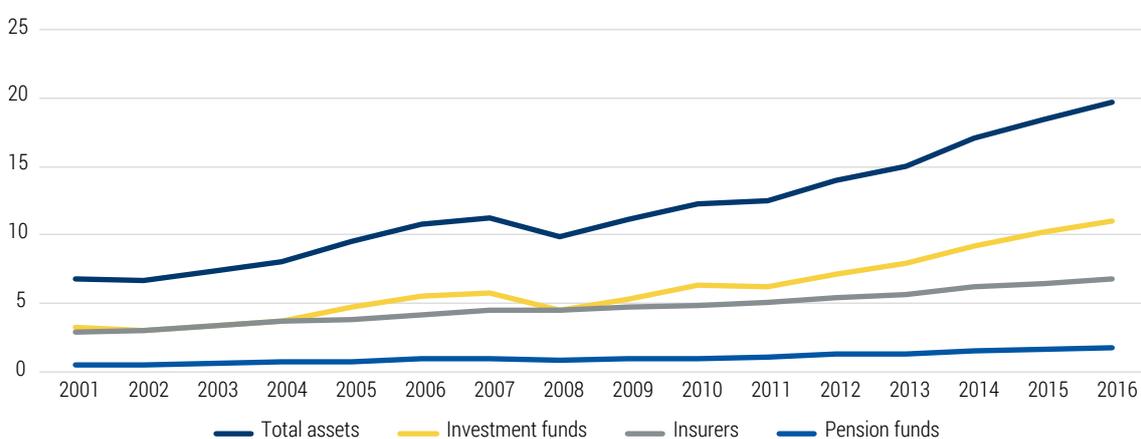
The changing face of financial intermediation is summarised in Figure 3.3. Countries in the euro area, except for Germany, showed a decline in banking to 60% and a corresponding increase in institutional investment to 40% in 2016. However, in Germany banking has been relatively stable at 70% and institutional investment at 30% for the last three years. The unleashing of pension funds has not yet started in Germany. But the German parliament has passed pension reform legislation for occupational pensions in the form of collective defined contribution (CDC) plans without guarantees starting in 2018 (Ottawa, 2017). Such CDC pension plans enable companies to make final annual contributions to the pension fund without future liability.

Figure 3.1
Banking remains flat in euro area
(in € trillion)



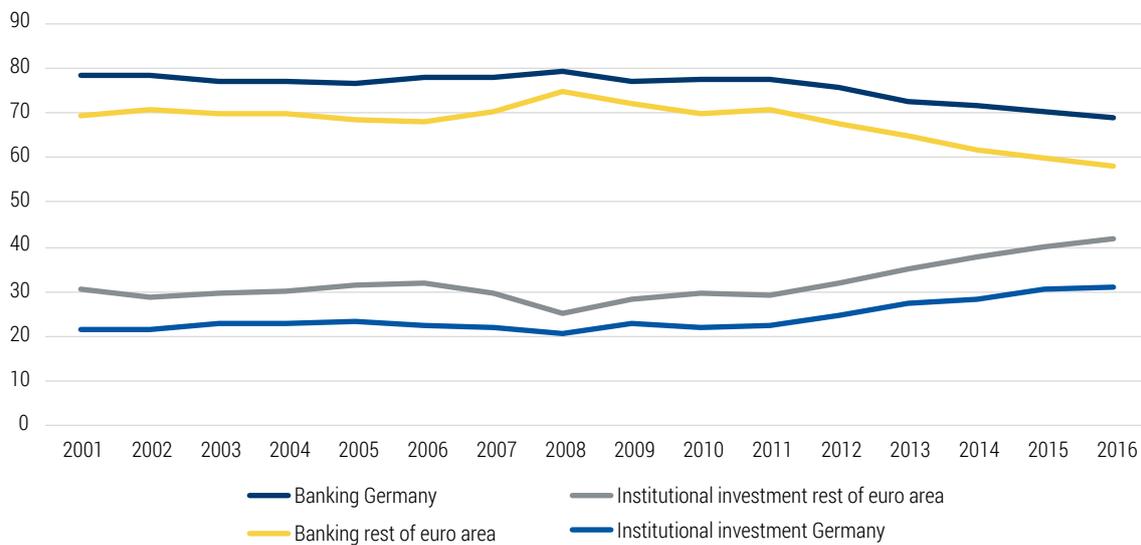
Sources: Money, Credit and Banking Statistics, Statistical Data Warehouse, and ECB

Figure 3.2
Institutional investment is on the rise
(in € trillion)



Sources: Financial Corporation Statistics, Statistical Data Warehouse, and ECB

Figure 3.3
Changing face of financial intermediation in the euro area
 (in % of financial system)



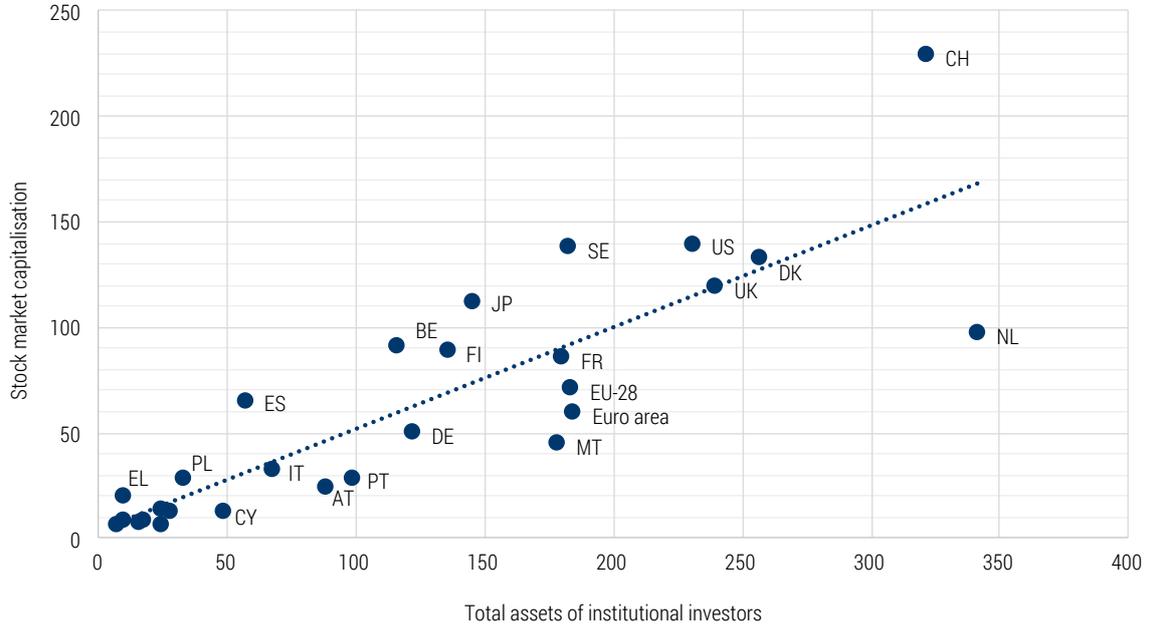
Source: Author calculations based on Figures 3.1 and 3.2

Institutional investment and capital markets

When institutional investment increases, what happens to the financial system? Darvas and Schoenmaker (2017) test the hypothesis that an increasing share of institutional investors increases the demand for marketable securities, such as equities and bonds. Figures 3.4 and 3.5 show that there is a strong relationship between the amount of assets managed by institutional investors in a country and the size of that country's equity and debt markets. The joint coefficient is close to 1 with 0.481 for equity and 0.516 for bonds. Of course, institutional investors also invest abroad, but figures 3.4 and 3.5 clearly indicate that an increase in institutional investment goes hand in hand with an increase in capital markets.

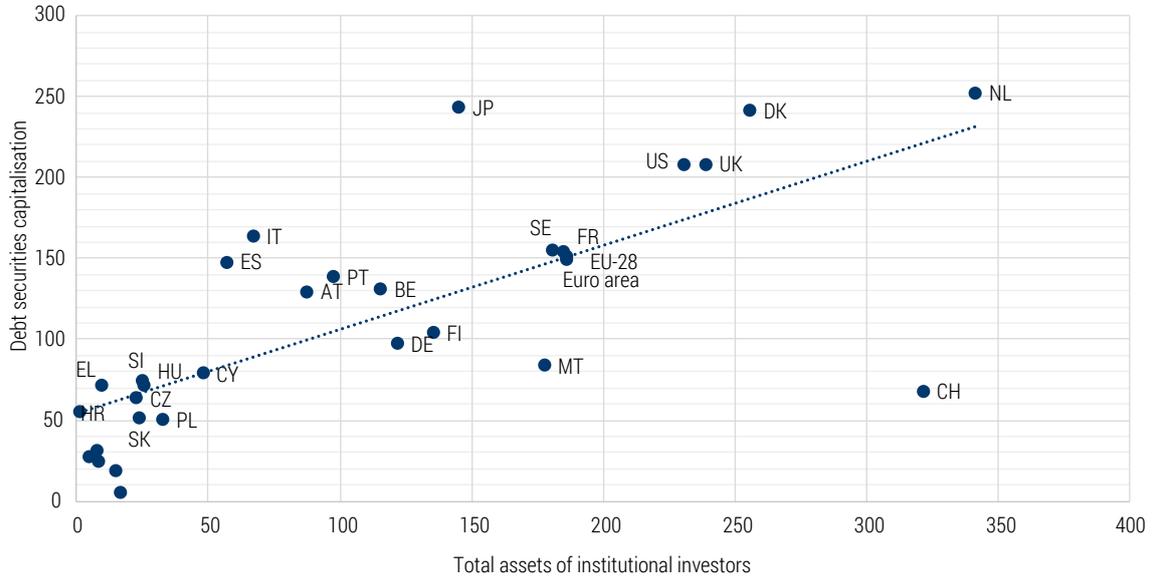
These stylised facts suggest that an increase in institutional investment will result in more bonds (including *Schuldschein*) and equities. Expanding the example of Germany in section 2, German companies are likely to refinance themselves with bonds and *Schuldschein* and not with bank loans, if and when they hive off their pension commitments to a separate pension fund.

