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# A methodological perspective on the Capital Markets Union: using economics to derive effective policy measures

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**Summary:** From the economists' perspective, the Capital Markets Union (CMU) represents a policy experiment that allows studying how legal conditions, economic incentives and financial activity interact. Recent papers provide economic support for the overall objective of CMU, but the robustness of this research is still to be established. Although harmonisation of legal frameworks can help overcome the information and competition problems that discourage market entry, it is difficult to identify which legal determinants are actually holding back the market development. The more detailed and granular the issue to be addressed, the more severe seem to be data gaps and limitations of analytical tools to identify the most effective policy measures and in consequence the stronger do policy directions rely on plausibility considerations. In the negotiation of concrete policy measures among the different policy actors in the EU, the still weak empirical foundations may hold up the realisation of the project's ambition.

**Zusammenfassung:** Die Kapitalmarktunion (Capital Markets Union, CMU) kann als Politikexperiment angesehen werden, in dem Sinne, dass sie es Volkswirten gestattet, die Zusammenhänge von rechtlichen Rahmenbedingungen, wirtschaftlichen Anreizen und Finanzaktivität zu analysieren. Die übergeordneten Ziele der CMU stehen in Einklang mit zuletzt veröffentlichten Forschungspapieren, auch wenn noch nicht endgültig geklärt ist, wie robust deren Ergebnisse sind. Zwar kann die Harmonisierung der rechtlichen Rahmenbedingungen helfen, die Informations- und Wettbewerbsprobleme zu überwinden, die die Kapitalmarktentwicklung zurückhalten. Allerdings ist es schwierig, die wirklich relevanten rechtlichen Rahmenbedingungen zu identifizieren. Insbesondere zeigt sich, dass je detaillierter und spezifischer die zu untersuchenden Fragen sind, umso schwerwiegender sind Limitationen aufgrund von fehlenden Daten und aussagekräftigen Analyseinstrumenten und desto stärker basiert daher die Herleitung effektiver Politikvorschläge und -richtungen auf Plausibilitätsüberlegungen. Die schwache empirische Fundierung steht dem Ehrgeiz dieses Projektes entgegen und kann sich als Hindernis erweisen, wenn konkrete Politikmaßnahmen auf EU-Ebene von den verschiedenen politischen Akteuren verhandelt werden.

→ JEL Classification: G10, G18, G28, G38

→ Keywords: Capital markets, financial structures, financial intermediation, financial institutions

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## I Introduction

Judging from the flow of publications, the interest of economists in the European project of Capital Markets Union (CMU) peaked in 2015 and has petered out since. This is regrettable given that the project faces substantial methodological and analytical challenges in the design of specific policy measures and in the communication of their impact during the political negotiation process. It would be both helpful to substantiate the concept underlying CMU and of general interest, if there were more research on issues such as the value-added chain in finance, factors explaining the underuse of financial markets and the relationship between legal determinants and market functioning beyond the already existing work on the finance growth nexus. Since the legislative initiatives emerging from the CMU Action Plan request impact assessments that demonstrate empirical support for each initiative, further targeted economic research on CMU will have a key role for the success of the project. While the financial crisis and the regulatory agenda to contain its consequences sparked considerable economic research in the field of financial stability, questions about the optimal design of financial markets and its determinants have not received comparable attention.

Rather than assessing progress with CMU two years after its launch, which is done in the European Commission's Mid-Term Review and the accompanying staff working paper (European Commission 2017a), my intention here is to explore in which areas CMU would warrant better underlying economic analysis. To this end, I review different approaches and strategies employed to design policy measures towards CMU and assess them against the economic literature and relevant methods. In brief, knowledge gaps are the more pronounced the more detailed the issue: There is a fair amount of empirical support for the general objectives and intuitively valid principles—though difficult to support empirically for the choice of policy priorities—, but little data available to substantiate the detailed policy measures to accomplish the objectives.

Such a methodological review can enrich various inputs to the policy debate. It may help frame discussions on future policy measures and priorities towards CMU and contribute to rationalisation and justification of the chosen policy agenda, including possible gaps and shortcomings. My direct aspiration is that it stimulates economists' interest in CMU as an exciting policy experiment that is worth studying. The policy debate would benefit from more granular insights about and especially from empirical backing of the different roles of financial intermediaries and markets, as well as from a robust approach towards prioritisation and better tools to identify effective means to enable market development. These are items, economic analysis could contribute to.

A sound empirical backing would be important for the success of this project as I assume that a successful implementation of CMU requires an educated communication with policy makers and the public in the EU Member States about benefits, costs and effectiveness of the policy measures proposed. Otherwise it will be extremely difficult to overcome any political opposition that may build up in Member States, parts of the financial industry or among other stakeholders once the concrete policy proposals are negotiated in detail in the political process. Such obstacles have already become evident in the difficulties encountered during the negotiations of the Commission's proposal to foster securitisation activity, which was flagged as one of the central early deliverables in the CMU project. Comparable obstacles and delays are likely to occur also with other ingredients if policy debates remain at a purely technical level, limited to a small circle of experts and with a focus on detailed cost and benefits without consideration of the bigger picture and changes the project intends. A robust economic analysis could help address the underlying

big challenge of CMU, which I see in overcoming the lack of political acceptability of policies to promote financial market activity. Obviously (and to a degree, naturally), acceptability has dwindled after the financial crisis, which produced huge economic costs for society and it seems difficult to re-establish support for policies promoting financial activity in the context of a critical attitude in large parts of the public towards the role of political and business elites. This includes critical assessments of openness to cross-border trade and globalisation as well as the apparently inevitable consequences for income and wealth distribution.

