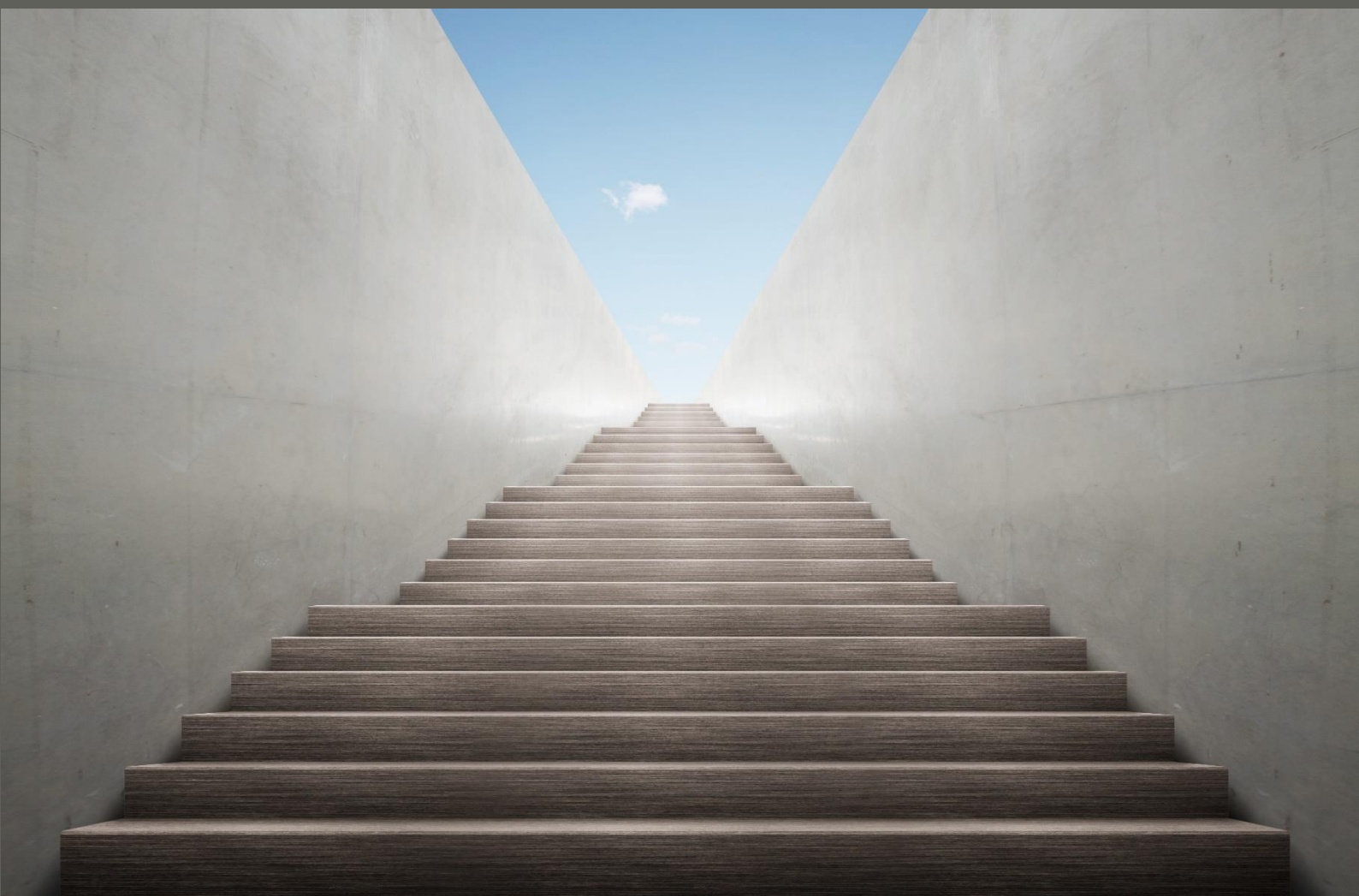


Report of a CEPS-ECMI Task Force

Rebranding Capital Markets Union

A market finance action plan



Chairman:

Vítor Constâncio

Rapporteurs:

Karel Lannoo

Apostolos Thomadakis





Rebranding Capital Markets Union: A market finance action plan

Report of a CEPS-ECMI Task Force

Chairman: Vítor Constâncio
Rapporteurs: Karel Lannoo
Apostolos Thomadakis

Brussels, June 2019

The views expressed in this report do not necessarily reflect the views and positions of all members involved in the Task Force. The members do not necessarily agree with all the positions put forward and do not necessarily endorse any reference to academic and independent studies. A robust and clear set of principles has guided the drafting process in order to preserve a neutral approach to divergent views. All members were given ample opportunity to express their views and – if well-grounded – they are reflected in the final text. Wherever fundamental disagreements arose, the rapporteurs have made sure that all views have been explained in a clear and fair manner. The content of the report and any remaining errors, however, can be only attributed to the rapporteurs.

The rapporteurs gratefully acknowledge the contributions provided by all participants in the Task Force, and in particular by the Chair, Vítor Constâncio. A list of participants is provided at the end of this report. Thanks are also due to Maarja Kuusik for tasks related to the administration of the Task Force.

Suggested citation: Lannoo, K. and A. Thomadakis (2019), *“Rebranding Capital Markets Union: A Market Finance Action Plan”*, CEPS-ECMI Task Force Report, Centre for European Policy Studies.

ISBN 978-94-6138-741-7

© Copyright 2019, CEPS and ECMI

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior permission of the Centre for European Policy Studies.

CEPS and ECMI

Place du Congrès 1, B-1000 Brussels

Tel: 32 (0) 2 229.39.11

e-mail: info@ceps.eu and ecmi@ceps.eu

internet: www.ceps.eu and www.eurocapitalmarkets.org

Table of contents

Foreword.....	i
Preface.....	iii
Executive summary and policy recommendations.....	iv
1. What is a capital market?	1
1.1. Complexity of capital markets	2
1.2. Regulating capital markets.....	3
1.3. Integrated capital markets and risk sharing.....	4
2. The Capital Markets Union project	6
2.1. The CMU Action Plan	7
2.2. The mid-term review	7
3. Europe's financial markets.....	9
3.1. Equity versus debt	10
3.2. Households' financial assets	11
3.3. Venture capital and private equity	13
3.4. Regulated equity markets	15
3.4.1. Primary market	15
3.4.2. Secondary market.....	17
3.5. Securitisation	19
3.6. Corporate bond market	20
4. Funding escalator for young, small and innovative firms	22
4.1. Pre-IPO risk capital.....	22
4.2. Taking the next step.....	24
4.3. SME Growth Markets.....	26
4.3.1. Getting the definitions right.....	27
4.3.2. Getting the regulation right	27
5. Private Sector Risk Sharing through a European Safe Asset	29
5.1. Capital market channel versus credit channel	29
5.2. The need for a European safe asset.....	30
5.3. Different proposals	31
5.4. The way forward	33
6. Investment product markets to capture household savings	34
7. Capital market regulation and oversight.....	36
7.1. The regulatory framework for EU securities markets	36
7.2. Supervision of securities markets	39
8. Conclusion.....	42
References	44
Annex 1. Task Force Members and Observers	50
Annex 2. List of Regulations/Directives.....	54
Annex 3. List of Abbreviations	55

Table of figures

Figure 1. Bank credit and stock market capitalisation, EU-28 and US (% GDP).....	9
Figure 2. Financial development and financial structure in EU-28	10
Figure 3. Structure of capital markets (end-2017, % GDP)	10
Figure 4. Stock market capitalisation and outstanding debt securities (end-2017, % GDP)	11
Figure 5. EU-28 household financial assets (€ billion).....	11
Figure 6. EU-28 household financial assets across member states (end-2017, % of total financial assets)	12
Figure 7. Financial assets of households in EU-28 and the US (end-2017, % of total financial assets) ..	13
Figure 8. Evolution of venture capital (VC) and private equity (PE) in the EU-28 (€ billion)	13
Figure 9. Average amount invested by venture capital (VC) and private equity (PE), EU-28 vs US (€ billion)	14
Figure 10. Geographic source of funds, private equity (PE) and venture capital (VC) funds raised (EU-28, € billion)	15
Figure 11. IPO activity by regions, and by value (€ billion) and volumes (number)	16
Figure 12. Stock market capitalisation (in € billion and as a % GDP).....	17
Figure 13. Average size (in € million) and number (in thousands) of listed companies (left-hand panel) and ETFs (right-hand panel), end-2017	18
Figure 14. Average size (in € million) and number (in thousands) of mutual funds, end-2017	19
Figure 15. Securitisation issuance in EU-28 and US (€ billion)	20
Figure 16. Financial liabilities of non-financial corporations in the EU (outstanding amounts at the end of period), as % of total liabilities.....	21
Figure 17. Financial liabilities of NFCs in the EU and the US (end-2018, € billion).....	21
Figure 18. Pre-IPO risk capital investments by asset class, EU-28 and US (end-2017, € billion)	23
Figure 19. Venture capital investments by stage focus, EU-28 and US (€ billion).....	23
Figure 20. IPO activity on Junior markets in the EU (value in € billion (lhs) and number (rhs))	25
Figure 21. Risk sharing in the euro area and the US (1998-2013).....	30
Figure 22. International role of euro (%)	31
Figure 23. Reduction in fund returns (expenses, sales and redemption fees) before inflation (%)	34

List of Tables

Table 1. The different layers of securities markets	2
Table 2. IPO activity in the EU, market share (average 2014-2018).....	17
Table 3. Average entry, exit and ongoing charges on investment products in the EU (% of assets).....	35
Table 4. EU securities markets basic rules	37
Table 5. EU disclosure rules framework.....	39
Table 6. Appropriate level of regulation for securities markets rules	40

Foreword

This Report of the CEPS-ECMI Task Force on Rebranding Capital Markets Union (CMU) represents a valuable contribution to the necessary relaunching of this important project. We learned the hard way that a single currency requires a financial system that is sustainably integrated and, indeed, as single as possible. The history of the EU is marked by a progressive search for the right institutional embedding of financial markets. The crucial question is whether we will achieve sustainable financial integration commensurate with maintaining financial stability through proper regulation and supervision at the European level.

Financial integration provides risk sharing mechanisms that can reduce the impact of country-specific shocks and contributes to macroeconomic stability. Internationally diversified portfolios – cross-regional and cross-border asset holdings, including firm ownership claims – are more resilient to global and local shocks and can mitigate the impact of such adverse scenarios. This is particularly true when integration also occurs in equity markets as opposed to the current bias towards debt finance intermediated by banks. Naturally for the member countries that belong to the euro area, this risk sharing mechanism is particularly important because the single monetary policy is unable to address asymmetric shocks. Therefore, more private financial risk sharing can significantly improve the macroeconomic stabilisation of the euro area and thereby the functioning of the Economic and Monetary Union (EMU). And it would foster the international role of the euro.

A big and liquid market, both of debt and equity, would spur innovation and enable the development of an efficient venture capital market. This relates to the importance of boosting the capacity to engage in activities conducive to innovation and productivity growth. In the years since the Great Recession, the pace of productivity growth in Europe has been persistently slow. In fact, European productivity growth had already started to stagnate during the mid-1990s.

Capital markets can contribute greatly to innovation and growth. Evidence increasingly suggests that while both banks and markets are important for the financing of economic growth, non-bank financial intermediation provides a relatively more powerful contribution to innovation and productivity-enhancing activities in modern sophisticated economies (Kremer and Popov, 2018). Importantly, complementarities between banks and markets increase as the economy develops and thus deep capital markets will end up complementing banks as sources of financing.

We should however, be well aware that creating a capital markets union is a difficult project because it implies deep integration, requiring a European safe asset, the harmonisation of taxes on financial products, a convergence of company law, including on bankruptcy, the creation of a single rule book of regulation for markets activity and ultimately a European Single Securities Market Supervisor.

This allows me to highlight one of the sections of this Report that addresses the question of the European safe asset. The main reason why this is an important question are the following: 1) Without a European safe asset, there will not be a solution to the question of the bank-sovereign nexus, important for the stability and robustness of the European banking system; 2) Without a European safe asset, the scarcity of secure assets will increase the temptation for the private sector to create pseudo-safe assets as occurred before the crisis, potentially endangering financial stability and the real economy; 3) Without a European safe asset, there will not be a complete, flourishing capital markets union; 4)

Without a European safe asset there will not be a fully integrated European bond market, which is crucial for fostering the international role of the euro (Constâncio, 2019).

A viable safe asset has to be different to the existing proposals of Eurobonds involving significant degrees of mutualisation of debts, which should not be considered at the present stage of European integration. The two proposals that the Report underscores are: i) the Sovereign Bond-Backed Securities (SBBS) that follows the series of papers by Brunnermeier *et al.* (2017) and was crystallised in the report published by the European Systemic Risk Board (ESRB) (ESRB HLTF, 2018); and ii) the Leandro and Zettelmeyer (2018b) version of the so-called E-bonds resulting from a European public entity issuing securities destined to cover a sizeable amount of national financing needs and backed by the seniority of its claims over other national sovereign liabilities. The two proposals rely, in different degrees, on diversification, seniority and in the case of the SBBS, on tranches.

The discussion in the Task Force was not conducive in the end to making a choice between the two projects. Personally, though, I think that the SBBS concept is in a weaker position, as it has been challenged in strong ways by market practitioners, rating agencies, national Debt Management Offices (DMOs) and finally, in December, by the Economic and Financial Affairs (ECOFIN) Council. The main substantive concern is the perceived insufficient diversification to ensure that the senior tranche can be indeed as safe as claimed because correlations among several countries' debt could increase in a stressful situation. Also, it may be difficult to sell the junior tranche at coupons that do not fatally compromise the overall economics of the synthetic security issuance. Indeed, if the junior tranche had to be placed at a relatively high coupon, then the senior tranche would need to offer a lower coupon than Bunds, a doubtful selling prospect. This would likely render the economics of the SBBS unviable. At this stage of the debate, the more hopeful concept corresponds to Leandro and Zettelmeyer's proposal, a solution without tranches and mutualisation, which puts the stress on seniority to build up the safety of the asset.

Other sections of the Report deal with a "Funding escalator for young, small and innovative firms"; "Investment product markets to capture household savings" and "Capital market regulation and oversight". The EU regulation has already dealt with many aspects related to infrastructures, intermediaries and products that are available on the market. However, the fragmentation of equity and bond markets is still too substantial. Many things are therefore missing if we want to achieve this vital main objective.

I think that the Report enumerates a comprehensive list of necessary reforms: harmonisation of primary government bonds; overcoming the limited transparency of price formation and the lack of central price sources in bond and equity markets; clarification of the present unclear rules for start-ups in different definitions for SME Growth Markets and the creation of single source of sensitive corporate information. Unfortunately, until now, most of the initiatives related to CMU were directed more to the general development of capital markets than to integrate and unify financial markets in Europe. **From now on the crucial goal should be to overcome fragmentation and create a genuine capital markets union.** This Report makes valuable contributions in that direction.

Vítor Constâncio

Former Vice President of the European Central Bank,
and current President at the School Council at ISEG

Preface

Initiatives to integrate Europe's capital markets have been on the agenda of policy makers since the start of the single market programme, and were singled out by the Juncker Commission as one of their priorities. Five years on, work on the Capital Markets Union has raised awareness about the importance of market finance for the Europe's financial system and the competitiveness of its economies, but much remains to be done to make it an effective financing channel. CEPS and ECMI therefore decided to create a task force to debate the way forward.

Launched in December 2018, the task force “Rebranding Capital Markets Union: Status quo and back to the drawing board” met three times over a period of 6 months and discussed several aspects of capital markets such as the crucial role of bond markets, the funding escalator of SMEs, regulated and private equity markets, the role of households in capital markets and the regulatory and supervisory system. This report puts the debates of the task force into perspective and arrives at a series of policy conclusions on how to advance the programme over the coming five years. These are summarised at the start of the report.

The first chapter discusses the definition of a capital market and its complexity. The second reviews the CMU action plan so far, which chapter 3 puts into the perspective of the different segments of Europe's financial markets. Chapter 4 discusses the problems for small innovative firms in gaining access to market finance. Chapter 5 highlights the central role of an integrated government bond market as a mainstay of a truly European capital market, while the role of fund markets for the participation in risk capital markets is discussed in chapter 6. Chapter 7 discusses market regulation and oversight.

Executive summary and policy recommendations

The European Union (EU) needs an action plan to stimulate market finance in the different EU markets. Capital Markets Union (CMU) gives the impression that a top-down approach can bring more market finance, and that it concerns mainly equity markets. A new plan should instead raise awareness about the advantages of more market finance in Europe, for firms and households. A set of indicators should be used as basis to measure progress towards more market-based finance. Action should be focused on the core bond and equity markets, and on advancing the participation of individuals in capital markets.

In the five years since the inception of CMU, European capital markets have barely become more unified. While a rebalancing of EU economic structures towards more market-based finance is necessary, CMU has not been particularly successful in integrating nationally fragmented capital markets, nor have risk capital markets grown. Moreover, Europe finds itself even further behind the United States. This has affected the competitiveness of the EU's economies and of European corporations, as well as the credibility of the project.

A continuation of the project should focus on:

Government bond markets, which are a core component of European capital markets. Despite that, they remain very national, in structure, regulation, orientation, and have been kept out of the scope of any EU initiatives. As a starting point for a genuine euro-bond, or safe asset, primary markets for government bonds should be integrated on the basis of EU rules. The related settlement and custody framework should be fully opened up and collateralisation requirements for the participation in local primary issuance abolished.

