

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Demary, Markus; Hornik, Joanna; Watfe, Gibran

Research Report SME financing in the EU: Moving beyond one-size-fits-all

IW-Report, No. 11/2016

Provided in Cooperation with: German Economic Institute (IW), Cologne

Suggested Citation: Demary, Markus; Hornik, Joanna; Watfe, Gibran (2016) : SME financing in the EU: Moving beyond one-size-fits-all, IW-Report, No. 11/2016, Institut der deutschen Wirtschaft (IW), Köln

This Version is available at: https://hdl.handle.net/10419/157172

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU



IW-Report - 11/2016

In cooperation with College of Europe:



College of Europe Collège d'Europe



SME Financing in the EU: Moving Beyond One-Size-Fits-All

Authors:

Markus Demary, Institut der deutschen Wirtschaft Köln demary@iwkoeln.de

Joanna Hornik, College of Europe joanna.hornik@coleurope.eu

Gibran Watfe, College of Europe gibran.watfe@coleurope.eu

12 April 2016

© Institut der deutschen Wirtschaft Köln Postfach 101942 - 50459 Köln Konrad-Adenauer-Ufer 21 - 50668 Köln www.iwkoeln.de Reproduction is permitted **Disclaimer**

The views presented here are those of the authors and do not reflect the views of the institutions with which they are affiliated.



2

Content

Exe	cutive s	ummary	3				
1.	Introduction						
2.	The SME landscape in Europe						
3.	Diversi	Diversifying the sources of financing for SMEs					
	3.1.	Types of SMEs according to their financing instruments	7				
	3.2.	Capital structure of SMEs in the EU	9				
	3.3.	Impact of CMU across types of SMEs	. 16				
4.	Tackling the cross-country differences in SME financing						
	4.1.	Types of SMEs across country clusters	. 18				
	4.2.	Market structures for SME financing in the EU	. 20				
	4.3.	Impact of CMU across countries	. 24				
5.	Conclu	sion	. 26				
Ref	erences		. 28				



Executive summary

The proposal for a European Capital Markets Union (CMU) carries large potential economic benefits from enhancing the financing possibilities for Small and Medium-Sized Enterprises (SMEs). By deepening the capital markets and strengthening cross-border integration, the European Commission hopes to stimulate economic growth and boost employment. In this paper, we discuss to what extent these goals can be achieved, in light of the complex business environment of European SMEs. We outline the different types of SMEs in terms of their financing structures as well as the pervasive differences across the EU, concluding that any policy approach must take into account the diversity of the companies' financing needs and the market realities in the Member States. We argue that the CMU is likely to have a heterogeneous impact, with some types of SMEs and certain regions gaining more than others.

About the authors:

<u>Dr. Markus Demary</u> studied economics at Rheinische Friedrich-Wilhelms-Universität Bonn and achieved a doctoral degree from Christian-Albrechts-Universität zu Kiel. He teaches behavioural finance at Ulm University and has been working at the Cologne Institute for Economic Research since 2008.

<u>Joanna Hornik</u> is an Academic Assistant for the European Law and Economic Analysis (ELEA) and European Public Policy Analysis (EPPA) options at the Bruges campus of the College of Europe. She has an MA in European Economic Studies (ELEA) from the College of Europe and a BA in Economics, Political Science and International Relations from University College Roosevelt (Utrecht University). Her fields of interest include EU competition law and policy, economics of IPR, and economic analysis of European public policy.

<u>Gibran Watfe</u> is an Academic Assistant in the Economics Department at the College of Europe, Bruges. He holds an MA in European Economic Studies from the College of Europe and an MSc in Economics from Humboldt University. Gibran has previously founded *rethink finance*, a financial services start-up company and has worked as teaching assistant at Maastricht University's School of Business and Economics. His research interests include monetary economics, financial markets and applied econometrics.



1. Introduction

At its basis, the initiative of the European Commission to build a Capital Markets Union (CMU) in the EU is a package of policy actions designed to remove barriers to integrated capital markets as well as to bank lending. Many of the proposed policy actions aim at improving the financing conditions for small- and medium-sized enterprises (SMEs), which should boost investment and growth in the EU.

This focus is justified by evidence that SMEs account for a major part of economic growth and employment. According to Kraemer-Eis et al. (2013), there are 21.3 million SMEs in Europe, which employ 88.6 million workers and produce 3,357 billion Euro of gross value added. Moreover, the majority of companies in Europe are small. In Germany, for example, 80.7 percent of the 2.9 million non-financial companies are small, with less than 10 employees, 15.6 percent have 10 to 49 employees, and 2.9 percent are medium-sized with 50 to 249 employees, while only 0.7 percent are large companies with 250 or more employees. Considering such an important presence of SMEs on the European business landscape, the CMU proposal has the capacity to unleash large growth potential for our economies.

However, the SME environment itself is not a unidimensional one. Not only do SMEs differ in terms of their financing needs but also there are large cross-border differences in types of SMEs and their financing possibilities. Therefore, we argue that the effect of the proposed policy actions may be heterogeneous across different types of SMEs as well as across countries. The SME landscape in Europe can be affected to a considerable extent and there will be both winners and losers from the CMU.

This paper considers two of the goals set out by the Commission with respect to creating a true Capital Markets Union: 1) broadening the sources of finance for SMEs and 2) reducing cross-country disparities in financial services. The question we raise throughout is how the proposals contained in the CMU Action Plan (European Commission, 2015a) might have a heterogeneous impact across different types of SMEs as well as across countries.

For this purpose, the analysis focuses on identifying different types of SMEs according to their past use of financing instruments and the evolution of their capital structure. The findings are used to derive policy implications with respect to the different proposals contained in the Action Plan. Subsequently, the cross-border disparities are described and the potential impact of the CMU on SME landscape in different Member States is discussed. We conclude with some policy recommendations and potential challenges.



5

2. The SME landscape in Europe

First of all, it has been found that firms' financing behaviour is dependent on their size.1 Larger companies are probably more active on capital markets than smaller companies due to the fixed cost of issuing securities. Moreover, large companies have treasury departments which are necessary for managing the high amounts of liquidity from the issuance of stocks or debt contracts. They also have more resources to cover documentation and compliance costs.

To a certain extent, the cost of going to capital markets is a variable that can be controlled by policy actions. One example is the exemption threshold in the Prospectus Directive. When issuing securities, companies have to produce extensive documentation in order to ensure investor protection. However, the threshold for an issuance from which a prospectus is required can be adjusted. Thereby, the fixed costs of issuance can be influenced.