Such a methodological review also appears justified when considering that the grand ambition of the Capital Markets Union is nothing smaller than to support, in fact engineer structural change in the European financial system. Until 2019, the European Commission intends to set in place the building blocks that set in motion a shift towards more market-based financing and less fragmentation of financial services along national patterns in the European Union. The 2015 Action Plan laid down a number of specific policy measures towards these two goals and the 2017 Mid-term Review took stock of first progress and proposed further measures. The Green Paper, the subsequent Action Plan and the Mid-term Review were accompanied by documents prepared by Commission staff that added economic analysis and reviewed the economic literature (European Commission 2015a, 2015b, 2017a), and were complemented by economic indicators to track progress (European Commission 2016a). While the announcement of the CMU led to a wealth of publications by researchers in think tanks, industry associations and public institutions released in a very short time period 2014/15, few analytical papers have been devoted to CMU by economists outside the European Commission since.

In the run up to the Action Plan, a tide of targeted economic publications provided valuable input to framing the policy agenda. For example, Veron and Wolff (2015) disentangled short and long-term objectives and benefits of CMU. Valiante (2016) derived principles and recommendations by putting CMU into the context of EU financial integration, risk sharing needed in a monetary union and functionalities of capital markets. Danielsson et al. (2015) describe CMU as a necessary challenge to the regulatory environment in order to allow market forces to match savings and investment more efficiently. SAFE (2015) cautioned that, since the financial literature is agnostic about the optimal structure of finance, CMU should focus on addressing identified market failures. Anderson et al. (2015) reviewed possible transmission mechanism of more market funding to economic growth and add implications for financial stability. AFME (2015) conducted a survey among financial investors to flag key priorities the Commission should pursue. Wright and Bax (2015) derived the potential for the various national financial systems to benefit from catching up to the EU average across eight different market segments. Wright et al. (2016) extended this approach to countries in Central and Eastern Europe.

Two years after inception, it seems clear that CMU presents an important experiment in terms of policy design, with lessons for policy-making beyond the immediate application to financial sector policy. A first challenge CMU faces is the wide gap between the ultimate objective of stimulating structural change and the very detailed and technical means to engineer this. Compared to the Banking Union, there is no clear set of institutional and regulatory reforms. Related to this is the challenge of complexity: the intention is to design a host of largely legal measures in order to provoke changes to economic agents' behaviour about borrowing and lending decisions towards

the use of financial instruments that have been hitherto underused.<sup>1</sup> Some of these measures look small and address a limited or diversified subset of market participants. Some may interact and some may be more important in reaching the final objective than others. A third challenge stems from the need to overcome habit persistence. The relationship between changes to the legal framework and intended changes to individual portfolio choices is not straightforward, especially as agents may consider their current behaviour optimal with respect to the current legal framework and undervalue the benefits of adjusting to a new environment. A further challenge stems from the notion that CMU requires an opening of the traditional policy tool box used to engineer behavioural change. The objective of enabling markets to develop, rather than regulating behaviour on existing markets, requires a mind-set different from standard regulatory work to create positive incentives so that agents use hitherto unexploited opportunities.

## 2 The justification of CMU

While there is broad political support for CMU and the desirability of deeper and more integrated capital markets in the EU (Juncker et al. 2015, European Commission 2017b for the political level, IIF and AFME 2015 as representatives of the industry's view), the economic literature has long been rather inconclusive whether there is an ideal financial structure and what its determinants are. Hence, the first objective of CMU, i. e. moving the EU financial structures towards a superior design, seems to rest on weak conceptual foundations. Something similar could be said about the second objective to accomplish a better integration of capital markets, which had been fairly uncontested in economic circles until recently.<sup>2</sup> The experience of the international transmission of financial shocks during the financial crisis, however, has led to a more nuanced assessment of the benefits of integrated capital markets and the discussion about the use of macroprudential measures to contain excess capital flows pays tribute to this scepticism. The issue of a sound economic justification also is of importance as the financial crisis has reinforced the request for accountability vis-à-vis the national tax payer so that national supervisors need to ensure that they are able to contain any risks arising from more in-depth market integration and more financial activity taking place on markets. Hence, in the more critical comments in the policy debate, support for CMU was conditioned on accompanying macroprudential measures that tackle possible risks to financial stability arising from a shift to perceived more volatile market funding (European Commission 2016a, 2016b).

The timing of the CMU initiative coincided with the recognition of an adverse self-reinforcing loop between mediocre economic growth, lacklustre bank lending and heightened sovereign risks in the EU and some of its Member States specifically. Although the evidence that weak bank lending held back economic activity in the euro area economy is scarce, and even the significance of financial constraints for the activity of small and medium-sized enterprises is disputed (see Monteiro and Priftis 2017 and ECB SAFE), the notion that banks provided insufficient funding for the economy has been a popular argument in the policy debate (see Anderson 2015, Daniels-

1 The terms borrowing and lending are used here as requesting and providing funding, respectively, in line with their usage in official statistics. They cover both debt and equity instruments.

2 European Commission 2016b added a third objective: "promote growth and financial stability by facilitating companies' access to finance".

son 2015) and was also one of the reasons summoned for launching CMU (European Commission 2015b). This is exemplified by the vision of capital markets as “spare tyre” (Draghi 2016).<sup>3</sup> Linked to it is also the notion of overbanking in the EU (ESRB ASC 2014). That capital market funding can play a larger role is also supported by the observation that in the aftermath of banking and sovereign debt crisis in the euro area 2009/10 and 2012, corporate bond issuance has partly offset the loan instrument as a funding tool (see Figure 1, Table 1). Obviously, this requires a minimum firm size. Thus, when funding conditions on bond markets appeared supportive, larger-scale firms tapped funding markets. A similar uptake or substitution was not visible on European markets with respect to other funding sources such as share issuance or venture capital.

