
Challenges for the European Capital Markets Union: reviving financial integration and safeguarding financial stability

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Summary: After a period of deepening financial integration, the financial crisis triggered a fragmentation of Europe's capital markets along national lines. Financial integration was prone to sudden stops and capital reversals because cross-border capital flows predominantly consisted of short-term debt flows. In this article, I argue that a Capital Markets Union, which aims at promoting financial integration by means of harmonization and common standards, would not be sufficient to reach its goals. In order to lessen the proneness to capital reversals, the new framework for capital markets should promote cross-border equity holdings rather than short-term debt flows. For ensuring integrated and stable capital markets, the EU needs a single capital market supervisor at the EU-level with a focus on non-bank financial investors. This supervisor should also monitor systemically important markets, like the government bond market, from which country-specific risks can spillover to other segments of the capital market.

Zusammenfassung: Nach einer längeren Periode zunehmender Finanzmarktintegration hat die Finanzkrise zu einer Fragmentierung der europäischen Kapitalmärkte geführt. Die Finanzmarktintegration war anfällig für plötzliche Umkehr der Kapitalströme, weil die grenzüberschreitenden Kapitalflüsse hauptsächlich aus kurzfristigen Verbindlichkeiten bestanden. In diesem Artikel argumentiere ich, dass eine Kapitalmarktunion, die das Ziel der Finanzmarktintegration durch Harmonisierung und gemeinsame Standards erreichen möchte, nicht ausreicht. Um die Anfälligkeit gegenüber einer Umkehr der Kapitalströme zu erreichen, müssen die neuen Rahmenbedingungen für die Kapitalmärkte grenzüberschreitende Eigenkapitalinvestitionen fördern anstelle von kurzfristiger Verschuldung. Um integrierte und stabile Kapitalmärkte zu erhalten, benötigt die EU eine gemeinschaftliche Kapitalmarktaufsichtsbehörde auf der EU-Ebene, welche einen Fokus auf die Nicht-Bank-Investoren legt. Diese Aufsichtsbehörde sollte zudem auch systemrelevante Märkte, wie den Markt für Staatsanleihen, überwachen, von welchen länderspezifische Risiken zu anderen Segmenten des Kapitalmarktes übergehen können.

→ JEL Classification: F32, F36, F38, G23, F38, G28, G38

→ Keywords: Capital markets, financial integration, financial stability

I Introduction

One cornerstone of the European Union's (EU) single market for goods and services is the free movement of capital. The EU started to deepen financial integration by removing all restrictions on capital movements through the Treaty of Maastricht in 1994 and by launching the Financial Services Action Plan in 1999. However, after a longer period of improving financial integration, the financial crisis triggered the fragmentation of the single market for capital along national lines. The breakdown of cross-border capital flows contributed to the restricted access to finance for households and companies, especially in the peripheral countries of the euro zone. The fragmentation of the capital markets in the euro zone worsened the transmission of the single monetary policy, which is why the European Central Bank (ECB) had to apply a series of unconventional and controversially disputed monetary policy measures in order to ensure price stability.

One lesson from the financial crisis is that financial integration does not imply financial stability if it is based on an overreliance on short-term debt. Since debt has a fixed maturity, short-term cross-border debt flows are prone to sudden stops and capital reversals when market conditions deteriorate. Stabilizing the euro zone, thus, needs a form of financial integration that helps to direct cross-border financial flows toward investments that are less prone to capital flight during times of stress (Anderson et al. 2015).

Reducing the dependence of short-term debt is challenging because the European financial system is mainly bank-based. Bank loans amount to 80 percent of the debt finance of companies (Demary 2017). Thus, the immediate response of the EU to the financial crisis and the fragmentation of the capital market was to replace the fragmented system of banking supervision with a Banking Union in the euro zone consisting of a common bank supervisor and a common restructuring and resolution authority, both located at the EU-level. The additional long-term response of the European Commission was to strengthen capital markets in Europe with a Capital Markets Union (CMU). Unlike the Banking Union, the CMU is not a project just for the European Monetary Union, but rather for the whole EU (COM 2015a). The CMU proposal is partly based on the observation that the U.S. recovered more quickly from the financial crisis and that the U.S. capital market lacks financial fragmentation. In the U.S., which has a market-based financial system, corporate bonds amount to 80 percent of the debt finance of companies and non-bank capital market investors play a larger role in financing the economy. It is the European Commission's view that appending the bank-based financial system with capital market alternatives might not only improve the funding of companies and households, but there are hopes that additional financing alternatives could stabilize the funding of companies during banking crises (COM 2015a, 2015b).