Second of all, countries in the EU differ to a large extent with respect to the depth of their capital markets. We know that small companies might rely less on capital market financing because of a lack of depth of their country's capital market. Whether the financing system of a country is more bank-based or more market-based depends on historic origins. The US, for example, had a separation of commercial banking and investment banking since the Glass-Steagall Act of 1933 which was loosened only in 1991. In contrast to the US banking system, Europe has a universal banking landscape with large banks covering commercial and investment banking activities. While there has been demand for capital market financing in the US, in Europe such demand was limited because of the presence of universal banks. This might represent a structural barrier that is very difficult to tackle through policies. While in the USA 80 percent of corporate debt financing depends on capital markets, in the EU 90 percent depends on bank financing (Figure 1). Thus deepening the European capital markets appears to be a necessity because especially the Euro Area is prone to banking crises which worsen the financing conditions of nonfinancial companies. A deepening of capital markets can lessen credit shortages in the aftermath of a crisis.

Other factors that have been identified to differ across SMEs include firm age, its ownership structure, the past, present and expected growth rates and profitability (Moritz et al., 2015). The firm-specific differences are complemented by diverse characteristics in terms of product or service innovation and industry-specific elements. The more established and larger firms tend to use more diversified

¹ See, for example, Beck et al. (2008); Canton et al. (2012); Hall et al. (2000); Holton et al. (2014).



financing instruments when compared to smaller and younger ones (e.g. Artola & Genre 2011). Firms that are owned by families or have more than one owner typically profit from a wider range of financing sources. Moreover, the more innovative and high-growing SMEs turn to more numerous financing instruments, especially alternative and short-term financing. Lastly, firms active in the services industry rely more on internal financing while industry-intensive sectors tend to be largely reliant on debt. Such a diversified SME landscape requires focused policy actions that take into account the specific context of each companies' financing decisions.

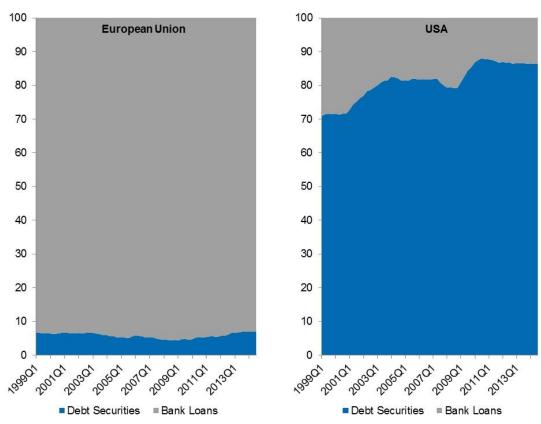


Figure 1: Financing structure in Europe and USA

In percent of debt capital

Sources: European Central Bank, Federal Reserve Bank of St. Louis, own calculations

This short overview of the SME landscape in Europe illustrates that the policy proposals included in the CMU action plan might impact the financing reality of SMEs differently, depending on a number of key characteristics. Any policy action should take into account the multiple factors that determine the financing patterns of SMEs. The subsequent analysis aims to outline the potential impact of the CMU on financing of different types of SMEs across the EU Member States, pointing out possible obstacles and negative side-effects.



3. Diversifying the sources of financing for SMEs

3.1. Types of SMEs according to their financing instruments

The broadening of financing sources is especially important for SMEs as large companies already have a wide range of financing instruments available. However, the concept of small- and medium-sized companies is very generic, depending on the staff headcount and the turnover, or the balance sheet respectively (European Commission, 2003).

Instead of being a homogenous group of companies, SMEs are very diverse with respect to the sector, country, growth potential, size, innovativeness and existing sources of financing. On the basis of their different sources of finance, Moritz et al. (2015) use a cluster analysis to identify six types of SMEs according to their use of financing instruments. The method they employ is a "multivariate method with the purpose to classify objects according to their occurrences".2 Thereby, the assumption is that the included variables capture the most relevant characteristics of SMEs in the EU.3

As active clustering variables, the authors use 11 different financing instruments employed by SMEs. The passive variables are a set of 11 characteristics in which SMEs may differ, among them firm size, age, ownership, past growth, expected growth, profitability, sector and country. The selection of variables was based on an empirical literature review.

As it is of specific importance for the analysis in this paper, it has to emphasize that the inclusion of the country as a passive variable is motivated by the empirical literature finding dependence of SME financing on the macroeconomic, legal and institutional environment. This environment is in practice defined along national lines as confirmed by their findings that country differences are more significant than firm, product, or industry differences.

The cluster analysis approach allows the authors to develop a taxonomy of SMEs in Europe based on a sample of 12,312 SMEs. A significant limitation of the approach is, however, that it allows the authors only to focus on SMEs' uptake of financing instruments over the previous six months. A short description of each identified cluster follows. Whenever it is mentioned that certain types of SMEs are more prevalent in one region or system than in another, this refers to comparing the shares of these types in the total number of SMEs in a country or system (see Figure 3).

² For further details, see Hair et al. (2010).

³ More specifically, Moritz et al. (2015) use Ward's method as an algorithm that optimizes the homogeneity within clusters. This was their preferred choice as other algorithms produced very unbalanced clusters.



Mixed-financed SMEs

Mixed-financed SMEs use a broad range of different financing instruments. Firms in this cluster are often rather young, innovative and have high future growth expectations. They tend to be most prevalent in Northern Europe and in market-based financial systems.

State-subsidised SMEs

State-subsidised SMEs mainly make use of subsidised bank loans. This is typically complemented by other forms of debt. These firms are mostly medium-sized, innovative, family-owned, with rather high past growth rates and medium future growth expectations. They tend to be located in Southern Europe and in bank-based financial systems. This is regardless of the absolute amounts of state aid for SMEs, as it results from a comparison of shares of SMEs across EU Member States that make use of state subsidies.

Debt-financed SMEs

The third type of SMEs, debt-financed firms, are primarily financed by bank loans and other forms of debt. They are typically mature, low-innovation, low-growth firms. Debt-financed SMEs are most prevalent in Western Europe as well as in bank-based systems.

Flexible-debt-financed SMEs

Flexible-debt-financed SMEs are usually financed by short-term bank debt in the form of bank overdrafts and through trade credit and leasing. A typical flexible-debt-financed SME is a mature micro firm with a single owner. These firms are mostly located in Western Europe and in bank-based systems.

Trade-financed SMEs

Trade-financed SMEs are, as the name suggests, primarily financed by trade credit and typically also through factoring and leasing arrangements. Typical attributes of a trade-financed SME include being young, small and having a rather low historical growth rate. This type of firm is more common in Northern Europe and in marketbased economies.

Internally-financed SMEs

Finally, internally-financed SMEs mainly use retained earnings, instead of external financing sources. None of the internally-financed SMEs in the cluster identified by Moritz et al. (2015) made use of external debt. Typical firm attributes are being very young and small as well as being single-owner with low growth expectations and low



innovativeness. Internally-financed SMEs are most prevalent in Eastern Europe but in fact are the dominant type throughout Europe.

The analysis of Moritz et al. (2015) shows that it is instructive to identify different types of SMEs. Without aiming at sharply defining an SME landscape, their analysis crystallizes the heterogeneity of SMEs, both in the structural and in the cross-country dimension. As there are different financing types of SMEs, the effects of the CMU policy efforts are likely to differ for each type of SME. At the same time, the identified clusters are not fixed. The relative importance of the clusters will change as a result of the CMU, meaning that some types will become more prevalent than others.