The question of whether there is an optimal market structure has been widely discussed in the wider economic literature and the CMU related papers (for a survey see Chapter 2 in European Commission 2015b). Earlier studies using the growth regression approach rejected the notion of a superiority of market over banking finance. Hence, there would be little basis to argue that the EU financial structure was too bank-based. Recent estimates have challenged this neutrality proposition given that they were able to detect a hump-shaped relationship between bank lending and economic growth (Cecchetti and Kharroubi 2012, Langfield and Pagano 2015, Courmède and Denk 2015). This means that beyond a certain size an expansion of bank lending would no longer be supportive to economic growth. And this threshold might be smaller than actual credit to GDP ratios. Existence of such a threshold could not be found for market-based funding, with the latter proxied by the capitalisation of stock markets or stock and bond markets. The choice of aggregated financial asset classes as empirical variables to cover size and structure of finance has the methodological limitation that it treats the financial securities as exogenous, while firms and investors have reasons to use different financial instruments. Moreover, the variables cover the characteristics of bank loans, bonds and shares are different *inter alia* in terms of maturity, control rights, reporting obligations and tradability. In an attempt to construct more refined variables of financial activity and structure, however, Sahay et al. (2015) find no relationship between financial structure and growth. Since this re-states the neutrality postulate, the question seems still open and suggests that a conclusive answer relies in particular on better proxies for measuring financial activity.

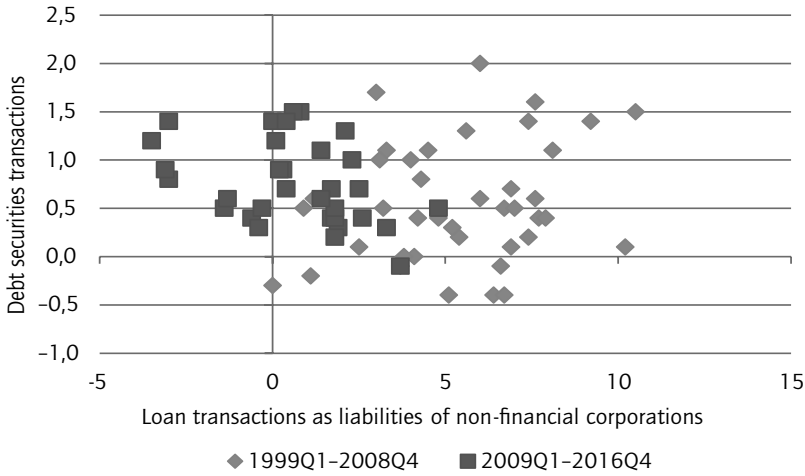
Since the microeconomic literature links the relative advantage of market and bank funding to underlying information and incentive asymmetries between borrower and lender, the CMU policy documents advocate a perspective of banks and markets as complements instead of substitutes. This maintains consistency with both the notion of neutrality of financial structures and superiority of market funding. It means in practice that measures that help banks increase their lending to the economy can be part of the CMU agenda. Examples are the initiatives to revive securitisation and covered bonds. In both cases, banks have an economic function in information provision, though not in ultimate funding. That is, banks select and monitor credit; they internalise sensitive information from the creditor and establish something like a quality label by providing their brand name as issuers; whereas the funding is outsourced to other financial institutions. Similarly, banks have a key role in market activity by helping borrowers to use financial instruments to tap market funding through advice and service provision in the issuance of financial securities.

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3 Draghi's complete quote was “it is better to finance the real economy through several channels rather than to rely on just one. Capital markets in particular can act as a useful “spare tyre”. See Draghi (2016).

Figure 1

**Funding instruments used by non-financial corporations in the euro area**  
 Quarterly transactions in percent of GDP



Source: Eurostat national accounts, author's calculations based on Eurostat data.

Table 1

**Correlation between non-financial corporations' loan transactions and funding through marketable securities**

Euro area, quarterly transactions of liabilities in percent of GDP, OLS estimates with constant

	Debt securities			Long-term debt securities		Listed shares	
	1999-2016	1999-2008	2009-2016	1999-2008	2009-2016	1999-2008	2009-2016
Constant	<b>0.708</b>	0.241	<b>0.817</b>	0.167	<b>0.904</b>	0.278	<b>0.475</b>
(std)	0.093	0.244	0.075	0.184	0.079	0.430	0.078
Loans	-0.018	0.058	<b>-0.083</b>	0.055	<b>-0.121</b>	0.119	-0.014
(std)	0.020	0.041	0.036	0.031	0.038	0.072	0.038
R2	0.012	0.052	0.151	0.081	0.250	0.069	0.005
obs	72	40	32	40	32	40	32

Significant coefficients in bold.

Source: Author's calculations based on Eurostat data.

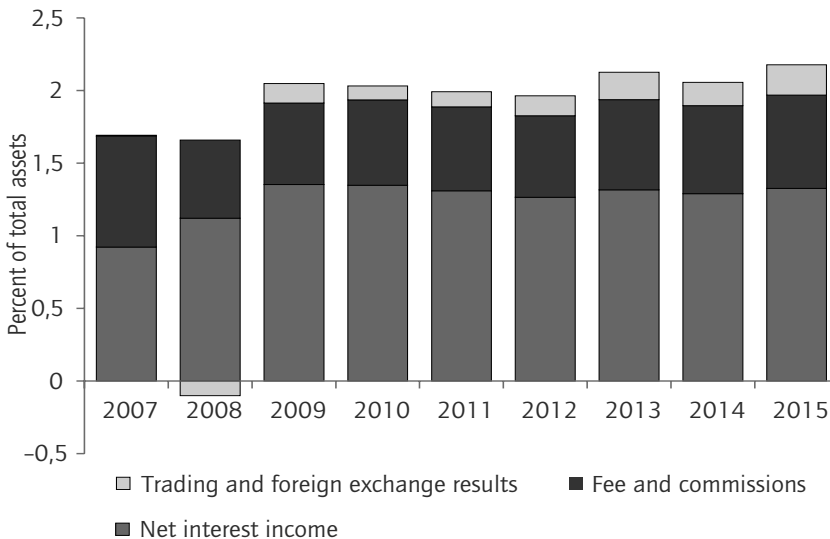
Figure 2 illustrates the importance of income derived from non-lending activity for European banks prior to CMU. Despite a low level of interest rates and correspondingly tight margins for banks in lending business, net interest income of banks in the EU has accounted for about two third of their revenues. The remaining part is due to fees and commissions and to trading income, i. e. largely derived from supporting capital market activity. Whether, how and under which conditions banks will be adjusting their business models, what their incentives are to encourage borrowers to search funding through market instruments are questions that require further investigation.