A euro area safe asset and a high-quality reference euro-bond yield curve would be a major step forward towards more integration in Europe's capital markets and will further enhance private risk-sharing in the euro area. It will create a deep and liquid European bond market, which will set a benchmark for all markets. Moreover, it will support further portfolio diversification, while providing a new source of high-quality collateral for cross-border financial transactions. The first step should be the joint issuance of short-term treasury bills, on the basis of a clear distribution key and with the participation of national debt management offices in its governance. The potential of issuing longer-term bonds as well should be subject to further analysis of the different possible models.

Start-ups, high-growth companies and Small and Medium-Sized Enterprises (SMEs) are the main drivers of the European economy. Yet, when in need of external financing, they rarely rely on public markets, due to the lack of a bespoke and proportionate regulatory framework. The SME Growth Market (GM) label, which exists under several EU rules, requires an exclusive focus on SMEs with less complex requirements/costs than the regimes for ordinary regulated markets. Consistent definitions of SMEs across different pieces of legislation that reflect current market realities are necessary. Furthermore, in order to preserve financial research for listed SMEs, it is urgent to establish a proportionate mechanism for investment firms, asset managers and analysts specialised in SMEs.

Investment fund markets are the foremost means by which households participate in capital markets. But fees are dissuasive and explain why European citizens keep their savings largely in bank deposits. The implementation of the Markets in Financial Instruments Directive (MiFID) II, and related measures, is bringing more transparency in costs structures of funds for investors and should be used as a basis to tackle excess costs. Further initiatives are required to reduce the costs of fund investments by households on the basis of a few clear benchmarks, and to channel savings of European households into long term assets.

Disclosure is a fundamental tool to create investor confidence. However, the framework is not consistently applied across the different market segments. An integrated storage mechanism or a single access point is necessary, where investors can find all sensitive corporate information. With sustainability reporting, the disclosure framework risks becoming even more fragmented instead of integrated. As regards market price information, a single data source is required.

Investor protection and enforcement are key to the proper functioning of capital markets, given the different layers and multiplicity of actors. The recent agreement on the European Supervisory Authorities (ESAs) review will give the European Securities and Markets Authority (ESMA) more competencies and staff, but fluid cooperation in a virtual network of European market supervisors and more supervisory convergence will be key to create the impression of a truly single market. The European Commission and the European Court of Justice (ECJ) will need to be vigilant that rules are respected, and prevent regulatory arbitrage, which undermines the attractiveness of the European capital markets, also as seen from third countries.

Action is also required in the areas of taxation and company law, to tackle the debt bias in taxation and double taxation of investment income, and to reduce differences in shareholder and debtor rights, although it is unlikely that much progress will be achieved soon.

A MARKET FINANCE ACTION PLAN

ENHANCE MARKET FINANCE TO ADVANCE INTEGRATION

*Karel Lannoo and Apostolos Thomadakis**

“The direction we need to take is clear: build a single market for capital from the bottom up, identifying barriers and knocking them down one by one, creating a sense of momentum and helping to spark a growing sense of confidence in investing in Europe’s future.”

Green Paper “Building a Capital Markets Union” (February 2015)

1. What is a capital market?

A capital market is easy to define but harder to implement – a challenge that the European Union (EU) itself has experienced over the last 25 years. One of the four fundamental freedoms of the European Single Market is the free movement of capital. Recognising the existence of global capital flows, the EU treaties also apply this freedom to third countries. In order for capital to flow freely within/from/to the EU, capital markets should be properly functioning, diversified and deeply integrated. The primary objective of such markets is to support economic growth and stability through two mechanisms: i) matching savers and borrowers (which supports economic growth), and ii) improving private sector risk sharing (which supports economic stability).

A capital market is a market that channels funds from net savers to borrowers. Participation in this channel is not only for residents, as non-residents can also contribute. In fully integrated capital markets, assets with identical risk characteristics have the same price regardless of the country in which they are traded. Furthermore, the smooth transfer of financial flows ensures that corresponding risk assets command the same expected return, irrespective of domicile. In other words, capital markets integration implies a process of convergence in market risk and price. For this to happen, a high degree of harmonisation across member countries should occur in securities legislation, company and bankruptcy law as well as in taxation of financial products.¹

Compared to bank-based finance, market finance is much more difficult to put in place, as it requires a very complex and developed structure to function efficiently. One could even argue that an effective capital market model is hard to ‘export’. No wonder that there are few developed and properly functioning capital markets in the world.

* Karel Lannoo is CEO of CEPS, and General Manager of ECMI. Apostolos Thomadakis, Ph.D. is Researcher at ECMI and CEPS. The authors are solely responsible for the content of this report.

¹ Progress in these matters is naturally quite difficult to achieve and this Report does not address these medium-term conditions necessary for a fully integrated capital market.

1.1. Complexity of capital markets

Capital markets are the perfect example of a complex system, consisting of a multifaceted set of institutions. Not only government bodies play a role, but also self-regulatory organisations and ‘reputational intermediaries’ (Black, 2000). Stock exchanges, investment banks, credit rating agencies, law firms and audit firms put their reputation on the line when participating in an initial public offering (IPO) or disseminating information on securities issuers and enterprises. They will suffer a loss of standing or even counter-claims if they support a bad security on the market.

A second tier of intermediaries consists of investment and pension funds (also called the ‘buy side’), which create market demand for securities. The financial press acts as opinion-shapers and data providers as repositories of information. The intermediaries are controlled by government and/or self-regulatory organisations (SROs). The latter can be subdivided into voluntary (professional organisations) and mandatory (including also SROs mandated and controlled by government) organisations. Intermediaries are liable by law for faulty information. Table 1 presents this structure schematically.

Table 1. The different layers of securities markets

ISSUERS	- Equity and debt securities
INFRASTRUCTURE	- Securities exchanges, trading platforms, settlement organisations, central counterparties
REPUTATIONAL INTERMEDIARIES	- Investment banks, brokers, credit rating agencies, analysts, auditors, law firms - Institutional investors (investment funds, pension funds, insurance companies) - Financial press, social media - Data providers
SELF-REGULATORY ORGANISATIONS	- Professional federations (analysts) - Standard setters (i.e. accounting, audit)
GOVERNMENT INSTITUTIONS	- Securities, futures and commodities authorities - Conduct authorities - Courts
LAWS	- Securities law - Company law - Consumer law

Source: Authors’ elaboration based upon Black (2000).

Such a structure is highly complex and requires years before it can be put in place and, ultimately, becomes fully functioning (i.e. the different layers of institutions work efficiently together). Bad functioning by one element of a layer affects the whole chain. Formal rules are only a start. Next comes the institutions and enforcement, which is the “more difficult task”, including direct public enforcement and indirect enforcement through the reputational intermediaries (Black, 2000). The financial crisis of 2007/08 is perhaps the best example to illustrate what can go wrong if one element does not function well. The lack of care by credit rating agencies, unregulated at that time, resulted in massive downgrades of securities, which affected balance sheets of financial institutions all over the world, and gave rise to massive bank bail-outs in the US and Europe.

1.2. Regulating capital markets

Regulation and self-regulation have a central role in making markets function well, and thus allowing the best-regulated market to have the lowest cost of capital. A well-integrated capital market works as a conduit for the demand and supply of debt and equity securities and derivative instruments. It channels money provided by investors and banks to borrowers through a variety of instruments, called securities. A capital market is not a compact unit, but a system with differing degrees of centralisation. In most countries, the stock market is centralised, although in the most developed markets, fragmentation has grown between different trading platforms as a result of competition. Bond and derivative markets were more decentralised and functioned under different models – bilateral or centralised in certain segments – but a process towards organised trading and electronification is ongoing as a result of the financial crisis, with requirements for more transparency in price formation, on-exchange trading and netting of exposures among derivative traders in central counterparties (CCPs).

A central problem, analysed at length in the literature, is the information asymmetry between issuers and investors (Myers and Majluf, 1984; Brennan and Kraus, 1987; Dierkens, 1991; Nachman and Noe, 1994; Fulghieri *et al.*, 2015; Bond and Zhong, 2016). Thus, in order to ensure equity and efficiency of securities markets, (self-)regulation must ensure that a sufficient amount of credible information is delivered equally to investors, and that issuers receive a correct price for their securities. Much of the debate has focused on: i) how to make disclosure by issuers work, ii) transparency of the price formation in ‘organised markets’, and iii) ‘best execution’ of trades at the best price for investors.

Compared to the United States (US), which has a long history of securities market regulation going back to the 1930s, and a specialised federal securities and a futures market supervisor, Europe has gone through different waves of harmonisation over the last two decades, but apparently without resounding success, given the growing lag with the US, and the resulting competitive distortions. The first attempts date back to the early 1980s with the European rules for public offerings and listing particulars. The 1992 programme resulted in the agreement on the Investment Services Directive (ISD), or the reciprocal opening up of the EU’s local securities markets, and the insider trading directive. By the end of the 1990s, in the wake of European Economic and Monetary Union (EMU), a new wave of harmonising measures was proposed with the Financial Services Action Plan (FSAP).² The centrepiece of the FSAP was the 2004 Markets in Financial Instruments Directive (MiFID), but it also contained a new prospectus directive, and measures regulating disclosure and tackling market manipulation. The financial and sovereign crises have led to a fourth wave of measures, with, among others, the creation of the European Supervisory Authorities (ESAs),³ the European Market Infrastructure Regulation (EMIR) and an upgrade of MiFID. The CMU plan led to a few new measures, such as on securitisation, benchmark

² The FSAP was the first Commission document to map out a coherent strategy for the regulation of securities markets. See <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM%3A124210>.

³ In March 2019, the European Parliament and member states agreed on the core elements of reforming European supervision of the EU financial markets. In April 2019, the European Parliament endorsed the legislation. The text on the general approach in the ESA review is available here: <https://data.consilium.europa.eu/doc/document/ST-5834-2019-INIT/en/pdf>.

regulation, personal pension products⁴ and the Investment Firm Review (IFR),⁵ but most were further amendments to earlier measures.

Europe has advanced a long way in the meantime, but its efforts have clearly demonstrated the complexity of building a set of institutions to support securities markets. European states had to build a national and Union framework almost at the same time. By the end of 1993, with the launch of the single market and the coming into force of the ISD, the first real piece of harmonising legislation, the member states of the EU had a domestic stock market capitalisation of only 43% of Gross Domestic Product (GDP), in contrast to 77% in Japan and 85% in the US (NYSE and Nasdaq). Excluding the United Kingdom (UK), average stock market capitalisation in the EU amounted to 31% of GDP. In countries like Austria, Germany or Italy, stock markets were less developed, with a combined capitalisation of around 20% of GDP, and weak market supervisory entities. Though much has changed in the meantime, not only in the numbers, but also the structure of the markets, the role of banks and institutional investors, the divide with the US remains. This was highlighted again recently by the US listing of the European Spotify,⁶ or in the huge market capitalisation, and thus clout, of US tech companies.

For emerging markets to create capital markets from scratch represents an even more complex task, which explains why it is easier to develop bank-intermediated financing in the first place, as it does require a much less complicated institutional and regulatory set-up. This is also noticeable in the 'rich' emerging markets of the Middle East or in China. A capital markets model implies that there is a huge task to educate issuers and investors in capital markets about their rights and obligations.

Black (2000) sees limited room for 'piggy-backing' on the reputation of foreign countries. The whole set-up is difficult to transpose, in as much as the functioning and reputation of the entire structure comes into play. The best-run system will have the cheapest costs for raising capital. Regulatory competition should thus increase standards. Other scholars came to the same conclusion (Romano, 2001; Lannoo and Khachaturyan, 2003). Opponents of regulatory competition argue that markets may not be able to differentiate properly between efficient and inefficient firms and thereby fail to prevent the resources from ending up in the 'lemons' market, according to Akerlof (1970). This may, at EU level, point to the need for a stricter enforcement mechanism of securities law, analogous with that for the banking union (BU), as the illusion of a common standard would put the best-run markets at a disadvantage (Lannoo, 2015).

1.3. Integrated capital markets and risk sharing

The integration of capital markets is fundamental for enhancing economic activity. Increased competition between intermediaries improves the efficiency and pricing of these intermediaries, resulting in a decrease in the cost of finance for borrowers and an increase in returns to savers. This ensures that potential borrowers with productive investment opportunities have access to the funding

⁴ In June 2017, the Commission proposed a regulation on a pan-European Personal Pension Product (PEPP), which was approved and adopted by the European Parliament in April 2019. The text is available here: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52017PC0343>.

⁵ In February 2019, the European Parliament and the member states reached a political agreement on the IFR proposal. In April 2019, the European Parliament endorsed the proposal. Available here: <file:///C:/Users/apostolos/Downloads/PART-2017-633466V1.pdf>.

⁶ There are also other reasons that contributed to Spotify's decision to be listed on a US stock exchange (e.g. access to the deeper and more liquid US markets, lack of harmonised IPO rules in Europe).

they need, and that the resulting financial risk is matched to the risk preferences of a diverse set of investors. Thus, efficient capital markets raise the level of investment.

Integrated capital markets do not only have an impact on economic activity and growth, but also on economic stability and resilience. Holding a more geographically diversified portfolio of financial assets provides asset returns that are not only less volatile but are also less correlated with domestic income (i.e. capital market channel of risk sharing). So, when a country is hit by an economic shock, cross-border flows enable households and investors to lend or borrow in order to offset the impact of the shock (i.e. credit market channel of risk sharing). Thus, improving diversification of funding enhances cross-border risk taking and allows capital markets to play a greater role in reducing the impact of a shock in one country.

However, despite their broad economic advantages, integrated and diversified capital markets are subject to various risks with implications for financial stability. On one hand, by spreading losses across countries, the impact of a negative economic shock can become widely dispersed, and therefore reduce the likelihood of financial instability in the economy. On the other hand, by increasing linkages across countries, the impact of a large economic shock can have systemic repercussions in the markets. In such cases, risk sharing might not only be insufficient to prevent financial instability in the country facing the shock, but it could lead to financial instability spreading to other countries.

2. The Capital Markets Union project

One of the key elements of the Investment Plan (IP) President Juncker announced in November 2014 was the creation of a true single market for capital (i.e. CMU) for all 28 EU member states by 2019.⁷ The rationale behind CMU was twofold: to address the issue that corporate financing relies too heavily on debt and in particular on bank loans on the one hand, and to foster the integration of European capital markets on the other. In particular, as the green paper (GP) of February 2015 (EC, 2015a) highlighted, capital markets should be strengthened in such a way that will: i) unlock more investments for all companies and infrastructure projects, ii) attract more investment into the EU from the rest of the world; iii) stabilise the financial system by offering a wider option of alternative funding; and iv) deepen financial integration through enhanced cross-border risk sharing.⁸

The Action Plan adopted in September 2015 (EC, 2015b) identified setting six specific areas of intervention:

- Expanding the financing options available to European firms (and SMEs in particular);
- Easing access to public markets for firms;
- Encouraging long-term and sustainable investment;
- Fostering greater participation of retail and institutional investors;
- Enhancing banking capacity; and
- Facilitating cross-border investments.

This Action Plan consists of a diverse set of approaches and measures. In particular, it includes directives, amendments and additions to existing regulations, as well as public consultations, studies, stocktaking and benchmarking tools (e.g. impact assessments, green papers, calls for advice, best practices, white papers) in order to accumulate knowledge and evidence before putting forward certain proposals. Moreover, when non-legislative actions are not successful, a complex set of legal acts, recommendations and regulatory measures comes into play. In total, thirty-three actions were proposed by the CMU Action Plan, some of which have already been included or are scheduled for inclusion in the legislative process.

This heterogeneous approach can – to some extent – be explained by the fact that CMU addresses the entire market finance part for the EU-28.⁹ Adding to this complexity, the CMU aims to promote capital market integration without – up until recently – the intention of centralising the supervision of the relevant instruments and institutions. Furthermore, CMU does not intend to create a new institutional architecture or a public risk-sharing mechanism,¹⁰ but rather to strengthen the current institutional framework and address shortfalls of the regulatory and supervisory system in cross-border activities. Thus, there is no single measure that will deliver CMU. Instead the project requires a range of steps whose impact will cumulatively have the potential to turn fragmented pieces of legislation into a cohesive regulatory framework “to unite Europe’s capital markets”.

⁷ Available at: http://europa.eu/rapid/press-release_SPEECH-14-2160_en.htm.

⁸ In addition, the CMU will reinforce the third pillar of the IP for Europe. It will offer benefits for all 28 Member States, while also strengthening EMU by supporting economic convergence and helping to absorb economic shocks in the euro area (EC, 2015b).

⁹ As opposed to the banking union which focuses on the banking sector of the euro area.

¹⁰ Such as the common fiscal backstop for the Single Resolution Fund (SRF).

2.1. The CMU Action Plan

The six main areas of intervention of the CMU Action Plan comprise 20 objectives, to be achieved through 33 actions. The Commission set an ambitious timetable for completing a properly functioning and integrated CMU by 2019.

The first three areas of intervention include actions that create more favourable conditions for investors to participate in capital markets and channel investments towards long-term and sustainable solutions. Some of these actions are fiscal in nature (e.g. encouraging venture capital and equity financing), while others are regulatory (e.g. reviewing the calibration for bank infrastructure investments in the Capital Requirements Regulation (CRR), reviewing Solvency II calibrations for insurers' investments in infrastructure). Others are aimed at facilitating the capital demand from firms and enterprises (e.g. feedback from banks to enterprises when credit applications are declined, simplification of prospectus requirements).

The fourth area has measures seeking to foster institutional and retail investment. While some of them are more generic, such as the green paper on retail investment services, others are specific to certain types of investor. For example, the prudential treatment of private equity and privately placed debt in Solvency II for insurance companies, or the evaluation of retail investment product markets for retail investors.

