
Capital Markets Union: deepening the Single Market makes sense, but don't expect too much

ANDREAS BLEY AND JAN PHILIP WEBER

Andreas Bley, National Association of German Cooperative Banks (BVR), Berlin, e-mail: a.bley@bvr.de
Jan Philip Weber, National Association of German Cooperative Banks (BVR), Berlin, e-mail: j.weber@bvr.de

Summary: The Capital Markets Union (CMU) is a flagship project of the European Commission that promotes a deepening of the financial markets. It aims at opening up new sources of funding for SMEs, as well as improving the matching between savers and borrowers. Additionally, CMU is supposed to increase the absorption capacity for asymmetric country-specific shocks. Some even see the CMU as a substitute for a fiscal union. However, it is questionable whether deeper financial market integration will succeed and materialize in a political and economic environment filled with severe uncertainties.

Zusammenfassung: Die Kapitalmarktunion (KMU) ist das Leuchtturmprojekt der Europäischen Kommission. Ziel der KMU ist eine tiefere Integration der nationalen Finanzmärkte in Europa, die unter anderem mit einer besseren Finanzierungssituation für mittelständische Unternehmen als auch einer effizienteren Interaktion von Sparern und Investoren einherginge. Darüber hinaus soll eine tiefere Integration der Finanzmärkte die Widerstandsfähigkeit gegen sogenannte ökonomische Schocks im Währungsraum erhöhen. In diesem Zusammenhang wird die KMU auch als ein Substitut für eine Fiskalunion gesehen. Angesichts der politischen und ökonomischen Unsicherheiten in Europa ist eine wesentlich tiefere Integration der Finanzmärkte zu dem gegenwärtigen Zeitpunkt allerdings sehr fraglich.

→ JEL Classification: E44, F36, G18, G28

→ Keywords: Financial markets, Capital Market Union, European Integration, risk absorption

I Introduction

The European Single Market was established in 1993 with the central goal of allowing the free movement of goods, services, people, and capital within the European Union. Although considerable progress has been made, the European Union (EU) has not reached its goal of fully integrated markets. So far, the member states have successfully integrated their markets for goods and citizens since they may circle freely within the whole EU.

Currently, the Capital Markets Union (CMU) is the most important project promoting further integration in Europe. After the crisis years, with the severe and persistent economic divergences across the member states, the European Commission elaborated a concept of how financial markets can be more deeply integrated in the European Union. The CMU is a key project that draws a parallel to the banking union, which, along with the introduction of the euro rescue fund ESM, is the most significant overhaul of the institutional structure of the common currency.

In July 2014, the president of the European Commission, Jean-Claude Juncker, announced a push to further integrate capital markets. Then, in February 2015, the European Commission published the Green Book about the Capital Market Union, illustrating the roadmap to deeper integrated financial markets in Europe. It is the Commission's goal to lay the foundation for the integration of the European capital markets before 2019.

The European Commission set three main objectives in order to achieve the goal of deeper integrated financial markets. First, the access to funding for all businesses and investments in infrastructure should be improved. Here, the focus is primarily on small and medium-sized enterprises (SMEs). The second objective is a significant increase and diversification of financing of the economy in order to reduce the cost of capital. Finally, the Commission wants to make markets more efficient and effective by a better matching of savers and borrowers within and across national borders (Juncker 2014, Green Book 2015).

The former commissioner for Financial Stability, Financial Services and Capital Markets Union, Jonathan Hill, who resigned following the Brexit-referendum in June 2016, explained the ambitions of the European Commission in the following way:

“My ambition is clear: to help unlock the capital around Europe that is currently frozen and put it to work in support of Europe's businesses, particularly SMEs. That is where the Capital Markets Union, a new frontier of Europe's single market, comes in. If a new business owner in the EU has an opportunity to expand, now his options are mainly to turn to friends and family or his local bank. I want to expand his range of options to include listing on a growth market, which could give him access to investors anywhere within the EU, to business angels, or crowd-funding. That would be good for business, but also good for savers as they have more investment choices” (Hill 2014a).

Later, Commissioner Hill added that another aspect of the CMU is the strengthening of the resilience of the financial system by diversifying funding sources for market participants across all EU countries (Hill 2015).