In addition to restoring the resiliency of the European Monetary Union, the establishment of the CMU is also about promoting financial development in the non-euro zone member countries, because more than 15 years after the introduction of the Financial Services Action Plan, member countries have different degrees of financial development and financial integration. The non-euro zone countries in Eastern Europe have especially underdeveloped stock and bond markets, resulting in not just restricted access to finance for companies and households, but also limited opportunities for pension provisions for households. Overall, the European Commission regards European capital markets as underdeveloped in comparison to U.S. capital markets (COM 2015b).

Since the CMU project consists of a broad set of objectives and measures, which cannot all be tackled in this article, this analysis focusses on the potential of a CMU to foster financial integration and financial stability. To this end, it analyzes what aspects of financial integration foster financial stability and risk-sharing across countries and how these aspects are fostered within the current framework of the CMU, as described in the CMU Action Plan.

2 Financial market integration in Europe

Cross-border investment flows can improve private sector risk sharing when financial portfolios are geographically diversified. These portfolios should provide more stable returns, while cross-border investment flows should also enable borrowing from other countries when the domestic economy is hit by a shock (Anderson et al. 2015). However, when these cross-border financial flows consist predominantly of short-term debt, these financial flows can be prone to sudden stops and capital flight when market conditions deteriorate. Before tackling the CMU's potential to promote financial integration, in this section I analyze how the different financial market segments in Europe, i.e. the money markets, the bond markets, the stock markets and the retail banking markets are characterized by financial integration and to what degree these markets are prone to sudden stops and fragmentation.

2.1 Money markets

The demand for and the supply of short-term interbank debt and deposits meet in the money market. The introduction of the Euro in 1999 eliminated the exchange rate risk between the euro zone member countries, while the introduction of the Trans-European Automated Real-Time Gross Settlement Express Transfers System (TARGET) connects since 1999 the 17 national gross settlement systems, thereby reducing technical barriers to cross-border flows of short-term interbank debt and deposits (ECB 2009). In short, financial integration at that time was promoted by harmonization and common standards. The growing degree of integration since 1999 can be seen from the falling standard deviation of the EONIA lending rates across the euro area countries (ECB 2008).

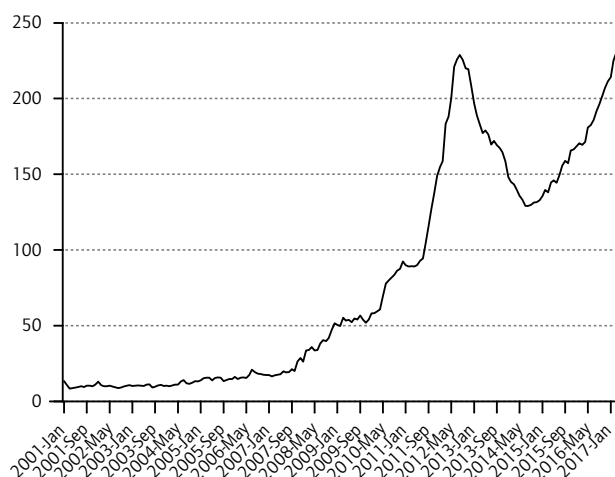
The outbreak of the Global Financial Crisis in August 2007 revealed that this high degree of financial integration in short-term debt markets only sustains in times of good economic performance, but not in times of economic stress. When the confidence about the liquidity positions of counterparties deteriorated, banks responded by hoarding liquidity. As a result, the money market fragmented along national lines. The decline in financial integration can be seen from EONIA lending rates, which reflected the increased credit risk among banks (ECB 2009). An analysis of the ECB shows that money markets were more affected on a cross-country level than domestically (ECB 2009). The fragmentation can also be seen from the diverging Target2-Balances (Figure 1).

The fragmentation increased again in 2012, when disruptions in government bond markets emerged due to uncertainties about the solvency of member states and expectations about a possible break-up of the euro zone (ECB 2013). In a bank-based financial system, like the European one, these tensions can spillover to money markets because of banks' use of their sovereigns' bonds as collateral in repurchase agreements, i.e. in short-term borrowing transactions. As the

Figure 1

Dispersion of Target2-Balances

Cross-country standard deviation, euro zone member countries, in billion Euro



Source: Institute for Empirical Research – Osnabrück University, own calculations.

value of the collateral of the banks in the peripheral countries deteriorated and their funding positions worsened, investors sought the safety of core euro zone countries.