A further implication of the complementarity perspective would be that policy measures fostering market funding, might actually help develop a market segment that does not necessarily crowd out the use of loans as a financing instrument. This could pertain to cases in which underlying information and incentive problems are less relevant (i. e. infrastructure financing, large firms' issuance of corporate bonds), other financial institutions are equally or better capable of addressing these problems (e. g. crowd funding, venture capital) or the information issues concern factors that market funding can better solve than bank funding. An example for the latter could be the matching of rare/idiosyncratic needs and supplies such as funding of innovations and other highly risky projects.

Figure 2

**Banks' income sources**

Percent of total assets, euro area



Source: European Central Bank consolidated banking data.

### 3 The framing of CMU

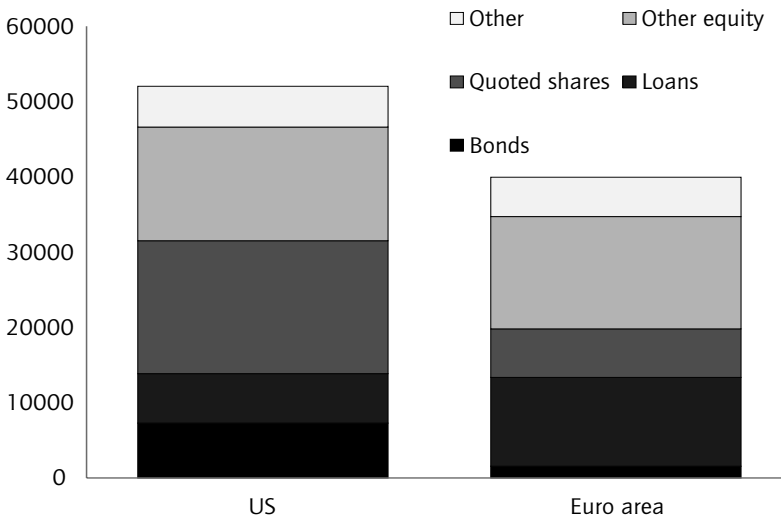
The notion of complementarity between bank and market funding allows for different conclusions about the framing of CMU. One approach propagated by Valiante (2016) and taken up in European Commission (2017a) considers that capital markets' main advantage stems from the tradability of financial instruments, which facilitates price discovery and helps matching specialised demand and supply, thereby spurring diversification and risk-taking in the financial system. In this context, the priority of CMU would be to develop functional preconditions for an effective and efficient working of capital markets such as data comparability, fair access and legal certainty. Investors' capacity to value financial assets and firms' incentives to provide the necessary information for investors to do so would also be crucial.

A popular tool to demonstrate the underutilisation of European capital markets has been the comparison with the size of U.S. markets. Wright and Bax (2015) applied this approach, describing the scope for catch up across a number of capital market segments and Member States. Also AFME 2015 used the U.S. as benchmark to identify catch up potential in selected market segments. A comparison in support of the notion of a broader reluctance to use market funding in the EU is shown in Figure 3. It contrasts the liability side of the balance sheet of the non-corporate sector in the USA and the euro area, which reveals that euro area corporations make less use of marketable instruments for both debt and equity. U.S. firms have a higher ratio of bonds over loans as well as of quoted shares over other equity. A similar picture emerges from Figure 4, which compares the ratio of debt securities in corporate debt with the ratio of listed shares in

Figure 3

#### Liabilities of non-financial corporations

Billion USD, 2014



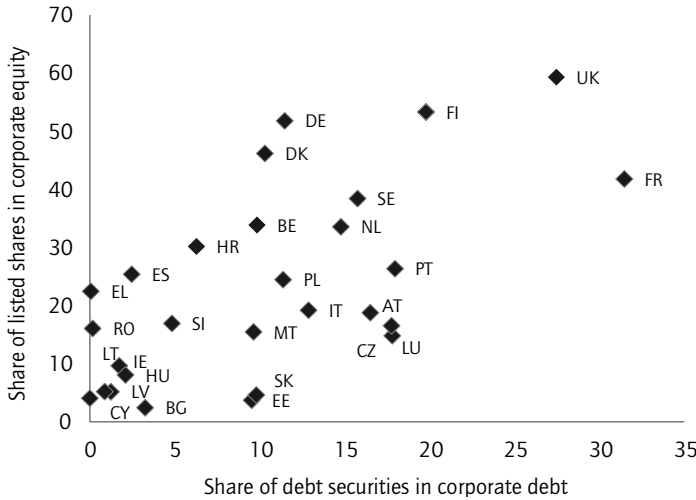
Source: OECD (SNA 2008, unconsolidated data).



Figure 4

**The use of market instruments by non-financial corporations in the EU (consolidated data 2015)**

In percent



Source: Eurostat national accounts (ESA 2010).

firms' equity across the EU Member States. Countries with a higher use of debt markets also tend to have a higher ratio of listed shares.<sup>4</sup>

A somewhat different framework was used in European Commission (2015b) in view of the goal of broadening funding choices through a more complete set of funding markets. The practical

Table 2

**Coefficient of correlation between the proportion of debt securities in corporate debt and the proportion of listed shares in corporate equity across the 28 EU Member States**

2015

Consolidated data	0.63
Unconsolidated data	0.61
Unconsolidated excluding UK	0.48
Unconsolidated excluding new MS	0.57

Source: Eurostat national accounts, authors' calculations based on Eurostat data.