Figure 3.4
Institutional investment and stock market capitalisation to GDP
 (in %)



Source: Darvas and Schoenmaker (2018)

Figure 3.5
Institutional investment and debt securities capitalisation to GDP
 (in %)



Source: Darvas and Schoenmaker (2018)

Institutional investment and home bias

A key question is whether increased institutional investment leads to more capital market integration. A commonly used indicator for market integration is the home bias in portfolio investment (Ahearne, Grier and Warnock, 2004). The international capital asset pricing model (ICAPM) suggests that when asset markets are integrated – implying that investors can buy and sell foreign securities without any restriction and without extra transaction costs – all investors should hold the world market portfolio in which each country portfolio is weighted by its market capitalisation. The home bias measures the deviation from the ICAPM benchmark, that is, one minus the ratio of the share of foreign equities in the home and world portfolios:

$$\text{Equity home bias}_i = 1 - \frac{\text{Share foreign equity in country } i}{\text{Share foreign equity in world portfolio}}$$

Whereby

- Equity home bias for country i is the indicator calculated;
- Share of foreign equity securities in country i 's total equity portfolio is calculated as 1 minus the share of domestic portfolio equity; and
- Share of foreign equity in world portfolio available to country i is calculated as 1 minus the share of country i in total world stock/equity market capitalisation).

Country i 's total equity portfolio is the sum of portfolio equity assets held abroad (CPIS data) and domestic stock market capitalisation minus the domestic portfolio equity held by foreigners (CPIS data). The foreign equity positions are taken from the IMF's Coordinated Portfolio Investment Survey (CPIS) and stock market capitalisation from the World Federation of Exchanges (see Darvas and Schoenmaker, 2018 for more details).

The interpretation of the equity home bias is as follows. An equity home bias of 1 suggests no integration: domestic investors only hold domestic equity securities. A home bias of 0 suggests full integration: domestic investors invest in foreign equity securities proportionally to the share of foreign equity in the world portfolio, in line with the ICAPM prediction. For values of the home bias between 0 and 1, domestic investors have some home bias for domestic equities, but they invest part of their portfolio in foreign equities (the closer to 1, the higher the home bias).

Portfolio debt securities home bias can be defined similarly, for which we consider debt securities (i.e. bonds, bills and other commercial paper) issued by all sectors of the economy (i.e. the general government, financial corporations and non-financial corporations). The debt securities are taken from the debt securities statistics of the Bank for International Settlements.

Table 3.1 reports the equity and debt home bias, as calculated by Darvas and Schoenmaker (2018). As equities represent the residual risk of companies, they are more important in cross-country risk sharing than bonds. The equity home bias in the euro area is at 0.49 slightly lower than the debt home bias at 0.53. These values indicate a reasonable degree of capital market integration.

Darvas and Schoenmaker (2017) explore whether the size of the assets managed by institutional investors contributes to the home bias. The main hypothesis is that the greater the amount of assets managed by institutional investors, the smaller the home bias and thereby the larger the scope for risk sharing, *ceteris paribus*. The model is estimated in a panel framework and includes country-specific and time-specific fixed effects and various control variables. We estimate the same model separately for equity and debt securities home bias and we use the total

assets managed by all three types of institutional investors, that is, the sum of assets managed by pension funds, insurance corporations, and investment funds.

The regression results reported in Darvas and Schoenmaker (2017) provide strong support for the main hypothesis: the larger assets managed by institutional investors the lower the home bias and thereby the greater the scope for risk sharing. The parameter for institutional investment has a negative sign and is statistically significantly different from zero. In addition, Darvas and Schoenmaker (2017) find the following results on the control variables:

- Higher GDP per capita seems to reduce home bias. In the regressions, most of the parameter estimates are negative and statistically significant.
- Higher trade openness is negatively associated with home bias. In the regressions, most of the parameter estimates are negative and statistically significant. This finding is consistent with the argument that cross-border trade integration drives financial integration.
- Home market capitalisation is positively related to home bias. The parameter estimates have a positive sign and are statistically significant from zero. Therefore, the availability of domestically issued securities influences the home bias: countries with a larger home stock of securities diversify less.

Table 3.1

Equity, debt, and bank home bias

Country	Equity home bias	Debt home bias	Bank home bias
Belgium	0.43	0.40	0.69
Bulgaria	0.75	0.60	0.95-1.00*
Czech Republic	0.64	0.86	0.95-1.00*
Denmark	0.45	0.74	0.79
Germany	0.46	0.41	0.78
Estonia	0.29	0.15	0.95-1.00*
Ireland	n.a.	0.27	0.90
Greece	0.83	0.48	0.79
Spain	0.77	0.80	0.62
France	0.58	0.49	0.74
Croatia	n.a.	n.a.	0.95-1.00*
Italy	0.34	0.80	0.83
Cyprus	n.a.	0.51	0.95-1.00*
Latvia	0.27	0.30	0.95-1.00*
Lithuania	0.64	0.69	0.95-1.00*
Luxembourg	n.a.	0.06	n.a.
Hungary	0.52	0.95	0.95-1.00*
Malta	-0.06	0.18	0.95-1.00*
Netherlands	0.23	0.36	0.65

continued from the previous page

Country	Equity home bias	Debt home bias	Bank home bias
Austria	0.35	0.45	0.68
Poland	0.91	0.95	0.95-1.00*
Portugal	0.51	0.65	0.81
Romania	0.94	0.94	0.95-1.00*
Slovenia	0.62	0.54	0.95-1.00*
Slovakia	0.63	0.46	0.95-1.00*
Finland	0.40	0.28	0.89
Sweden	0.52	0.73	0.64
United Kingdom	0.45	0.63	0.58
Euro area	0.49	0.53	0.76
EU-28	0.50	0.58	0.73
Switzerland	0.53	0.34	0.72
Japan	0.71	0.80	0.75
United States	0.60	0.85	0.78

Note: Home bias for the euro area and EU-28 are calculated as a weighted average based on GDP (in current prices). The equity and debt home bias are for 2014 and the bank home bias for 2016. * means an estimate. The domestic banks in these countries have no to very few foreign assets leading to a high bank home bias. N.a. means not available.

Source: For equity and debt home bias Darvas and Schoenmaker (2018); for bank home bias calculations based on Structural Financial Indicators and Money, Credit and Banking Statistics, Statistical Data Warehouse, ECB

Institutional investment versus banking

An interesting question is the overall impact of the observed switch from banking to institutional investment on financial integration. We can calculate a bank home bias in a similar way to the equity and debt home bias. Data on foreign bank claims are taken from the Consolidated Banking Statistics of the Bank for International Settlements, while the remaining banking data are taken from the Structural Financial Indicators and Money, Credit and Banking Statistics, Statistical Data Warehouse of the ECB. The bank home bias measures the extent to which domestic banks have foreign assets in proportion to the size of foreign banking in the global banking system. Banks naturally have a strong home bias, as they expand abroad from their home base.

As expected, Table 3.1 reports a larger bank home bias, with the exception of Spain. The two large Spanish banks, Santander and BBVA, have a strong international outlook in Europe, North America and Latin America. The bank home bias in Sweden with Nordea and the United Kingdom with HSBC, Barclays and Standard Chartered is between the equity and debt home bias. Another country with a relatively low bank home bias at 0.65 is the Netherlands with ING. A low bank home bias provides integration, whereby international banks are more suspect to international shocks (RBS, Barclays, ING to the US sub-prime shock) and more robust in the case of domestic shocks (BBVA and Santander were less exposed to the Spanish housing crisis).

The average bank home bias at 0.76 is substantially higher than the average equity and debt home bias at 0.49 and 0.53. A shift from banking to institutional investment will thus lead to a lower home bias and more financial integration and risk sharing in the euro area.

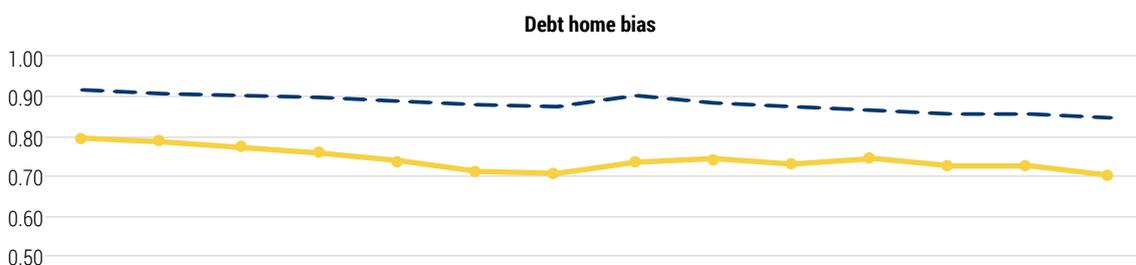
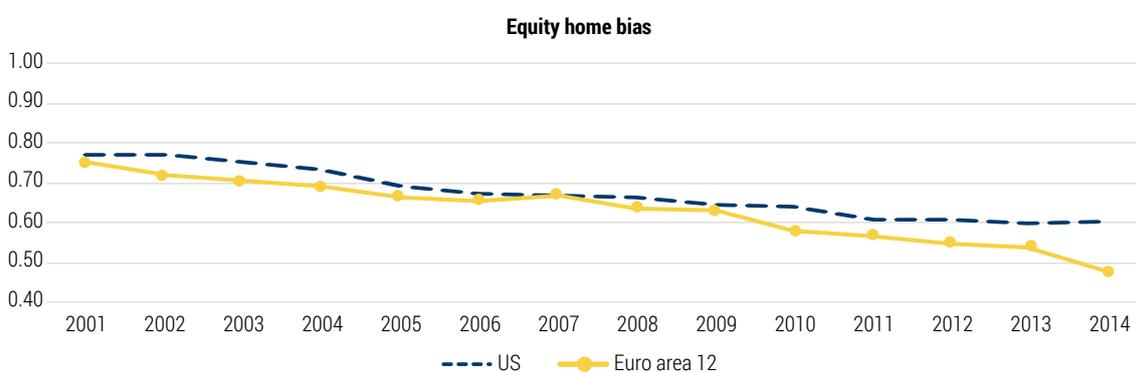
External integration

Finally, we consider the euro area as a whole for the original 12 members. Darvas and Schoenmaker (2018) consolidate the intra-euro area claims and regard those claims as 'domestic claims' from the perspective of the euro area 12 aggregate and consider only non-euro foreign claims as 'foreign' claims from the perspective of the euro area 12 aggregate. The total market capitalisation of the euro area 12 aggregate is simply the sum of market capitalisations of the 12 countries. By calculating these "consolidated" euro area 12 aggregates, we can calculate the home bias of the euro area 12 group using our indicators, as if the euro area 12 was a single country.