The fifth area establishes a more favourable framework for securitisation, with a view to leveraging banking capacity to support the wider economy. Actions aim at freeing up the capacity of bank balance sheets and increasing banks' ability to lend and contribute towards a long-term investor base, as well as developing a pan-European framework for covered bonds that will help reduce the cost of funding for banks issuing covered bonds.

The sixth area of intervention concerns actions to facilitate cross-border investing. Such actions include the convergence of company insolvency proceedings across member states, the removal of overlaps in cross-border withholding taxes, and the strengthening of supervisory convergence and effectiveness.

2.2. The mid-term review

By the time of the mid-term review in the second quarter of 2017 (EC, 2017), 20 out of 33 actions had been completed. Half of them were studies, reports, consultations and calls for evidence related to either venture capital, business angels, crowdfunding or barriers to cross-border distribution of investment funds, covered bonds and supervisory convergence. The remaining ten actions were legislative in nature, namely proposals related to the European Venture Capital Funds (EuVECA) and European Social Entrepreneurship Funds (EuSEF), the modernisation of the Prospectus Regulation (PR), the relaunch of the Common Consolidated Corporate Tax Base (CCCTB), the review of risk calibrations for banks and insurance companies, the establishment of a Pan-European Personal Pension Product (PEPP), as well as the restructuring and second chance frameworks for entrepreneurs, the proposal on improving the covered bond market, and the proposal on clarifying conflict-of-law rules for third-party effects of transactions in securities and claims.

However, developments such as the departure of the UK from the single market, the disruption that financial technologies bring to capital markets, and the urgency of moving towards sustainable and environmentally-friendly solutions, necessitated the introduction of nine new priority actions. As a result, attention has been given to: i) strengthening supervision and enforcement across the EU (i.e. amend the functioning of ESAs and strengthen the powers of ESMA); ii) exploiting the potential of

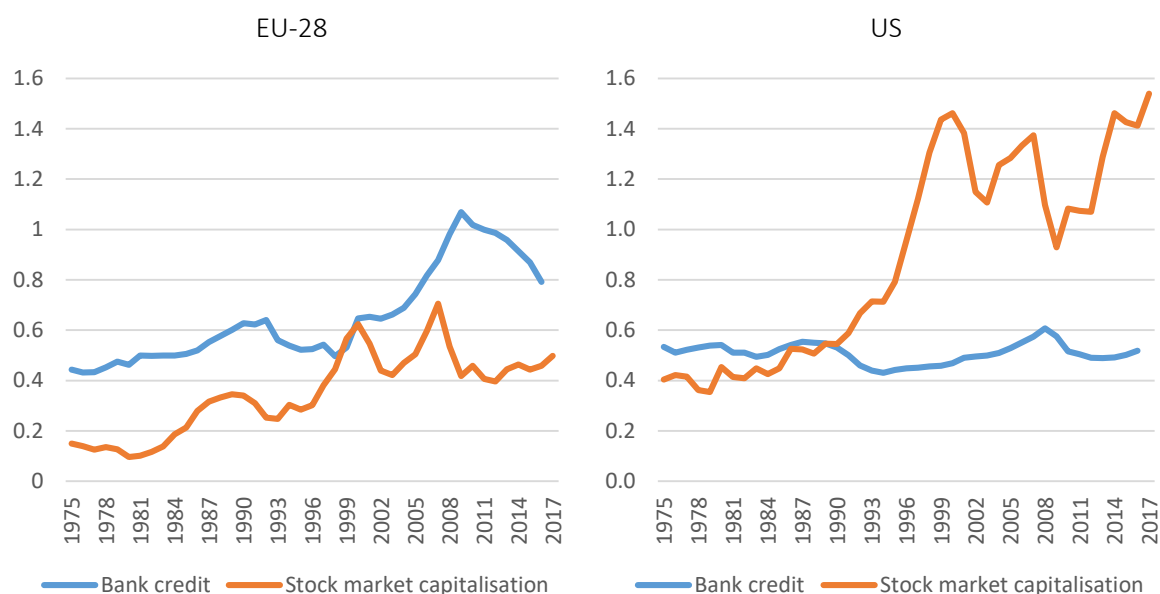
fintech and its contribution towards deepening and broadening EU capital markets (i.e. EU licensing and ‘passporting’ for fintech activities); iii) supporting the development of local capital markets (i.e. a comprehensive EU strategy to develop local and regional capital markets across the EU), and iv) reorienting capital flows towards more sustainable investments (i.e. improving disclosure and integration of sustainability/ESG factors).

By mid-2019, much progress had been achieved on the legislative agenda, but the views on the reach and impact of these initiatives towards a more integrated capital market are divided. The question remained whether it would bring the EU closer towards a more balanced financial system. This is discussed in more detail in the following chapter.

3. Europe's financial markets

Since the 1970s, financial markets have been steadily developing and increasing in size, both in absolute terms and relative size to the rest of the economy. This is evident when looking at the evolution of credit markets and stock markets for the EU-28 (Figure 1, left-hand panel). Credit markets grew robustly until the early 1990s, followed by a short stagnation, and then doubled in size over the next decade, but have been declining ever since the financial crisis. On the other hand, stock market development has been more volatile, due to the bursting of the dot-com bubble and the financial crisis.

Figure 1. Bank credit and stock market capitalisation, EU-28 and US (% GDP)



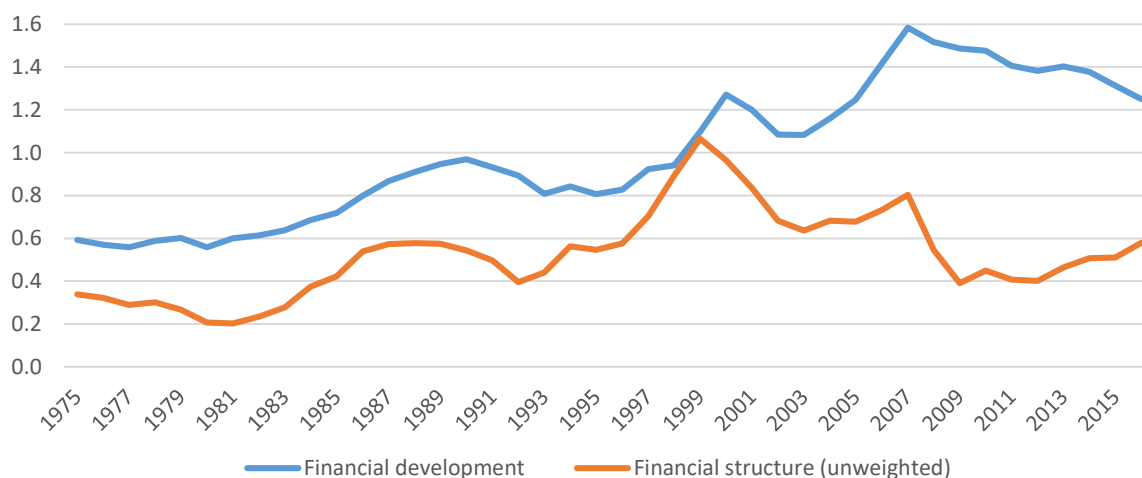
Note: The graphs show the unweighted average, by year, of EU-28 and US ratios of private credit by deposit money banks to GDP and stock market capitalisation to GDP, over the period 1975-2017. While data on stock market capitalisation are available up to 2017, data on private credit are up until 2016.

Source: World Bank Financial Structure Database, FRED Economic Research.

Attempting a comparison between the EU and the US – the world's largest and most successful 'CMU' due to its depth, scale and breadth – highlights the key difference between the two markets (Figure 1, right-hand panel). Europe's financial system is considerably more bank-based than its US counterpart. European credit markets, even though on a declining trend since 2009, represent around 80% of GDP while stock markets just 50%. In the US this is reversed: market financing accounts for three times more (154% of GDP) than bank credit (52% of GDP).

Despite significant growth in financial development (tracked as the sum of bank credit to the private sector and stock market capitalisation divided by GDP), Europe's financial structure indicator (the ratio of stock market capitalisation to bank credit to the private sector) has returned to the levels observed during the 1990s (Figure 2). In particular, while the overall size of the financial markets (i.e. financial development) has more than doubled over the past 40 years (from a ratio of 0.60 in 1975 to 1.25 in 2016), the relative importance of equity markets compared to bank credit to the private sector (i.e. financial structure) is at the same level as it was in 1996 (at 0.58 in 2016, i.e. about half the size of credit markets). Financing of the real economy through public and private equity markets has not been fostered. As a result, the risk sharing capacity in the EU remains very limited.

Figure 2. Financial development and financial structure in EU-28



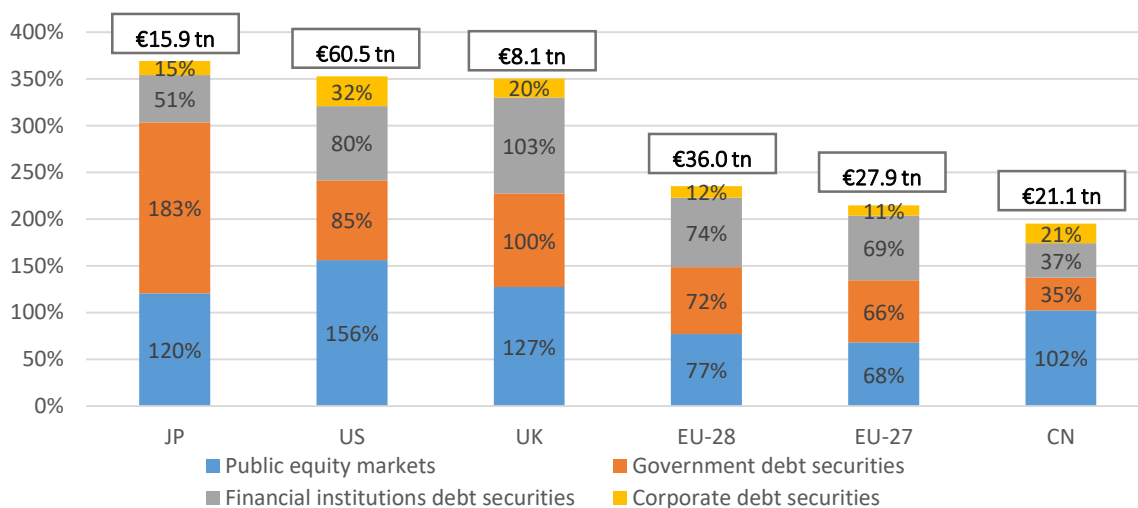
Note: Financial development is measured as the sum of bank credit to the private sector and stock market capitalisation divided by GDP. Financial structure is measured as the ratio of stock market capitalisation to bank credit to the private sector. Data refer to EU-28 over the period 1975-2016.

Source: World Bank Financial Structure Database, FRED Economic Research.

3.1. Equity versus debt

Taking the different components of the core domestic equity and debt securities markets together, the EU-28 market is about one third smaller relative to GDP than that in the US (Figure 3). Government and financial debt securities are of comparable weight, but a big difference lies in the securities markets for corporations, where corporate equity and debt securities in the US are over twice as substantial as in the EU.

Figure 3. Structure of capital markets (end-2017, % GDP)



Source: 2018 ECMI Statistical Package.

Digging deeper and looking at the situation in individual member states, further significant discrepancies occur that indicate regional divergence (Figure 4). There is no single EU model for securities markets, but rather an enormous diversity of models. Sovereign indebtedness explains one aspect of the development of debt securities markets, but not everything. For example, markets in Germany are underdeveloped, whereas the Netherlands and Denmark have debt securities markets equivalent to almost three times their national GDP.

Figure 4. Stock market capitalisation and outstanding debt securities (end-2017, % GDP)



Notes: Luxembourg has been excluded in order to not distort the graph (stock market capitalisation: 103.5%, outstanding debt securities: 1,572.9%). Romania has also been excluded as data on debt securities are not available.

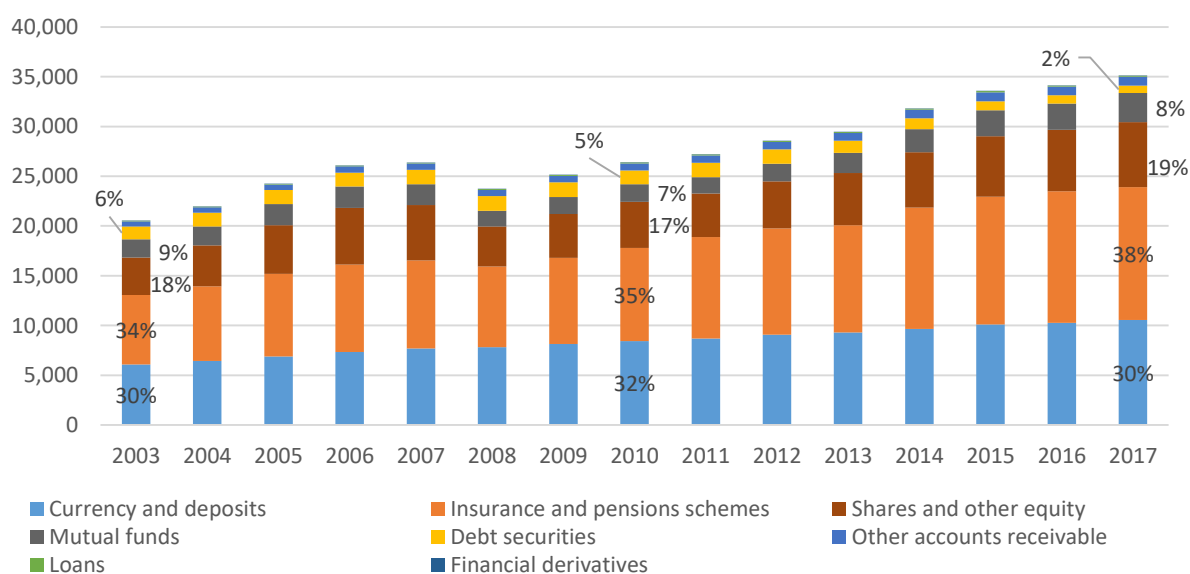
Source: 2018 ECMI Statistical Package.

Capital markets in some countries are well developed and can, for example, respond to the financing needs of SMEs or infrastructure. However, in other cases, an equity market is still emerging, and the debt market is dominated by the needs of the government. Furthermore, data also indicate that there is limited integration among the capital markets of EU member states. Several local factors seem to hamper cross-border provision of capital market products or prevent competition at EU level.

3.2. Households' financial assets

Despite the significant increase of EU household financial assets since 2003 (by 70.1%), retail investments channelled through capital markets (i.e. holdings of equity, and debt securities) represent a rather small portion (Figure 5). The main driving forces behind EU household financial wealth are cash and deposits holdings together with investments in insurance and pension products, which grew by 74%, respectively 91% over the same period.

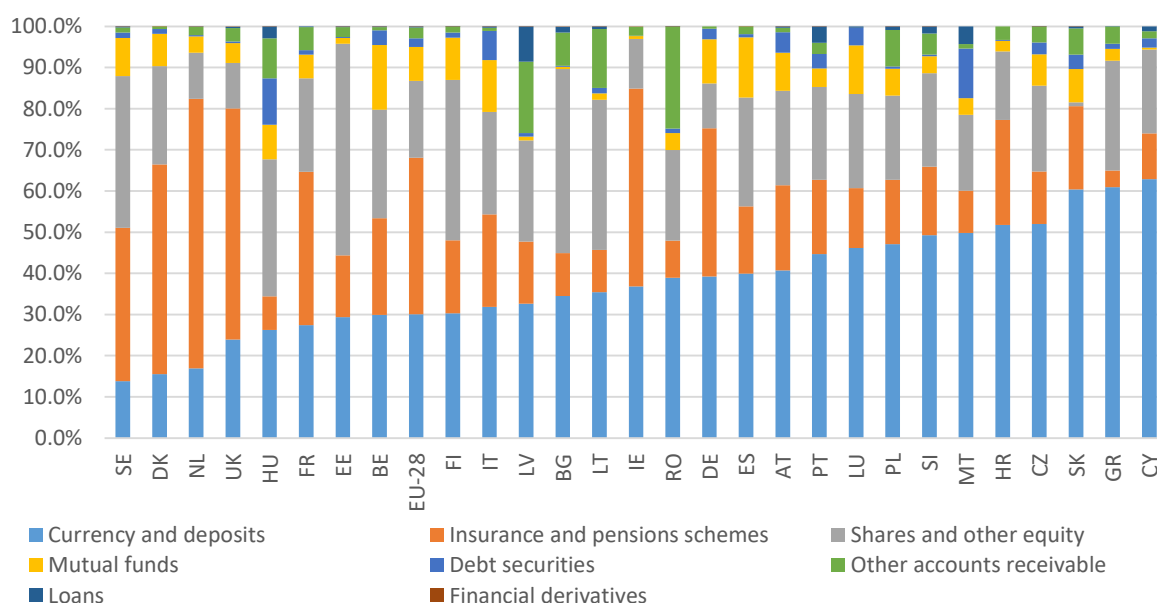
Figure 5. EU-28 household financial assets (€ billion)



Source: Eurostat.

The composition of household financial assets varies considerably across member states (Figure 6). While some countries (i.e. Cyprus, Greece and Slovakia) show very large financial assets held in currency and deposits, others (i.e. the Netherlands and the UK) have much higher proportions invested in insurance and pension funds. As for equity investment, with the exceptions of Estonia, Bulgaria and Slovakia where households invest 51.4%, 44.7%, and 0.9% of their assets into shares and equity, the remaining countries are very close to the EU-28 average of 24%.