4 The correlation is significant for both consolidated and unconsolidated data, it stays significant if the UK as potential outlier or new Member States are removed from the panel.

application follows the concept of the funding escalator, which is built on the premise that firms' funding needs change over the life cycle of the firm. Bank funding caters properly for needs of specific firms at specific points of their life-time, but is less suited for other firms and at other points of time. This hypothesis is in line with findings that very young firms require funding from family members, business angels or venture capital while large, mature firms have possibilities to issue corporate bonds. As the ideal capital market would offer a complete set of funding possibilities, the CMU Action Plan proposes measures to reinforce the development of funding sources under-utilised by firms. As mirror image, supply by non-bank financial intermediaries might fill such emerging demand, assuming that institutional investors have different preferences and strategic objectives than banks in terms of time horizon of the investment, its underlying risks and liquidity, or geographical boundaries.

Although the market functioning and the complete market approach are not mutually exclusive, they would warrant different policy priorities. Moreover, they would request different approaches to identify effective policy measures. Applying the market functioning approach, one would pay particular attention to measures that reduce transaction costs and raise scale economies. For creating the latter, market integration could be instrumental. Scope economies might also play a certain role if one considered liquidity in some existing markets as relevant for developments on related markets. Examples would be trade on government bonds markets as a stepping stone for larger corporate bond markets, or short-term commercial paper markets as vehicle to promote the use of debt instruments with longer maturities. For assessing market incompleteness, the key would be to understand why agents are reluctant to use some financial instruments either for borrowing or lending purposes. Concerns about legal entitlements, control rights, information disclosure would be suitable starting points. The economic literature identified as relevant legal factors protection of minority shareholders, disclosure of conflict of interest and legal enforcement, which are more demanding in market-based than in bank-based financial systems (La Porta et al. 1997, Sahay et al. 2015). In this context, the positive correlation between higher share of marketable debt and of equity instruments shown in Figure 2 may suggest that in some countries firms have fewer concerns about the loss of control rights or that revelation of information to investors puts them at a competitive disadvantage (being useful to potential competitors) than in others.

#### 4 **How to select priority areas (from an economic point of view)?**

The traditional way for economists to justify policy intervention starts with an analysis of market failures. While absence of markets or incompleteness of markets is a key market failure, one cannot say that capital markets are missing in Europe. The point is that activity is thin in many market segments. Yet, SAFE (2015) requested market failure to be demonstrated as a precondition for policy intervention and the European Commission (2015b) established potential links between the different measures proposed in the Action Plan and market failures, largely relying on arguments based on asymmetric information and/or moral hazard, which may hold back agents to engage in markets that are perceived as small and, therefore, suffering from potential benefits dwarfed by information and other transaction costs.

It is intuitively plausible that information problems and high transaction costs on small markets discourage market entry, but difficult to prove. Information from consultations, surveys

or market intelligence enriches the analysis, but may be biased either because respondents are not representative or have an incentive to bias their replies. Substantiating with data the link between market failure and market size, respectively the lack thereof, is hard if not impossible in some cases. Data on market size is often available, though rarely from official sources. For some markets, there are commercial data suppliers, but as regards activity on less known markets, quantitative analysis relies on statistics compiled by market infrastructure providers, industry associations and consultants. Examples are the ICMA survey on repo markets or AFME statistics on asset-backed securities. Data quality, especially coverage, representativeness or consistency are difficult to judge. And as the data compilers often rely on voluntary contributions, they are not in the position to exert a data quality screening as rigorous as official statistic institutions can do.

A further complication to deal with the request that policy intervention should address market failures is the circularity in the reasoning that markets are underdeveloped because information or incentive issues discourage participation in small markets. The relevant market failure appears to be endogenous to market size and subject to what was labelled as endogenous constraints in reaching critical size (European Commission 2015a). The comparison of market sizes across different constituencies, either vis-à-vis the U.S. or across the EU Member States (see the references above) has often been used as shortcut to circumvent determining the critical size. Whereas this looks like a practical solution to avoid the problems such calibration exercise would face, a simple comparison of capital market size across jurisdictions seems highly debatable. To be meaningful, it should need to control for those exogenous factors that explain the difference and are not amenable to change by policy measures: history, differences in legal frameworks and taxation, industry composition and preferences. The practical implication is that the different history and legal framework of the more market-oriented U.S. financial system limits its usefulness as benchmark for the EU capital market (see also below). Using a best performer as benchmark should therefore make explicit the reasons for the difference and make conditional the catch up potential on them. Calculations of the scope for conditional convergence that control for differences in firms' size and industrial composition have been done in European Commission (2016a). These two variables are able to explain a considerable part of the differences in the share of listed companies between the USA, the euro area and six EU Member States. A substantial residual remained, nevertheless, unexplained by the industrial structure.

Scale effects are exploitable on many aspects of capital market activity, either through higher transaction costs prevalent if activity is split across fragmented markets or higher exposure to non-competitive outcomes on markets with fewer participants. Given the scale effects of capital markets, it seems straightforward to request more market integration across national capital markets as a means to address the simultaneity of market failures and lack of critical size. The interdependence between market size and market development generates an important link between market integration and market development as two objectives of CMU. While both objectives are regarded as somewhat separated for example in Anderson et al. (2015) and European Commission (2017a), it is cross-border market integration that is able to overcome the limitation of insufficient market size. Integration is tantamount to scale. Hence, though more participation of cross-border institutional investors or easier access for firms to tap foreign markets may not increase the size of EU capital markets, it may help some national capital markets (and capital market segments) to reach critical size, which may trigger entry from firms and investors who had stayed away from the previously too tiny market. Reducing obstacles to cross-border trades improves market access and allows more agents to participate, thereby facilitating the matching and price discovery process, reducing transaction costs and increasing competitive pressure. Fa-

cilitating access especially for foreign entrants can be a suitable tool to ensure contestability of markets. Information asymmetries and moral hazard should therewith be of lesser importance, the larger the market.