3.2. Capital structure of SMEs in the EU

This section covers the capital structure of European SMEs using examples of particular countries. Before embarking upon a policy agenda that aims at broadening the financing sources for SMEs, it is important to understand the relative importance of financing sources today. For this purpose, we examine SME financing along two dimensions. Firstly, we look at the equity-debt shares of SMEs. Secondly, a closer look at the composition of SMEs' debt follows. Using balance sheet data from SMEs in a sample of EU Member States, a few broad trends can be observed:

- Companies (including SMEs) have increased their equity capital ratios between 2006 and 2013.
- Bonds are used mostly by large companies rather than by SMEs; however, bond finance is only a small share of the balance sheets.
- Bank loans make a large part of the balance sheets of companies, with longterm loans being more important than short-term loans.
- The importance of short-term bank loans is decreasing over time, since companies rely more on short-term loans from non-financial corporations. This might be due to a more frequent use of cash-pools and intra-company financing solutions. The trade-financed SME thus seem to have gained importance between 2006 and 2013.

Equity Capital and Debt Capital

In many European countries companies, including SMEs, have increased their equity capital ratios and reduced their debt levels between 2006 and 2013.4 This process is not a direct response to the financial crisis since it began earlier as can be seen from

⁴ Due to data availability, balance sheet data is limited to nine countries. We focus on the manufacturing sector here. It is important to note that, in the context of the SME financing types, the sample includes seven bank-based economies from Western and Southern Europe and two former socialist economies from Eastern Europe. Market-based financial systems as well as Northern European countries are not represented.



Table 1, which contains the equity capital ratios of manufacturing firms. Since equity capital is measured as a fraction of total assets, a higher equity capital ratio corresponds to lower indebtedness.

Italian firms, i.e. mainly state-subsidised and debt-financed firms, had the lowest equity capital ratios in 2006 but managed to increase them. The small companies lifted their capital ratios from 22.4 percent of their total assets to 28.2 percent, the medium sized-companies increased their equity capital from 28.0 percent to 35.7 percent, while the large companies increased their capital levels from 31.6 percent to 36.3 percent. The small companies in Germany had the largest increase in equity capital. Their capital base rose from 27.9 percent to 37.8 percent. The trend holds across all company sizes and countries included in the sample, with Portugal and Slovakia being exceptions to the rule.

Table 1: Equity Capital Ratios

	Small Companies		Medium-sized Comp.		Large Companies	
	2006	2013	2006	2013	2006	2013
AT	26.9	32.9	35.3	37.6	40.9	42.0
BE	44.6	52.3	41.7	43.0	41.7	50.8
DE	27.9	37.8	33.9	40.1	29.7	32.6
ES	38.1	46.3	44.0	47.5	37.0	38.8
FR	38.6	42.7	37.2	41.7	36.8	36.5
IT	22.4	28.2	28.0	35.7	31.6	36.3
PL	44.2	50.6	48.6	53.8	51.6	51.6
PT	39.0	32.6	43.0	43.5	47.5	38.5
SK	30.8	33.6	43.7	43.0	56.7	37.3

Manufacturing firms, in percent of total assets

Source: Banque de France, Cologne Institute for Economic Research

The reason behind the higher equity capital ratios might be the companies' desire to strengthen their credit scoring. Through the Basel II regulation, banks had to put more weight on credit scoring for granting loans. That might have given especially the smaller companies an incentive to enhance their credit scoring, since larger companies already had credit scorings provided through rating agencies.

Increasing equity capital ratios possibly point to a rise of internally-financed and mixed-financed SMEs since 2006. While this cannot be inferred with certainty from



the data, the trend of increasing equity capital ratios is generally desirable from the perspective of the CMU since numerous policy efforts intend to strengthen the capital base of SMEs.

Bank Finance and Bond Finance

While equity capital is a very important source of funding, SMEs can also rely on debt capital to finance investments. To this end, SMEs can either issue debt contracts, such as bonds, or they apply for bank loans. In fact, one has to recognize that also large corporations rely only to a tiny amount of up to 3.5 percent of their total assets on the issuance of debt contracts (Table 2). For SMEs, this share is even smaller. In many European countries, bond issuance plays a very limited role in SME financing. This can be either because of a lack of depth in the countries' capital markets or because of high fixed costs connected to bond issuance. Another explanation could be the lack of demand for external finance by European SMEs. Interestingly, European banks predominantly issue long-term bonds and less short-term bonds. The reason behind this might be the high costs of bond issuance that only break even in the case of long-term financing.

Table 2: Long-Term Bonds

	Small Companies		Medium-sized Comp.		Large Companies	
	2006	2013	2006	2013	2006	2013
AT	0.6	0.4	0.2	0.1	0.7	0.4
BE	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
DE	0.1	0.0	0.3	0.1	1.4	2.8
ES	0.0	0.0	0.0	0.0	0.0	0.4
FR	0.1	0.1	0.1	1.5	0.5	0.8
IT	0.2	0.2	0.8	0.6	0.6	1.2
PL	0.0	0.2	0.1	0.2	0.4	1.3
PT	0.1	0.0	1.1	0.2	4.5	3.5
SK	0.2	0.1	0.2	0.3	0.0	0.0

Manufacturing firms, in percent of total assets

Sources: Bank de France, Cologne Institute for Economic Research

Banks continue to play a central role in SME financing. Most SMEs have long-term relationships to local banks. These long-term relationships can be beneficial for both sides. In contrast to a short-term lender, a relationship bank has a higher incentive to



become familiar with the business models of its debtors. This is important for SMEs because of the diversity in their business models. While a low-innovation and low-growth company might be uninteresting from an equity or bond investor's point of view, such a company can be interesting from a bank's point of view because it might be characterized by a lower credit risk than a company with an innovation or growth strategy. Therefore, the high prevalence of debt-financed SMEs in Western Europe could be endogenous. This means that it might not be the dominance of banks that causes SMEs to be reliant on bank loans but it could rather be the SMEs' business models that make them relatively more attractive for banks than for capital markets.

Another advantage relationship banks have compared to capital markets is the long track record of the SMEs' financial health through frequent transactions, from which the bank can determine the SME's credit risk more precisely. Such precision is beneficial for the companies because they can better signal their creditworthiness to the bank from which they can profit through lower credit costs. Capital market investors typically demand higher risk premia instead because they lack this long track record of the companies' creditworthiness. Moreover, capital market investors have lower incentives to screen and monitor the creditworthiness of companies because they can freeride on the information contained in financial market prices of stocks or bonds of similar companies. This prevents a precise estimate of the smaller companies' creditworthiness.