Figure 6. EU-28 household financial assets across member states (end-2017, % of total financial assets)

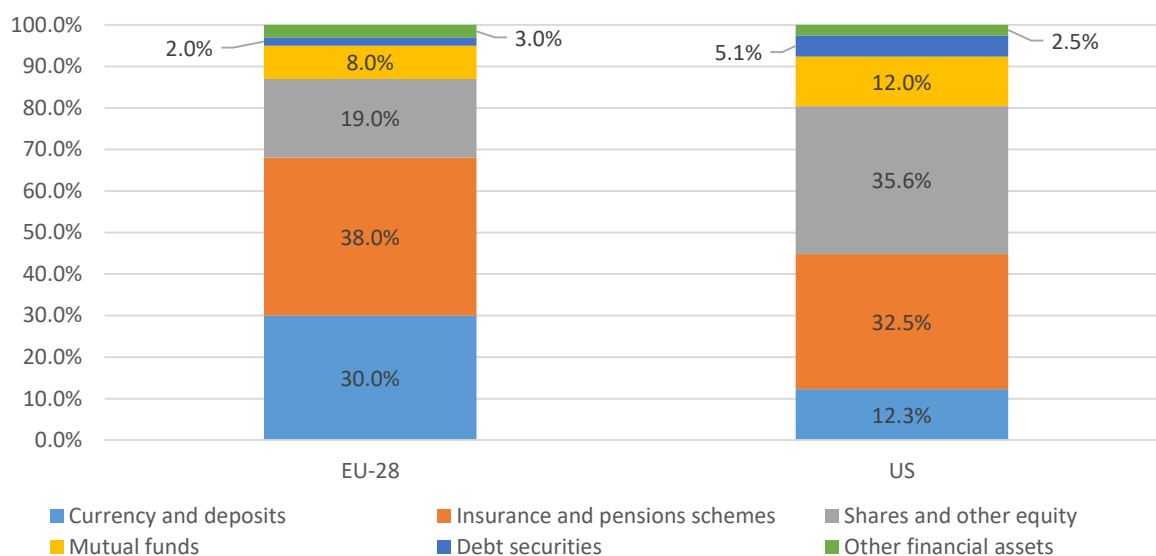


Source: Eurostat.

In comparison to the US, the biggest difference occurs in cash and deposits as well as holdings of shares and debt securities (Figure 7). Cash and bank deposits amount to 30% of total EU household assets, compared to 12.3% in the US. On the other hand, equity and debt securities in Europe claim a share of 21%, compared to 40.7% in the US. Among the main factors of the low participation in capital markets are: the risk aversion of most European households, the cultural habit of allocating savings to banks, as well as other differences between the two regions (e.g. tax treatment, regulatory treatment of pension systems, financial development, banks' credit policy).¹¹

¹¹ However, it is worth noting that some drivers/factors explaining the relatively high share of cash and deposits, would be very difficult to addressed by *per se* CMU measures. For example, the share of financial assets held in cash and deposits is correlated with macro-economic factors (e.g. disposable income per capita, 'trust', or lack thereof, in financial markets and intermediaries, etc.).

Figure 7. Financial assets of households in EU-28 and the US (end-2017, % of total financial assets)



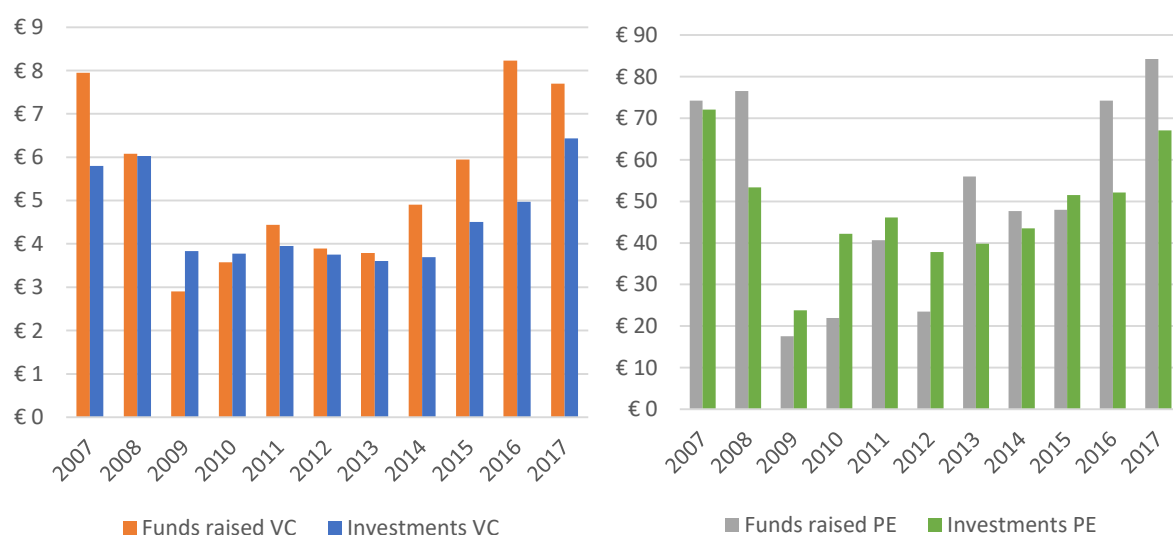
Notes: The category 'Other financial assets', for the EU includes: other accounts receivable, financial derivatives, and loans. For the US it includes: other accounts receivable, and loans.

Source: Eurostat and OECD.

3.3. Venture capital and private equity

Venture capital (VC) and private equity (PE) are two alternative sources of early stage equity financing for fast growing companies. These types of funding have shown signs of recovery since the global financial crisis – both in terms of funds raised and investments (Figure 8). However, their share is very limited: as of end-2017, VC investments stood at 0.04% of GDP and PE investments at 0.44% (from 0.04% and 0.55% in 2007, respectively).

Figure 8. Evolution of venture capital (VC) and private equity (PE) in the EU-28 (€ billion)

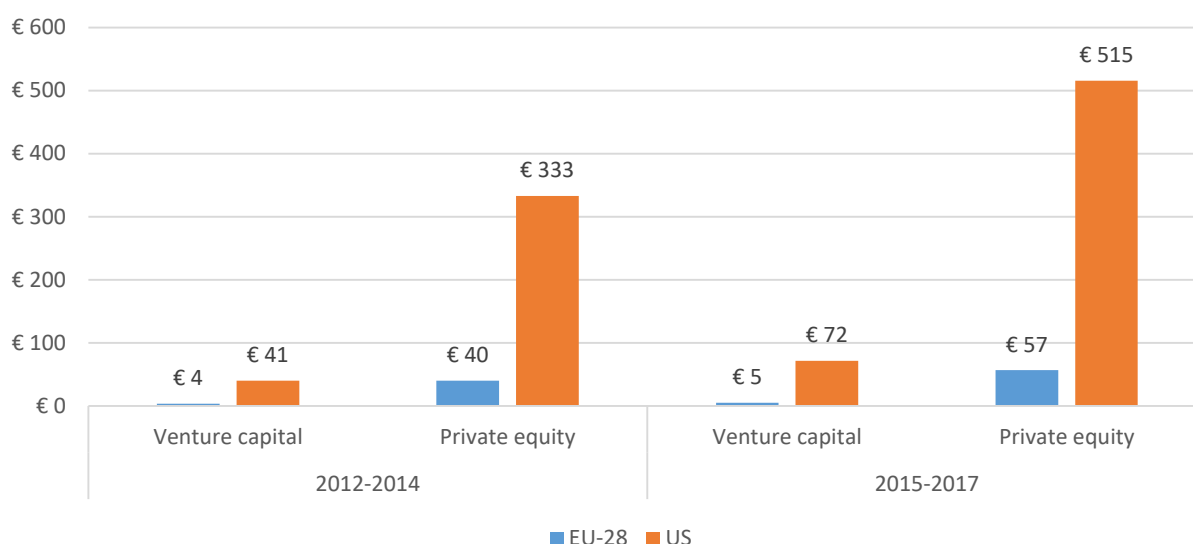


Source: Invest Europe.

Compared to the US, VC and PE is much less developed in the EU, meaning that European companies receive far less access to early-stage equity funding than their US counterparts (Figure 9). In the period 2012-2014, US PE and VC funds invested on average €373 billion per year, compared to €44 billion in

Europe (i.e. 11.8%). Moreover, the funding gap further increased from 2015 to 2017, when European VC and PE-backed firms received just 10.5% of the amount invested in US firms.¹²

Figure 9. Average amount invested by venture capital (VC) and private equity (PE), EU-28 vs US (€ billion)



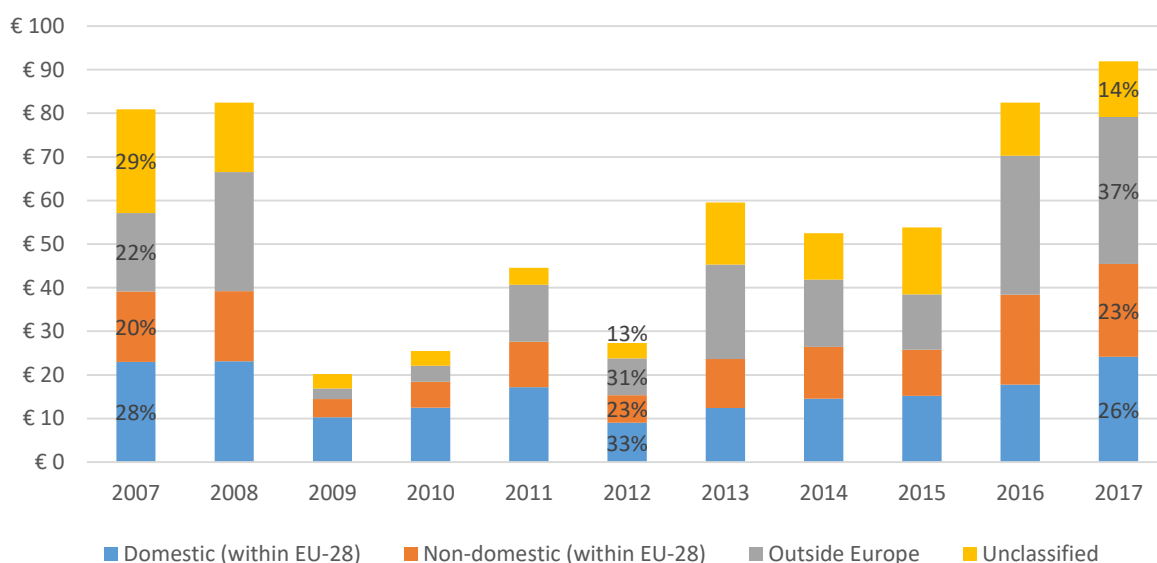
Notes: Data on European and US venture capital are not directly comparable. This is because NVCA/Pitchbook report data that capture the entire investment round of VC-backed companies. Moreover, also other types of investors – other than formal PE/VC funds – participate in such rounds. On the other hand, Invest Europe reports data that are focused on formal PE/VC funds and their equity investments.

Source: Invest Europe, National Venture Capital Association and PitchBook.

The lack of a stable pan-European funding base is illustrated by the fact that 37% of PE and VC funds come from non-European investors (Figure 10). North American investors are among the most active (22%), followed by French & Benelux (19%) and Asian & Australian (13%) investors. In addition, 88.7% of the EU's supply of PE and VC is concentrated in just eight member states (FR, UK, LU, DE, DK, NL, IT and SE), and there is little cross-border investment.

¹² While the availability and quality of aggregate data on VC has improved over recent years, the international comparability of the data remains a problem. This is due to the lack of standardised international definitions of venture capital, as well as the diverse set of methodologies applied by data compilers ("International Comparability of Venture Capital Data", Annex C in OECD, 2017).

Figure 10. Geographic source of funds, private equity (PE) and venture capital (VC) funds raised (EU-28, € billion)



Source: Invest Europe.

The lack of early-stage VC or PE equity financing is a crucial missing building block for market financing, and a properly functioning capital market. In its absence, innovative entrepreneurs have to rely on bank finance, or the project is abandoned. Bank finance is not adapted to the need of many of these early stage start-ups. Moreover, innovative projects in Europe that eventually found their way to the capital markets often obtained funding from non-European investors, who may in a next step prefer a US, rather than European, listing – as happened with Spotify, for example (Lannoo, 2018).

3.4. Regulated equity markets

Well-developed and properly functioning equity markets provide companies with long-term capital for growth, leading to higher levels of economic activity, greater wealth and more jobs. In particular, equity markets channel capital directly from investors to companies, accessing sources of capital not open to banks. Moreover, equity investment is more suited to taking the risks necessary to grow businesses. However, and despite these benefits, European equity markets remain underdeveloped, the number of listed companies in European exchanges is declining,¹³ thus weakening Europe's economic potential.

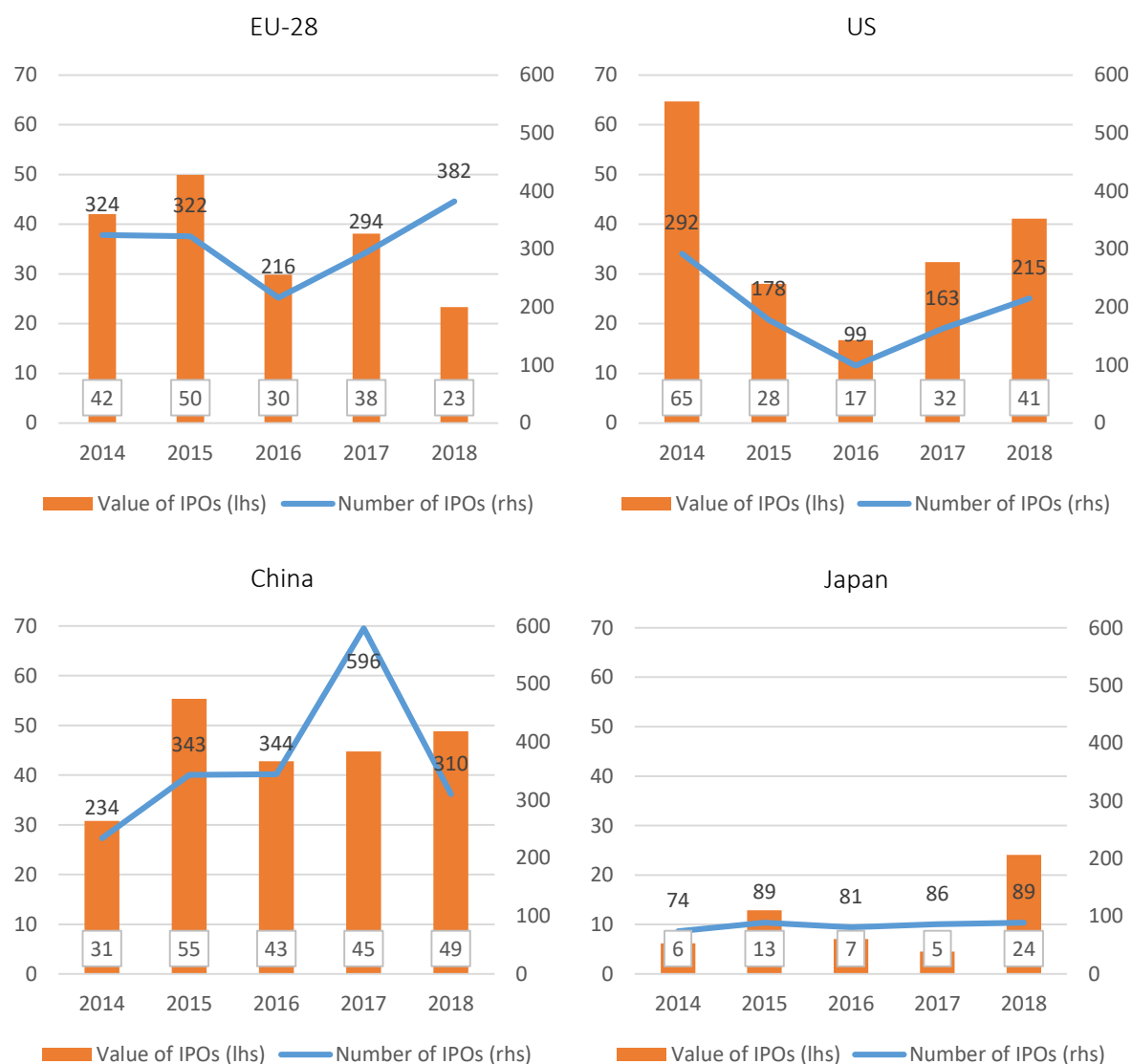
3.4.1. Primary market

Starting with the primary market, which forms a link between savings and investments, corporates issue securities in which investors deploy their savings. A vital source of long-term financing, especially for larger corporations, comes from the primary market for listed equities. Comparing the IPO activity in Europe with other regions of the world, a rather contradictory picture emerges (Figure 11). While the number of European IPOs increased over the last years, this has not been followed by an increase in the investment flow. In 2018, the number of IPOs increased by 30% compared to 2017, but the value declined by 40% to €23 billion over the same period (or by 54% compared to 2015). In contrast, the

¹³ A similar trend is observed in the US as well. Over the last two decades the number of domestic public companies listed in US exchanges dropped by nearly 50%. (US Department of the Treasury, 2017). This trend is attributed to low levels of new listings, high numbers of delistings (many of which are the result of acquisitions (EY, 2017; Doidge *et al.*, 2017), as well as increasing benefits for remaining private (e.g. loosening regulation on the private market, increased liquidity in private securities) (Vanguard, 2017).

trend in the US and Japan (and to a lesser extent in China) follows a more harmonised and steadily positive path over time.

Figure 11. IPO activity by regions, and by value (€ billion) and volumes (number)



Notes: For EU-28 the following stock exchanges have been used: Athens, BME, Bucharest, Budapest, Bulgaria, CEESEG – Prague, CEESEG – Vienna, Cyprus, Deutsche Börse AG, Euronext (which includes Amsterdam, Brussels, Dublin, Paris, and Portugal), Ljubljana, LSE Group (which includes the London Stock Exchange and Borsa Italiana), Luxembourg, Malta, Nasdaq Nordics and Baltics (which includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga, and Vilnius), Warsaw, and Zagreb. For US, Nasdaq-US and NYSE. For China, Hong Kong Exchanges and Clearing, Shanghai, and Shenzhen. For Japan, the Japan Exchange Group.