Figure 3.6 reports remarkable similarity of the euro area 12 as a whole and the US in terms of equity home bias, while there is a higher level of debt home bias in the US than in the euro area 12 group. As expected, the home bias of the euro area 12 as a whole is higher than the average of country-specific home biases of the 12 countries (see the latter in Table 3.1).

Figure 3.6

Home bias in the euro area as a whole and in the United States



Source: Darvas and Schoenmaker (2018)

Impact on policy

What is the impact of capital market integration on the financial architecture? After Brexit, those London capital market activities that require a passport to operate throughout the European Union (EU) will move to the EU-27 countries. To ensure an integrated capital market for the EU-27, a strong supervisory body is needed at the centre. In Sapir, Schoenmaker and Véron (2017), we argue that the European Securities and Markets Authority (ESMA) should move from its current coordination role of national supervisors to a supervisory body with direct powers. ESMA would then become the central supervisor (in a hub-and-spoke model with national supervisors) of the EU-27 capital market, like the Securities and Exchange Commission in the US capital market.

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4. The shortage of risk capital for Europe's high-growth businesses

Rick Watson, Association for Financial Markets in Europe⁷

⁷In 2017, AFME, together with a number of other major stakeholders, published a report examining the specific challenges associated with raising capital for small and mid-size high-growth businesses in the European Union. *The Shortage of Risk Capital for Europe's High Growth Businesses* was authored by AFME with the support of 12 other European organisations representing all the different stakeholders involved in pre-IPO finance. These include the European Investment Fund (EIF), seven other European trade associations representing business angels (Business Angels Europe, EBAN), venture capital (Invest Europe), accountants (AccountancyEurope) and crowdfunding (European Crowdfunding Network), as well as stock exchanges (Federation of European Securities Exchanges (FESE), Deutsche Börse, Euronext, London Stock Exchange Group, and Nasdaq).

Introduction

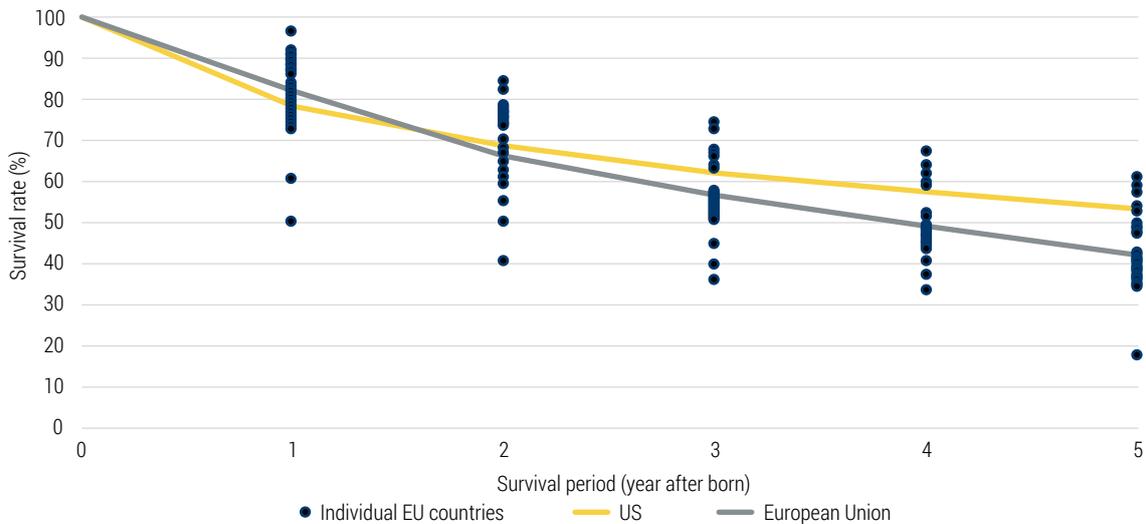
Among the 23 million SMEs in Europe, only a fraction create new jobs. For instance, 60% of start-ups that survive their first three years in business create 42% of all new jobs in the United Kingdom (UK), according to Nesta. In Belgium, young companies represent only 17% of total employment but 41% of new jobs.

Business start-ups and jobs

Europe was home to just 16 unicorns⁸ in January 2017. This compared to 91 in the US and 44 in Asia.⁹ What's more, while 17 of the world's 50 most valuable companies in 2006 were from the EU, today, only six are.¹⁰

Start-up businesses or existing businesses with significant expansion plans usually have uncertain or negative actual and/or projected cash flows. Although there are banks which provide loans to such businesses, risk capital in the form of equity or venture debt provided by family and friends, business angels, peer-to-peer market-places, venture capital and private equity funds, venture debt providers are often more appropriate for businesses at this stage.

Figure 4.1
Business survival rates in the European Union (EU) and United States (US)



Sources: Eurostat and US Bureau of Labor Statistics

In the AFME–Boston Consulting Group (BCG) *Bridging the Growth Gap* publication of 2015, BCG compared small business finance in Europe and the US. The report found that European SMEs have more financing available than their US counterparts. There is €2 trillion of funding available for SMEs in Europe compared to €1.2 trillion in the US.

⁸ High-growth, venture capital (VC)-backed companies with valuations of more than \$1 billion.

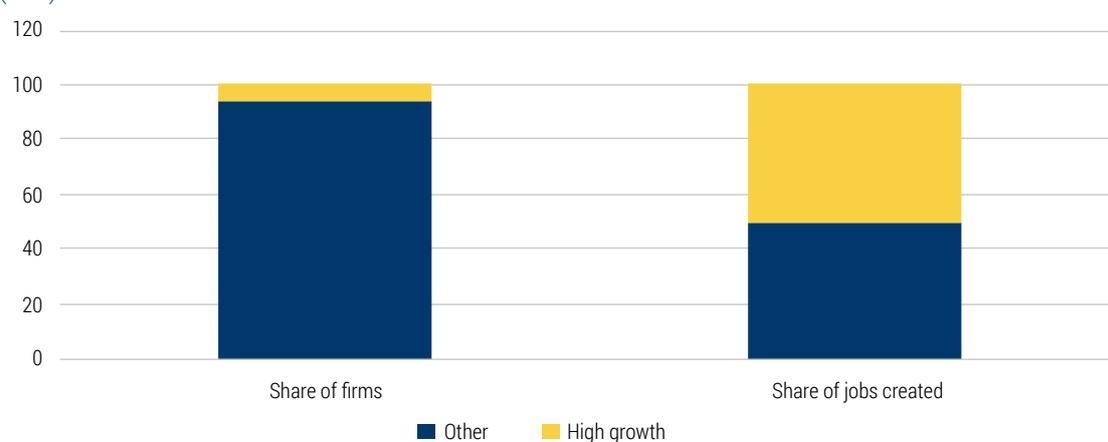
⁹ Wall Street Journal.

¹⁰ The Economist, August 2016.

Figure 4.2

Concentration of job creation (UK)

(in %)



Source: Nesta, 2009

But of those €2 trillion available in Europe for SMEs, 77% was in the form of loan or debt compared to only 40% in the US.¹¹ European SMEs have more funding than US SMEs but lack risk capital whether in the form of equity or venture debt.

Table 4.1

Sources of finance for high-growth companies in the EU and the US

	EU	US
Total stock of outstanding finance for SMEs [†]	€2,007 billion	€1,236 billion
Share of bank finance [†]	77%	40%
Listed market capitalisation [†]	€10 trillion (53% of gross domestic product, GDP)	€19 trillion (140% of GDP)
Number of listed companies with capitalisation of €200 million–€1 billion	23% (main markets and multilateral trading facilities)	48% (Emerging growth companies only)
Venture capital (VC) fundraising [*]	€5.3 billion	€25.9 billion
Frequency of multiple VC rounds	40%	58%
Venture debt (of % of VC-backed companies)	5% (exc. UK)	15–20%
Business angel investments ^{**}	€6.1 billion	€22.7 billion
Equity crowdfunding ^{***}	€354 million	€149 million
Accelerators ^{****}	€38 million	€83 million
Business survival rates after five years ^⑤	43%	+50%

Notes: Because data are being collected by different sources with different methodologies and collection processes, data may not be directly comparable.

[†] AFME-BCG *Bridging the growth gap report* *InvestEurope and NVCA, 2015, **EBAN, Centre for Venture Research (2015), ***Crowdsurfer.com, Cambridge Centre for Alternative Finance, ****Global Accelerator Report, ⑤Median values, Eurostat and US Bureau of Labor Statistics

Sources: *The Shortage of Risk Capital for Europe's High-Growth Businesses* and the AFME-BCG *Bridging the growth gap* reports

¹¹ AFME-BCG *Bridging the Growth Gap*, 2015.

There are many studies regarding SME financing gaps, e.g. research¹² shows that the equity gap in some EU Member States¹³ is three-to-five-times larger than that of the US, with a large equity financing gap in the smaller countries. Further, 90% of European SMEs either regard equity finance as irrelevant or don't know that equity providers exist.¹⁴

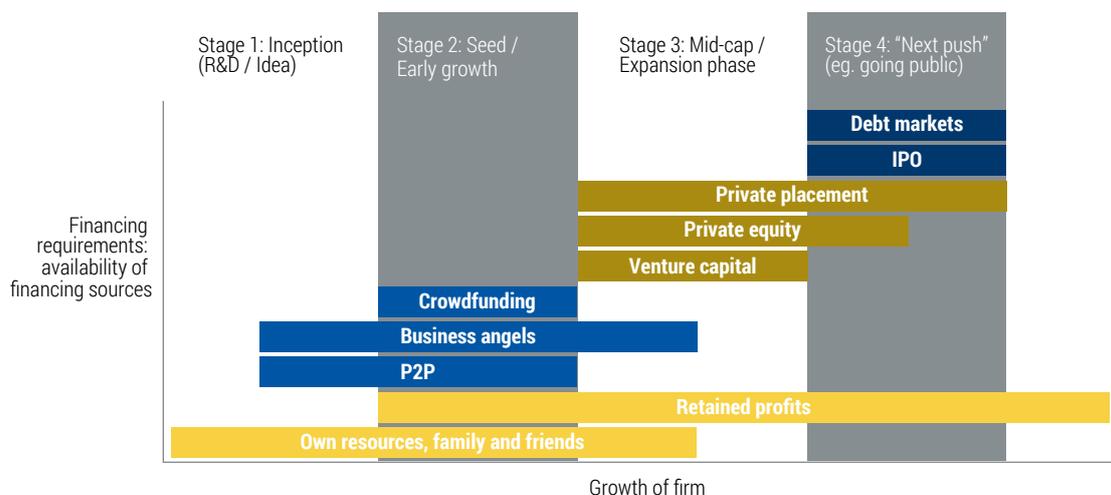
Many European SMEs are profitable businesses with recurrent stable cash flows, making bank loans an appropriate source of financing. But high-growth or innovative SME businesses have different needs. They have higher growth but less stable cash flows. This higher degree of risk makes equity and quasi-equity funding more appropriate for this type of businesses. But today, Europe cannot provide enough risk capital to start-ups and growing companies (see Figure 4.1).