The problem of asymmetric information in signalling creditworthiness is more severe in case of SMEs as compared to larger corporations. SMEs are often specialized single-product manufacturers while larger companies have diverse product lines and are therefore more frequently recognized in the news. Long-term relationships can account for the fact that a specialized single-product SME can be a highly successful company with stable cash flows, without the need for frequent innovations. Smaller companies, therefore, often rely on bank finance (Table 3). In Austria, short-term bank loans make 13.0 percent of the balance sheet of small companies, 11.7 percent of the balance sheet of medium-sized companies but only 6.4 percent of the balance sheet of large companies. The numbers are comparable for other European countries, e.g. 12.9 percent and 14.8 percent for small and medium-sized companies in Italy but only 8.3 percent for large companies. A qualitatively similar result can be found for long-term loans. In Spain, 11.5 percent of the balance sheet of small companies are long-term loans, while the shares are 7.6 percent for medium-sized companies.

While relationship banking can be beneficial for SMEs, these benefits depend on the health of the banking sector. When banks realize large losses on their assets, e.g. through a deep recession and a sovereign debt crisis, their capital base might shrink to a critical threshold from a supervisor's point of view. Since banks' regulatory



13

capital requirements are defined as equity capital in percent of risk-weighted assets, the easiest way for banks to react to their shrinking equity capital base is to decrease their risk-weighted assets which means they cut lending or sell assets.

The empirical observations of bank lending during the last financial crisis can be summarized as follows (Central Bank of Ireland, 2015):

- The decline in bank lending explains approximately half of the decline in real GDP in the Eurozone and the US (Gambetti and Musso, 2012).
- Banks' restricted access to money markets during 2007 to 2009 has led to a significant decline in bank lending to non-financial corporations (Hempell and Sorensen, 2010).
- Banks which were hit by the crisis cut their lending more compared to banks which were not hit by the crisis (Chava and Purnandam, 2011).
- Non-financial companies which rely mostly on bank credit suffered more from the financial crisis compared to corporations which also had access to alternative financing sources (Bofondi et al., 2013).
- Companies which were customers of distressed banks faced tougher credit restrictions compared to companies which were customers of non-distressed banks (Bentolila et al., 2013).

First of all, this justifies the Commission's intention to make it easier for SMEs to diversify their financing sources towards capital markets. Second of all, the empirical findings point to the fact that debt-financed SMEs were the most affected by the financial crisis as negative shocks to banks' balance sheets transmitted to the SMEs via cuts in bank lending. Thus, SMEs that had more diversified financing sources proved to be more resilient to the crisis. An SME that depends on a single bank is highly exposed to a negative idiosyncratic shock as long as the bank is weakly capitalized and has strong capital market exposures and thus very vulnerable to banking crises.

However, a more differentiated look into the banking sector reveals that there exist important differences with respect to crisis resilience. While the larger and active in capital markets banks went into crisis, more customer-oriented local banks fared relatively better. This holds, at least, for the German banking sector. Figure 2 shows the returns on equity of the German banking branches. The largest banks and the Landesbanken, both of which were active in capital markets, had negative returns on equity of -10.5 and -7.3 percent between 2008 and 2010 respectively, while the locally oriented savings banks (Sparkassen) and the credit unions (Kreditgenossenschaften) had positive returns on equity of 8.0 and 8.9 percent. The higher profitability of the local banks resulted to a large extent from avoiding risky investments. Together with their high profitability and high capitalisation, this means that they did not have to cut lending during the financial crisis.



Table 3: Short-term and Long-Term Bank Loans

Manufacturing, in percent of total Assets

	Small Co	ompanies	Medium-sized Comp.		Large Companies		
	2006	2013	2006	2013	2006	2013	
	Short-term bank loans						
AT	16.2	13.0	13.5	11.7	7.5	6.4	
BE	5.4	4.9	5.5	4.5	4.5	2.3	
DE	9.7	8.9	7.2	6.1	1.7	1.3	
ES	13.5	6.3	13.0	9.0	4.9	4.0	
FR	4.1	2.5	4.6	2.6	3.0	1.6	
IT	14.2	12.9	16.9	14.8	9.2	8.3	
PL	9.5	8.2	11.7	9.0	9.0	7.2	
PT	10.7	8.6	9.4	9.1	3.8	3.8	
SK	8.1	7.5	5.5	8.6	2.9	10.7	
	Long-term bank loans						
AT	17.8	17.2	9.4	8.5	5.4	4.1	
BE	10.5	6.2	5.4	5.5	12.2	9.2	
DE	10.2	9.7	7.0	6.1	1.8	2.5	
ES	11.0	11.5	7.2	7.6	5.3	4.9	
FR	11.5	11.8	8.1	8.3	4.2	3.5	
IT	6.7	7.7	8.1	7.8	6.2	5.0	
PL	7.2	9.3	7.5	8.2	7.9	9.3	
PT	9.9	12.2	8.0	10.7	3.0	4.9	
SK	6.4	4.2	10.5	4.6	4.5	3.5	

Sources: Banque de France, Cologne Institute for Economic Research

It appears that we cannot directly conclude that companies can easily switch to capital markets when their banks go into crisis and cut lending to the economy. When banks go into crisis, the insolvency risks of their sovereigns, measured by premia on credit default swaps, normally rise because markets expect the sovereign to rescue its banks by means of public spending. When credit rating agencies downgrade the



sovereign's credit rating, the credit ratings of all companies located in this country also experience a downgrade, which can worsen their funding position in capital markets. While the CMU cannot prevent this, it can enrich the availability of funding sources for companies and thereby calm the negative effects of a credit crunch.5

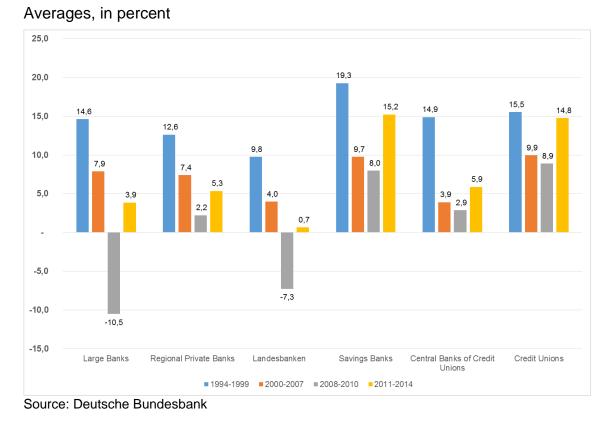


Figure 2: Returns on Equity of German Banks

However, the empirical findings also point to a largely neglected risk of CMU. By

inducing SMEs to revert relatively more of their funding towards capital markets, banks may also adjust their business models and become more active in capital markets. Therefore, the banking sector as a whole would be more vulnerable to negative shocks in the financial system, transmitted through capital markets. While today most SMEs in the EU are dependent on banks due to their use of bank loans, SMEs could in the future become dependent on banks through a combination of bank loans and, more indirectly, capital market services. Typically, the latter are provided by universal or investment banks. Therefore, given that SMEs will rely more on capital markets in the future, an ailing banking sector could affect SMEs even more than during the last financial crisis.

⁵ It is worth noting that the CMU is not intended to break the sovereign-bank nexus. It is rather the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism (SRM) that tackle this issue.