Source: FESE, WFE, and Eurostat.

As a result, the average size of a European IPO has declined by 61% since 2015 (from €156 million in 2015 to €61 million in 2018), while in the US it increased by 22% (from €157 million in 2015 to €191 million in 2018). On top of that, IPO activity in Europe is strongly concentrated (Table 2). The London Stock Exchange Group (LSEG) – which includes the UK London Stock Exchange (LSE) and the Italian Borsa Italiana – plays a dominant role, accounting for 40% in terms of the total number of European IPOs and 39% in terms of total IPO value.

Table 2. IPO activity in the EU, market share (average 2014-2018)

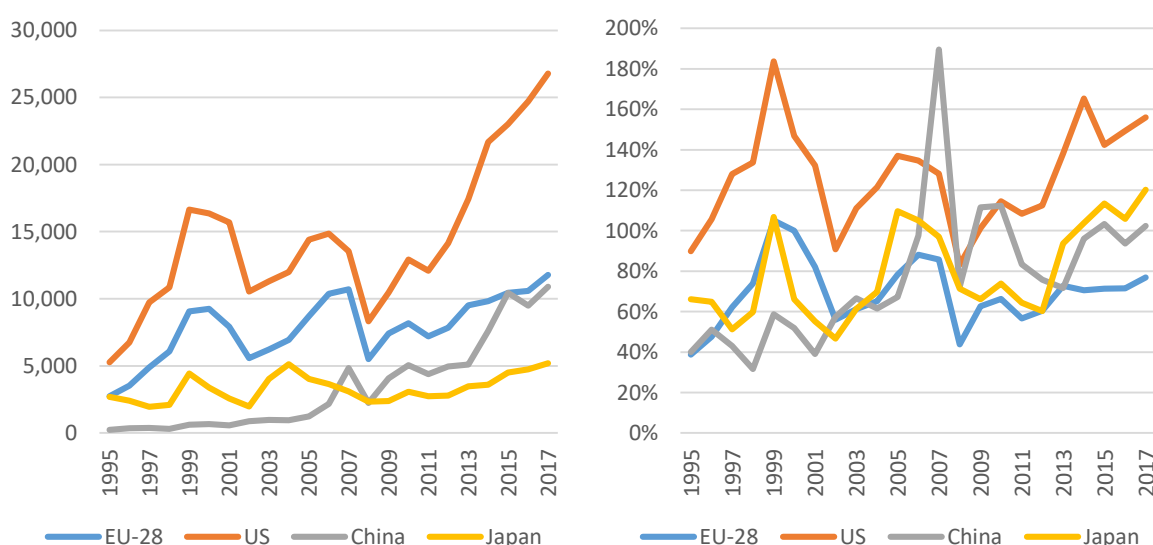
	% of total IPOs	% of total IPO value
LSE Group	40%	39%
Nasdaq Nordics & Baltics	23%	14%
Euronext	11%	13%
Deutsche Börse	4%	14%
BME Spain	5%	9%
Warsaw SE	8%	2%
Luxembourg SE	2%	6%
Other	7%	3%

Notes: LSE Group includes London Stock Exchange and Borsa Italiana. Euronext includes Amsterdam, Brussels, Paris, and Portugal. Nasdaq Nordics and Baltics includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga, and Vilnius.

Source: FESE, WFE.

European equity markets, which have the potential to fund the growth of businesses and offer a large pool of capital, are currently untapped. While in absolute terms European capitalisation has grown significantly over the last years (by 114% since 2008) and has surpassed the pre-crisis level reaching a peak of €11.8 trillion (Figure 12, left-hand panel), it represents only 77% of GDP (Figure 12, right-hand panel). On the other hand, the US market is recovering at full speed: capitalisation has reached €26.8 trillion (up by 222% since 2008) and by the end of 2017 it represented 156% of GDP.

Figure 12. Stock market capitalisation (in € billion and as a % GDP)



Notes: For EU-28 the following stock exchanges have been used: Athens, BME, Bucharest, Budapest, Bulgaria, CEESEG – Prague, CEESEG – Vienna, Cyprus, Deutsche Börse AG, Euronext (which includes Amsterdam, Brussels, Dublin, Paris, and Portugal), Ljubljana, LSE Group (which includes the London Stock Exchange and Borsa Italiana), Luxembourg, Malta, Nasdaq Nordics and Baltics (which includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga, and Vilnius), Warsaw, and Zagreb. For US, Nasdaq-US and NYSE. For China, Hong Kong Exchanges and Clearing, Shanghai, and Shenzhen. For Japan, the Japan Exchange Group.

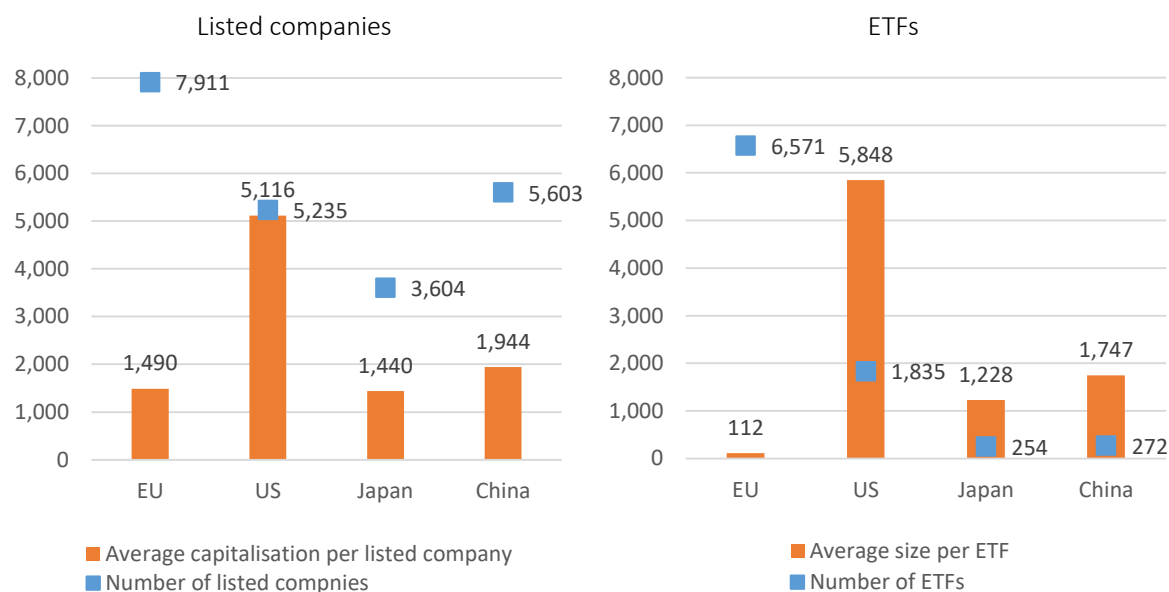
Source: 2018 ECMI Statistical Package.

3.4.2. Secondary market

Properly functioning secondary markets are key to providing financing opportunities for companies and creating suitable investment opportunities for savers. Looking at the companies listed on European exchanges, the average capitalisation per listed company at the end of 2017 was €1.5 billion (Figure 13, left-hand panel). This is about 3.5 times lower than the capitalisation of a typical US company (€5.1

billion). Furthermore, the European companies were admitted for listing on 28 stock exchanges, as opposed to US companies which were admitted to only two US exchanges (Nasdaq and NYSE). However, just three exchanges dominate trading activity: London Stock Exchange (LSE), Euronext Paris and Deutsche Börse account for 61% of the total European market in terms of market capitalisation (and 56% in terms of value of share traded).¹⁴

Figure 13. Average size (in € million) and number (in thousands) of listed companies (left-hand panel) and ETFs (right-hand panel), end-2017



Notes: For listed companies, EU-28 contains the following stock exchanges: Athens, BME, Bucharest, Budapest, Bulgaria, CEESEG – Prague, CEESEG – Vienna, Cyprus, Deutsche Börse AG, Euronext (which includes Amsterdam, Brussels, Dublin, Paris, and Lisbon), Ljubljana, LSE Group (which includes the London Stock Exchange and Borsa Italiana), Luxembourg, Malta, Nasdaq Nordics and Baltics (which includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga, and Vilnius), Warsaw, and Zagreb. For US: Nasdaq-US and NYSE. For China: Hong Kong Exchanges and Clearing, Shanghai, and Shenzhen. For Japan: Japan Exchange Group.

For ETFs, EU-28 contains the following stock exchanges: Athens, BME, Bucharest, Budapest, Bulgaria, CEESEG – Prague, CEESEG – Vienna, Deutsche Börse AG, Euronext (which includes Amsterdam, Brussels, Dublin, Paris, and Lisbon), LSE Group (which includes the London Stock Exchange and Borsa Italiana), Luxembourg, Nasdaq Nordics and Baltics (which includes Copenhagen, Helsinki, Iceland, Stockholm, Tallinn, Riga, and Vilnius), Warsaw. For US: Nasdaq-US and NYSE. For China: Hong Kong Exchanges and Clearing, Shanghai, and Shenzhen. For Japan: Japan Exchange Group.

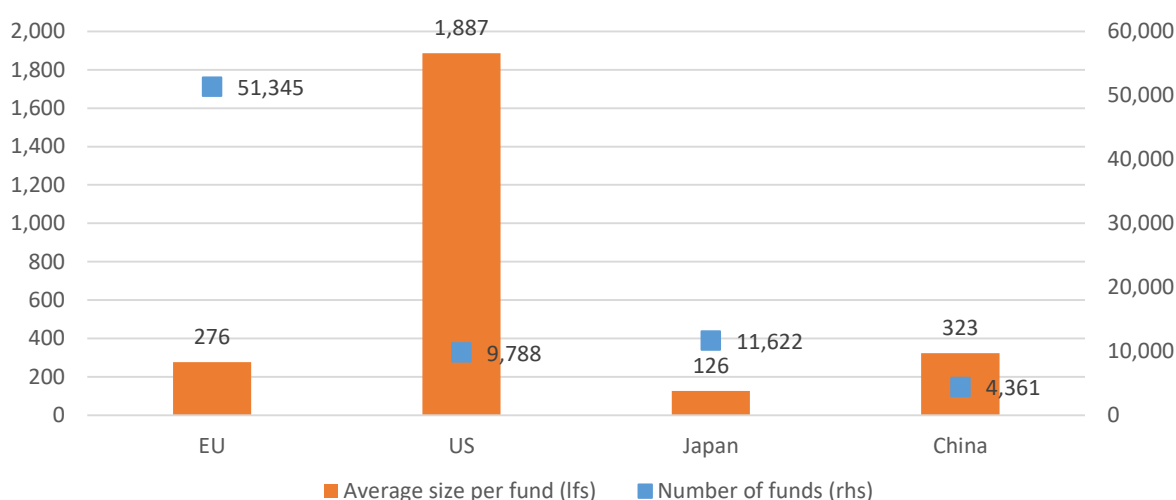
Source: 2018 ECMI Statistical Package.

The picture is similar when examining exchange traded funds (ETFs) (Figure 13, right-hand panel). The number of European ETFs admitted for listing peaked at 6,751, three-and-a-half times more than in the US. However, the total value of European ETFs traded (i.e. turnover) represents only 6.9% of US ETFs. Thus, the average size of a European ETF is €112 million, while in the US an ETF has, on average, a value of €5.8 billion. There are various reasons for the gap between Europe and the US: i) European ETFs are listed on 24 different exchanges, as opposed to only two in the US, ii) retail investors' participation in Europe ranges between 10-15%, as opposed to around 45% in the US, iii) the majority of European ETF trading activity (around 70%) is taking place off-exchange (over-the-counter, OTC), while the picture is reversed in the US (Thomadakis, 2018).

¹⁴ These numbers exclude the pan-European trading activity taking place on Cboe, Acquis, Turquoise and Six.

Another indication highlighting Europe's preference for quantity over size comes from the asset management industry (Figure 14). Europe has twice as many funds as the US, Japan and China combined (51,345 compared to 25,771), while the overall size of its industry represents only 66% of the size of that in the other three regions (€14,153 billion compared to €21,342 billion). Thus, despite the fact that the overall EU size is growing at a similar annual rate with that of the US (by 15% in the EU and by 12% in the US), the number of funds is increasing at twice the speed of those in the US (by 5.3% in the EU and by 2.5% in the US). As a result, the average size of EU funds is seven times smaller than that of US funds.

Figure 14. Average size (in € million) and number (in thousands) of mutual funds, end-2017



Notes: Mutual funds include equity, bonds, money market, balanced/mixed, and other funds. Funds of funds are excluded.

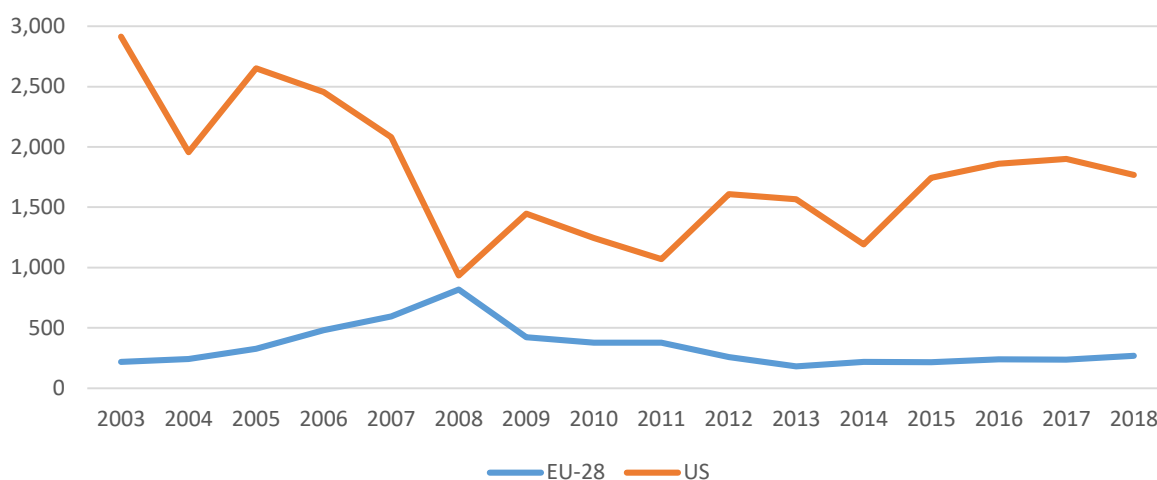
Source: 2018 ECMI Statistical Package.

3.5. Securitisation

Securitisation, which allows loans and other receivables to become tradable and thus foster financing of firms (especially SMEs), has slowly started recovering in Europe: EU securitisation markets declined significantly from the peak of 2008 until 2013 (by 78%), but since then they are up by 49% (Figure 15).¹⁵ However, the evolution of securitisation issuance between the US and the EU is very different: at the end-2018 EU issuance represented just 15% of US issuance. Perhaps the main reason for the higher size in the US is the existence of Government Sponsored Enterprises (GSEs) – such as Fannie Mae, Freddie Mac and Ginnie Mae – that are big buyers of securitised mortgages. Moreover, US regulation allows for a greater proportion of structured finance vehicles to be treated as instruments that are off banks' balance sheets, while Europe has substituted securitisation with covered bonds, which require higher collateralisation – such substitution has not taken place in the US (PwC, 2015).

¹⁵ However, since the beginning of 2019, public issuance has fallen significantly with only €32.4 billion of securitised product issued in Europe in Q1 (down by 45% compared to 2018Q1). This decline can be attributed to the delay in approval by the EU public authorities of key elements of the new securitisation framework, the new Liquidity Coverage Ratio (LCR) rules (AFME, 2019), as well as the extension of the rather onerous due diligence requirements that the Simple, Transparent and Standardised (STS) Regulation is imposing on all EU regulated investors.

Figure 15. Securitisation issuance in EU-28 and US (€ billion)



Source: Association of Financial Markets in Europe (AFME).