A resulting lesson is that it is not sufficient to promote financial integration in these markets with only harmonization and common standards. In addition, integration must be preserved with financial supervision and a lender of last resort. The establishment of the Banking Union and the availability of the European Central Bank (ECB) as a lender of last resort was needed to restore integration in these markets.

2.2 Bond markets

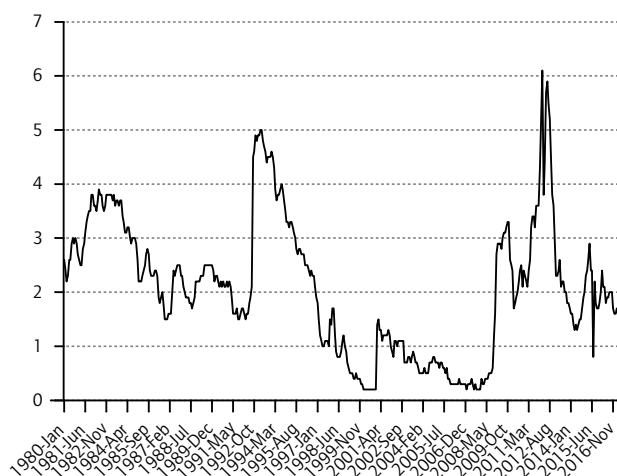
Bond market integration is lower than money market integration and the degree of integration depends on the bond market segment due to the segmentation of the trading infrastructures as well as due to national differences in tax law, securities law, and insolvency proceedings (ECB 2008).

The largest segment is the market for government bonds. On the primary market, national agents, like the Bundesbank in Germany or the Italian treasury in Italy, issue bonds (Cheung et al. 2005). On the secondary market, bonds were traded on either exchanges or over-the-counter (OTC) markets. There are several OTC market platforms that operate in many, but not all, member countries (Cheung et al. 2005). The introduction of Target2-Securities in 2015 increased financial integration in bond markets through harmonization and common standards. Target2-Securities is a platform for the settlement of securities central bank money. Given the technical infrastructure and the possibility to access these infrastructures by electronic means without the need for a co-location, there should be an integrated market for these bonds. However, barriers

Figure 2

Dispersion of government bond yields

Cross-country standard deviation, euro zone member countries, percentage points



Source: Eurostat, own calculations.

to full integration still exist due to different national tax treatments or differences in national securities law.

Bond market integration in the euro zone increased with the introduction of the Euro (ECB 2008). The integration of the government bond market can be inferred from the convergence of the yields on bonds of the different member countries in the pre-crisis-era (Figure 2). The yields of government bonds converged after the introduction of the Euro because investors believed that sovereign risks were absent. A divergence began in the wake of the Sovereign Debt Crisis in the euro zone as national risk premiums skyrocketed (Figure 2). The divergence in the benchmark rates of the government bond market spilled-over to the corporate bond market and the covered bond markets, in which country-specific risk-premiums significantly increased. An analysis by the ECB shows that even after controlling for differences in sovereign risks, there are increasing signs of divergence from benchmark values indicating a fragmentation of bond markets (ECB 2009).

While fragmentation that is caused by structural differences can be tackled by means of harmonization and standardization, this bond market fragmentation is based on country specific risk factors that spill-over from the government bond market to the covered bond market and the corporate bond market. These risk factors must be tackled by financial supervision and by economic policies that restore the sustainability of government finances.

2.3 Equity markets

Equity markets are less integrated than bond markets because of structural differences between stock and bond markets (ECB 2008). The securities settlement infrastructure for equities is

less integrated than the infrastructure for bonds. While the cross-border settlement of bonds is concentrated in two international central securities depositories (CSDs) (Clearstream 2017a), the settlement of equities relies more on national CSDs (Clearstream 2017b). There are national differences in the settlement cycles or the handling of corporate events, which hinder the progress of integration (ECB 2010). Integration of equity markets was fostered by the introduction of Target2-Securities. However, national differences in taxation, company law, and insolvency proceedings still exist and contribute to the lower integration of equity markets.

While the Sovereign Debt Crisis triggered a fragmentation in bond markets, the tensions in the government debt markets did not spillover to equity markets. National stock markets were responding to the crisis with declining stock prices, but country-specific effects and fragmentation could not be found (ECB 2010).

There are several possible reasons why the disruptions in money markets and government debt markets did not lead to fragmentation in the stock markets. First, there cannot be a run on stocks due to the infinite maturity of stocks. Investors can only sell their shares to other investors and there is no possibility to redeem shares. Second, companies that relied to a large degree on bank funding faced funding shortages during the crisis, especially when troubled banks refused to roll over credit lines. This type of risk is absent for companies that finance their investments by issuing stocks because stocks can be sold to non-bank investors during times of banking crisis. Third, most listed companies are globally active, so country-specific risk-factors play a minor role for them.