What's missing: unlocking Europe's risk capital

Risk capital can be provided to businesses by different types of investors (e.g. founders, family and friends, crowdfunding platforms, business angels, venture capital, venture debt, public EU and national finance providers and equity capital markets) at various stages of development described by the European Commission's so-called 'funding escalator' (see Figure 4.3).

Figure 4.3

The EU 'funding escalator' for high-growth companies



Source: European Commission

AFME has identified eight key considerations that could help unlock the creation and growth of business in the EU:

- **Fragmented start-up market:** Different rules, standards, and taxes across the 28 Member States hamper young businesses seeking to scale up across borders. Businesses operate in a fragmented Europe in terms of innovation. There is a huge difference between Europe's most and least innovative regions. As the map below shows, the most innovative regions include southern Germany, southern England, and the Nordic region as well as the cities of Paris and Berlin (see

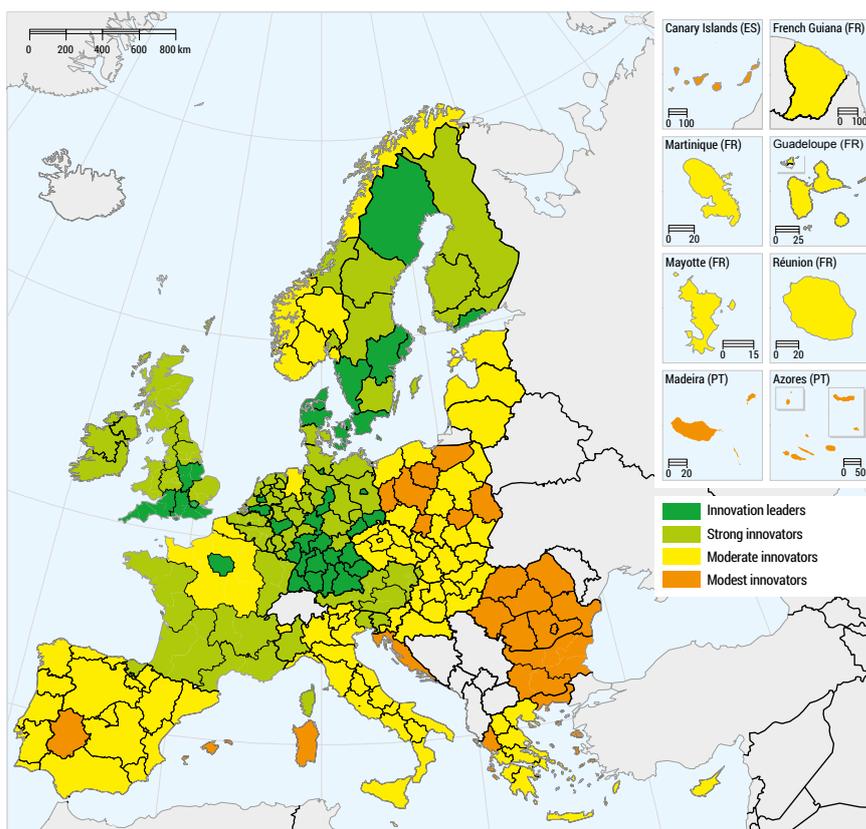
¹² Lopez de Silanes, F, J McCahery, D Schoenmaker, and D Staniscic (2015), "The European Capital Markets Study: The Estimation of the Financing Gap of SMEs", Duisenberg School of Finance, Amsterdam.

¹³ France, Germany, Netherlands, Poland, and Romania.

¹⁴ European Central Bank, Survey on the access to finance of enterprises in the euro area. October 2015 to March 2016. June 2016.

Figure 4.4). Establishing a single EU framework for start-ups with standard rules across EU Member States would enable young businesses to scale up across borders and facilitate access to 510 million customers. This could be done through the establishment of an EU expert group to focus on the revision of the various EU legal frameworks, insolvency laws, and tax incentives for investors. There is already momentum for such a transformation with the recent Commission Start-up and Scale-up Initiative, including the proposal for an Insolvency Directive.

Figure 4.4
The most and least innovative regions in Europe



Source: Regional Innovation Scoreboard 2016, European Commission, <http://ec.europa.eu/DocsRoom/documents/17824>

- **Lack of awareness of risk capital benefits among businesses:** Improving awareness among entrepreneurs of how to gain and retain risk capital investors would reduce business failure rates. In Europe, only 43% of new companies survive after five years, compared to more than half in the US (Figure 4.1). Better business structure and governance from the start would increase the chances of raising subsequent rounds of financing from professional investors. Businesses with stronger cash positions would emerge, leading to higher chances of survival. When starting a business, initial investments usually comes from the founders, and their families and friends.
- **Under-developed business angel and crowdfunder capacity:** Unlocking business angel and crowdfunder capacity would allow them to invest in companies across the EU. Many small businesses do not have access to crowdfunding or business angels in their domestic countries. For instance, only 12 Member States have tax incentives for business angels, venture capital, and start-ups. In addition, there

are 33,000 business angel investments reported compared to 71,000 in the US. Creating a single market for business angel investors by aligning best practices and ensuring consistent tax incentives in the EU-28 could be one way to provide more risk capital to Europe's innovative businesses. Education, training, and certification of individual investors, as well as the promotion of the role of syndicates and networks with a European reach, would also increase the number of crowd-funders and business angels. Providing tax incentives for family offices and private individuals through programmes, such as the UK's Seed Enterprise Investment Scheme and Enterprise Investment Scheme, would also help. Some of this equity investment could be provided by the three million EU citizens who each hold non-real estate assets in excess of €1 million.¹⁵ This could encourage a change in investment culture in favour of equity. According to the European Central Bank, US households allocate one-third of their incomes to equity, while this share is only one tenth of savings for German households and one fifth for French and Italian ones.

- **Insufficient business angel exit opportunities:** If business angels and crowd-funders are to invest more, they must have access to better exit opportunities. The development of networks and training, as well as the development of secondary markets for private shares at EU level would enable such access.
- **Insufficient venture capital funding:** If Europe's venture capital industry is to provide more funding, it needs to scale up. Fundraising by VC funds are worryingly low compared to historic data as well as the US.¹⁶ This impacts the investments in EU start-ups, especially late-stage companies with €1.3 million invested on average although such companies are looking for around €5 million to expand compared to €6.4 million in the US. A quarter of the VC asset class is invested by government agencies. Compared to the US, pension funds, insurance, endowments, fund of funds, and family offices invest much less in the EU VC asset class.

Scaling up the VC industry could be achieved by providing incentives for investing in VC funds, encouraging investment in the asset class and promoting pension savings in the EU-28 generally. Achieving a workable EU-level marketing passport for VC fund managers (as part of the review of the European Venture Capital Funds, EuVECA) and the launch of the pan-European fund of funds are good steps forward.

- **Small venture debt market:** Developing the venture debt market in Europe could provide the necessary funding for VC-backed businesses to reach their next milestone. Venture debt can fill the gap between two VC equity rounds. The European market for venture debt is small compared to the US. While it is difficult to get an overview, estimates suggest that 15–20% of all US VC is in the form of venture debt. This compares with 8–10% in the UK and 5% in continental Europe.¹⁷
- **Unfavourable environment for businesses to access public markets:** Building a favourable environment for access to capital markets would help small businesses access the information necessary to initiate long-term growth financing strategies. To do this, the development of SME advisory ecosystems of issuers, advisors, entrepreneurs, academics, and European centres of innovation is recommended. Several exchanges have successfully established programmes designed to help SMEs prepare for and structure the next stage of growth through the access to long-term financing. For instance, the London Stock Exchange's ELITE programme, the Deutsche Börse Venture Network, the EnterNext subsidiary of Euronext and the #IPOready initiative of the Irish Stock Exchange are suc-

¹⁵ European Commission, *Opportunity Now: Europe's mission to innovate*, Robert Madelin and David Ringrose.

¹⁶ In 2015, VC funds raised €5.3 billion in Europe and €25.9 billion in the US (Invest Europe).

¹⁷ EY and *Scale-up UK* report.

successful examples of programmes gathering young companies, Venture Capital and Private Equity funds, public equity funds, family offices and high net worth individuals.

- **Sluggish primary equity market:** In 2012–2015, 31 EU companies representing €31.7 billion in market capitalisation decided to list in the US. From 2005 to 2007, an average of €11 billion was raised annually through 300 IPOs on European junior markets while the annual average fell to €2.8 billion from 2008 to 2015, and to €2 billion in 2015. While IPO markets continue to function well for larger companies they are becoming less and less accessible to smaller companies. There is a need to tackle the decline in IPOs, which play a crucial role in Europe's economy. The proposed Prospectus Regulation is a great opportunity and further initiatives should be undertaken, such as supporting new categories of investors to invest in high-growth companies.

How can EU initiatives help?

Appropriately, European policymakers have launched many constructive initiatives to increase the access of European SMEs to finance, as highlighted in the European Commission's capital markets union (CMU) action plan.

Recent examples are the launch and expansion of the Investment Plan for Europe – which also provides significant support in terms of risk capital via the European Investment Fund (EIF) – unlocking €75 billion for SMEs, the review of the Prospectus Regulation to improve larger SMEs' access to the capital markets, the review of the securitisation framework and the launch of the EuVECA regulation. The launch of the pan-European Venture Capital Fund of Funds, the study of the national tax incentives for venture capital and business angel investments,¹⁸ as well as the recent European Commission proposal to build a proportionate regulatory environment to support SME listings are further steps towards better capitalised start-ups and growth companies.

The CMU action plan states that “so far, external equity funding for SMEs is rather limited in Europe”, including to finance their growth ambitions. CMU was jointly supported by a group of major European associations at its announcement in June 2015.¹⁹

Further flagship initiatives to support risk capital – covering various investment stages and sectors – will be necessary.