On the European side, while the Simple, Transparent and Standardised (STS) Regulation (which was adopted in December 2017, and applied in January 2019) does put in place a number of safeguards, namely limitations on asset types, the prohibition of re-securitisation, as well as the ban of synthetics (Schwarcz, 2016), concerns have also been expressed on whether it can truly foster a stable securitisation market (Bavoso, 2018). Criticism has focused on the decision to have a private notification process instead of a public certification system (in order to verify compliance with the STS criteria), while at the same time attributing ESMA a rather ‘marginal’ coordination role.¹⁶ Meanwhile, National Competent Authorities (NCAs) are tasked with the monitoring of market developments and imposing sanctions, in an area of wholesale capital markets (i.e. securitisation) that is by nature cross-border rather than domestic.¹⁷

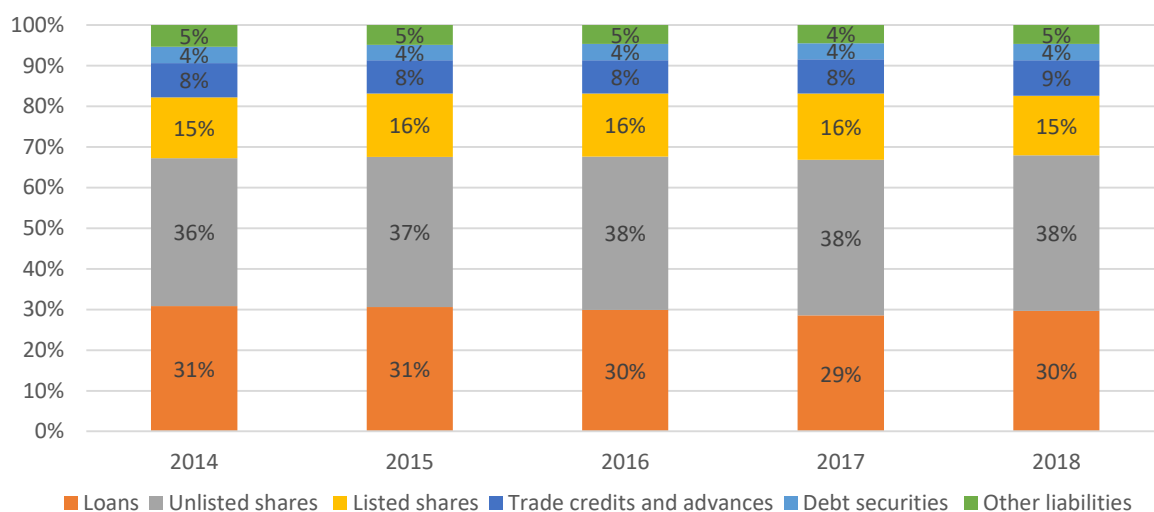
3.6. Corporate bond market

Corporate bond markets serve a vital function as they bring together corporations requiring capital to fund or expand their businesses and investors and savers looking to earn a stable income from their investments and savings. They thus play a vital role in facilitating economic growth, productivity, and employment, as well as financial stability (Thumrongvit *et al.*, 2013; Tendulkar and Hancock, 2014). As the capacity of banks to provide direct funding to the corporate sector has become challenged, post-crisis, policy makers are beginning to look to capital markets as an ever more important source of financing for the real economy, while also underpinning economic stability; an objective that is at the very heart of the CMU project (EC, 2015b). What is more, corporate bond markets provide an alternative to public funding, facilitating private investment and so reducing the burden of government indebtedness, while offering investors and savers a higher rate of return than government bonds (ICMA, 2013).

¹⁶ Having a certification system that relies primarily on market players empowers originators and sponsors in securitisation transactions to ensure compliance with the STS label and leaves investors to exercise due diligence before buying securitised bonds.

¹⁷ And issues of financial stability and systemic risks could arise.

Figure 16. Financial liabilities of non-financial corporations in the EU (outstanding amounts at the end of period), as % of total liabilities

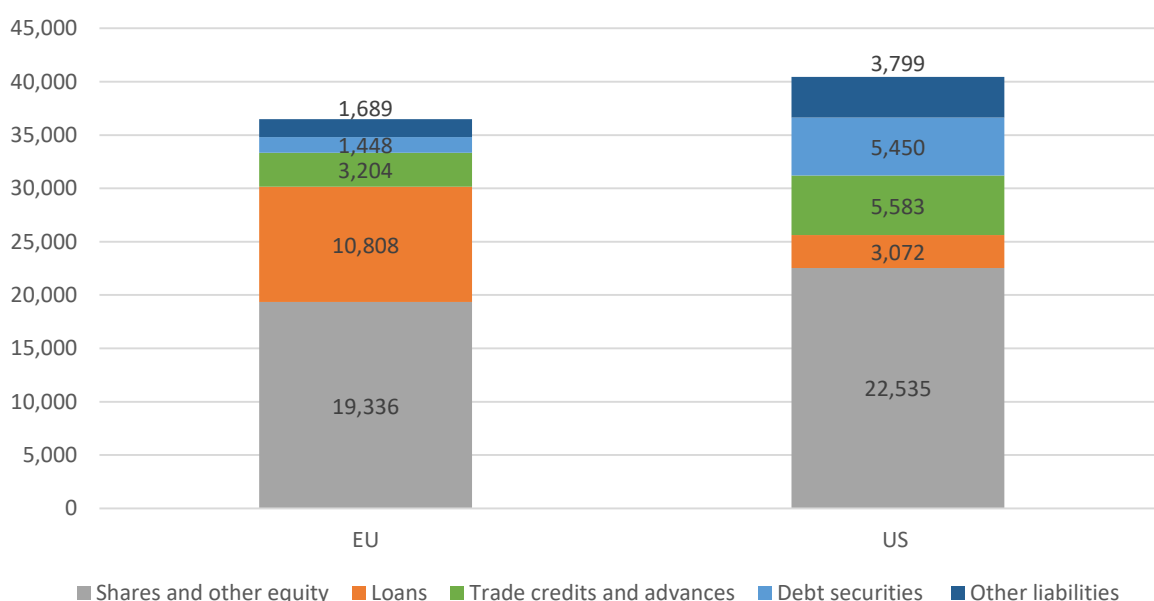


Notes: Other liabilities include: pension schemes, other accounts payable without trade credits and advances, financial derivative's net liabilities and deposits.

Source: ECB Statistics Bulletin.

Looking at the composition of the liabilities of non-financial corporations (NFCs) reveals the reliance of EU firms on bank financing – 30% on average (Figure 16). On the other hand, bonds remain a very marginal source of financing, representing on average only 4% of total liabilities. Moreover, the market is highly fragmented along national barriers as bond issuances are concentrated in a handful of countries (FR, UK, DE, IT and NL account for 82% of total EU outstanding bonds), while they are of limited importance in other member states. In the US, corporate bonds represent 12% of total liabilities of NFCs (Figure 17).

Figure 17. Financial liabilities of NFCs in the EU and the US (end-2018, € billion)



Source: ECB Statistics Bulletin, FRED Economic Data, Eurostat.

4. Funding escalator for young, small and innovative firms

Europe is home to the world's largest banking system.¹⁸ While this by itself does not constitute a problem, the fact that European companies overly rely on bank lending, as opposed to capital market-based funding, requires urgent attention. Traditionally, bank lending was the largest funding source for EU NFCs in order to finance their fixed investment and working capital needs. Between 2002 and 2008 the share of bank financing in total NFC financing was around 70% (ECB, 2016). Following the financial crisis and the subsequent changes in the financing structures of large enterprises, the share of bank credit in total NFC financing dropped significantly to around 30%.

However, when focusing on SMEs, the picture is different. Bank credit is the most relevant source for SME external financing, at around 56% over the period 2015-2017 (EIBIS 2017/2018).¹⁹ On the other hand, market-based sources of finance are rarely used. External funding in the form of bond issuance or equity represents around 0.2% and 0.6%, respectively, over the same period (Thomadakis, 2018). Thus, the CMU project should make a greater contribution to the diversification of financing sources beyond "traditional" bank lending.²⁰

There is a substantial literature comparing bank and capital market financing. For example, Allen and Gale (1999) show that bank-based systems can choke lending to innovative companies due to the higher risks involved. However, the authors also find that banks are superior when information costs are high, since they can process information more effectively. Some studies highlighted the irrelevance to the growth of an economy of whether the financial system is more bank or capital market based (Allen and Gale, 2000; Levine, 2002; Beck and Levine, 2004; Levine, 2005), while others concluded that more highly intermediated financial systems are associated with less dynamic growth (Pagano *et al.*, 2014; Cournède and Denk, 2015). More recently, empirical evidence has suggested that capital market-based systems are better able to absorb shocks and have higher long-term growth rates (Gambacorta *et al.*, 2014; Levine *et al.*, 2016). Either way, the financial system should reflect the needs of the real economy, thus, economies with relatively larger service sectors will be increasingly financed by markets, while more industrial economies will see higher levels of bank financing (Allen *et al.*, 2018).

4.1. Pre-IPO risk capital

For small, young and innovative companies, the availability of risk capital is of great importance, especially for those with limited or no track record. In particular, pre-IPO risk capital funding in the form of business angel investment, equity crowdfunding, venture capital, or private equity for companies at their growth stage, can supplement traditional forms of financing (AFME, 2017).²¹ Despite encouraging

¹⁸ The total assets of banks in the EU-28 amounted to €32 trillion (211% of EU-28 GDP) in Q4 2017. In contrast, US bank' assets were worth €14 trillion (81% of US GDP), while Japanese bank assets accounted for €8 trillion (189% of Japan's GDP).

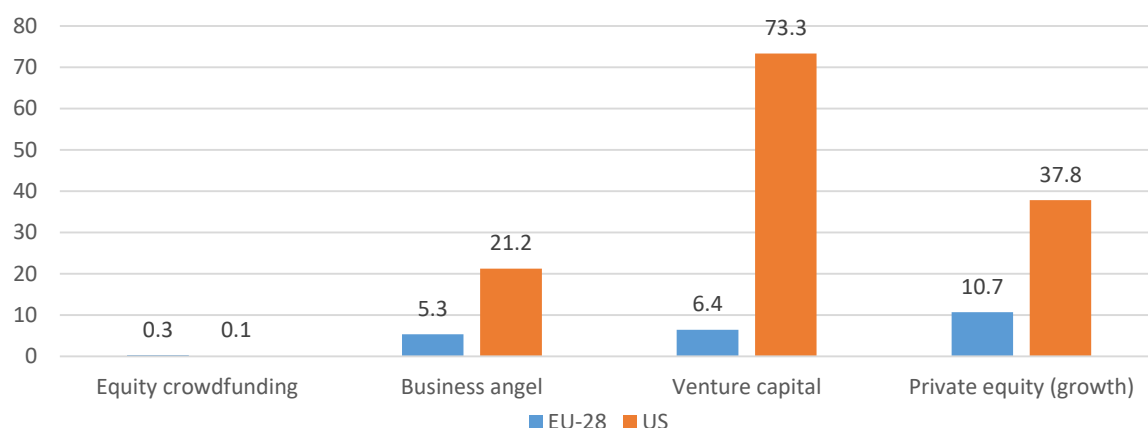
¹⁹ This is true not only for the reported period, but in general (EIF, 2017).

²⁰ In the context of the CMU debate, alternative bank lending channels have also been proposed. One of them, for example, is the creation of a new financial instrument for SMEs, called the European Secured Note (ESN) (EBA, 2018; EC, 2018f; EC, 2019). The development of this new dual recourse instrument could potentially be an additional channel for funding bank loans to SMEs, complementing not only covered bonds but also STS securitisation. Furthermore, ESNs might contribute to overcoming the problems related to lack of information on SMEs and their credit quality.

²¹ Pre-IPO risk capital not only can supplement traditional forms of financing, but also may operate as a 'bridge' for young and innovative companies towards 'proper' listing on regulated markets, as it may contribute to the structural growth of these companies.

recent progress in the availability of risk capital for SMEs (EIF, 2016; AFME, 2018),²² several persisting impediments in Europe (e.g. diversity in rules, taxes and standards across the 28 member states) do not allow the creation of an adequate pool of risk capital for small, early stage growing businesses. On top of that, the EU is still at a significant disadvantage when compared to the US (Figure 18).²³

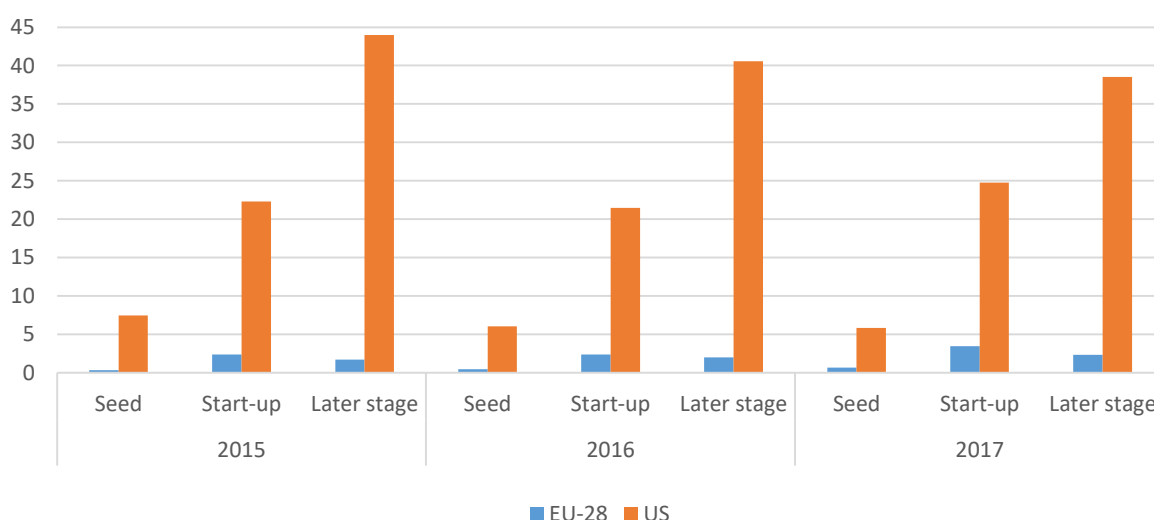
Figure 18. Pre-IPO risk capital investments by asset class, EU-28 and US (end-2017, € billion)



Source: AFME (2018).

Notwithstanding the significant increase in funds raised and investments by European venture capital and private equity (Figure 8 of previous section), there has been an even bigger increase in other advanced regions of the world, namely the US and Asia (EC, 2018c). While the gap with the US with regards to seed and start-up investments is slowly narrowing, the gap in later stage funding of companies (i.e. at the mid-cap and unicorn level) still remains (Figure 19).

Figure 19. Venture capital investments by stage focus, EU-28 and US (€ billion)



Notes: VC seed investment refers to the funding provided before the investee company has started mass production/distribution with a view to completing research, product definition or product design. This type of funding will not be used to start mass production/distribution. VC start-up investment refers to the funding provided to a company (once

²² Since 2013, when risk capital represented 1.4% of the total annual flow of SME financing, it has increased by 1.1 percentage points to 2.5% at the end of 2017.

²³ This is largely due to the high heterogeneity of SMEs' access to finance in Europe (EIF, 2018).

the product/service is fully developed) to start mass production/distribution and to cover initial marketing. VC later stage investment refers to the financing provided to an operating company, which may or may not be profitable.

Data refer to investments in Europe-based and US-based companies. Data on European and US venture capital are not directly comparable. This is because NVCA/Pitchbook report data that capture the entire investment round of VC-backed companies. Moreover, also other types of investors – other than formal PE/VC funds – participate in such rounds. On the other hand, Invest Europe reports data that are focused on formal PE/VC funds and their equity investments.

Source: Invest Europe and National Venture Capital Association.

In 2015 seed (start-up) investments in European companies represented 4% (11%) of similar investments made to US companies. By the end of 2017, this figure had increased to 11% (14%). However, equity financing in VC later stage European companies has remained stable representing approximately 5% of that in the US, over the period 2015-2017.²⁴ This is due to the heavy reliance of European firms on bank finance, which tends to be risk-averse, thus making it difficult for promising high-growth companies (which made it through the first funding rounds) to secure the necessary follow-up finance, scale up and access capital markets.

The size of the European venture capital fund market is very small and not enough to attract major institutional and private investors or to finance the needs of fast growing companies (Thomadakis, 2016).²⁵ Venture capital funds in Europe have an average size of around €47 million (over the period 2015 to H1 2018), whereas in the US their average size is around €111 million.²⁶ On top of that, the fragmentation of the European VC market (90% of the EU's supply of VC is concentrated in just eight member states) and the very small cross-border investment activity hinder larger funds from emerging.

For a European company to scale up to a global business, it is essential to have in place an 'investment ecosystem'. Such an ecosystem will allow companies to raise capital, grow, innovate, scale up and mature, by bringing together a network of investors, savers and entrepreneurs. So far, it is not clear whether European capital markets can truly provide an environment for growing businesses in the same way that the more integrated US market does. Thus, in order to foster growth in an ecosystem of investment, barriers to cross-border growth for young, small and innovative companies should be eliminated. This can be achieved, for example, through tax incentives, simplified and harmonised regulatory systems, and provision of more public resources that will increase investment volumes and encourage investors to invest.

4.2. Taking the next step

As companies grow and mature, the transition from relying on risk capital to listing their shares on a stock exchange might be a natural step with significant benefits. Equity finance is key for innovative

²⁴ It is worth mentioning that these data (which refer to Figure 19) are measuring the location of investments (e.g. in Europe-based and US-based companies), and not the source of capital. This means that while the US far outpaces the EU, it should not be ignored that there could be a significant amount of EU capital counted in the US figures, as well as some EU companies who are also fundraising in the US, and so counted there too. For example, there could actually be cases of European capital funding European companies entirely in the US.

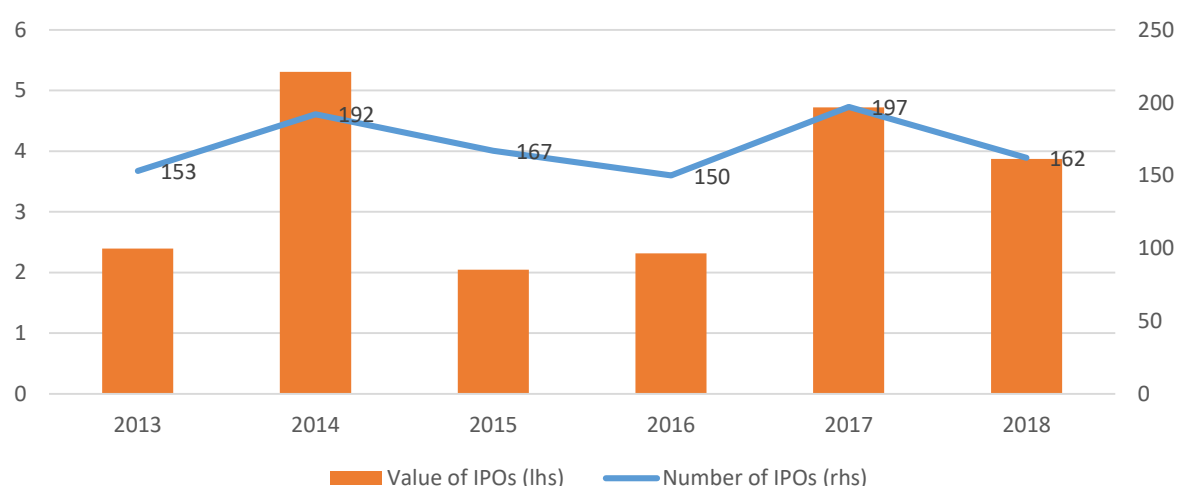
²⁵ While the size of the VC market plays a key role, particularly for 'big ticket' investors (such as sovereign wealth funds), for others, regulatory issues are more important. On top of that, a VC investment requires know-how and sometimes the firms in which investors invest are too small to justify, for example, a VC team. Moreover, institutional investors sometimes look only at the long-term historical track record of the European VC market (in terms of returns), which fails to capture the latest positive developments.