Summing up, equity markets are less prone to a fragmentation when economic fundamentals deteriorate than debt markets. Their fragmentation is more due to structural factors, like technical standards, tax law, and company law.

2.4 Banking markets

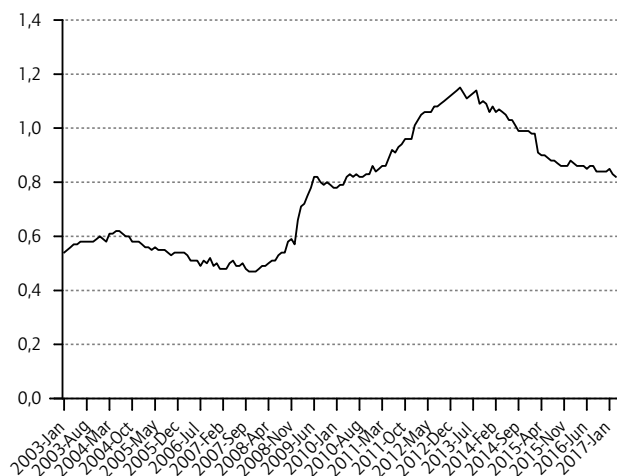
The supply of, and the demand for, interbank activities, capital market-related activities, and retail banking activities meet on banking markets (ECB 2008). Interbank markets and capital market-related activities of banks have become integrated due to the integration of money markets and bond markets, while retail-banking activities are more or less focused on national markets, since different national languages limit the cross-border provision of retail products (ECB 2008). The lower degree of integration can be inferred from the dispersion of interest rates on loans and deposits from banks to non-financial corporations and households, which are higher, compared to the dispersion in the yields of benchmark rates, like money market interest rates and government bond yields.

In addition to crisis effects, fragmentation is also due to several other factors. First, there are national differences in firm size and industrial structure as well as the degree of capital market development, taxation, regulation, supervision, consumer protection, as well as in financial structures (ECB 2010). Second, there is a preference of households and companies for relationship banking (Mommel et al. 2008, Peltoniemi 2004). Third, there was, on average, more domestic consolidation in the banking sector than cross-border consolidation (ECB 2008). Fourth, payment infrastructures were fragmented until the launch of the Single European Payment Area (SEPA) in 2014. With the introduction of SEPA, differences between national and cross-border

Figure 3

Dispersion of bank loan interest rates

Cross-country standard deviation, euro zone member countries, loans to non-financial corporations, percentage points



Source: European Central Bank, own calculations.

payments within the euro area as well as for payments with the nine other EU member countries and the two non-EU countries of Norway and Switzerland were eliminated.

Banking retail markets were also prone to an increased fragmentation in times of stress (Figure 3). The fragmentation of money markets transmitted to the retail banking market, since the worsened funding positions of banks force them to restrict their lending to businesses and households. Hempell and Sorensen (2010) found that banks' restricted access to money markets during 2007 and 2009 led to a significant decline in bank lending. The proneness of the well-integrated money market to a reversal of integration was based on the type of integration. Short-term debt flows can stop and reverse easily, which means that the integration of the money market depends a lot on financial conditions, like the health of banks and their sovereigns.

The proneness to fragmentation in banking markets during the financial crisis was also due to a fragmentation in banking supervision. The establishment of the European Banking Union with a single supervisory mechanism and a single resolution mechanism strengthened the convergence of supervisory practices and, thereby, financial integration. One lesson for the CMU is that it would be necessary to have a single capital market supervisor at the EU-level in order to safeguard financial integration and financial stability.

3 **How can the Capital Markets Union revive financial integration?**

One aim of the CMU is to foster financial integration by strengthening capital markets. In this section, I analyse to what degree the CMU action plan initiatives, like reviving securitizations, creating a harmonized framework for covered bonds, and promoting stock and bond markets, can support these aims.

3.1 Securitization

Part of the CMU Action Plan was the revival of the market for asset-backed securities (ABS). ABS are bonds that are issued by special purpose vehicles (SPV) with loans on the asset side, which were originated by banks and transferred to the SPV. This financial technology, known as securitization, transforms illiquid loans into liquid bonds. Moreover, it can transform large loans into sets of smaller bonds. These bonds can then be sold to investors, including banks, insurance companies and pension funds.