3.3. Impact of CMU across types of SMEs

As most of the SMEs in the EU are internally-financed and debt-financed and the CMU is intended to broaden the financing sources of firms, the benchmark for SME financing from the perspective of the Commission is the mixed-financed SME. That means that the proposals mainly target the markets for equity capital to induce previously debt-financed SMEs to develop in the direction of mixed-financed SMEs. This is not an entirely new priority of the Commission. In 2014, the Commission adjusted the state aid rules for risk finance in a way that encourages equity funding.6 In this section, each of the proposed policy actions in the context of the CMU is analysed in this light.

Support of venture capital and equity financing

The CMU Action Plan indicates the policy initiatives that will be taken for setting up venture capital fund-of-funds as well as multi-country funds. Moreover, the EuVECA and EuSEF Regulations for EU-wide passports of venture capital funds will be revised to increase their take-up. Finally, tax incentives will be considered for venture capital and business angel investments.

Taken together, the proposals aim at strengthening the access to finance for startups, i.e. very young SMEs with high growth expectations and low current profits. Start-ups are very often mixed-financed firms, using funds from business angels in the form of debt and/or equity, their own equity, and venture capital investments, which usually come in the form of equity or equity-like instruments. Only rarely do banks take the high risk to invest in early-stage start-up companies, given their very high default rates. Moreover, start-ups may find it unattractive to accept equity funding as this usually entails a dilution of ownership.

Nevertheless, the proposals for promoting venture capital are likely to make the mixed-financed SME more prevalent as equity becomes more readily available for young SMEs. They would thereby also likely lead to a change in the average capital structure of SMEs towards more equity and less debt, contributing to the prevailing trend in the capital structure of SMEs.

Overcome information barriers to SME investment

Under this heading, the Commission wants to strengthen the feedback given by banks when declining SME credit applications. This applies primarily to debt-financed

⁶ Commission Communication 2014/C 19/04.



SMEs. As discussed above, SMEs' debt comes mainly in the form of bank loans. Companies whose credit applications are declined would have a better chance to adjust their business model and obtain a bank loan if they are given more comprehensive feedback. This could give especially internally-financed SMEs better access to external funding.

Furthermore, existing national support and advisory structures for SMEs are to be collected and a possible pan-European information system for SMEs is envisaged. The former would give a better opportunity to SMEs to benefit from the public in a different way than with state subsidies, i.e. with public services instead of public funding. It could thus partially replace subsidies and make the state-subsidised SME less prevalent. The latter would possibly alleviate some of the information problems described above and thereby lead SMEs to make use of a broader base of financing instruments. This would be particularly important for flexible-debt-financed and internally-financed SMEs. These types of SMEs could gain the most from improved harmonisation of company information.

Promote innovative forms of corporate financing

This part of the CMU Action Plan contains the proposal to issue a report on crowdfunding and to develop an approach to loan origination by funds. Crowdfunding mainly comes in the form of equity and is – at least currently – most relevant for start-up companies. It represents financial innovation on the equity side and would likely lead to a shift of SME capital structures towards equity, if only for mixed-financed SMEs, or start-ups to be more precise. Other SMEs might opt for diversifying their sources of finance by including crowdfunding to finance the development of single products or raising funds for specific purposes.

Loan origination by funds is financial innovation on the debt side. It might be interesting for debt- and flexible-debt financed SMEs to diversify away from bank loans while still keeping their capital structure unchanged. Thereby, it could serve as a substitute for bank lending in so far as it could be a different form of relationship lending. However, as is always the case with financial innovation, this comes with potential benefits and largely uncertain costs.

Making it easier for companies to enter and raise capital on public markets

Proposals under this heading include a revision of the Prospectus Directive, the listing regime in the EU, and a review of regulatory barriers to SME listings.

As the name suggests, this part of the CMU action plan is supposed to make it easier for SMEs to raise equity. Thus, it is especially suited for mixed-financed SMEs. Success would depend on whether other types of SMEs would be induced to switch into the mixed-financed type, using the more readily available opportunities to raise



equity on public markets. If that were successful, a larger share of SMEs would become mixed-financed by diversifying their funding sources. Once again, the average capital structure would change towards more equity and less debt.

Support bank financing of the wider economy

The Action Plan also includes ideas on developing frameworks for covered bonds and for the securitization of SME loans. The latter is currently in the legislative process with difficult and prolonged negotiations.

Both of these proposals aim at enabling banks to lend more of their funds to SMEs. Therefore, this would mainly strengthen the financing base of debt-financed SMEs. While a high-quality legal framework for securitization would lead to higher growth of bank lending, it could also in practice lead to more risk-taking behaviour.

4. Tackling the cross-country differences in SME financing

The CMU Action Plan involves a number of actions under the heading "facilitating cross-border investing". This initiative seems necessary as evidence suggests that there is in fact no single market for capital in the EU. In order to analyse to what extent the Commission's proposals can affect capital market integration, we firstly describe the cross-country differences in the types of SMEs and the various financing structures prevalent in Member States. The last section then discusses to what extent the CMU can alleviate the existing cross-country differences in SME financing.

4.1. Types of SMEs across country clusters

The Moritz et al. (2015) study of SMEs across Europe identifies a number of countryspecific characteristics in SME financing patterns. The authors conclude that differences across country groups are higher than those pertaining to other characteristics, specific to firm structure, product types or industry. The study looks at four country clusters based on geography: Eastern – Northern – Southern – Western Europe.

The Eastern European cluster comprises six post-communist states that joined the EU in either 2004 or 2007 (Bulgaria, Czech Republic, Hungary, Poland, Romania and Slovakia). In this group, more than 45 percent of SMEs are internally-financed, which is a much larger share than in all the other clusters (27.0 percent, 26.8 percent and almost 30 percent in North, South and West respectively). At the same time, the Eastern European states have the lowest share of flexible-debt-financed SMEs (9.8



percent) and a relatively high share of state-subsidized SMEs (6.3 percent). The share of mixed-financed SMEs is the smallest in this cluster (14.4 percent) as compared to other regions. Given the large share of internally-financed SMEs, the potential benefits for opening up capital markets to Eastern European SMEs seems to be particularly high.

The group with the largest share of debt-financed SMEs (20.2 percent) are the seven Western European countries: Austria, Belgium, Germany, France, Luxembourg and the Netherlands. Out of them, six (except for the Netherlands) have bank-based market systems. The Western states also have the second largest share of internally-financed SMEs (29.8 percent).