Making sure that these companies are able to finance themselves in a coherent single market remains as essential now as it was at the launch of the CMU initiative in 2015. It should be a core objective of the EU, individual Member State policymakers and industry, and should be a priority for a bold, ambitious, and far-reaching CMU agenda following 2019 European parliamentary elections.

¹⁸ European Commission, *Capital markets union: First status report*, April 2016.

¹⁹ AFME, BAE, EBF, Eurochambres, EBAN, EBN, ECN and European Issuers issued a joint declaration on the capital markets union in May 2015.

5. Capital markets union and Brexit

Paul Richards, International Capital Market Association

What are the prospects for the EU capital markets union (CMU) action plan and how will it be affected by Brexit? At one level, Brexit makes CMU in the European Union 27 (EU-27) a more important initiative, as capital markets are less developed in the EU-27 than in the UK. The prospects for CMU in the EU-27 would also benefit from renewed political momentum in the euro area to strengthen the economic pillar of the Economic and Monetary Union (EMU). But at another level, Brexit divides CMU in two between the EU-27, on the one side, and the United Kingdom (UK) – as the largest international financial centre in the EU – on the other. There is a risk that the negotiations between the EU-27 and the UK could lead to international capital market fragmentation and financial instability, to the disadvantage of both sides. This paper, written in December 2017, considers possible alternatives that would be in their mutual interest.

Introduction

The paper addresses three related questions:

- First, what are the prospects for making further progress in the EU towards CMU?
- Second, how can the prospects for CMU be improved by strengthening the economic pillar of EMU?
- Third, how will the prospects for CMU be affected by Brexit, and what can be done about this?

The European context

New prudential regulations have been introduced in response to the international financial crisis of 2007–2009 to improve bank resilience by increasing capital and liquidity requirements, though the process of bank recapitalisation has taken longer in the EU than in the United States (US). New regulations also provide that, in the event that banks fail in future, selected creditors as well as shareholders should be bailed in rather than relying on taxpayers to bail them out. In addition, new conduct of business regulations have been introduced to improve market standards, backed by fines for mis-selling. These measures are all designed to rebuild and maintain public trust in the stability, safety, soundness and fairness of the financial system.

Following the sovereign debt crisis of 2010–2012 in several euro area countries, which led to the European Central Bank's (ECB) initiative in 2012 to do "whatever it takes" to save the euro, the ECB introduced quantitative easing, accompanied by negative short-term interest rates, to bring inflation in the euro area back towards its target of close to, but below, 2% per annum.

There is increasing evidence that, in response, the European economy is at last recovering on a sustainable basis, and that unemployment in the euro area is declining though youth unemployment is still very high in some euro area countries. The economic recovery appears to be extending to those euro area countries whose governments had to be bailed out in response to the sovereign debt crisis of 2010–2012. But there are still questions about their long-term economic competitiveness with Germany.

Following the 2017 elections in France and Germany, there may be a new political opportunity for closer economic integration in the euro area, supported by the European Commission. The UK, by contrast, has voted to leave the EU and triggered Article 50 of the EU Treaty, leading to negotiations with the European Commission on behalf of the EU-27 on the terms of UK withdrawal from the EU by 29 March 2019.

EU capital markets union

The European Commission's CMU initiative is designed to develop capital markets in the EU-27 through greater capital market integration across national borders, with the objective of strengthening the EU economy and stimulating investment to create jobs. In developing EU capital markets, the Commission does not intend to replace bank financing, but to complement it. This is particularly important in the EU-27, whose capital markets are not as developed as in the UK or the US. The CMU mid-term review²⁰ has provided an opportunity to assess progress to date. There are five main ways in which to make further progress towards CMU in the medium term:

New EU measures: CMU involves the introduction of new EU measures by 2019 to develop and integrate capital markets across the EU.²¹ Out of 33 measures originally envisaged as part of the CMU work programme, 20 had been introduced by the time of the mid-term review. New measures planned but not yet fully implemented, such as measures relating to insolvency reform and taxation, could potentially make a significant difference to capital market integration across national borders in the EU, though agreement in the EU on measures which make the most significant difference have often proved politically the most intractable in the past.

Review of existing measures: CMU also involves ensuring that existing EU measures are fit for purpose. Reviewing clauses in EU legislation provide an opportunity to check this. The Commission's call for evidence was designed to assess regulatory reforms introduced in response to the international financial crisis, without altering the broad thrust of the reforms. Respondents drew attention to the need for a number of regulatory improvements, to offset the potentially harmful effects of some specific regulatory calibrations on market liquidity for example,²² and these improvements need to be implemented following the mid-term review.

Supervisory convergence: The effectiveness of CMU depends on achieving greater supervisory convergence across the EU. This involves completing the single rulebook,²³ and ensuring that new legislative measures are implemented and enforced across the EU in a consistent way.²⁴ Following the CMU mid-term review, the European Commission has proposed greater powers for the European Securities and Markets Authority (ESMA) to ensure supervisory harmonisation across the EU-27.²⁵ The ESMA already has direct responsibility for supervising credit rating agencies and trade repositories, and the Commission proposed in June that the ESMA should take direct responsibility for the oversight of central counterparties, in close consultation with the ECB. By 2019, the Commission envisages that the first steps may also be taken towards establishing a single EU capital markets supervisor.²⁶

²⁰ European Commission Communication: *Mid-Term Review of the Capital Markets Union Action Plan*, 8 June 2017.

²¹ The objectives of the measures are summarised by the European Commission as to: "strengthen the capacity of EU capital markets; encourage finance for innovation, start-ups and non-listed companies; make it easier for companies to raise capital on public markets; invest for the long term in infrastructure and sustainable investments; foster retail investment; strengthen banking capacity to support the wider economy; and facilitate cross-border investment": *Mid-Term Review of the Capital Markets Union Action Plan*, 8 June 2017.

²² See, for example, the ICMA response to the European Commission consultation on the Capital Markets Union Mid-Term Review, 10 March 2017.

²³ See: Danièle Nouy, Chair of the Supervisory Board of the ECB: "In Europe, we have 19 versions of the Single Rulebook, and each one is slightly different from the others. Such a fragmented set of rules is a problem. It increases risks, and it makes European banking supervision more complex and costly for banks.": *Regulation and Supervision in Europe – Can Many Cooks Make a Good Broth?* Frankfurt, 15 May 2017.

²⁴ This will be easier if the EU makes greater use of Regulations, which apply directly in EU Member States, rather than Directives, which have to be transposed by EU Member States into national law.

²⁵ European Commission Communication, *Reinforcing Integrated Supervision to Strengthen CMU and Financial Integration in a Changing Environment*, 20 September 2017.

²⁶ European Commission: *Reflection Paper on the Deepening of EMU*: 31 May 2017.

Financial stability: CMU is intended to increase financial stability in the EU by diversifying funding channels and sharing risks across national borders to make the EU financial system more resilient, recognising that international capital flows are now only half their pre-crisis levels in relation to world output.²⁷ In a monetary union such as the euro area, risk sharing across national borders through the capital markets is particularly important because a single monetary policy is not able to address asymmetric shocks, which affect some countries more than others. Risk sharing can also help to offset the potential threat to financial stability arising from financial integration. Without risk sharing, financial stability may be vulnerable to cross-border contagion.²⁸

Market infrastructure: In parallel with the Commission's work on CMU, the ECB has made considerable progress in developing and integrating the financial market infrastructure for the euro through the TARGET2 payment system and the TARGET2-Securities settlement system linking national and international central securities depositories. The ECB now has plans to consolidate TARGET2 and TARGET2-Securities, provide settlement services to support instant payments, and establish a potential Eurosystem collateral management system.²⁹ Even so, there are still many barriers to post-trade services across financial markets which remain to be addressed. The European Post-Trade Forum's recent report on these barriers has provided the basis for a Commission consultation, which will inform a Communication on post-trade, planned for the end of 2017.³⁰

Capital markets union and euro area integration

The prospects for EU capital market integration through CMU would be improved if accompanied by policy changes to strengthen the economic pillar of EMU in the euro area. Following the 2017 elections in France and Germany, there may be a new political opportunity for closer economic integration in the euro area, and a proposal has been put forward by the President of the European Commission, though the response in Germany is not yet clear.³¹ EMU still represents a "half-way house", in which there is a fully developed monetary union, with the ECB taking responsibility for monetary policy in the euro area, but not a fully developed economic union, where responsibilities remain largely at national level.³² Strengthening the economic pillar will require closer economic convergence within the euro area, agreement on a path to fiscal integration, and a settlement between the euro area and other EU countries that will still represent 15% of EU GDP after Brexit.³³ But it will also depend on resolving two specific issues which are closely related to CMU: the completion of Banking Union; and the search for a European safe asset as a euro area benchmark.

²⁷ ECB: *The Future of Globalisation*, November 2016.

²⁸ See: Vítor Constâncio, Vice-President of the ECB: *Risk Sharing and Macroprudential Policy in an Ambitious Capital Markets Union*, Frankfurt, 25 April 2016.

²⁹ Yves Mersch, Member of the ECB's Executive Board: September 2016.

³⁰ European Commission: *Post-trade in a CMU: Dismantling Barriers and Strategy for the Future: Consultation Document*, 23 August 2017. The main barriers identified by the European Post-Trade Forum, and subject to consultation, include: diverging corporate action processes; lack of convergence and harmonisation in information messaging standards; lack of harmonisation and standardisation of ETF processes; complexity of post-trade reporting; unresolved issues on reference data and standardised identifiers; legal uncertainty about risk mitigation techniques; deficiencies in the protection of client assets; inadequate EU rules on finality; lack of harmonisation of registration and investor identification rules; and inefficient withholding tax procedures.

³¹ See: Jean-Claude Juncker, European Commission President: State of the Union Address, 13 September 2017.

³² See: European Commission: *Reflection Paper on the Deepening of EMU*: 31 May 2017; and *The Five Presidents' Report*: June 2015.

³³ The settlement negotiated by the British Government with the EU-27 in February 2016 failed when the UK voted to leave the EU in a referendum in June 2016. There is a case for reviving the settlement to protect the position of EU countries still in the EU outside the euro area.

Banking union

Progress has been made towards a banking union, which is intended both to increase the resilience and integration of the euro area banking system and, by doing so, to support the integration of capital markets in the EU.³⁴ Banking union and CMU are seen as complementary parts of a complete financial union. But in the case of a banking union, it is important to distinguish between three separate steps. More progress has so far been made on some steps than others.