Due to a lack of standardization and national differences in insolvency laws, the market is more fragmented than the market for government bonds. However, since the ABS can be sold to a wider audience of international investors, credit risks can be geographically diversified. Under the right framework, securitization could promote financial integration and cross-border risk sharing.

The securitization of loan portfolios can also foster the loan availability by freeing banks' equity capital, thus helping bank-dependent small and medium-sized companies. For companies that refrain from issuing bonds in capital markets, e.g. because of the high fixed costs of the issuance, the high issuance limit, or because of the additional informational responsibilities vis-à-vis the investors, securitization is the way of accessing the investors' money, while staying in the legal framework of a bank loan. One reason is that the investors hold claims against the SPV, which is different from holding corporate bonds, which are claims against the issuing companies. Thereby the SPV has responsibilities vis-à-vis the investors, e.g. issuing the prospectus, and not the companies themselves, which reduces the administrative burdens of the companies. Moreover, securitization is the preferred form of capital market activity, because the banks conduct the credit assessment instead of capital market investors. Long-term relationships between banks and companies can improve credit ratings, since the bank can refer to its past experience with the company when determining the rating. As such, a relationship bank will provide the company with better credit conditions than it can get from capital market investors, which only have information from the prospectus.

Reviving the market for securitizations is a straightforward way to append a bank-based financial system with capital market alternatives, since banks can originate loans, conduct the risk assessment, and transfer them into bonds, which can then be sold to capital market investors. Promoting other forms of capital market activity would require that markets for corporate bonds, especially the segments for small and medium-sized companies, evolve. The direct financing of companies through capital market investors is much harder to promote since markets for asset classes, like private placements or corporate bonds, have to evolve in countries where these asset classes are infrequently used.

In order to foster financial integration and financial stability, securitization needs a functioning regulatory framework. The crisis of the U.S. mortgage-backed securities revealed that these securities could contain a common risk factor, e.g. a decline of the U.S. housing market, that cannot be diversified. The problem of U.S. securitizations was, however, that they tried to transform sub-prime mortgages into AAA-rated securities, which cannot work in the long-run. European securitizations, e.g. those based on auto loans, were not based on the same fallacy; instead, they were characterized by very low default rates even during crisis times, since their underlying loans were of a good quality (COM 2015).

The Commission's proposal for simple, transparent and standardized (STS) securitizations was intended to revive confidence in European securitizations. A crisis lesson was that the U.S.-MBS were too complex and opaque, such that investors were unable to understand the true risk of these bonds. Under the new regulatory framework, European securitizations can qualify as STS if they meet certain criteria. In principle, these securitizations should be less risky, in part because the underlying risk factors are more transparent compared to other securitizations.

The securitization market has, however, not revived yet. Practitioners refer to the high legal uncertainty about which securitizations qualify as STS (Bechtold and Demary 2016). Moreover, STS are possibly unattractive to investors, because the capital requirements for STS might be too high in relation to their default rates. Investors' demand for sovereign bonds or covered bonds with the same default rate as an STS-securitization is higher because of the lower capital requirements for sovereign bonds and covered bonds as well as because of the preferential treatment of sovereign bonds and covered bonds in banks' liquidity regulation (Bechtold and Demary 2016). A prerequisite for securitizations to revive is a level playing field between sovereign bonds and other asset classes with comparable default risks and liquidity.

3.2 Covered bonds

The volume of covered bonds sums to 2.5 trillion Euro in the EU (EBA 2016). Thus, covered bonds are the second largest segment of the EU's bond markets after the government bonds market. They are issued by banks or mortgage institutions and they are collateralized through a dual recourse proceeding, i.e. the investors have recourse against the collateral as well as against the issuer. Due to their collateralization, covered bonds count as relatively safe assets, are traded in liquid secondary markets, and can be used as collateral in refinancing operations with central banks.

The European Commission started a public consultation on covered bonds on September 30, 2015, in order to get more information about the causes and cures of the fragmentation in these markets. Part of the CMU action plan is a European covered bond framework, which should help to improve the funding conditions in the EU and facilitate cross-border investment. The respondents of the public consultation saw the main source of fragmentation in the spillover effects from government bond markets to other segments of the bond market. They refer to the investment mandates that operate on the basis of credit lines per country, which makes the market integration prone to country-specific risk factors, e.g. as those that can spill-over from sovereign bond markets (COM 2015).