When framing the decision about effective policy measures towards CMU, a simple comparison of market size across countries can give a first hint which market segments might be underdeveloped. Moreover, studying the reasons why market segments or use of certain financial instruments differ across countries helps identifying suitable policy measures if the underlying factors are resolvable.

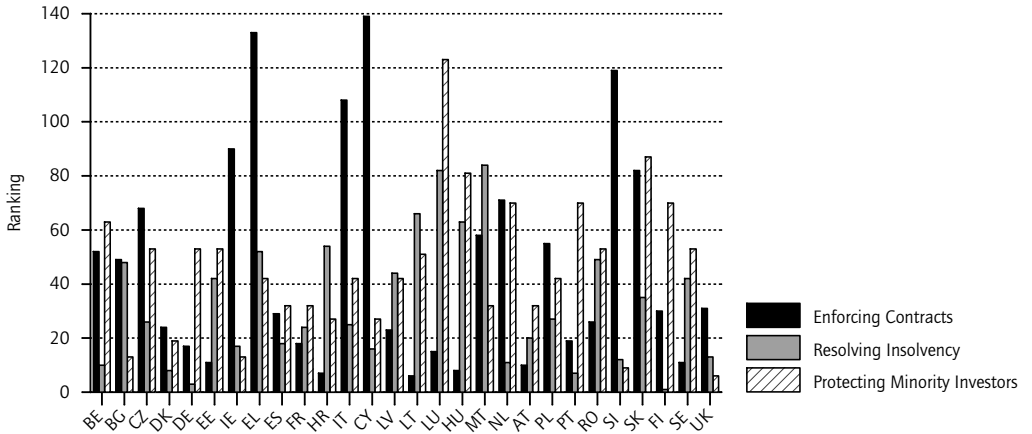
An accepted determinant of differences in capital market size and structures are legal tradition and legal structures. Legal traditions and structures create framework conditions in which market participants act and in which financial structures evolve. Legal factors are however most probably not purely exogenous to economic activity, although their use of instrumental variables in cross-country growth regressions in parts of the empirical finance-growth literature suggests so. Instead they might be endogenous to underlying information and enforcement problems. Moreover, since the European Commission has legislative power, there is scope to adapt the legal environment.

The immediate implication of integrating legal determinants into the analysis is that they impair in particular the use of market structures in the USA as a benchmark for EU markets unless one opts for simply copying the U.S. legal framework. Yet, the experience in the USA suggests that a number of decisive factors that led to a more market-based funding structure have to do with legislation that disadvantaged banks. The Glass-Steagall Act separated investment from commercial banking; Regulation Q limited banks' possibility to pay interest on demand deposits and the Bank Holding Company Act impeded inter-state banking (Anderson et al. 2015). Legislative action in the EU to disadvantage banks in order to encourage a shift towards more market funding is not foreseen in the Action Plan and would not be consistent with the idea of a complementarity between financial market and banks.

EU legislation aims to reduce obstacles due to different national legal frameworks, and the Single Market allows corporations to tap capital markets in other Member States. While there is already accomplished harmonisation of financial legislation, available indicators suggest still quite stark differences across EU Member States in those areas that the economic literature identified as supportive to market-based financial activity. This is demonstrated in Figure 5 by the wide variation of country rankings in the World Bank Doing Business indicators covering three legal indicators: enforcing contracts, resolving insolvency and protecting minority shareholders. Even some Member States with relatively large capital markets, such as Ireland, Luxembourg and the Netherlands, are outside the top 50 ranks in at least one of the three above mentioned legal indicators. The correlations between these legal indicators and the financial structure variables shown in Figure 4 are not significantly negative in most cases (Table 3). Of course, these observations cannot claim causality. And this might also question the information content of the existing legal variables. Moreover, it raises doubt whether any policy adjustment that builds on copying the legal parameters of the best performers on its own would spark a catch up of less developed capital market segments towards the EU average or even towards best performers in the EU. Much more detailed knowledge about legal factors and in particular of their interplay would be required before such an approach could credibly be applied in the design of policy reform and the communication of their benefits.

Figure 5

**EU Member States' ranking in selected World Bank's Doing Business indicators**  
2016



Source: World Bank Doing Business.

Table 3

**Correlation coefficients across the EU Member States (28 observations) between legal indicators (global ranking) and the use of market funding by non-financial corporations in debt and equity**

	Enforcing contracts (rank)		Resolving insolvency (rank)		Protecting minority investors (rank)	
	2008	2016	2008	2016	2008	2016
Bonds in corporate debt % 2015	-0.16	-0.30	-0.24	-0.30	-0.09	0.14
Listed shares in corporate equity % 2015	-0.23	-0.26	<b>-0.52</b>	<b>-0.52</b>	-0.17	-0.10
Change in bond ratio 2008-2015	-0.20	<b>-0.37</b>	-0.07	-0.18	-0.25	0.25
Change in listed share ratio 2008-2015	-0.24	<b>-0.39</b>	-0.17	-0.24	<b>-0.50</b>	0.03

Significant coefficients in bold.

28 observations for 2016, 26 observations for 2008 legal variables (CY and MT missing).

Source: Eurostat national accounts and World Bank Doing Business.