²⁶ Data for H1 2018 are preliminary. Authors' calculation based on data from Invest Europe and NVCA.

companies that create value and growth, especially for those with a high risk-return profile.²⁷ Moreover, equity financing may be more suitable than debt financing for SMEs that lack collateral, have negative or irregular cash flows, or require longer maturities for their investments to pay off (Nassr and Wehinger, 2016). Other benefits of listing include a reduced dependence on bank funding, a higher degree of diversification of investors, easier access to additional equity capital and a higher public profile and recognition.

However, despite these benefits, European public markets for SMEs are currently struggling to attract new issuers. Europe is producing only half of the SME initial public offerings that it used to generate before the financial crisis (AFME, 2018), while the amount raised through IPOs on SME-dedicated multilateral trading facilities (MTFs) declined by 80% (EC, 2018).²⁸ At end-2018, IPOs proceeds on junior markets had declined by 18% to €3.8 billion, while the number of IPOs had dropped to 162 (Figure 20). The fragmentation of the markets is such that the majority of the activity is concentrated on three exchanges (London AIM, Borsa Italiana AIM, and Nasdaq Nordic First).²⁹ Some of the factors driving these results are information asymmetries, high listing and maintenance costs, administrative and regulatory burdens, lack of equity culture, and inadequate management practices. Moreover, on the investor side, high monitoring costs relative to the level of investment and low levels of liquidity act as significant deterrents.

Figure 20. IPO activity on Junior markets in the EU (value in € billion (lhs) and number (rhs))



Notes: The junior markets included are: London AIM, Borsa Italiana AIM, Euronext Alternext, Nasdaq Nordic First North, Deutsche Börse Scale, Warsaw New Connect, and BME Alternative.

Source: IPO Watch Europe, PwC.

²⁷ While seed and early stage equity finance can boost firm creation and development, other equity instruments, such as specialised platforms for SME public listing, can provide financial resources for growth-oriented and innovative SMEs.

²⁸ Between 2006 and 2007, an average of €13.8 billion was raised annually on European SME-dedicated MTFs through IPOs. This amount fell to €2.55 billion on average from 2009 to 2017.

²⁹ In terms of IPO value, London AIM accounts for 54% of the total value raised, followed by Nasdaq Nordic First North (20%), Borsa Italiana (15%), Deutsche Börse Scale (5%), Euronext Alternext (5%), BME Alternative (2%), and Warsaw New Connect (0.4%). In terms of number of IPOs, London AIM accounts for 30%, Nasdaq Nordic First North 29%, Warsaw New Connect 13%, BME Alternative 10%, Euronext Alternext 6%, and Deutsche Börse Scale 2%.

Financial reforms have a very important role in creating properly functioning ecosystems that will help and support companies, both directly and indirectly, in going public, as well as investors to invest in these companies. For example, as the Nordic experience illustrates, key components of such an ecosystem are innovative companies willing to take the next step and grow, financial advisors helping companies to list, and a strong equity culture where both institutional and retail investors are willing to take risks. Moreover, offering tax incentives for investments in SMEs (e.g. the Swedish model of investment savings account),³⁰ lowering regulatory costs for intermediaries and thus increasing SME research,³¹ promoting long-termism, reducing information asymmetries, and embracing new technologies and innovation, can contribute and boost the financing of companies through public markets.

In particular, and regarding the impact of Level 2 rules on inducements under MiFID II,³² concerns has been raised (CFA, 2019) about the poor coverage and liquidity of small and mid-cap companies, as well as the adverse effect on the cost of capital and the ability to raise capital or list on the market. Increasing the coverage of SME research will positively affect the liquidity of securities issued by SMEs, and will bring down the costs of capital for such companies. Thus, the establishment of a proportionate mechanism for investment firms, asset managers and research providers specialised in SMEs, is urgently needed (Demarigny, 2015). Such a mechanism, for example, could take the form of a carve out of research on securities issued by SMEs, or of an annual threshold under which SME research would not be considered as an inducement.

4.3. SME Growth Markets

Aiming to broaden access to market-based sources of financing for European SMEs, MiFID II introduced a new designation for MTFs, the 'SME Growth Market' label (SME GM). An MTF can be registered as an SME GM if at least 50% of the issuers whose financial instruments are traded on the trading venue are SMEs. Here, an SME is defined by MiFID II as an enterprise with average market capitalisation of less than €200 million on the basis of end-year quotes for the previous three calendar years.

The 50% threshold implies that SME GMs will not only target SME listings, as both SMEs and larger companies can gain access to them. In other words, SMEs and large companies are admitted to trading on an SME GM on an equal basis. But is there a need to adopt specific standards and rules that favour SMEs, when non-SMEs can also benefit from them? Why should non-SME issuers be allowed to enter an SME GM and thus take advantage of alleviated burdens justified by the fixed-costs effects for SMEs? Why not increase the 50% threshold to 75% or even higher?

³⁰ The investment savings account allows the account holder to buy and sell shares actively with a simple annual taxation on the total value of the portfolio (in 2018 the tax was at 0.45%).

³¹ Increasing the coverage of SME research will positively affect the liquidity of securities issued by SMEs, and will bring down the costs of capital for such companies. Thus, the establishment of a proportionate mechanism for investment firms, asset managers and research providers specialised in SMEs, is urgently needed (Demarigny, 2015).

³² The inducement rules require research to be paid separately from other types of fees, whereas previously the cost of research used to be bundled with execution fees. The main aim if the new rules is to provide more clarity and transparency around costs.

It is understandable that a 50% limit might be beneficial for market liquidity and a trading venue's profitability.³³ However, market liquidity and profitability could still be maintained when a lower number of large companies is admitted to trading on SME GMs. Increasing the proportion of SMEs on SME GMs – through the creation of a trading facility genuinely dedicated to them – would contribute to market liquidity and profitability as a result of an increase of the total number of market participants.

4.3.1. Getting the definitions right

Looking at the definitions related to SMEs, there are certain inconsistencies worth mentioning. For example, an SME equity issuer is defined (within the context of SME GM by MiFID II) as a company with market capitalisation of less than €200 million. However, this is not in line with the threshold of €500 million (market capitalisation) set out in other EU acts and regulations, such as the EU Growth Prospectus (part of the Prospectus Regulation) and the European Long-Term Investment Fund (ELTIF) Regulation.³⁴ Moreover, the current threshold appears to be very low, as it only takes into account small enterprises and not mid-caps.

Another example is the definition of an SME debt issuer. In particular, a non-equity issuer can be deemed as an SME if it fulfils at least two of the following three criteria: i) staff headcount below 250, ii) net turnover of less than €50 million, and iii) balance sheet not exceeding €43 million.³⁵ Yet, it fails to take into account the current market realities for debt issuers. For example, such issuers have annual turnover of €19-400 million and a minimum issuance size of €17 million (AFME, 2015). More importantly, it does not take the issuance itself as a criterion into account.

Furthermore, a package promoting SME listings should provide a definition of a small and mid-cap company. While the role and importance of such companies recognised in a number of scattered EU initiatives (Horizon 2020, EFSI, etc.), there is a lack of a clear and Europe-appropriate definition. This would make it possible to facilitate a proportionate regulatory regime for these companies, which could be tailored to specific characteristics. Small and mid-caps differ from SMEs in terms of their size, growth, turnover, job creation, shareholding structure, types of investors, etc.

4.3.2. Getting the regulation right

SMEs face many impediments when going public, notably admissions costs (both direct and indirect costs, and especially those related to prospectus), listing requirements and costs, as well as administrative burdens deriving from the heavy regulatory framework applicable to listed companies.³⁶ Moreover, SMEs are also concerned about losing control of the company once listed. Thus, despite the benefits of listing in terms of access to capital (through initial and secondary offerings) and increased creditworthiness, SMEs are strongly resistant to going public. Perhaps this also reflects the lack of

³³ It might also allow for some flexibility when a former SME reaches a market capitalisation higher than €200 million (meaning that it is not an SME according to MiFID II), by letting the company to continue to be traded on an SME GM for a certain period of time.

³⁴ For example, the alleviated "EU Growth Prospectus" is available to SMEs, as well as to companies listed on an SME GM with a market capitalisation up to €500 million, while the ELTIF Regulation allows funds to invest in companies listed on a MTF (including SME GMs) with a market capitalisation up to €500 million. This misalignment was also acknowledged in the Commission's impact assessment (EC, 2018e). In particular, one of the options the Commission considers is that an increase to the market capitalisation threshold should be combined with a higher SME percentage requirement (e.g. at least 75%).

³⁵ This is the definition of an SME: http://ec.europa.eu/growth/smes/business-friendly-environment/sme-definition_en.

³⁶ The huge information costs associated with small, often local businesses throughout the EU should also not be forgotten (Schammo, 2017).

interest from institutional investors in their shares, resulting in low analyst coverage and low share turnover (low liquidity).

The Commission is committed to building a supportive environment that will ease access to public markets for SMEs. Steps in this direction are achieved by the Commission's regulatory initiative (EC, 2018d; EC, 2018g) to amend: i) the Prospectus Regulation (PR), by creating a "lighter" and less burdensome transfer prospectus for SMEs graduating to a regulated market; ii) the Market Abuse Regulation (MAR), by narrowing down disclosure requirements and alleviating administrative burdens on SMEs; and iii) the MiFID II Delegated Act on SME GMs, by adjusting the definition of a debt issuer (that takes into account the nominal value of its debt issuances) and requirements for first-time issuers.

Nevertheless, this regulatory framework lacks ambition. It is currently based on the assumption that by sharpening regulatory differences between trading venues (i.e. alleviations related to MAR and PR) and by gathering a heterogeneous set of firms (SMEs and large companies) in the same trading venue, this will eventually attract SMEs and liquidity for the securities listed there. However, success so far is limited. Equity and bond issuance remain of marginal importance for SMEs compared to other sources of funding (Thomadakis, 2017). On top of that, firms would prefer to pay more (up to an 8.8% interest rate) for bank credit than use public markets to finance their activities (Brutscher and Hols, 2018).

Thus, more ambition is needed in order to adopt measures that will facilitate and encourage smaller issuers to go public. What is missing in particular is a bespoke and separate regulatory framework for SME GMs with an exclusive focus on SMEs. The increased visibility stemming from such a framework and the harmonisation of procedures (listing-delisting regime, liquidity provisions) would increase liquidity and facilitate the creation of a network among those markets, attracting further liquidity.³⁷

The current decision to restrict the SME GM label to only MTFs is based on the argument that investors should not be confused and there should be a clear differentiation between regulated markets and SME GMs. For example, if the regime was divided into two, with one set of more protective rules applicable to large listed companies and another one of less comprehensive rules for SME listed companies, investors might fail to notice the difference – and not recognise that by investing in an SME company, they are investing in a less regulated company and riskier shares. Consequently, they might overpay for these riskier shares, and be on the hook if market abuse or another misleading behavior were to occur in the SME regulated market or segment (Enriques, 2018). This does, however, contradict the efficient market hypothesis (Fama, 1970), according to which share prices incorporate all the available information and are traded at fair value,³⁸ meaning that any difference between regulated markets and SME GM (including differences in protection) should be fully reflected in the share price.

Having said that, perhaps a better way to favour access to public markets for SMEs and build upon the SME GM label would be to allow regulated markets (or their specialised segments) to be treated as such and at the same time to restrict new admissions to SMEs only. A simplified regime would be applied to all companies listed on the SME GM, be it a segment of a regulated market or an MTF. And by thus allowing for a more proportionate treatment of SMEs listed on regulated markets, they could also benefit from the burden alleviations of, for example, the EU Growth Prospectus.

³⁷ A regime dedicated to SMEs would simplify the regulatory environment, may improve market participation and could create the conditions for greater market integration at the EU level (Perrone, 2018).

³⁸ In reality, capital markets are semi-strong efficient, meaning that new information takes a while to get reflected in prices.

5. Private Sector Risk Sharing through a European Safe Asset

Risk sharing in a common monetary union, such as the euro area, is meant to provide an insurance mechanism that allows households, firms, countries or regions hit by an asymmetric economic shock to mitigate the impact of the resulting decline in consumption, income or output growth. While risk sharing can be achieved through public policies at the national and supranational level (i.e. public risk sharing), it can also be achieved through integrated financial and capital markets (i.e. private risk sharing). The focus in this section is on the latter.

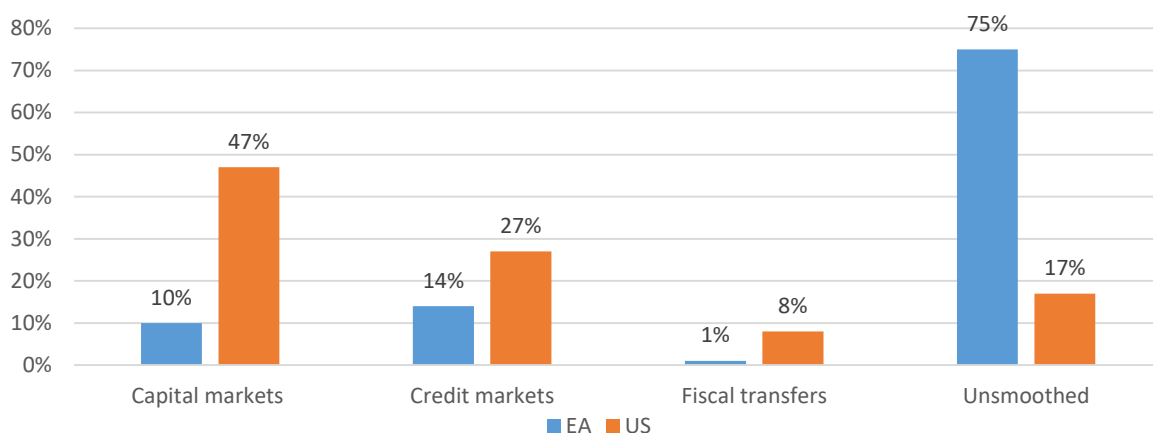
5.1. Capital market channel versus credit channel

There are two main channels through which private risk sharing operates.³⁹ First, the ‘credit channel’ (also referred to as the ‘savings channel’ or ‘consumption smoothing channel’) which operates via cross-border savings and borrowings. In this channel, households, firms and the public sector borrow directly or indirectly internationally or inter-jurisdictionally in order to sustain consumption and investment levels. Second, the ‘capital market channel’ which operates through the access and ownership of assets in international/inter-jurisdictional capital markets. In this channel, rather than cushioning the impact of a negative shock on savings and corporate profits, retail and institutional investors can diversify their portfolios by having access to capital markets across borders.

There is a plethora of studies documenting that risk sharing across euro area countries falls short of the level achieved in other federations, such as the US, Canada, and Germany (Sala-i-Martin and Sachs, 1991; Asdrubali *et al.*, 1996; Bayoumi and Klein, 1997; Sorensen and Yosha, 1998; Hepp and Von Hagen, 2013; IMF, 2013; Furceri and Zdzienicka, 2015; Alcidi *et al.*, 2016; Ferrari and Picco, 2016; ECB, 2018a, Cimadomo *et al.*, 2018). In summary, results show that while in federations around 20-40% of a shock to state-specific GDP remains unsmoothed, in the euro area 70-80% of a country-specific shock to GDP is unsmoothed. Moreover, while in federations capital markets account for about 35-45% of risk sharing and credit markets for about 20-30%, euro area capital markets help to smooth around 10-20% of a shock and credit markets 15-20%. In other words: i) federations achieve more intensive risk sharing largely because of more integrated capital markets, and ii) private sector, as opposed to public institutions, play a larger role in providing risk sharing in federations than in the euro area.

³⁹ There is also a third channel, called the ‘labour market’ or the ‘labour compensation’ channel, which operates through streams of cross-border factor income. In this channel, residents of a country that experiences a negative shock to output could smooth their consumption with labour income generated in another jurisdiction. Such workers are called commuters or expats.

Figure 21. Risk sharing in the euro area and the US (1998-2013)



Note: Euro area consists of 11 countries: all current member states except Cyprus, Estonia, Latvia, Lithuania, Luxembourg, Malta, Slovakia, and Slovenia.

Source: Alcidi *et al.* (2017).

The operation of both the capital and the credit market channels is greatly facilitated by integrated financial markets and competition among financial institutions. Hence the importance of the adoption of a legal framework (e.g. insolvency laws, taxation) for competitive cross-border financial intermediation, the creation of an efficient financial infrastructure and the required institutional safeguards to ensure stable financial systems (EC, 2016).