The Commission's aim of deeper integration is very ambitious. The implementation of a far reaching CMU will be very complex. Its success is challenging, especially during times of high

political and economic uncertainties in the European Union. The structural economic crisis in several member states of the euro zone, the rise of nationalism in the European Union and, most recently, Brexit, give just a taste of how fierce political conditions currently are. A noticeable deeper integration of financial markets would require the harmonization of the heterogeneous structures in the member countries in Europe. This seems ambitious since the patterns of law and economics are quite diverse, even among euro zone member states. Finally, it is unclear whether a deeper integration will automatically lead to higher growth rates and stability. More cross-border capital flows do not necessarily promote sustainable growth. There were massive cross-border capital misallocations in the pre-crisis years, which are seen as amplifiers of the European debt crisis.

This article is structured as follows. First, the benefits of a deeper integration are discussed briefly in section 2. Then, the current and past levels of cross-border risk sharing are estimated. In section 4, three central obstacles for a deeper integration are presented. This short paper closes with some concluding remarks.

2 The benefits of a deeper financial market integration

Financial markets in the European Union are already integrated to a certain level. Securities and assets may be traded freely among the EU member states and, with respect to the euro zone, there are no foreign exchange rate risks for cross border activities. The European Commission showed very recently that the introduction of the Euro has led to a slight reduction of cross-country income dispersion by reducing cross-border transaction costs (European Commission 2016a). However, to guarantee a fully integrated financial market, it takes more than the mentioned two factors. Certainly, the most important requirement is the elimination of market imperfections, such as structural information asymmetries or certain market entry barriers. This will ensure more competition and fewer distortions.

Even within the euro zone, economic conditions and regulatory frameworks vary tremendously across the member states. In particular, there are still significant differences in taxes, regulation patterns, legal practices, and the official working language. This inner diversity leads to less liquid capital markets, more information asymmetries, and a distinct home-bias of investments and funding. The years after the crisis have shown a strong home-bias on capital markets.

The abolition of these structural impediments would undoubtedly enhance the efficiency of capital allocation in Europe. Small and medium sized enterprises (SMEs) and private households would surely benefit from a more efficient match of borrowers and savers. In theory, a significant harmonization of market frameworks, such as taxing or bankruptcy law, would put enterprises and (private) investors in a more comfortable position. Furthermore, the more efficient allocation of capital would improve private sector risk sharing among member states, thus helping to better absorb economic risk. It is clear that an appropriate integration of financial markets would lead to higher growth rates and stability in Europe.

Better integrated financial markets would offer enterprises improved access to finance in countries with less efficient financial markets, since uncertainties for investors are reduced in the course of structural harmonization. The past crisis years highlighted the tremendous shortcom-

ings of funding in countries with weak banking sectors. In the wake of the global financial crisis, even profitable enterprises had severe problems accessing funding in recession countries, such as Portugal, Spain, and Ireland. Many banks in the mentioned countries restricted their lending to companies because of massive disparities in their balance sheets. Cross-national capital funding, in turn, was not strong enough to fill this gap and served as a trigger of economic depression.

A deeper integration of financial markets would also benefit savers and investors. The increased diversification and transparency of investment opportunities would allow private investors to match better their risk preferences. This would benefit not only professional investors, but also improve the efficiency of millions of private household pension plans. Furthermore, private households would find it easier to smooth their consumption in economically bad times due to more cross-border investment returns from foreign securities. The same holds for profitable enterprises that may be able to better smooth the access of funding over the business cycle.

On a macroeconomic level, increased cross-border private risk sharing supports the decoupling of private income and funding from domestic growth. This would make the European economy more resilient to asymmetric shocks through a more efficient absorption of macroeconomic risks. Here the intertemporal mechanism of the permanent income hypothesis is the theoretical fundament of this macroeconomic aspect. According to the hypothesis, forward looking risk-averse households react to temporary symmetrical income shocks by transferring income over time by increasing or decreasing savings in order to smooth consumption over lifetime. The same mechanism may apply at each point in time on a cross-sectional dimension.