Differences in national preferences question the usefulness of any benchmark exercise, but it may well be that there are valid economic reasons behind differences in preferences. This could be exemplified along differences in households' allocations of their wealth across different asset classes. These have been identified to vary substantially across EU Member States in European Commission (2016b). In addition to the importance of the income level, the income distribution seems also to be an important determinant of the use of marketable financial instruments. Households in the EU hold a large share of their financial assets in the form of currency and bank deposits (Figure 5). The share of financial assets held in this form is smaller, the higher is the country's per capita GDP. Moreover, the lower the income level in an economy the fewer households hold insurance products and pension funds. There may therefore be a good economic justification for the portfolio allocation of households. In addition to income levels, the distribution of income and wealth seems to have a decisive influence on portfolio choices. Only top percentile households hold substantial amounts of financial securities. The standard vehicle to store wealth for most households is real estate (ECB 2016). These observations could be indicative that rather than preferences, households' ability to address underlying information problems given their limited means to assess the credit risk and business prospects of borrowers might be the main determinant of their wealth allocation. By holding bank deposits, households gain access to the intermediaries' risk management capacity. Direct holding of financial securities gives a more immediate exposure to market risks, diversification is difficult to accomplish with small amounts of wealth and not at least the median households' main risk, namely to become unemployed, is pro-cyclical to stock price returns.<sup>5</sup>

Any shift of household savings in the form of bank deposits to financial securities or to claims against non-bank institutional investors, such as investment funds, insurance companies or pension funds, would not necessarily increase the amount of funding available to the economy. More funds for financial investment would become available if households' reduced their large share of wealth in housing (Figure 6). Although the share of housing wealth is likely to be determined by both preferences and economic factors such as taxation, inflation expectations etc., i. e. it is impossible to say upfront that the share of wealth stored in real estate is oversized, it seems warranted to be cautious with respect to policy measures that may ultimately spur over-proportionally funding for housing and other real estate. Covered bonds and securitisation products have this effect as they are often backed by mortgage loans, which would become cheaper if banks use these vehicles to tap funding from non-banks. Rather than increasing the supply of funds available to the economy, they have a tendency to increase demand for funding. This effect needs to be balanced against the immediate effect of allowing banks to offload some credit exposure from their balance sheet.

## 5 What makes an effective policy measure?

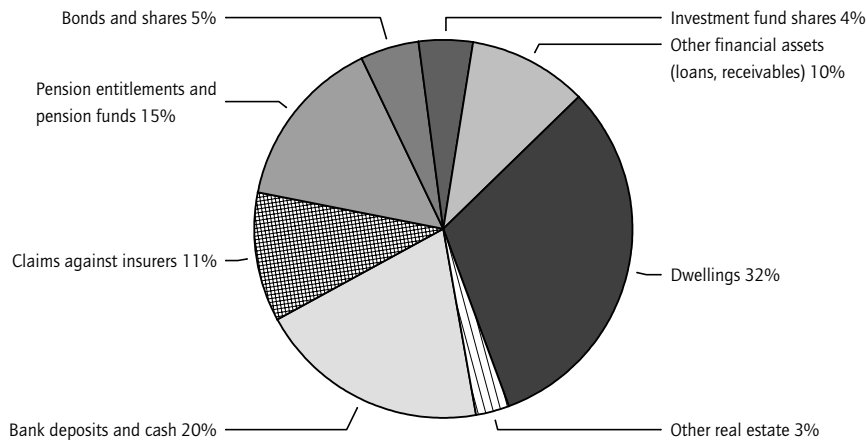
A further challenge consists in identifying whether and how policy can contribute to initiate a structural change into the intended direction, i. e. enabling the targeted market development. The section continues with a number of reflections on what categories of tools are foreseen in the CMU context and under which conditions they could be suitable. The transformation of the

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<sup>5</sup> In order to diversify risks, households would need to invest in firms of which returns are negatively correlated with the returns of their employer rather than in shares of the firm they are employed in. In fact, they might wish to invest into a well-diversified market portfolio. ETFs allow doing this. But, of course, this exposes them to other risks.

Figure 6

### Households' allocation of wealth, European Union 2014



Source: Eurostat national accounts (ESA 2010).

financial system towards a stronger role of market-based ingredients would therefore require identifying which framework conditions are supportive and adaptable. To demonstrate the relevance in this context: The CMU Action Plan contains a number of specific ideas in the field of transparency, insolvency law and tax incentives. A first delivery was a modernisation of the EU's legislation on prospectuses that accompany the issuance of securities with the aim of simplifying the information made available for investors while reducing the costs of producing the prospectus. Concrete proposals were simplified prospectuses for frequent issuers and tailor-made prospectuses for small and medium-sized issuers. Further measures are foreseen to help small and medium-sized companies to access capital markets and review how liquidity on secondary markets for corporate bonds can be improved.

The Action Plan also proposed to review for a number of areas whether parts of sector-specific legislation introduced after the financial crisis hampered the development of some capital market segments. For example, the easing of capital requirements has been a prominent feature in the discussion of possibilities of how to spur market activity in ABS markets, investment in infrastructures and possible biases in institutional investors' portfolio choices towards domestic versus foreign and debt versus equity investments. In all these cases it has been rather difficult to strike the right balance between desirability of more investment and controlling of the risks they inherently harbour. The experiences made during the financial crisis initiated a fundamental overhaul of the risk weights used to calculate banks capital requirements, legislated in Europe through the capital requirements directives and regulation. This process also led to reassessment of regulatory capital needs in insurance, implemented in Europe through Solvency II. Since parameters used to calibrate risk weights were strongly influenced by the experiences made during the financial crisis, criticism arose that they unduly penalised some financial instruments and different calibrations would be adequate. This reasoning has been pertinent in the case of asset backed securities, where most parameters used for the calibration reflected U.S. experiences,

while loss rates on investment in European securitised assets were much lower. The result was risk weights on securitised products much higher than those on covered bonds, although product features can be considered broadly comparable. Similarly, finding suitable data on which to base risk weights on infrastructure investment has been considered difficult since the underlying markets have been thin and specialised, with the consequence that differences in base periods can have a decisive influence on calibration results. A related example: the risk weights on SME loans have been considered equally critical and difficult to resolve despite a much better data basis (European Commission 2016b). This suggests requirements on data quality and identification of a proper base line represent a difficult challenge for economic analysis when supporting calibration of capital requirements.