Summing up, the integration of bond markets is highly prone to country-specific risk factors that can spillover from government bond markets. Thus, promoting financial integration solely

by harmonization and standards is insufficient. More important is stabilizing these markets by stable government finances, which prevent tensions on the government bond market. Due to the systemic importance of the government bond market, the mandate of a potential European capital market supervisor should include supervision of the government bond market.

3.3 Cross-border asset ownership

Although several national stock exchanges have merged in the last decades, there are still several operating systems that hinder cross-border asset ownership. However, it will be a highly complex task to increase cross-border asset ownership, because cross-border transactions are determined by multiple factors, like the interoperability of exchanges, as well as by differences in national securities laws, tax laws, and insolvency proceedings. Another barrier to cross-border asset ownership is the uncertainty about the security ownership when the issuer and the investors are located in different countries (COM 2015). Moreover, there is still uncertainty over who owns an asset in case of an insolvency and whose rights take precedence in the insolvency proceeding (COM 2015). Reducing these barriers involves the cooperation of national legislators since these barriers are often due to differences in national securities laws, national gold-plating of EU minimum rules, divergent application of EU rules, national measures taken in areas where there is no EU legislation, and where responsibilities are still at the national level (COM 2015). In the responsibility of the national legislators is also the withholding tax treatment (COM 2015). In order to facilitate additional cross-border asset ownership, as the next step in developing the CMU, the EU needs closer cooperation with national legislators, seeking convergence of national tax laws, security laws, as well as and insolvency and restructuring proceedings. Cross-border mergers of exchanges would facilitate cross-border transactions, but previously proposed mergers were often stopped due to worries about market power.

4 Brexit and financial supervision in the CMU

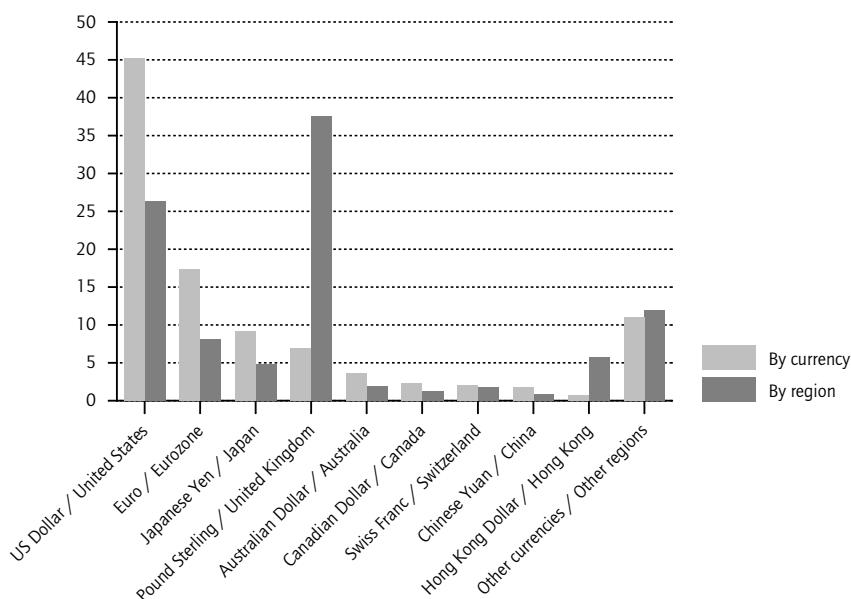
The above sections highlight the necessity of a capital market supervisor for the CMU. The impending secession of the United Kingdom from the EU strengthens the need for such a supervisory body at the EU-level. From the European, and even the global, perspective, London is the most important financial hub for financial wholesale activities, like the clearing of OTC derivatives of all major currencies. This can be inferred from Figure 4, which compares the distribution of clearing volumes by region and the distribution of clearing volumes by currency. The largest fraction of the global volume, around 45 percent, is denominated in U.S.-dollar, around 17 percent is denominated in Euro, 9 percent in Yen and 7 percent in Pound Sterling, while the rest is denominated in other currencies. The distribution of clearing volumes by region, however, is different from that. The bulk of the global clearing volume, close to 38 percent, is cleared in the UK, but only 26 percent of the global volume is cleared in the U.S., 8 percent in the euro zone, 5 percent in Japan and the rest in other regions. The excess of the clearing volume of Dollar, Euro and Yen contracts over the clearing volume in the U.S., the euro zone and Japan fits the excess of the clearing volume of the UK over the clearing volume in Pound, which indicates the relevance of the UK for derivatives clearing in the major foreign currencies.