Especially for euro area countries, more shock resilience would be very desirable since exchange rates are fixed and common ECB monetary policy is unable to deal properly with asymmetric shocks (ECB 2016a). The gain in macroeconomic stability through more financial integration would be very useful. In recent years, asymmetric recessions and severe disparities of economic growth have strongly undermined the economic and political stability of the European Union. Often, and especially during the crisis, money has been withdrawn when it was most needed, thus exacerbating the crisis instead of providing resilience. Deeper financial market integration could therefore also strengthen the EU and the Monetary Union at the overall macroeconomic level.

Generally, debt instruments seem to be more prone to runs than equity investments, long-term investments seem to be more favorable than short-term holdings, and direct cross-border lending between banks and non-banks seems to be more stable than indirect intermediation via money markets. Additionally, the direction of capital flows matters. Capital flows that go in both directions seem to be more stable. In the pre-crisis euro area, the flows had largely been “down-hill” to the catching-up countries. Following the outbreak of the crisis, these flows were subject to sudden reversals, partly flowing to safe havens in more stable countries (ECB 2016b). This shows that cross-border capital flows do not automatically stabilize the economy. Thus, returns on investments on foreign European equity markets may be a good way to stabilize and smooth the income in a macro- and microeconomic dimension.

3 Measuring cross-state private risk sharing in Europe

Sharing (macroeconomic) risks among the member states is an important promise of the European Union. This can be achieved through smoothing income growth, consumption and other economic activities. In theory, there are two important channels how risk sharing may take place. On the one hand, there is the private risk sharing channel. It works through the access of private agents to foreign capital markets as well as cross-border loans and deposits. Cross-border labor compensation belongs to the private channel. It appears when individuals and enterprises earn money in another member state. On the other hand, there is public risk sharing. This channel of cross-border risk sharing covers fiscal redistribution among the member states, including social protection, cross-border subsidies, and fiscal transfers (European Commission 2016a).

What is unclear, however, is how can cross border risk sharing be measured? In 1996, Asdrubali et al. demonstrated in their groundbreaking study how to use U.S. national account statistics to estimate cross-border risk sharing. They showed that, in the United States, capital and credit markets are more important for shock resilience than the federal tax-transfer system. Capital markets smoothed 39 percent of shocks to gross state product. The system of federal tax-transfer smoothed another 13 percent and credit markets further 23 percent. Thus, 25 percent of shocks were not smoothed. More recent studies, including the work of the European Commission (European Commission 2016a), confirm these levels of risk sharing in the USA with updated national accounts data.

Several studies used the methodology given by Asdrubali et al. (1996) to estimate the cross-border risk sharing levels in the euro zone and Germany. According to these studies, cross-border risk sharing within Germany is similar to that of the United States (Hepp and von Hagen 2006). However, cross-border risk sharing in Europe is significantly lower among euro area member states than among the U.S. states (CEPS 2016, European Commission 2016a). This is mainly due to a lower level of financial and fiscal integration in the European Union. While Germany and the USA are federations with a sizeable central budget, the European Union has limited spending power due to a small budget. Furthermore, cross-state equity markets are much more developed in the U.S. than among member states of the monetary union.

Own calculations confirm the results of the European Commission (European Commission 2016a). Table 1 shows that the unsmoothed share of an asymmetric shock is more than four times higher in the euro area than in the USA. Furthermore, only 5 percent of shocks to the gross domestic product are smoothed by capital markets compared to nearly 45 percent for the U.S.. Excluding the New Member States in the panel, the share of cross-border factor income decreases to a level of 2.1 percent. The credit markets provide around 19 percent of smoothing (27 percent in the U.S.) while cross-border fiscal transfers are zero percent (8 percent in the U.S.). Excluding the Baltics and the two other New Member States (Slovakia and Slovenia)¹ leads to a significantly higher credit markets risk sharing that is comparable to the USA. This may be due to better integrated cross-border loan and deposit markets in the core countries than in the new members of the euro zone. However, cross-borders fiscal transfers do not play a role in the core countries; these remain on a very low, but significant, smoothing-level of 1.6 percent.