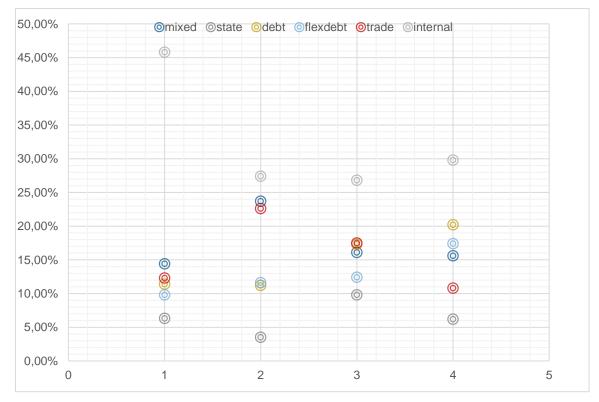
The cluster that demonstrates the highest share of mixed-financed SMEs (23.7 percent) consists of Norther European states (Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Norway, Sweden and the UK). Interestingly, this cluster groups together market-based countries (SE, UK, FI), bank-based countries (NO, IE) as well as some former socialist states (EE, LT, LV). The mixed-financed SME thus seems to be a role model that applies to all types of market structures in the EU. Finally, the Northern cluster is also characterized by a very low share of state-subsidized SMEs (3.5 percent) and a relatively high share of trade-financed companies (22.6 percent).

The Southern countries include Cyprus, Spain, Greece, Hungary, Italy, Portugal and Slovenia. Interestingly, being a mixture of bank-based and former socialist countries, the cluster has the highest percentage of state-subsidized SMEs (9.8 percent) and second highest share of debt-financed SMEs (17.3 percent) after the Western states. Out of the four clusters, Southern Europe has the lowest share of internally-financed SMEs (26.8 percent). In this region, a move away of state-subsidized SMEs towards capital market funding could have two beneficial effects. First, it could unleash the highly desirable public resources. Second, it could make Southern economies more competitive due to mark-to-market valuation of SMEs.

The shares of different SME types across the four country groups are displayed in Figure 3. The analysis of country clusters reveals that regardless of the region, European SMEs are for now mostly internally-financed, meaning they do not use external debt. The remaining share of financing methods is very different per country group. The clusters vary in the extent to which they rely on state subsidies or financing from trade. Except for Northern Europe, most regions remain reliant solely on debt financing (whether from trade, state subsidies or bank loans). In this respect, broadening the sources of financing to include more capital market instruments through the CMU seems to be a relevant proposal for SMEs across the EU.



Figure 3: Types of SMEs across country clusters



1-Eastern; 2-Northern; 3-Southern; 4-Western.

4.2. Market structures for SME financing in the EU

It can be found that the financing systems of the Member States are diverse. For SMEs in particular, the country-specific discrepancies in bank vs. capital markets financing can have profound implications. In bank-based countries, most SMEs are either internally-financed (27.1 percent) or debt-financed (18.6 percent). It is in market-based countries that we find the largest share of mixed-financed (23.7 percent) and trade-financed SMEs (21.2 percent).

The strong reliance on debt financing in bank-based systems puts SMEs at a disadvantage, compared to larger companies, due to higher interest rates on small loans (European Commission, 2015b). Those differences are equally conspicuous across countries, with Portugal, Spain and Italy maintaining higher costs of credit when compared to Germany and France. Based on its access to debt finance index, the Commission identifies the relative difficulties in the access to bank loans for

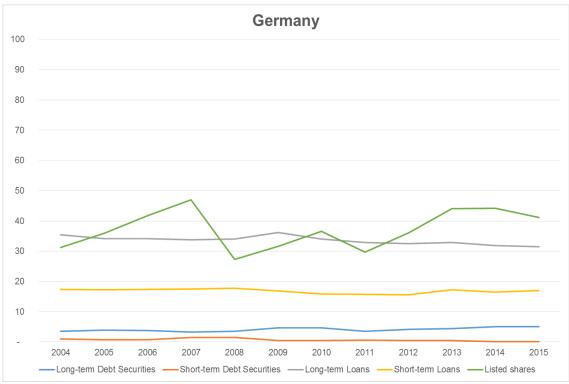
Source: European Investment Fund



SMEs in some of the former socialist countries (Romania, Hungary and Bulgaria) but also in Denmark or Spain, as compared to the EU average.7

In order to analyse the quantitative importance of banks and capital markets for the financing of companies in different Member States, the aggregated liabilities of non-financial corporations are divided by the countries' Gross Domestic Product to control for the size of the countries' economies and to flatten out business cycle fluctuations. We use the examples of three Member States to illustrate the diversity. Germany provides an example of a country where both bank and capital markets are well-developed. On the other hand, at the extremes, the UK has a very deep capital market and Latvia a very small one.

Figure 4: Equity and financial Liabilities of Germany



In % of GDP

Source: European Central Bank, Cologne Institute for Economic Research

For Germany (Figure 4), it can be found that although financing is dominated by banks, the country also has a deep stock market. Listed stocks were 31 percent of GDP in 2004 and rose to 47 percent of GDP in 2007. In the crisis year 2008, they fell to 27 percent of GDP and are now 41 percent of GDP. However, the German debt

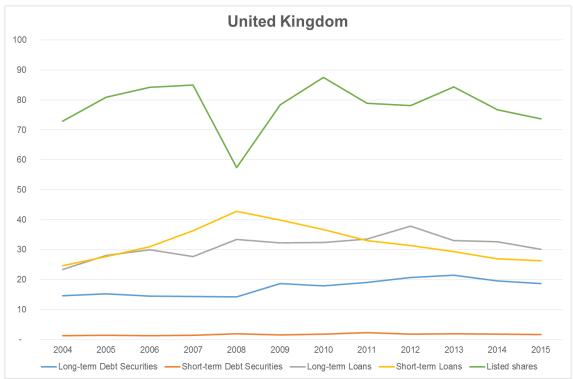
⁷ These observations are based on the SMEs' access to debt finance index from 2013 (European Commission, 2015b, p. 90).



securities markets are smaller. Short-term debt securities make up less than 1 percent of GDP while long-term debt securities make 5 percent of GDP. Bank lending is very stable in Germany, with short-term bank loans staying at 17 percent of GDP. Long-term bank loans declined slightly from 35 percent of GDP to 32 percent of GDP.

In the Moritz et al. (2015) study, Germany belongs to the Western European cluster where the largest shares of SMEs are either financed internally or by debt. Germany is also classified as a bank-based country where mixed-financed SMEs constitute only 15.6 percent of the market. This might suggest that in reality German SMEs do not make full use of the deep stock market but rather rely on the stable bank funding.

Figure 4: Equity and financial liabilities in the UK



In % of GDP

Source: European Central Bank, Cologne Institute for Economic Research

Our analysis reveals that the UK has the deepest capital markets in the EU (Figure 5). The amount of listed shares was 73 percent of GDP in 2004, rose to 85 percent in 2007, fell to 57 percent in the crisis year 2008, recovered to 88 percent in 2010 and is currently at 74 percent of GDP. In addition to its deep stock markets, the UK also has well-developed markets for corporate bonds. While short-term debt securities only account for 2 percent of the UK GDP, long-term debt securities are 19 percent of GDP. Despite its deep capital markets, the UK also has a relatively strong banking



sector. Short-term loans and long-term loans both started from 23 percent and 35 percent of GDP respectively in 2004. While short-term loans rose to 43 percent of GDP in 2008, long-term loans rose to 33 percent of GDP. In 2015, short-term loans fell to 26 percent of GDP while long-term loans remained at 30 percent of GDP.