The Brexit is critical for the EU's financial stability, which is why it is important to discuss a reform of financial supervision within the context of the CMU. It can be best seen from the deriva-

Figure 4

OTC derivative turnover

In percent of total derivative turnover



Sources: Bank for International Settlements, Demary (2017).

tives market and the current supervisory framework for clearinghouses. Financial firms, which supply clearing services in the EU, must be authorized by the European Securities and Markets Authority (ESMA) under the European Market Infrastructure Regulation (EMIR), while national regulators are responsible for the day-to-day supervision (ESMA 2017). Currently, that means that the Bank of England and the UK Financial Conduct Authority supervise a large part of the EU's clearing activities (Demary 2017). Moreover, clearinghouses from third-countries, e.g. the U.S., which supply their services in the EU, are still subject to the supervision of their home country (ESMA 2017). Thus, the EU's national supervisors are dependent on the cooperation with the third-country supervisors. In the post-Brexit environment, the UK authorities will become third-country supervisors (Demary 2017).

Due to the global nature of wholesale activities of European financial firms, it would be difficult to ensure financial stability, if the supervision of these markets is not conducted at the EU-level. While the banking sector in the euro zone is more efficiently supervised since the Single Supervisory Mechanism (SSM) was established, capital markets lack a comparable comprehensive supervisory approach. The financial stability risks, which could emerge from a larger role of capital markets, are probably not covered by the supervisory model that focusses on banks. Since, wholesale activities are cross-border in nature, it would be best to build up knowledge and personnel at the European level and strengthen the hub of the European network of supervisors, as proposed by Sapir et al. (2017).

A natural candidate for a capital market supervisory authority would be the European Securities and Markets Authority (ESMA), as suggested by several authors. Besides reforming the ESMA's governance structure and the scope of its mandate as proposed by Sapir et al. (2017), ESMA could also be strengthened as the macroprudential supervisor of the EU's wholesale markets and ESMA could be responsible for promoting supervisory convergence and for ensuring financial stability and financial integration in the EU. Batsaikhan et al. (2017) and Schoenmaker and Véron (2017) suggest that a reformed ESMA could be given additional responsibilities for market segments for which EU activity is currently mostly concentrated in London, which would take the negative effects of a Brexit on the financial stability in the EU into account.

5 Which steps are needed for integrated and stable capital markets?

The European Commission intends to strengthen capital markets in the EU with the establishment of a CMU. From the preceding analysis, it can be concluded that it is not sufficient for the EU to promote financial integration by further standardization and harmonization alone. For the CMU to safeguard financial stability it is important that the state of financial integration is independent of market conditions. In order to achieve both goals of financial integration and financial stability, the CMU should be based on the following principles:

- Financial integration has to be strengthened through equity and foreign direct investments and less through debt investments. The preferential tax treatment of debt over equity provides incentives for companies to rely excessively on debt financing. Equal tax treatment of equity and debt would balance this bias and foster financial integration that is based more on equity flows than on debt flows.
- Financial stability has to be safeguarded by a single capital market supervisor at the EU-level. While the establishment of the Banking Union has improved the cross-border supervision of banks in the euro zone, the non-euro zone member countries lack such a comprehensive supervision. Since the European financial system will remain largely bank-based, the CMU needs an enlargement of the Banking Union to the whole EU. The EU should take the Brexit as a starting point to reform financial supervision in the EU, since the bulk of the EU's financial wholesale activities are located in London, which will no longer be part of the EU after Brexit. At best, the EU should establish a single capital market supervisor at the EU-level, since financial stability risks could emerge from a larger role of capital markets and non-bank investors, which are not covered by the existing supervisory model with its focus on banks.
- The proneness to fragmentation in systemically important markets, like money market and sovereign debt markets must be reduced. The crisis in money markets revealed the need for a European supervisor as well as the need for a lender of last resort in times of crisis when this market dries up. The crisis in sovereign debt markets reveals the sensitivity of capital markets to disruptions in reference rates, as in the yields on government bonds. So far, the CMU action plan has not addressed this problem. Since the markets for government bonds are systemically relevant for the stability of capital markets, measures ensuring sustainable government finances must be included.

However, the European Commission's expectations on the success of the CMU should not be too high. The preference for relationship banking will limit the demand for non-bank financial services. There are good reasons, why businesses fare better with a relationship bank than with capital market investors. One is that businesses have to give up control when they engage in a relationship with equity capital investors, while they keep the control over their company in lending relationships. If the company expects private equity investors to interfere too much into the business model, they will prefer bank funding. The availability of capital market investors, however, will become more important in times of a banking crisis when lending is impaired. Moreover, capital market investors suit better to younger companies without stable cash flows that are needed to service a bank loan.