First, the ECB has taken direct responsibility for supervising 130 key banks in the euro area through the Single Supervisory Mechanism (SSM). This should help improve bank resilience by ensuring there is a fully consistent approach to bank supervision including on stress testing across the euro area, and that the interdependence between some banks and their national governments through bank holdings of government debt, and the overhang of non-performing bank loans, is reduced to more manageable levels, particularly if supported by a sustained economic recovery in the euro area.

Second, the Single Resolution Board (SRB) has been established to ensure that failing banks are resolved without recourse to the taxpayer. Under the Bank Recovery and Resolution Directive, bank resolution is to be financed by banks' shareholders and selected creditors, and by a Single Resolution Fund (SRF), pre-financed by the banking industry. But if this is not sufficient, a credible fiscal backstop to the SRF is still needed, for example through a credit line to the SRF from the European Stability Mechanism (ESM).³⁵ The new arrangements for bank recovery and resolution have been put to the test this year. In Spain, Banco Popular was sold in June to Banco Santander for €1 after equity and junior debt holders were bailed in without a cost to the Spanish taxpayer. But in Italy, Banca Monte di Paschi di Siena was recapitalised, and restructured, and the regional banks of Vicenza and the Veneto were bailed out by the Italian Government in June and sold to Banca Intesa San Paolo, following a decision to exempt them from the recovery and resolution directive. The head of the SRB has since proposed that this potential loophole should be reviewed.

The third issue, which remains to be resolved, is the need to reach agreement on a European deposit insurance scheme to insure deposits with banks up to €100,000 across the euro area in place of existing national schemes. Agreement has not so far been reached, mainly because of concern in Germany that German banks would be required to bail out insured depositors with banks in other euro area countries. But German resistance to common deposit insurance may become less pronounced if banking reform in the euro area is successful in ensuring that banks, especially those in Italy and Spain, are more resilient.

³⁴ See: Vitor Constâncio, Vice-President of the ECB: *Synergies Between Banking Union and Capital Markets Union*, Brussels, 19 May 2017.

³⁵ European Commission: *Reflection Paper on the Deepening of EMU*: 31 May 2017 (p. 20).

A European safe asset

The issuance of government debt in the euro area remains largely a national responsibility.³⁶ German Bunds are treated in the market as the safest national asset when, for example, there is a flight to safety in financial markets. Various options have been considered for creating a European safe asset, such as a “eurobond”, which would be intended to act as a benchmark for the euro area equivalent to Treasuries in the US, provided that there is sufficient political and economic integration in the euro area to ensure that the euro project itself is considered safe. There are two main options currently under consideration:

One option would be for euro area governments to provide joint and several guarantees on new issuance of euro-denominated national government debt in the euro area. The provision of joint and several guarantees would result in a euro area benchmark, which would reduce the cost of funding for those sovereign issuers in the euro area that currently have lower credit ratings but might increase the cost of funding for those that currently have AAA ratings. In addition, there is a concern that the provision of joint and several guarantees would weaken financial discipline among the governments of less creditworthy euro area countries. More fundamentally, there would be political resistance, particularly in Germany, to the provision of taxpayer guarantees of this kind. Joint and several guarantees would also require a change in the EU Treaty.

The other option under consideration, for instance by the European Systemic Risk Board (ESRB), is for the issuance of euro-denominated sovereign bond-backed securities (SBBs), which would effectively carry several, but not joint, guarantees by sovereigns in the euro area. The pool of sovereign assets in the SBBs would be weighted, e.g. by GDP. SBBs would be designed to promote risk sharing and reduce the interdependence between banks and their own sovereigns. However, it is not clear to what extent SBBs would increase risk sharing in practice, as there is a high correlation between most euro area sovereign risks. Nor is it clear whether risk sharing would significantly increase the resilience of banks which buy SBBs, rather than buying the debt of their own sovereign, unless the pool of sovereign assets underlying the SBBs were split between a senior, as in safe, and a junior, as in less safe, tranche. This might make the junior tranche less liquid and more difficult to sell to junior investors without a significantly higher yield, leaving a much lower yield for senior investors. A major uncertainty is the regulatory treatment of SBBs: whether SBBs would be treated as securitised products or sovereign assets for regulatory purposes; and if so, how the current regulatory treatment of sovereign exposures, which are generally risk-free for capital purposes, will be changed. At present, given that sovereign debt in less creditworthy countries carries a relatively high yield and is generally treated as risk-free for capital purposes, there is little incentive for bank holders of the debt of their own sovereign to diversify. To demonstrate the authorities’ commitment to SBBs, a public sector issuer might need to test the market first, and possibly also provide liquidity in the secondary market.³⁷

Capital markets union and Brexit

Brexit will make CMU in the EU-27 a more important initiative, as capital markets are less developed in the EU-27 than in the UK. But the immediate impact of Brexit will be to reduce the scope of CMU, given the size of London as a European as well as a global financial centre, even if there is a transfer of business in response to Brexit from London to financial centres in the EU-27. Costs for end users of capital mar-

³⁶ However, the European Investment Bank and the ESM, among others, borrow at European level. It is also important to note that there are already very substantial claims by creditor countries on debtor countries in the euro area which have been accumulated through the TARGET2 payment mechanism.

³⁷ The issuance of euro bills has also been suggested as a pilot project.

kets will also increase as a result of Brexit, if capital market firms have to operate in two centres rather than one. While it may become easier and quicker for the EU-27 to reach decisions on capital markets regulation without the UK, the market-friendly influence of the UK on decision making at EU level will be lost, though the UK will still influence decision making at global level.

CMU is designed to encourage capital market integration across national borders in the EU, but capital market integration could potentially also benefit from closer economic integration in the euro area. The question posed by Brexit is whether capital market integration is solely of benefit to the EU-27 across national borders internally in the EU-27, or whether open and competitive markets would benefit the EU-27 internationally as well. Clearly, it is important that promoting international capital market integration should be consistent with ensuring financial stability, which is in the EU's public interest. In order to assess these issues, the following section is divided into three: capital market preparations for Brexit; capital market operations after Brexit; and capital market regulation after Brexit. The conclusion is that a sensible agreement between the EU-27 and the UK on the terms of Brexit is in their mutual interest.

Capital market preparations for Brexit

Following the UK referendum on 23 June 2016, the British Government proposed that the UK should leave the EU Single Market when it leaves the EU by 29 March 2019, and instead negotiate – as a third country – a new free trade agreement with the EU-27.³⁸ There is still considerable uncertainty in international capital markets about the prospective outcome of the negotiations between the UK and the EU-27. Two key issues affecting international capital markets relate to the need for sufficient time to prepare for changes resulting from Brexit, and the need for legal certainty when Brexit takes place:

Time to prepare: A free trade agreement is very unlikely to be reached before the UK leaves the EU because: the length of time likely needed to negotiate such an agreement is much greater than the length of time until Article 50 expires; the European Commission insists that only the framework of an agreement can be negotiated before Article 50 expires; and as a detailed free trade agreement can only be negotiated afterwards, it will take time to ratify. Capital market firms will need long lead times to prepare for Brexit, and have already drawn up contingency plans to ensure that they can continue to serve all their clients without disruption.³⁹ The outcome of Brexit negotiations will be uncertain until a late stage because, as stated in a joint report from the EU and UK December 2017 negotiations “nothing is agreed until everything is agreed”.⁴⁰ Consequently, a transition period⁴¹ between the UK and the EU-27 will need to be agreed before Brexit to cover the period after Brexit, until a free trade agreement comes into effect, in order to avoid the risk of a regulatory “cliff edge”. There would be a “cliff edge” if the UK were to leave the EU either with no withdrawal agreement at all or an agreement involving substantial regulatory change at the outset. This would be disruptive to capital markets and risk damaging financial stability on both sides.⁴²

³⁸ This is because the British Government's objectives on Brexit involve taking back control of the UK's borders by limiting EU immigration to the UK, and taking back control of UK laws by bringing an end in the UK to the direct jurisdiction of the European Court of Justice. These objectives are not consistent with remaining in the UK Single Market when the UK leaves the EU.

³⁹ In addition to preparing for Brexit, banks with headquarters outside the EU have been required since 2016 to set up a holding company for their EU subsidiaries; and in the UK banks are preparing to ring-fence their retail from their investment banking activities in separate entities by January 2019.

⁴⁰ European Commission. *Joint report from the negotiators of the European Union and the United Kingdom Government on progress during phase 1 of negotiations under Article 50 TEU on the United Kingdom's orderly withdrawal from the European Union*, TF50 (2017)19 – Commission to EU 27, 8 December 2017, p. 1. https://ec.europa.eu/commission/sites/beta-political/files/joint_report.pdf.

⁴¹ A transition period is described by the British Government as an “implementation period” or an “interim period”.

⁴² See Andrew Bailey, Chief Executive of the FCA: “We need to preserve close regulatory and supervisory

Agreement between the UK and the EU-27 on a transition period needs to be reached as early as possible during the Article 50 negotiations, and publicly announced – even if the announcement is subject to finalisation of the withdrawal agreement later – to avoid market uncertainty. Capital market firms will also want to be confident that regulatory changes will be made only once – or at the end of the transition period – and not twice – as in at both the beginning and the end – and that they have a clear idea of the changes planned.⁴³ If that is not possible, given the long lead-times, capital market firms will need to implement their contingency plans on the grounds that they may not be able to rely on a transition period after Brexit. Some have already started to do so.

In Florence on 22 September, the British Prime Minister proposed such a period of “implementation”, in other words transition, during which “access to one another’s markets should continue on current terms” for a “strictly time-limited period” of “around two years”, and under which the framework “would be the existing structure of EU rules and regulations”, so that businesses “should only have to plan for one set of changes in the relationship between the UK and the EU”.⁴⁴ The detailed arrangements for this implementation period would need to be agreed “as early as possible”.⁴⁵ However, the Prime Minister recognised that “the EU Institutions will need to adopt a formal position” on the UK’s proposal.⁴⁶

Legal certainty: In order to avoid legal uncertainty over Brexit, the British Government has accepted that EU law will continue to apply in the UK until the UK leaves the EU, and has introduced into Parliament the Repeal Bill to take EU law into UK law when Brexit takes place.⁴⁷

- In the narrow sense in which contractual provisions may be invalidated or disrupted, these measures may not in themselves avoid legal uncertainty with respect to jurisdiction and choice-of-court clauses in cross-border financial contracts outstanding when Brexit takes place, and for new cross-border financial contracts entered into after Brexit. Recognition of the governing law, including contracts governed by English law, should not alter, with the EU courts continuing to give effect to non-EU law under Rome I. The position is less clear in relation to jurisdiction. The Brussels I Regulation, which provides for recognition and enforcement of judgements between EU Member States, will cease to apply to the UK after Brexit. It is not yet clear which measures will be taken to support jurisdiction enforcement. Possibilities include a revival of pre-Brussels Convention bilateral treaties, adherence to the Lugano Convention, and ratification of The Hague Convention.

links with the EU. Looking ahead, strong coordination is a sensible approach to take in order to demonstrate the strength of the system. I would point to four permanent features: comparability of rules, but not exact mirroring; supervisory coordination; exchange of information; and a mechanism to deal with differences. I would add to this importance of transitional arrangements being put in place which allow for a smooth path to the new post-Brexit world.” *Why Free Trade and Open Markets in Financial Services Matter*: Reuters Newsmaker, London, 6 July 2017.