Moritz et al. (2015) classify the UK as a Northern European country which is a region with the highest share of mixed-financed SMEs. Given the depth of the British capital markets, such an outcome is not surprising. Interestingly, only 11.2 percent of SMEs in the Northern cluster rely on debt financing. It could imply that when the banking sector is strong, such as in the UK, yet the capital markets are well-developed, so SMEs would tend to diversify their financing sources and reach for less debt-reliant instruments. In such a context, the CMU's goal of deepening the single market in capital financing could be achieved by spreading the British model to other Member States.

Figure 5: Equity and financial liabilities in Latvia

Latvia -Long-term Debt Securities -----Short-term Debt Securities -----Long-term Loans ------Short-term Loans ------Listed shares

In % of GDP

Source: European Central Bank, Cologne Institute for Economic Research

Lastly, we look at the example of Latvia (Figure 6) which joined the EU together with the other post-communist Eastern European states in 2004. Latvia belongs to the country group with the smallest capital markets. Long-term debt securities make up 1



percent of GDP and listed shares make up only 4 percent of GDP. Short-term loans account for 17 percent of GDP which is comparable to Germany. The share of long-term loans has risen from 35 percent of GDP in 2004 to 80 percent of GDP in 2010 and fell back to 58 percent of GDP in 2015. Clearly, long-term bank loans remain the most-prevalent financing instrument as a share of Latvian GDP.

Interestingly, Moritz et al. (2015) classify Latvia as a Northern European country which has the lowest share of debt-financed SMEs of all clusters. This puts Latvia in the same country-group as the UK. At the same time, this region is characterised by the largest share of trade-financed SMEs (over 22 percent). Although firm conclusions cannot be made, one gets the impression that even within the identified country clusters, there may be large financing disparities. Even more interestingly, it is possible that even countries with relatively underdeveloped capital markets (such as Latvia) can have SMEs that diversify their sources of financing outside traditional bank loans.

Overall, the empirical results indicate that banks and capital markets are both important for financing the economy. So more capital markets does not necessarily mean less banks. It is more that companies need stable banks and that the financial intermediation of banks has to be complemented by capital markets.

4.3. Impact of CMU across countries

Having looked at the cross-border differences in types of SMEs and their sources of financing, we turn to discuss how the proposals laid out in the Action Plan on Building a Capital Markets Union can impact the SME environment in the EU. The plan is designed to fully implement the principle of free movement of capital, as entrenched in Art. 63 of the Treaty on the Functioning of the European Union.

The Commission identifies "fragmentation of the EU financial sector" as an impediment to growth. With regard to SMEs, it is recognized that they are largely dependent on domestic banks. This became particularly apparent during the crisis when SMEs could not profit from cross-border bank lending to a desirable extent (Hoffmann and Sorensen, 2015).

To address the gap between the use of bank loans and the depth of capital markets, described in the previous section, the Commission argues that "cross-border market integration helps creating larger capital markets" (European Commission, 2015b, p. 71). The main argument in favour of facilitating cross-border investments relates to better risk allocation in integrated financial markets. It is expected that all EU Member States will benefit from better integration and higher development of capital markets.



Considering that in bank-based countries there is also a large share of statesubsidized SMEs (8.5 percent), the Commission proposes creating a pan-European Fund-of-Funds for allocating public financial resources. Arguably, pooling international capital, also coming from sources outside of the EU, would allow more SMEs to obtain the necessary financing from non-bank sources.

However, at the moment, several countries already have their own national business growth funds (France, Italy, UK, Denmark, Spain) which have been found to provide the necessary venture capital to fast-growing businesses. Moreover, the European Investment Fund (EIF) can co-finance funds of funds in cooperation with national stakeholders; for example, just this month the EIF joined forces with the Estonian Ministry of Economic Affairs and Communications and an Estonian financial institution, KredEx, to create a EUR 60 million risk capital fund for SMEs in Estonia.8 Thus to some extent, the EU is already involved in helping highly innovative and growing companies through cooperation with national parties. In light of the evident cross-country differences in SME financing, it is to be seen how a pan-European fund of funds would be more suitable to expand SME financing across the EU.

Another obstacle to the success of the CMU in eliminating cross-country differences in SME financing is the fact that the quality of institutions and specific legal provisions play an important role in determining financing conditions at national level. Access to credit, taxation regimes, contract enforcement, protection of minority investors and insolvency laws differ largely across Member States,9 deepening the regional disparities in SME financing. Moreover, Daude and Fratzscher (2008) recognize that the rules for disclosure of information, standards for accounting as well as costs related to legal proceedings affect attractiveness of a country in terms of crossborder financing. These country-specific characteristics cannot be easily altered with EU action as they remain largely national competences of the Member States. Therefore, there exists a risk of geographic concentration of capital markets in countries with more favourable legal and administrative regimes. However, harmonization of best-practices across the EU might lead to improvements in regulatory and institutional financial regimes which would facilitate access to financing for SMEs across Member States.

Yet harmonization does not need to imply full convergence of financing structures and patterns across Member States. For example, where capital markets are already well-developed, the goal of the CMU is to generate growth from attracting new stakeholders, such as banks, investment funds, institutional investors or market

⁸ As announced in the press release of the European Commission on 1 March 2016.

⁹ As revealed by the World Bank's Doing Business Report which provides indicators of business regulations in 189 economies, including almost all EU Member States (European Commission, 2015b, p. 26).



operators and intermediaries. For countries with underdeveloped capital markets, the CMU offers an opportunity to inspire investments in crucial areas, such as infrastructure, education and innovation. Consequently, the goal is not to turn all countries towards either bank- or market-based structures or make all SMEs either debt- or equity-financed. Combined with the regional differences in types of SMEs and the related various financing needs, there is a need for a more targeted approach (be it according to sector, country or SME type) that would allow SMEs to flourish, creating growth and jobs in the process.

5. Conclusion

The findings of this paper demonstrate that the proposed policy actions of the Commission in the framework of the CMU Action Plan will have heterogeneous effects across different types of SMEs as well as across countries.

Firstly, most European SMEs are financed internally. Thus, the CMU can have large potential benefits if it leads to an increase in the relative attractiveness of external finance. This holds in particular for Eastern European countries that have a high share of internally-financed SMEs. Secondly, even before the CMU initiative, European SMEs generally decreased their dependence on banks, either by reverting to internal financing or to capital markets. The CMU would thus reinforce a trend that is already present. Thirdly, banks play an essential role for SME financing and are vital for a diversified landscape of financing instruments for SMEs. This is inter alia due to the fact that banks finance types of SMEs that would be not attractive for capital market investors. While a move from financing through bank loans towards capital market-based financing has great potential especially in Western European countries, it does contain the risk of higher vulnerability of SMEs to financial market crises.