For companies with a preference for relationship banking, securitization is the better form of capital market activity, compared to issuing stocks or bonds directly in capital markets. The market for safe securitizations has to be strengthened. The demand for safe and liquid assets is high and securitization has the potential to transfer risks in such a way that this demand can be met. Safe securitizations have the potential to distribute risks geographically, thereby strengthening cross-border risk sharing.

Given the bank-based nature of the European financial system and companies' possible preference for relationship banking, securitization is the European model of capital market activity. In order to achieve and preserve financial integration, the framework for securitizations needs to be adjusted, so that legal uncertainties are absent and so that capital and liquidity requirements better reflect default risks and liquidity. Besides that, the European Commission's action plan for a CMU must be appended with measures for a single capital market supervisor at the EU-level, a strengthening of the Banking Union, and a framework for more stable government finances.

References

- Anderson, N, M. Brooke, M. Hume, and M. Kürtösiová (2017): A European Capital Markets Union: Implications for Growth and Stability. Bank of England Financial Stability Paper No. 33. February 2015. London.
- Batsaikhan, U., R. Kalcik, and D. Schoenmaker (2017): Brexit and the European Financial System. Bruegel Policy Contribution, <http://bruegel.org/wp-content/uploads/2017/02/PC-04-2017-finance-090217-final.pdf> (accessed April 24, 2017).
- Bechtold, H., and M. Demary (2016): Das europäische Modell der Kapitalmarktfinanzierung ist die Verbriefung. ifo Schnelldienst, 17/2016, September 15, 2016, 8–11.
- Cheung, Y., F. de Jong, and B. Rindi (2005): Trading European Sovereign Bonds: The Microstructure of the MTS Trading Platforms. ECB Working Paper Series, No. 432. January 31, 2005. Frankfurt on the Main.
- Clearstream (2017a): The ICSD Model (CBL). www.clearstream.com/clearstream-en/products-and-services/issuance--1-/issuance-models/icsd (accessed April 24, 2017).
- Clearstream (2017b): The German Model. www.clearstream.com/clearstream-en/products-and-services/issuance--1-/issuance-models/csd (accessed April 24, 2017).
- COM – European Commission (2015a): Green Paper Building a Capital Markets Union. COM(2015) 63 final. February 18. Brussels.
- COM – European Commission (2015b): Action Plan on Building a Capital Markets Union. Communication, COM(2015) 468 final. September 30. Brussels.

- Demary, Markus (2017): The European Derivatives Market after Brexit. IW-Kurzbericht No. 22-2017, March 10, 2017, Cologne.
- EBA – European Banking Authority (2016): EBA Report on Covered Bonds. EBA-Op-2016-23. London.
- ECB – European Central Bank (2008): Financial Integration in Europe. April 2008. Frankfurt on the Main.
- ECB – European Central Bank (2009): Financial Integration in Europe. April 2009. Frankfurt on the Main.
- ECB – European Central Bank (2010): Financial Integration in Europe. April 2010. Frankfurt on the Main.
- ECB – European Central Bank (2013): Financial Integration in Europe. April 2013. Frankfurt on the Main.
- ESMA – European Securities and Markets Authority (2017): Central Counterparties. www.esma.europa.eu/policy-rules/post-trading/central-counterparties (accessed April 24, 2017).
- Hempell, H., and C. Sorensen (2010): The Impact of Supply Constraints on Bank Lending in the Euro Area: Crisis Induced Crunching? ECB Working Paper Series, No. 1262. November 2010. Frankfurt on the Main.
- Memmel, C., C. Schmieder, and I. Stein (2008): Relationship Lending – Empirical Evidence for Germany. Economic and Financial Report 2008/01. European Investment Bank (EIB), Luxembourg.
- Peltoniemi, J. (2004): The Value of Relationship Banking: Empirical Evidence on Small Business Financing in Finnish Credit Markets. Dissertation. University of Oulu.
- Sapir, A., D. Schoenmaker, and N. Véron (2017): Making the Best of Brexit for the EU27 Financial System. Bruegel Policy Brief. http://bruegel.org/wp-content/uploads/2017/02/Bruegel_Policy_Brief-2017_01-090217.pdf (accessed April 24, 2017).
- Schoenmaker, D., and N. Véron (2017): To Make the Best of Brexit, the European Union Needs to Beef Up ESMA. Realtime Economic Issues Watch. <https://piie.com/blogs/real-time-economic-issues-watch/make-best-brexit-european-union-needs-beef-esma> (accessed April 24, 2017).