⁴³ On 27 August, the Opposition spokesman for Exiting the EU stated that Labour’s policy would be to stay in the EU Single Market and Customs Union during the transition period after the UK leaves the EU.

⁴⁴ British Prime Minister, *A New Era of Cooperation and Partnership Between the UK and the EU*, Florence, 22 September 2017. During the implementation period, the Prime Minister said that “people will continue to be able to come and live and work in the UK”, subject to a registration system; and that the UK’s partners will not “need to pay more or receive less over the remainder of the current budget plan as a result of our decision to leave.” <https://www.gov.uk/government/speeches/pms-florence-speech-a-new-era-of-cooperation-and-partnership-between-the-uk-and-the-eu>

⁴⁵ *Ibid.*

⁴⁶ *Ibid.*

⁴⁷ The British Government won a vote in the House of Commons on the EU (Withdrawal) Bill – ie the Repeal Bill – on 11 September 2017. But it is not yet clear whether, and if so how, the Repeal Bill will be amended during its remaining passage through Parliament.

- In the broader sense of contractual uncertainty arising from the risk that capital market firms may no longer all be authorised to operate across the EU-27 if passporting ends when Brexit takes place, the UK and EU-27 authorities need to reassure market participants that the continuity of their cross-border financial contracts will not be affected by Brexit. One way of providing such reassurance would be for the UK and the EU-27 authorities jointly to announce as soon as possible that cross-border financial contracts between market participants in the UK and the EU-27 outstanding when Brexit takes place would be grandfathered, for example by providing for this in the UK/EU-27 withdrawal agreement.⁴⁸ An alternative would be for legislation to be introduced in both the UK and the EU-27 to protect the long-term validity of existing contracts.⁴⁹ The objective would be similar to the provisions for continuity and freedom of contract in the Regulation under Article 235 of the Treaty (EC/1103/97) in all EU Member States, including the UK, when the euro was introduced in 1999.⁵⁰

Capital market operations after Brexit

It is in the interests of both the UK and the EU-27 for capital market operations to continue after Brexit with minimum disruption. Subject to the outcome of the negotiations between the UK and the EU-27, there appear to be two main options for capital market firms operating in both the UK and in the EU-27:

Mutual recognition of regulatory equivalence: One option is to rely on mutual recognition of regulatory equivalence between the UK and the EU-27, to the extent that this is practicable. At present, regulatory equivalence consists of a patchwork of equivalence, endorsement, recognition, and third country passporting for some – but not all – EU capital market regulations. There are provisions for determining equivalence in some EU regulations but not others and, where equivalence does apply, it is not always complete. Determining equivalence involves a judgment by the European Commission as well as a technical assessment and takes time, and the determination of equivalence can be withdrawn at short notice, though this has not happened to date. It is also relevant to note that the assessment of regulatory equivalence is based on measuring outcomes, but that outcomes are not straightforward to measure. For an equivalence assessment in the case of the UK to be workable upon Brexit, the European Commission would need to make the assessment before Brexit takes place.

Authorisation in both the UK and the EU-27: If it is not possible to rely solely on regulatory equivalence, the other option is for firms involved in the international capital markets to be authorised, capitalised and staffed in both the UK and the EU-27, where that is not the case already.⁵¹ This would increase costs for international capital market firms, which would need to operate from two jurisdictions in Europe rath-

⁴⁸ See also: HM Government: *Providing a Cross-Border Civil Judicial Cooperation Framework*: 2017; The Financial Markets Law Committee: *Issues of Legal Uncertainty Arising in the Context of the Withdrawal of the UK from the EU – The Application of English law, the Jurisdiction of English Courts and the Enforcement of English Judgement*: December 2017; and *Issues of Legal Uncertainty Arising in the Context of the Withdrawal of the UK from the EU – The Provision and Application of Third Country Regimes in EU Legislation*: July 2017; ISDA: *Brexit – CCP Location and Legal Uncertainty*: August 2017 (pp. 6–8); and AFME: *Impact of Brexit on Cross-Border Financial Services Contracts*: September 2017.

⁴⁹ Bank of England Financial Policy Committee, 25 September 2017.

⁵⁰ Bank of England: "Continuity and freedom of contract are safeguarded. The introduction of the euro will not have the effect of altering any term of a contract, or discharging or excusing performance, or entitling a party unilaterally to alter or terminate the contract, subject to whatever the parties may have agreed.": *Practical Issues Arising from the Euro*: 14 December 1998.

⁵¹ In the EU-27, this would be through subsidiaries. In the UK, it needs to be clear whether branches would be an acceptable alternative to subsidiaries. See Andrew Bailey: "Even if UK firms lose passporting rights to the European Single Market after Brexit, we should do what we can to maintain inwards activity into the UK": 19 July 2017.

er than one,⁵² and could complicate the task for supervisors.⁵³ As a condition for providing authorisation to operate in the EU-27, the question is whether – and to what extent – EU-27 supervisors would insist on relocation of capital market activities and the market infrastructure from the UK to the EU-27 on the grounds that location within the EU-27 is necessary to ensure financial stability, or whether an acceptable alternative would be some form of joint supervision between the UK and the EU-27 over capital market activities and the market infrastructure needed to support them, where these are located outside the EU-27, for example in London. Clearly, the UK and EU-27 supervisors would need to agree that the supervisory arrangements would be sufficiently robust to ensure that financial stability would not be put at risk. Indeed, avoiding financial instability would be one of the main reasons why coordination between supervisors would be necessary.

Location, supervision, and systemic risk

The European Commission has proposed that, as a result of Brexit, the framework for the recognition of third country, as in non-EU, central counterparties (CCPs) and their supervision needs to be enhanced because of the “potential risks to the EU’s financial stability”.⁵⁴ Under the Commission’s proposal, the ESMA, in agreement with the relevant central banks, will recommend to the Commission whether or not a non-EU CCP is of “substantial systemic” importance.⁵⁵ If so, the Commission will then have the power to decide whether or not the CCP should be required to relocate activities within the EU-27 as a condition for obtaining the regulatory approvals needed to operate in the EU Single Market.⁵⁶

In a similar way, the ESMA has published a cross-sectoral opinion on supervisory convergence and three opinions on sector-specific principles on relocations from the UK to the EU-27 relating to investment firms, investment management, and secondary markets in response to Brexit. The ESMA’s opinions are concerned with two main points. First, “firms need to be subject to the same standards of authorisation and ongoing supervision across the EU-27 in order to avoid competition on regulatory and supervisory practices between Member States”.⁵⁷ Second, delegation, of investment management for instance, and outsourcing of market activities beyond the EU-27 by firms authorised to operate in the EU-27 need to be overseen and properly supervised from within the EU-27.⁵⁸

⁵² Boston Consulting Group (for AFME) estimates that “approximately €1,280 billion of bank assets may need to be re-booked from UK to EU-27 following a hard Brexit, unless alternative arrangements can be agreed. These assets are supported by €70 billion or approximately 9% of the (Tier 1) equity capital of the banks affected.”: *Bridging to Brexit: Insights from European SMEs, Corporates and Investors*: AFME, June 2017. Oliver Wyman estimates that costs for banks will increase by up to 4% and capital requirements by up to 30%: FT, 1 August 2017.

⁵³ Letter from the Head of the Prudential Regulation Authority to the Treasury Select Committee, 8 August 2017.

⁵⁴ CCPs play a critically important role in providing the market infrastructure for managing risk. Market firms are required to clear certain derivatives trades through CCPs authorised for the activity concerned, and CCPs are also used to clear other products (eg repo), where use of CCPs is discretionary rather than mandatory. Most central euro-denominated clearing currently takes place in London as an international financial centre.

⁵⁵ Proposal for a Council Regulation (EC) No.331/888739 of 13 June 2017 amending Regulation (EU) No 1095/2010 establishing a European Supervisory Authority (European Securities and Markets Authority) and amending Regulation (EU) No 648/2012 as regards the procedures and authorities involved for the authorisation of CCPs and requirements for the recognition of third-country CCPs.

⁵⁶ European Commission proposal to amend EMIR, 13 June 2017. In addition, the ECB is seeking to amend its Statute so that it has clear legal competence in the area of central clearing.

⁵⁷ It remains to be seen whether there will be competition between different national competent authorities in the EU-27 (eg for the relocation of financial services business). Commissioner Dombrovskis said in Tallinn on 15 September: “We think that national supervisors in the EU should follow the same supervisory priorities.” See also the European Commission Communication, *op. cit.*, 20 September 2017.

⁵⁸ ESMA: *Opinion on General Principles to Support Supervisory Convergence in the Context of the UK Withdrawing from the EU*: 31 May 2017; and *Sector-Specific Principles on Relocations from the UK to the EU27*: 13 July 2017.

There are differing views about the links between the location of CCPs and systemic risk. The ECB has argued that CCPs have become effective vehicles for reducing systemic risk in the financial system, and the challenge is to ensure that they do not themselves become a risk to financial stability.⁵⁹ The Governor of the Banque de France has argued, “Do not let sources of systemic risks for the EU grow outside the EU.”⁶⁰ The alternative view is that clearing does not need to take place in the jurisdiction in which a financial asset is denominated, as central bank swap agreements can counter any systemic risks, and it is more efficient to clear on an international basis, regardless of currency, because this allows firms to net their risk in different currencies.

If mandatory relocation of derivatives contracts in CCPs from London to the EU-27 is required by the EU-27 authorities, it would involve costs and risks for users of capital markets, given current economies of scale in London from pooling liquidity in several currencies, which allow multilateral netting of transactions and a reduction in the collateral needed.⁶¹ There is also a risk that mandatory relocation would cause market disruption, particularly if relocation is not properly organised over a sufficient period of time; there may be implications, not just for the UK, but for the US and other third countries.