The conclusions of this paper with respect to the CMU Action Plan proposals are mixed. They are largely balanced in the sense that they stipulate mixed-financed SMEs as the benchmark but do take into account that SMEs have different financing needs. They also acknowledge that banks have an essential role in SME financing. However, the Action Plan itself does not promise to eliminate the deep structural barriers that stand in the way of fully integrated capital markets. Moreover, much of the CMU's success depends on whether SMEs' financing instruments represent free choices by the SMEs or whether they are dependent on the domestic market structure. The German example shows that companies might stick to bank loans even in the presence of deep stock markets. However, the British case demonstrates that a strong banking sector combined with deep capital markets leads SMEs to diversify their funding sources to a large extent.



Generally speaking, the lack of ambition of the CMU Action Plan could lead to an overly strong geographical concentration of capital market activity in the financial centres of the EU. As the deep structural barriers, such as legal barriers and different accounting standards, will most likely not be tackled, the financial centres that already have a competitive advantage are in a good position to increase their market shares. The proposed merger of Deutsche Börse and London Stock Exchange is one indication of this concentration force.10 But it can also contribute to financial stability by providing a larger regulated market infrastructure for securities trading.

The proposals with respect to crowdfunding and loan origination by funds are welcome complements to the European financial system. However, in any future attempt of legislative action in these fields, the Commission needs to take into account that financial innovation always bears hidden risks. This also holds to a certain extent for securitization. National support and advisory structures as envisaged in the CMU Action Plan could be used as a substitute for some state subsidies that are particularly prevalent in Southern European economies. Moreover, direct national subsidies could be replaced by the envisaged pan-European funds-offunds. First initiatives in the framework of the European Fund for Strategic Investments (EFSI) are promising. Finally, the planned pan-European information systems for company information would be a potentially powerful tool for inducing SMEs to use external finance. But a public system of company information will also negatively affect relationship banking. Therefore it is necessary to carefully trade-off the advantages of capital market financing and with the disadvantages for relationship banking. It is important that the CMU relies on stable and profitable bank as providers of debt financing. Nevertheless, bank regulation needs to take account the fact that the CMU will change the financial ecosystem and in particular make banks adapt their business models towards providing capital market services, instead of term structure arbitrage.

Like any ambitious policy project, the CMU initiative contains substantial risks and will likely produce winners and losers. However, where it succeeds, it can improve the financing environment for SMEs and consequently stimulate the creation of growth and jobs in the EU.

¹⁰ The merger of these two European stock exchanges has been announced on March 16. The parties claim that "the merger would be expected to optimise fully and benefit from the potential of the Capital Markets Union project" (see Stafford, 2016).



References

Artola, Concha / **Genre**, Veronique, 2011, Euro Area SMEs Under Financial Constraints: Belief or Reality?, CESifo Working Paper Series No. 3650, <u>http://www.econstor.eu/handle/10419/53136</u> [5.4.2016]

Banque de France, 2015, BACH-Datenbank, <u>https://www.bach.banque-france.fr/?lang=fr</u> [12.2.2016]

Beck, Thorsten / **Demirgüç-Kunt**, Asli / **Maksimovic**, Vojislav, 2008, Financing Patterns Around the World: Are Small Firms Different?, Journal of Financial Economics, Vol. 89 No. 3, pp. 467–487

Bentolila, Samuel / **Jansen**, Marcel / **Jiménez**, Gabriel / **Ruano**, Sonia, 2013, When Credit Dries Up: Job Losses in the Great Recession, IZA Discussion Paper No. 7807, Institute for the Study of Labor, Bonn

Bofondi, Marcello / **Carnipelli**, Luisa / **Sette**, Enrico, 2013, Credit Supply During a Sovereign Debt Crisis, Working Paper No. 909, Bank of Italy

Canton, Eric / **Grilo**, Isabel / **Monteagudo**, Josefa / **van der Zwan**, Peter, 2012, Perceived Credit Constraints in the European Union, Small Business Economics, Vol. 41 No. 3, pp. 701–715

Central Bank of Ireland, 2013, Loan Origination by Investment Funds, Discussion Paper, July 2013, http://www.centralbank.ie/regulation/poldocs/dispapers/Documents/Discussion%20P aper%20Loan%20Origination%20by%20Investment%20Funds.pdf [21.04.2015]

Chava, Sudheer / **Purnanandam**, Amiyatosh, 2011, The Effect of Banking Crises on Bank-Dependent Borrowers, Journal of Financial Economics, Vol. 99, pp. 116-135

Daude, Christian / **Fratzscher**, Marcel, 2008, The Pecking Order of Cross-border Investment, Journal of International Economics, Vol. 74, No. 1, 2008, pp. 94-119

European Commission, 2003, Commission Recommendation of 6 May 2003 Concerning the Definition of Micro, Small and Medium-sized Enterprises, L 124/36 (2003/361/EC)

European Commission, 2015a, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on Building a Capital Markets Union, COM(2015) 468 final

European Commission, 2015b, Commission Staff Working Document: Economic Analysis Accompanying the document: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Action Plan on Building a Capital Markets Union, SWD(2015) 183 final



29

Gambetti, Luca / Musso, Alberto, 2012, Loan Supply Shocks and the Business Cycle, European Central Bank Working Paper, No. 1469, Frankfurt am Main

Hair, Joseph / Black, William / Babin, Barry / Anderson, Rolph, 2010, Multivariate Data Analysis: A Global Perspective, 7th ed., New Jersey

Hall, Graham / Hutchinson, Patrick / Michaelas, Nicos, 2000, Industry Effects on the Determinants of Unquoted SMEs' Capital Structure, International Journal of the Economics of Business, Vol. 7 No. 3, pp. 297–312

Hempell, Hannah / Sorensen, Christopher, 2010, The Impact of Supply Constraints on Bank Lending in the Euro Area Crisis Induced Crunching?, European Central Bank Working Paper, No. 1262, Frankfurt am Main

Hoffmann, Matthias / Sorensen, Bent, 2015, Small Firms and Domestic Bank Dependence in Europe's Great Recession, European Economy Discussion Paper, 012, http://ec.europa.eu/economy_finance/publications/eedp/pdf/dp012_en.pdf [5.4.2016]

Holton, Sarah / Lawless, Martina / McCann, Fergal, 2014, Firm Credit in the Euro Area: A Tale of Three Crises, Applied Economics, Vol. 46 No. 2, pp. 190-211

Kraemer-Eis, Helmut / Lang, Frank / Gvetadze, Salome, 2013, Bottlenecks in SME Financing, in: EIB (Ed.), Investment and Investment Finance in Europe. http://www.eib.org/attachments/efs/investment and investment finance in europe en.pdf [3.6.2015]

Moritz, Alexandra / Block, Joern / Heinz, Andreas, 2015, Financing Patterns of European SMEs: An Empirical Taxonomy, EIF Research and Market Analysis, Working Paper 2015/30

Stafford, Phillip / Massoudi, Arash, 2016. London Stock Exchange and Deutsche Börse Unveil Deal, Financial Times, March 16, 2016, https://next.ft.com/content/7f98cd92-e6e6-11e5-a09b-1f8b0d268c39 [5.4.2016]