1 New member state refers to countries that joined the euro zone in 2007 and later.

Table 1

Regression results

	[A] USA EC (2016a)	[B] Euro zone	[C] Euro zone Exclusive Baltics	[D] Euro zone Old members
	PC-OLS	2-step-GLS	2-step-GLS	2-step-GLS
Cross-border factor income	0.4476*** (11.98)	0.0496*** (6.56)	0.0227*** (6.63)	0.0210*** (2.82)
Cross-border fiscal transfers	0.0832*** (8.03)	-0.0010 (-0.58)	0.0255*** (11.74)	0.0161*** (8.63)
Credit markets	0.2668 (5.08)	0.1891*** (19.66)	0.2262*** (9.20)	0.2418*** (8.20)
Unsmoothed	0.1760*** (5.05)	0.7506*** (330.25)	0.6354*** (29.39)	0.6201*** (25.23)
Countries	50	13 ⁱ	11 ⁱⁱ	9 ⁱⁱⁱ
Period	1964–2013	2000q4–2015q4	2000q4–2008q3	2008q4–2015q4
Observations	2,500	793	671	549

The results of regression [A] are taken from the European Commission (2016a) that used an OLS estimator with panel-corrected standard errors. The models [B][C][D] follow the methodology of the European Commission (2016a) but are estimated by the authors. Here, a 2-step generalized least squares (GLS) is used where heteroscedasticity and cross-sectional correlation are used. All estimations use a AR(1) autocorrelation structure. Z-statistics are in parantheses. See for a detailed presentation of the methodology and database European Commission (2016a).

***= significant at the 1percent level; **=significant at the 5percent level; *=significant at the 10percent level. ⁱ

The panel sample covers thirteen countries of the euro zone. These countries are Belgium, Germany, Estonia, Spain, Finland, France, Ireland, Italy, Latvia, Netherlands, Portugal, Slovakia, and Slovenia. ⁱⁱ excl. Estonia and Latvia ⁱⁱⁱexcl. Slovakia and Slovenia.

Sources: European Commission (2016a), own calculations.

The estimation results for the euro zone core countries show that credit markets are much better integrated than capital markets. Output smoothing through cross-border income from property and equity is underdeveloped. Financial deepening may be traced back solely to credit markets in the euro zone. It is worth noting that the estimation results for the euro zone have to be seen as a rough guide to the level of cross-border risk sharing. The relatively strong reduction of capital market risk sharing if the two economically tiny Baltic countries are excluded may be a good example of a low, but existent, unsteadiness of the results. First, this is due to the fact that the methodology solely uses the national growth rates and therefore ignores the economic size of the different countries. Second, the necessary data are not available for every country of the euro zone.

4 Current limits for a deeper integration

The expectations and hopes of the Capital Market Union by institutions and economic think tanks are still very high (Feld et al. 2013; Constancio 2013, SVR 2013, Buch 2014). Seeing the

CMU as a strategy to increase the shock-absorbing capacities of the capital market is widely shared and has been reviewed by the European Commission (2016) and the European Central Bank (2016). Even the 2015 Five Presidents Report mentioned the enhancement of shock resilience of the EU economy (Juncker et al. 2015). However, it is questionable whether the euro zone would ever reach the mentioned U.S. levels of interstate integration. In this regard, it is doubtful that the euro zone member countries would ever fully benefit from deeper integrated capital markets in Europe.

The successful implementation of the CMU is tied to challenging requirements. The EU member states would have to reform substantially business and finance. Experience shows the complexity of harmonizing regulations among the member states. The empirical studies discussed in the preceding chapter argue that deeper integrated capital markets have the potential to enhance the level of economic shock resilience. Currently, there are three impediments to overcome in order to make the Capital Market union a story of success rather than a story of failure.

First, there is a much higher cultural and institutional divergence between the member states of the euro zone than between the states of the United States. Language is the smallest integration problem: Europeans have successfully dealt with these divergences for centuries. Rather, the main hurdles of integration will stem from high institutional diversity. Even the euro zone encompasses four distinct legal traditions (i) common law and French, (ii) German, (iii) Scandinavian, and (iv) former Socialistic legal traditions.

The rich work of Shleifer et al. (2008) about legal origins exemplarily shows that legal traditions tremendously influence the outcome of regulation and legal practices. The member's legal origin in the European currency union is highly diverse. It will be very demanding to harmonize structures of market architectures that are strongly tied to varying legal traditions such as taxes or bankruptcy laws.