But if sufficiently robust arrangements can be established between the UK and the EU-27 supervisors, mandatory relocation may not be needed. The ECB’s concern is that “the current EU regime regarding third-country CCPs was never designed to cope with major systemic CCPs operating from outside the EU.”⁶² As a potential solution, the Governor of the Bank of England has proposed that cross-border arrangements for the supervision of CCPs “should be based on deep cooperation between jurisdictions and authorities who defer to each other’s regimes where they meet international standards and deliver similar outcomes.”⁶³

Capital market regulation after Brexit

When Brexit takes place, as capital market regulation in the UK and EU-27 will be the same, there should be an opportunity for the UK and the EU-27 to negotiate a free trade agreement that would provide mutual recognition of each other’s regulatory regime.⁶⁴ In this respect, the UK will be unlike any other third country, because it starts from a position in which its regulatory and supervisory system is the same as the EU-27, whereas other third countries have a different regulatory and supervisory background. Mutual recognition of the regulatory equivalence provisions in existing EU capital market legislation would not on its own be sufficient to achieve this, as there are gaps that would need to be filled. The free trade agreement between the UK and the EU-27 could fill these gaps.⁶⁵

⁵⁹ Benoit Coeuré, Member of the Executive Board of the ECB: *European CCPs After Brexit*: GFMA, Frankfurt, 20 June 2017.

⁶⁰ François Villeroy de Galhau, Governor of the Banque de France: FESE Convention, 22 June 2017.

⁶¹ ISDA has estimated that “a requirement that euro-denominated interest rate derivatives be cleared post-Brexit in an EU-based CCP would result in an overall initial margin increase in the range of 15 to 20%”: Letter to Commissioner Dombrovskis, 8 June 2017.

⁶² Benoit Coeuré, Member of the Executive Board of the ECB: *European CCPs After Brexit*: GFMA, Frankfurt, 20 June 2017.

⁶³ Mark Carney, Governor of the Bank of England: *A Fine Balance*: Mansion House speech, 20 June 2017.

See also the Chancellor of the Exchequer: “We acknowledge that there are legitimate concerns among our EU colleagues about the oversight and supervision of financial markets here in the UK that are providing vital financial services to EU firms and citizens. We will address them by making forward-leaning proposals for greater transparency, cooperation, and agreed standards based on international norms. But, let me be clear, we will not accept protectionist agendas, disguised as arguments about financial stability. We will seek to agree new mechanisms around key issues, from dispute resolution to data protection.”: UK Finance Dinner, 13 September 2017.

⁶⁴ The alternative approach would consist of regulatory divergence after Brexit, which would risk leading to a regulatory “race to the bottom”. This approach was implicitly rejected in the British Prime Minister’s Florence speech on 22 September, in which she said: “We share a commitment to high regulatory standards.”

⁶⁵ An alternative might be the adoption of an Equivalence Regulation in the EU-27 and reciprocal UK measures, if feasible in time. See Barnabas Reynolds: *A Template for Enhanced Equivalence*: Politeia, 10 July 2017.

Mutual recognition of regulatory equivalence would mean that regulatory provisions in the UK and EU-27 would need to continue to be comparable in the future after Brexit, while allowing the UK and the EU-27 to implement agreed outcomes in their own way. There would also need to be provisions in the free trade agreement for enforcement and for settling disputes.⁶⁶ However, that should be less difficult to achieve in the future than it would have been in the past for two reasons. First, there is less new financial regulation in the pipeline now, as so much has been introduced in response to the crisis already. Second, in so far as further new regulatory initiatives are needed, they are likely to originate at global level from the G20 through: the Financial Stability Board; the Basel Committee on Banking Supervision; and the International Organisation of Securities Commissions, which will affect both the EU-27 and the UK in the same way, and in which both the EU-27 and the UK will have a say.

Conclusions

There are five main ways in which to develop capital market integration across the EU: completing the programme of new EU measures under CMU; ensuring that existing EU measures are fit for purpose; achieving greater supervisory convergence across the EU; sharing risks across the EU to promote financial stability; and developing and integrating the financial market infrastructure.

The prospects for CMU would be improved if accompanied by policy changes to strengthen the economic pillar of EMU. This would involve agreement in the euro area on a path to fiscal integration, but it would also depend on resolving two specific issues that are closely related to CMU: the completion of banking union; and the search for a European safe asset as a euro benchmark.

The question posed by Brexit is whether capital market integration is solely of benefit to the EU-27 across national borders internally in the EU-27, or whether open and competitive markets would benefit the EU-27 internationally as well, and also be consistent with ensuring financial stability.

Given the long lead times for capital market firms in preparing for Brexit, agreement on a transition period needs to be reached by the UK and the EU-27 as early as possible before Brexit to cover the period after Brexit until a free trade agreement is reached. Capital market firms will also want to be confident that they will need to make changes only once, and that they have a clear idea of the changes required.

To avoid the risk of uncertainty around the continuity of cross-border financial contracts between market participants in the UK and the EU-27, if passporting ends when Brexit takes place, the UK and EU-27 authorities need to reassure the market by announcing as soon as possible that existing contracts outstanding when Brexit takes place will be grandfathered, for example by providing for this in the UK/EU-27 withdrawal agreement.

⁶⁶ The British Government has proposed a number of options, including a new UK/EU27 legal body that takes account of the European Court of Justice's rulings (like the EFTA Court), but ends the "direct" jurisdiction of the European Court of Justice in the UK: August 2017. In her speech in Florence on 22 September, the British Prime Minister said: "It would not be right for one party's court to have jurisdiction over the other. But I am confident we find an appropriate mechanism for resolving disputes."

There are two main options for capital market firms operating in the UK and the EU-27. One is to rely on mutual recognition of regulatory equivalence, but this is currently a patchwork. The other is to be authorised, capitalised, and staffed in both the UK and the EU-27, which would increase costs for firms and could complicate the task for supervisors.

As a condition for providing authorisation to operate in the EU-27, the question is whether – and to what extent – EU-27 supervisors will insist on the relocation of capital market activities and market infrastructure from the UK to the EU-27 on the grounds that location within the EU-27 is necessary to ensure financial stability, or whether an acceptable alternative would be an agreed form of coordination between the UK and EU-27 supervisors.

When Brexit takes place, as capital market regulation in the UK and EU-27 will be the same, there should be an opportunity for the UK and the EU-27 to negotiate a free trade agreement, which would provide mutual recognition of each other's regulatory regime by filling in the gaps in the current regulatory patchwork. Regulatory provisions in the UK and the EU-27 would need to continue to be comparable in the future after Brexit, with provisions for enforcement and for settling disputes.

Country codes

EUROPEAN UNION

COUNTRY CODE	COUNTRY NAME
BE	Belgium
BG	Bulgaria
CZ	Czech Republic
DK	Denmark
DE	Germany
EE	Estonia
IE	Ireland
EL	Greece
ES	Spain
FR	France
HR	Croatia
IT	Italy
CY	Cyprus
LV	Latvia
LT	Lithuania
LU	Luxembourg
HU	Hungary
MT	Malta
NL	the Netherlands
AT	Austria
PL	Poland
PT	Portugal
RO	Romania
SI	Slovenia
SK	Slovakia
FI	Finland
SE	Sweden
UK	United Kingdom

NON-EUROPEAN UNION

COUNTRY CODE	COUNTRY NAME
BR	Brazil
CA	Canada
CH	Switzerland
CL	Chile
CN	China
IN	India
JP	Japan
MX	Mexico
RU	Russia
US	United States

Annex

European Stability Mechanism



ESM workshop

CROSS-BORDER CAPITAL FLOWS AND

CAPITAL MARKETS UNION

QUO VADIS EUROPE?

8 December 2017

Venue: ESM premises, 6a Circuit de la Foire International, 1347 Luxembourg

Overview

Deep and integrated financial markets are key for the smoothing of economic cycles across countries, financial stability and the transmission of monetary policy. Yet, despite some recent improvements, the degree of financial integration in European capital markets remains limited. This is evidenced, for instance, by the large fragmentation of retail credit markets, subdued cross-border private risk sharing, and persistent home bias in portfolio allocations.

This workshop will look at the need and the main challenges ahead to accelerate the integration of European capital markets. This will involve understanding recent capital flows dynamics in the region, and discussing how to build more efficient market infrastructures, broaden access to market financing, and unlock idle capital for investment purposes.

Registration and webpage

In order to register to the workshop, please kindly contact Dominika Miernik at d.miernik@esm.europa.eu by **10 November 2017** at latest.

You are also welcome to visit the [event webpage](#).

Agenda

9.00-9.30

Registration and welcome coffee

ESM Conference Area

9.30-10.00

Keynote speech and opening remarks

Klaus Regling, Managing Director, European Stability Mechanism

10.00-10.50

Session 1: Capital Flows Dynamics and Capital Market Union

Capital flows in the euro area: a real and financial story

Angel Gavilan, Deputy Head of Economic and Market Analysis, European Stability Mechanism

Martin Hillebrand, Senior Quantitative Analyst - Funding, European Stability Mechanism

Enhancing financial integration and stability in the EU: the evolving rationale for CMU

John Berrigan, Deputy Director General at DG FISMA - European Commission

10.50-11.10

Coffee break

Session 2: International Risk Sharing and Home Bias

11.10-12.00

Private risk sharing as a contribution to strengthening EMU

Philipp Hartmann, Deputy Director General Research - European Central Bank

Declining home bias fosters capital market integration

Dirk Schoenmaker, Erasmus University Rotterdam, Bruegel, CEPR

12.00-13.00

Lunch break

13.00-13.50

Session 3: Practical Implementation of a European Capital Market Union

Addressing the Shortage of Risk Capital for Europe's High Growth Businesses

Rick Watson, Head of Capital Markets - Association for Financial Markets in Europe

Capital Markets Union and Brexit

Paul Richards, Head of Market Practice and Regulatory Policy - International Capital Market Association

13.50-15.00

Policy panel: The need and challenges for more integrated European capital markets

Chair: Thomas Wieser, President of the Euro Working Group

Panellists: John Berrigan, Philipp Hartmann, Paul Richards, Kalin Anev Janse, Dirk Schoenmaker, Rick Watson

15.00-15.15

Concluding remarks

Rolf Strauch, Chief Economist, European Stability Mechanism



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