The CMU agenda has already reinforced the debate about remaining obstacles to cross border investments. The lifting of these obstacles should foster market integration. To identify meaningful barriers, an expert group was set up to review national barriers to the free flow of capital and a second to analyse to what extent higher costs for cross-border transactions than for domestic trades are due to the rules governing post-trade market infrastructures, the so-called Giovanni barriers (EPTF 2017). In both cases and some others such as corporate bond market liquidity or green finance, the follow-up to the CMU Action Plan was the search for market intelligence and detailed knowledge to come up with specific policy proposals.

Harmonisation of legislation across EU Member States is the standard instrument to allow integration to occur. There is scepticism whether it is sufficient to deliver CMU (Veron 2014). The reason is that since harmonisation superimposes an EU wide legal framework, it is difficult to keep or protect structures considered suitable to country specific properties. Existing regimes in the different Member States tend to be rather different, which prevents identification of a large common denominator. The perceived advantages of realising scale effects in a single market are reduced by the costs of adjustment to the new rules at national level. Considerations of consumer protection and financial stability are equally relevant at country level and Member States rely on different approaches to secure them. In the extreme case, it may mean that some Member States may oppose the introduction of joint structures because they consider their national rules more suitable and the move towards a different regime too costly compared to the expected benefits. In the case of a dominating Member State in a specific market segment, there can be even cases that other Member States object a regime too close to the dominant one, in anticipation of the EU regime cementing competitive advantages of the leading one. Rather than quantification of costs and benefits of different regimes, political choices are often determined by political feasibility and interests, in fact.

The lessons from the previous wave of financial integration serve as example for the challenges CMU is likely to face. The central tool of the EU's Financial Services Action Plan (FSAP) launched in 1999 was to spur convergence of national financial legislation through harmonisation. When the different ingredients of FSAP were negotiated, Member States made an effort to maintain characteristics of their legal environment they considered optimal or at least more suitable to their specific needs than a harmonised rule. Since the CMU Action Plan contains a number of measures that target lifting of cross-country investment barriers, this experience with FSAP may also shape Member States' interest to embark on CMU, especially once changes to legislation are negotiated in detail. A telling success story in FSAP was the Markets in Financial Instruments Directive (MiFID), which harmonised regulation of investment services and trade venues across all EU Member States. Rather than minimum harmonisation and mutual recognition, MiFID



stepped up legislative harmonisation by insisting on level playing field and prohibiting Member States to require harsher requirements than the EU standard in the form of “gold plating”.

The role of regulation in fostering a change towards more market integration and structural change seems limited to establishing framework conditions that reduce transaction costs and create legal certainty. Whether market participants adjust behaviour in the intended direction is a different question. A number of private initiatives may reach similar objectives through provision of standardisation and therefore the promotion of market-driven initiatives is an alternative to regulatory measures for enabling market development. While the direct involvement of the private sector may increase the likelihood that the policy measure is effective and that the intended behavioural change occurs, private sector initiatives are subject to similar cooperation failures as Member States in the regulation field. Especially if they are driven by key market players, others may oppose standardisation as cementing market power of dominant incumbents. Since standardisation often entails the exploitation of scale effects on information, the initial supplier of the information, for example in form of a label or standard, is gaining market power, derived from a first-mover advantage. The use of ratings and the dominance of the rating through a very small number of major credit rating agencies is a classic example. The use of standards for identifying instruments (ISIN numbers), messaging services for trades (consolidated tape) or for settlement (ISO20022 standard) are other examples where the benefits of realising scale effects has to be balanced against establishing dependency from the supplier of the standard. Expectation of such dependency can be seen an explanation why standardisation approaches may not arise spontaneously. Public sector support for private initiatives therefore requires a clear understanding of participants’ incentives, possible dependencies and consequences. In addition to the impact on existing participants’ market position, the effects on possible market entrants and innovative activity seem important to consider.

Since policy makers have little experience with enabling policy initiatives to build on in the field of capital markets, it seems to be compelling that a number of measures foreseen in the CMU Action Plan cover the collection of more knowledge before a specific policy measure is proposed. This already signals in which market potential is expected, but leaves open how it can be accomplished. As regards policy areas that require further study, a number of expert groups with industry or Member States were set up to come up with policy proposals. They cover areas such as liquidity on corporate bond markets, post-trade infrastructures, green financing, national barriers to cross border investments. Most of this work is still ongoing. The expert group on post trade infrastructure issued its report in May 2017 on the basis of which the Commission envisages to derive policy measures. Despite a prioritisation of barriers to more efficient post-trade market infrastructures in the expert group’s report, more information is needed to design effective measures to address them. A public consultation was launched to further inform Commission work on this issue. A specific CMU related initiative relates to studying market potential in CEEC, in which public and private institutions undertake a systematic study of capital markets in Central and Eastern Europe (Vienna Initiative 2017).

## 6 Conclusions

For economists, the CMU could become an exciting policy experiment. It creates demand from policy makers to better understand how financial activity interacts with economic incentives and

legal framework conditions. Since EU procedures request that each legislative initiative is accompanied by an impact assessment that demonstrates the empirical support for the initiative, progress with CMU relies on such empirical analysis becoming available. The general objectives of CMU have received wide political support. Analytical support can be drawn from the observation that capital markets in many EU Member States have not yet reached critical size that encourages participation of savers and investors. While bank and market finance are complementary, recent empirical research points to disadvantages of a financial system that is too reliant on banking. The robustness of this finding is still to be demonstrated. Framing and policy design in the first phase were largely driven by plausibility considerations with reference to economic theory, but with little role for substantiating empirical analysis. Economic research has entered this area with general perceptions supported by empirical analysis of indicators at aggregated level. More targeted and detailed knowledge is necessary to substantiate the effectiveness and consequences of policies towards CMU. Academic research can play an important contribution in this regard. At the same time, policy implementation will offer a wide range of cases for study and this text presents an attempt to flag areas in which creation of more expertise would be worthwhile.

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