The second hurdle to fully integrated financial markets are the comparatively unstable political and economic conditions within the euro zone. These weaknesses foster uncertainty about the future of the Euro. Since the financial market crisis the member states did not converge economically any further. Instead, economic growth is still subdued in several countries, while others follow a moderate but stable growth path. When the euro was introduced, many economists expected a gradual convergence process of the member economies. However, among the 12 countries adopting the euro in 1999 and 2001, real convergence before 2007 was limited and all progress was unraveled during the crisis. So far, the only sustainable convergence was the catching-up of the central and eastern European countries (ECB 2015). Therefore, the euro area is still a long way from being an optimal currency area.

The economic problems in the euro zone that emerged with the European debt crisis have persisted for more than six years. For many Europeans, the successful first decade of the Euro turned out to be a wrong track that did not enhanced sustainable growth and wealth but rather economic malaise. Especially in countries of the periphery, discontent with the euro zone became a fruitful breeding ground for nationalistic and anti-European sentiments. The 2015 refugee-crisis further fueled Euro-skepticism. The economic and political weakness of the euro zone has raised the possibility of single country drop-outs. This has almost been acknowledged by investors, even if the probability is currently low.

The possibility of a single country drop-out contradicts the idea of fully integrated financial markets. When the euro was introduced, national currencies were replaced with the euro, based on article 109 of the Maastricht treaty, based on the adoption of “irrevocable conversion rates,” as announced by the European Commission. The treaty does not provide for the possibility of a country leaving the currency union. However, reality may be different. The danger of member countries leaving the euro area became real. Greece only avoided leaving the euro zone (Grexit) because of a last minute deal with euro area leaders. Since then, the genie is out of the bottle.

Since 2012, the Euro Breakup Index (EBI), published by Sentix, an economic research platform, is the probability of a country quitting the euro area during the coming 12 months. The index is based on an internet survey of about 1,000 respondents. While surveys of this kind probably tend to have a substantial upward bias, the results of with probabilities between 10 percent and 25 percent in the first months of 2017 are concerning. Even if the probability is much lower in reality, the fear of a country drop-out will be a significant impediment for cross-border investments. Under these conditions, the euro zone cannot take full advantage of the benefits of a single (financial) market, even if the structural harmonization is perfect.

Another limit to more cross-border capital flows is the *prominent role of banks in the financial systems of most euro zone member countries*. In countries with a traditionally strong and healthy banking sector, however, the growth potential of capital market funding is limited since banks fulfil their role as dominant lender of capital. The ECB (2007) documents that the share of loans to total debt liabilities in the euro area before the financial crisis was 0.9, much higher than in the U.S. (0.6). Today, debt securities play a more prominent role with shares above 0.2 in only a few

Table 2

Liabilities of non-financial corporations in selected euro area countries in 2016

In billion euro

	EA	DE	FR	IT	ES	NL	BE	AT	FN	GR	PT
<i>Billion euro</i>											
Total financial liabilities	29,069.0	5,680.6	9034.9	3,528.9	3393	2,155.2	1,884.9	737.7	628	215.3	571.3
Debt Liabilities	12,772.0	3,018.2	3634.6	1,966.6	1,537.2	972.1	828.1	394.8	296.2	126.5	339.7
Loans	9,817.0	1,480.9	2181.0	1,118.2	1,100.0	720.4	613.6	275.5	204.8	110.0	178.1
Debt Securities	1,336.0	183.0	643.6	158.4	29.5	145.5	61.1	46.3	33.6	0.1	33.2
Life insurance and pension schemes	378.0	259.2	0.0	99.8	1.8	0.0	0.0	10.8	0.0	0.0	3.9
Other	1,241.0	1,095.1	810.0	590.2	405.9	106.2	153.4	62.2	57.8	16.4	124.5
Shares and other equity	16,297.0	2,662.4	5400.3	1,562.3	1,855.8	1,183.1	1,056.8	342.9	331.8	88.8	231.6
<i>Percent of the sum of loans and debt securities</i>											
Loans	88.0	89.0	77.2	87.6	97.4	83.2	90.9	85.6	85.9	99.9	84.3
Debt securities	12.0	11.0	22.8	12.4	2.6	16.8	9.1	14.4	14.1	0.1	15.7

Source: ECB.

countries, like Belgium and France, while Spain has the lowest share with 0.02 among the larger states. The financial and European debt crisis did not change the share of bank-based corporate finance even though many banks in the periphery of the euro zone had difficulties during the crisis (Table 2).

Imitating the financing structure of countries like the United States should not be the goal of the Capital Market Union, since it is not an appropriate blueprint for the euro zone. It would be too simplistic and misleading to think that market-based financial systems are better than bank-based systems. Comparative studies, like Allen et al. (2001), show that markets and intermediaries such as banks are alternatives that perform the same functions and may have similar success. In practice, different economic structures drive the larger share of bank intermediation in Europe. In Germany, for example, regional savings and cooperative banks mirror the regionally rooted German “Mittelstand” and its long-term relationships of banks and enterprises. The recent crisis years showed for Germany that the institutional diversity in the German banking system contributed to stable financing conditions for SMEs (Detzer 2014). The Capital Market Union has to cherish these structures by guaranteeing a one-level playing field that does not advantage special ways of funding.

Additionally, the vast majority of companies is simply too small to tap capital markets. Most corporations in the EU are SMEs. In 2008, the share of SMEs in EU-27 was 99.8 percent. According to the definition of the European Commission, SMEs are corporations with fewer than 250 persons employed and annual turnover of up to 50 million euro or a balance sheet total of no more than 43 million euro. A lower bound for the corporations with potential access to capital markets is the share of large corporations of 0.2 percent. If the share of medium-sized enterprises is included, the share remains low at 1.3 percent. Even in Germany, with its above average proportion of medium-sized enterprises, the upper bound of capital marketable enterprises would be 2.5 percent in 2014 (Institut für Mittelstandsforschung 2017).

5 Final remarks

The hurdles to deeply integrated financial markets in the euro zone are challenging. The three mentioned obstacles show that a successful implementation of the Capital Market Union will take years, if not decades. Furthermore, even if capital markets in Europe play a bigger role in the future, its growth potential should not be overrated. In most member countries, banks fulfill the task of SME-financing quite well and will probably continue to do so, as long as they act on a level playing field with capital markets. Only in countries with weak banking systems or in financing segments with market failures the growth potential of capital markets is significant.

But what has to be done in the coming years to reap full benefits of CMU? First, the euro zone must improve as a currency area. Currently, the risks of countries leaving the euro zone are too high. Few long-term investors and private households would consider investing their money in securities across the borders if they have to fear, though with a low probability, that they are being paid back in a different currency. Fostering economic convergence is a stepping-stone on the way to a more stable euro zone. According to the analysis of the ECB (2015), the lack of real convergence since the introduction of the euro is due to three factors. First, institutional conditions in some countries were not supportive for business innovation and underlying productivity growth.

Second, structural rigidities and a lack of effective competition contributed to a misallocation of capital. Third, the sharp drop in real interest rates triggered non-sustainable credit and investment growth that stopped during the crisis.

The analysis of the ECB shows that national economic policies are the key to structural improvements in the euro zone. Governments should have strong incentives to increase long-term prosperity. With the European Semester, an appropriate process is in place in the EU. However, national policy makers do not put enough effort in implementing policies that the European Commission recommends. However, there is still hope and time to change the euro zone. The OECD (2017) reports a slightly accelerated pace of reform in several countries, e.g. Austria, Belgium, France and Italy, of the euro area in 2015/16 compared to 2013/14. With the tailwind of euro area recovery, reform effects may become more and more visible in the coming years.

On the track to a better functioning currency union, the efforts to reduce public and private debt need to be increased in those countries with excessive debt. The reduction of public debt is critical for building up sufficient buffers for future downturns (ECB 2016c). Private debt levels pose an additional risk if they get out of hand. Protracted balance sheet recessions can hardly be alleviated by macroeconomic stabilization policy, especially in countries with limited fiscal buffers.

Finally, there are two more requirements that must be thought about in order to make the CMU a success. First, investors should be aware of the risks, especially in case of foreign capital market investments. Carefully calibrated market risk measurements would definitely help investors. Otherwise, investors, especially private households, may be pushed into very risky investments that may cause high losses. Second, the European Commission must ensure a single level playing field for all market participants. Capital market funding should not be favored through less regulation. Structural discrimination against banks, however, would surely undermine economic stability since banks play, and will play, a significant and important role in funding throughout the European Union.

References

- Alcidi, Cinzia, and Gilles Thirion (2016): Assessing the Euro Area's Shock Absorption Capacity, Centre for European Policy Studies (CEPS), CEPS Special Report, No.146, September.
- Asdrubali, Pierfederico, Bent E. Sorensen, and Oved Yosha (1996): "Channels of interstate risk sharing: United States 1963-1990", *The Quarterly Journal of Economics* 111 (4), 1081-1110.
- Buch, Claudia (2014): The banking union – setting the course for better integrated and more stable financial markets in Europe? Speech by Prof Claudia Buch, Deputy President of the Deutsche Bundesbank, at the 19th Handelsblatt Annual Conference, London, September 4, 2014.
- Constantio, Vitor (2013): Banking Union and the Future of Banking. Speech, Dublin, December 2, 2013.
- Detzer, Daniel (2014): The German Financial System and the Financial Crisis. *Intereconomics*.
- ECB (2007): Corporate Finance in the Euro Area. Occasional Paper No. 63, June.

- ECB (2015): Real Convergence in the Euro Area: Evidence, Theory and Policy Implications ECB Economic Bulletin, No. 5, 2015.
- ECB (2016a): Financial Integration and Risk Sharing in a Monetary Union. Financial Integration in Europe, April.
- ECB (2016b): Increasing resilience and long-term growth: the importance of sound institutions and economic structures for euro area countries and EMU. ECB Economic Bulletin, Issue 5.
- ECB (2016c): Government debt reduction strategies in the euro area. ECB Economic Bulletin, Issue 3.
- European Commission (2015): Green Paper: Building a Capital Markets Union. Brussels.
- European Commission (2016a): Cross-border Risk Sharing after Asymmetric Shocks: Evidence from the Euro Area and the United States. Quarterly Report on the Euro Area, 15 (2).
- European Commission (2016b): How to make the Economic and Monetary Union more resilient? Quarterly Report, 15 (3).
- Eurostat (2011): Key figures on European business with a special feature on SMEs. Eurostat pocketbook.
- Feld, Lars P., and Steffen Osterloh (2013): Is a Fiscal Capacity Really Necessary to Complete EMU? Paper presented at the Workshop “How to Build a Genuine Economic and Monetary Union”, May 30, 2013.
- Franklin, Allen, and Douglas Gale (2001): Comparing Financial Systems. Cambridge.
- Furceri, Davide, Aleksandra Zdienicka (2013): The euro Area Crisis: Need for a Supranational Fiscal risk Sharing Mechanism? International Monetary Fund Working paper, WP/13/198, September.
- Hepp, Ralf, and Jürgen von Hagen (2013): Interstate risk sharing in Germany: 1970–2006. Oxford Economic Papers 65 (1), 1–24.
- Hill, Jonathan (2014a): Capital Markets Union—Finance Serving the Economy. Speech, Brussels, November 6, 2014.
- Hill, Jonathan (2014b): Building to Last: Boosting Long-Term Investment in Europe. Speech, Rome, December 12, 2014.
- Hill, Jonathan (2015): Refocusing Financial Integration on Growth and Jobs, Speech, Brussels, April 27, 2015.
- Hoffmann, Mathias, Bent Sørensen (2012): Don’t expect too much from EZ fiscal union—and complete the unfinished integration of European capital markets! VoxEU, November 9, 2012.
- Institut für Mittelstandsforschung (2017): KMU in Deutschland.
- Juncker, Jean-Claude (2014): A New Start for Europe: My Agenda for Jobs, growth, Fairness and Democratic Change. Political guidelines for the next European Commission. Speech, Strasbourg, July 15, 2014.
- Juncker, Jean-Claude., Donald Tusk, Jerome Dijsselbloem, Mario Draghi, and Martin Schulz (2015): Completing Europe’s Economic and Monetary Union. European Commission.
- LaPorta, Rafael, Florencio Lopez-de-Silanes, and Andrei Shleifer (2008): The Economic Consequences of Legal Origins. Journal of Economic Literature, June.
- OECD (2017): Going for Growth. Paris.
- Sachverständigenrat zur Begutachtung der gesamtwirtschaftlichen Entwicklung (SVR) (2013): Gegen eine rückwärtsgewandte Wirtschaftspolitik. Jahresgutachten 2013/14. Wiesbaden.