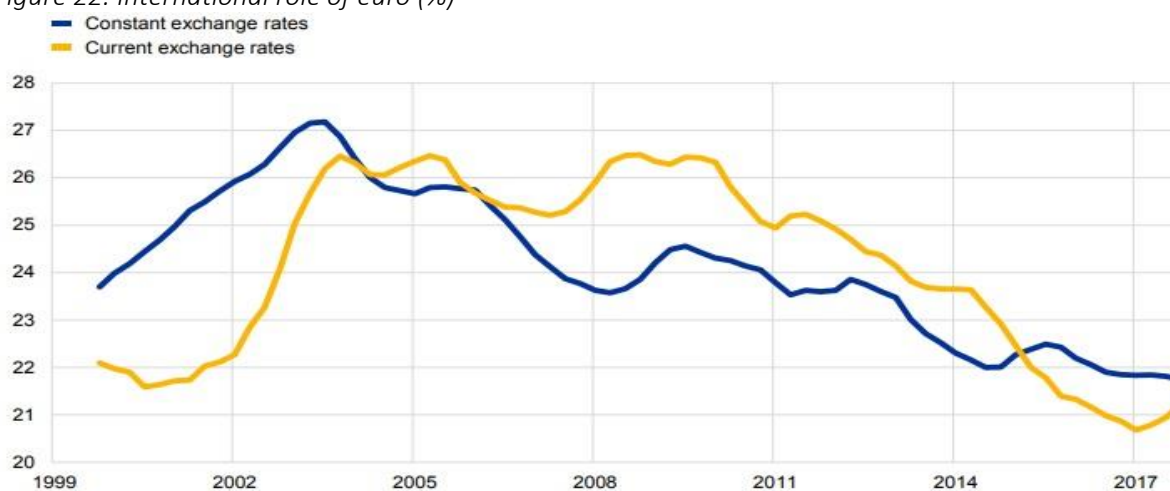
As the evidence from the empirical studies suggests, a deepened CMU would support and improve private risk sharing, as well as tackle European capital markets fragmentation (e.g. via equity and fixed income flows, cross-border bank flows). In order to achieve that, CMU should strike the right balance between financial diversification and integration, by attracting both borrowers and savers to interact with capital markets. For that, the establishment of appropriate mechanisms allowing retail and institutional investors to access financing from market-based (non-bank) sources is very important. However, bringing borrowers to the market requires investors. Thus, directing more household and corporate-sector savings towards vehicles that will invest via capital markets, and encouraging more investors to allocate capital across the European markets is necessary (Anderson, 2015).

5.2. The need for a European safe asset

As a step forward towards enhanced private risk sharing and the creation of fully integrated European capital markets, the idea of a public safe asset (even though it is as old as the euro currency itself) has recently regained attention in the wake of the euro area sovereign debt crisis. Such an asset would not only provide more diversified and liquid financial markets (of both debt and equity), enabling more private sector risk sharing, but it would also contribute to lowering risks on bank balance sheets. Moreover, a safe asset would support further portfolio diversification in the financial sector, helping to address the sovereign-financial nexus, while providing a new source of high-quality collateral for cross-border financial transactions. Also, it could render sovereign bonds issued in otherwise small and less liquid markets more attractive for international investors. This would foster private sector risk sharing and risk reduction, as well as promote a more efficient allocation of risks among investors. Moreover, such an asset would increase the range of available instruments on financial markets, thus contributing towards deeper and more integrated European capital markets.

A euro-denominated safe asset would make the euro more attractive internationally, a considerable disadvantage today relative to the US (Figure 22). Indeed, despite the fact that the euro remains the second most important currency in the international monetary system, its international role is close to historical lows (ECB, 2018b; EC, 2018h). A European safe asset will promote the development of deeper and more integrated capital markets (through a shared low-risk safe financial asset), and increase the global relevance of Europe's financial system and European financial regulation. In addition, the international role of the euro also depends on strengthening the liquidity and resilience of European market infrastructures, and creating a fully integrated EU-based instant payment system (Acedo Montoya and Buti, 2019).

Figure 22. International role of euro (%)



Notes: Simple arithmetic average of the shares of the euro at constant (Q4 2017) exchange rates in stocks of international bonds, cross-border loans, cross-border deposits, foreign exchange settlements, global foreign exchange reserves and exchange rate regimes.

Source: ECB (2018b).

5.3. Different proposals

To adequately achieve the stated objectives while remaining feasible, a European safe asset should at least: i) avoid the need for mutualisation of debts, ii) be able to attain a sizeable amount of issuance over time to really make a difference in financial markets, and iii) cover short and medium to long-term maturities to create a full yield curve (although a first step might be to start common issuance only at the short-end of the maturity spectrum).

Even though discussions on a common European debt instrument predate the euro crisis (Giovannini Group, 2000), it was only in 2009 when the creation of a euro area-wide safe asset became part of the policy agenda. There have been several proposals on the table over the last few years, with differences in key design elements and consequences (Eurobonds, Blue/Red Bonds, Eurobills, Stability Bonds, E-bonds, Sovereign Bond-Backed Securities (SBBS)/European Safe Bonds (ESBies)).⁴⁰ While several proposals (i.e. Eurobonds, Blue/Red Bonds, and the original Eurobills proposal) envisaged some form of mutual guarantee that would ensure the safety of these assets, more recent proposals dispense with this feature. In one of them for example, safe assets are using financial structures that avoid debt mutualisation, such as sovereign bond-backed securities (SBBS) (Brunnermeier *et al.*, 2017, ESRB HLTF, 2018; Leandro and Zettelmeyer, 2018a). In this type of assets, 'safety' is achieved by some combination

⁴⁰ For an overview of the different proposals see Leandro and Zettelmeyer (2018a), Best (2018).

of diversification and seniority. In particular, financial intermediaries would purchase a standardised diversified portfolio of sovereign bonds and use this as collateral for a security issued in several tranches (e.g. ESBies).

While the SBBS proposal appears to have certain appealing features – it does not require member state guarantees or a “fully-fledged” euro area budget, can be issued in relatively large volumes (while maintaining liquid national bond markets), and could contribute to stability and financial integration (Leandro and Zettelmeyer, 2018b) – it has been subject to criticism from market practitioners, credit rating agencies, and Debt Management Offices (DMOs) (see Minenna, 2017; ESRB HLTF, 2018; Tonveronachi, 2018; “French German roadmap for the Euro Area”⁴¹).⁴² There are two main concerns. First, the impact of extreme market events: as sovereign risks become highly correlated among several countries in a crisis situation, it cannot be ensured that the ‘safe’ senior tranche will indeed be as safe as it promises. Second, the risk that investor appetite for the junior tranche may dry up: as the senior and junior tranche need to be issued together, if it becomes difficult to find investors to buy the junior tranche, this could also bring a halt to the issuance of the senior instrument, particularly in a crisis.⁴³ More recently, in order to overcome such problems, the debate has shifted towards proposals that do not rely on securitisation and still avoid joint and several guarantees/liabilities.⁴⁴

The more recent of these proposals is the E-bond proposed by Leandro and Zettelmeyer (2018b). In the case of E-bonds, a supranational entity would cover a portion of the financing needs of euro area countries by issuing E-bonds, backed by a portfolio of senior claims towards those countries. The advantage of this approach, compared to the SBBS, is that while safety would be created through the combination of diversification and seniority, the latter would be related to the intermediary itself, and not to the specific tranche of the bonds issued by the intermediary. The decisions of the common issuer of E-bonds regarding the amounts and timing of issuances could be coordinated by national DMOs, which would facilitate coordination with national access to the market.

⁴¹ See: https://www.bundesfinanzministerium.de/Content/EN/Standardartikel/Topics/Europe/Articles/2018-06-20-Meseberg-att1.pdf?__blob=publicationFile&v=3.

⁴² A common safe asset should complement rather than replace national debt markets and it must be constructed through and with the cooperation of national DMOs. This was one of the shortcomings of the SBBS model as proposed by the European Systemic Risk Board (ESRB) – it did not bring DMOs into the governance and operations, for instance to jointly decide the main instruments, issuance schedules, maturities, etc.

⁴³ In particular, in a crisis situation, the demand for the riskier tranche (i.e. junior) decreases, resulting in lower prices of the EJBies (European Junior Bonds). This will cause capital to shift from EJBies to ESBies (European Senior Bonds), and push the prices of ESBies up. Given that the arbitrage between EJBies and ESBies is not perfect, there is no guarantee that the total market value of senior and junior tranches of SBBS will cover the cost of buying the underlying government bonds. Thus, the decreasing demand for the junior tranche will undermine the issuance of ESBies.

On the same topic, De Grauwe and Ji (2018) express concerns on whether the SBBS scheme would improve the stability of the euro area financial system, especially during a crisis. The authors argue that in crisis periods, and since the markets of sovereign bonds will shrink, the yields are likely to be more volatile.

⁴⁴ The proposals of short term European securities do not include tranches but imply mutualisation of debts. They include the Temporary Eurobill Fund proposal of Bishop (2013), where the guarantees will be pro-rata (like that of the ECB and the ESM) and not joint and several/mutual. Or the proposal by Philippon and Hellwig (2011), in which a European DMO will issue jointly and severally guaranteed Eurobills with a maximum maturity of one year and an issuance cap for any individual state of 10% of GDP.

5.4. The way forward

The final form that a European safe asset will take, in order to contribute to a better risk sharing and integration of capital markets, is very important. Such an asset should be able to attract sufficient investor demand, create a meaningfully deep and liquid market, and become the new reference safe asset for European financial markets. Furthermore, it should help in reducing the bank-sovereign nexus, strengthening the international role of euro, as well as assisting the transmission of monetary policy to the real economy.

However, risks and unintended consequences associated with such an asset would need to be carefully internalised in its design. One of them, for example, concerning synthetic securities with tranches, is whether investor demand will be available for the riskier part of the asset (i.e. junior tranches) during times of crisis. Or if a safe asset will ultimately address the disruptive flight to quality/safety phenomenon within euro area sovereigns that occurs during crisis, or investors would still prefer to move assets into the safest bonds of a euro area member state (Strauch, 2018). Another concern is whether or not the 'safe' aspect of the asset will be misinterpreted as a guarantee by a European official body, even if it does not carry such an explicit guarantee.⁴⁵ Finally, there are also questions regarding the regulatory environment of a safe asset, in terms of the treatment of sovereign exposures on bank balance sheets, and the type of intermediary/ies (public or private) that should issue them (Benassy-Quéré *et al.*, 2018). Thus, in order to achieve its policy objectives and contribute to financial stability, a safe asset must be properly designed and the issuance/holdings of such a security must be prudently regulated.

While the policy debate around the creation and structure of a European safe asset continues, it would be perhaps better to take a more pragmatic approach towards such an initiative. For example, a good starting point could be the joint issuance of treasury bills, which depending on how they are constructed, might not require mutualisation or risk sharing by participating member states. This would cover the short term (e.g. one month) needs of the market and provide liquidity in a market that is shrinking and becoming increasingly expensive for some DMOs to maintain. The advantage of a joint issuance would accrue to all the euro area countries willing to participate. Liquidity would be partitioned on the basis of clearly agreed keys, with the same applying to the extra amount generated. This would also be adapted to market developments, where the role of local banks is diminishing as they are replaced by very large institutional investors. The original Eurobills proposal was based on public-sector risk sharing and would most likely not be compatible with the current European treaties.⁴⁶ However, more recent proposals would see the issuance of E-bills based on the seniority of loans from a common issuer, as in the E-bonds model, thereby avoiding mutualisation.

⁴⁵ The room for such misinterpretation would depend on the clarity and credibility of the legal and economic construction underpinning the safe asset.

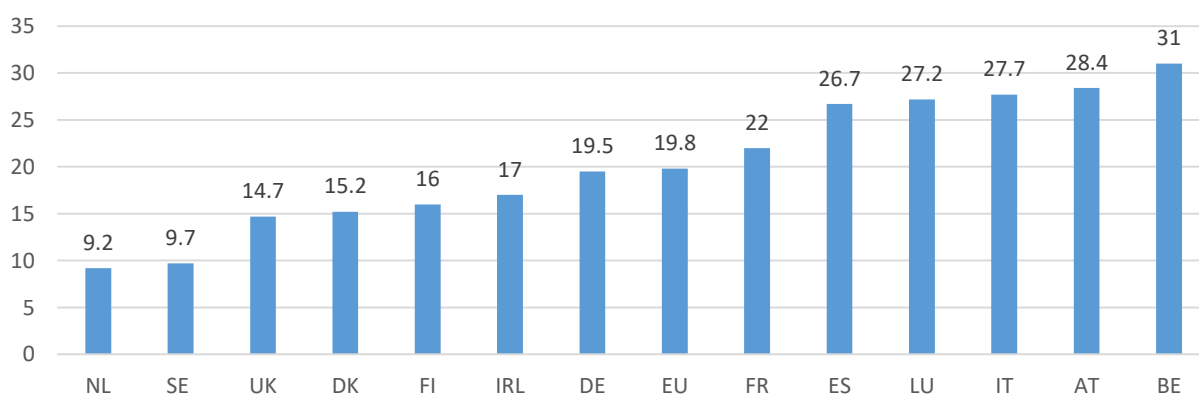
⁴⁶ Article 125 of the Treaty on the Functioning of the European Union.

6. Investment product markets to capture household savings

A key instrument to channel household savings to effective capital market products are investment products. The Undertakings Collective Investment in Transferable Securities (UCITS) product harmonisation rules are one of the success stories of the single financial market, which has led to the creation of thousands of EU-wide authorised investment funds. It was followed by initiatives to harmonise other segments of the investment product market. The problem, however, is that the market has remained too fragmented, which has increased the costs, and reduced the attractiveness for households. The recently adopted PEPP may change this in the long term, as it creates a large scale portable long-term savings product, although the final compromise text leaves many questions open as to whether there will be providers for such products (Lannoo, 2018 and 2019).

Further to a request by the European Commission, the ESAs have published several studies about retail investment product charges and performance (ESMA, 2017; EIOPA, 2018; EBA, 2019; ESMA, 2019). In a study on fund performance, ESMA (2017) found that over the three-year horizon (2013-15), ongoing fees, one-off charges and inflation reduced the returns available to investors by an average 29% of gross returns or, in absolute terms, by 252bps. Fees charged to retail investors reduce their returns more than those charged to institutional investors. As shown in Figure 23, the Netherlands, Sweden, Denmark, and the UK – countries that have implemented unbundling rules or organised long-term saving plans more recently – have significantly lower charges, which are about half that of the most costly country – Belgium – where total charges reduce returns by 31% (before inflation). By asset type, the highest reductions apply to the money market (34.8%) and bond funds (31.9%) for retail clients (before inflation) and for actively managed funds compared to passively managed funds.

Figure 23. Reduction in fund returns (expenses, sales and redemption fees) before inflation (%)



Source: ESMA (2017).

A more recent Commission study (EC, 2018b) on the distribution of retail investment products, concluded that there is a complete mismatch between supply and demand. Using a mystery shopping exercise,⁴⁷ the results show that comparing and interpreting fees across providers and products is very difficult, even for a well-informed investor. Information provided to clients is neither transparent nor is it standardised across countries. Fees vary widely depending on the investment product and distributor, with the lowest fees overall (about 1%) charged for listed equities and bonds, and ETFs (including execution and custody fees). The highest fees applied to equity, mixed and real estate funds, with the fees totalling 8% if an investor sells the product within one year (entry, exit and ongoing charges). The

⁴⁷ A tool used by market research companies to measure the quality of service, compliance with regulation or to gather specific information about products and services.

average first-year cost for an investment product in the sample was 4% (entry and ongoing charges, Table 3).

Table 3. Average entry, exit and ongoing charges on investment products in the EU (% of assets)

	Real estate funds	Mixed funds	Equity funds	Bond funds	Money market funds	Guaranteed life insurance	Life insurance	Guaranteed pension products	Pension products	Pension mutual funds	Average
Entry	3.76%	3.77%	3.65%	2.87%	1.37%	2.88%	2.22%	3.40%	2.19%	2.30%	2.84%
Exit	3.20%	2.73%	2.01%	1.69%	1.25%	1.83%	1.03%	2.62%	0.97%	1.65%	1.90%
Ongoing charges	1.28%	1.51%	1.89%	1.01%	0.39%	0.88%	1.38%	0.87%	1.45%	1.15%	1.18%
Total	8.24%	8.01%	7.55%	5.57%	3.01%	5.59%	4.63%	6.89%	4.61%	5.10%	5.92%

Source: EC (2018b).

The most independent financial advice is available in countries that have actively implemented unbundling requirements and have banned inducements, such as the UK and the Netherlands, which also have the lowest fees (Figure 23). The study concludes that financial services for consumers are consistently ranked among “the poorest performing services market”. Digitalisation or robo-advice will not necessarily change this. Even if it may become easier to compare products, it will not reduce the sheer complexity of the supply.⁴⁸

A more recent detailed study, published by ESMA in January 2019 (ESMA, 2019), confirms the overall cost and performance structure of its earlier work (ESMA, 2017), referred to above.⁴⁹ Ongoing costs for equity UCITS stand at about 1.8%, for bond funds at about 1.2% and mixed funds at about 1.6%, which is in line with the data from the Commission study above (EC, 2018b), while redemption fees are significantly lower.⁵⁰ Ongoing costs for retail are on average double that for institutional investors. ESMA adds that the heterogeneity across member states is significant: there is a diversity in cost levels, in costs of cross-border distribution and in measurement.⁵¹

A more far-reaching initiative is thus required to shake up the fragmented and costly fund markets and stimulate retail investors towards higher-performing investments. Initiatives should be taken towards market consolidation, consistency and investor education, in different ways, and to make cost structures more comparable or possibly limit charges. A step was taken in the recently adopted Commission proposal to standardise national marketing requirements and regulatory fees for funds. Also, MiFID II unbundling and cost standardisation measures should start to have an effect, notably when combined with the implementation of Packaged Retail and Insurance-based Investment Products (PRIIPs) Regulation. An alternative is for funds fees to be capped, which is under consideration among policy makers. The recently agreed PEPP, for example, caps ongoing fund charges at 1%.

⁴⁸ The study also finds that fees related to robo-advice are often either difficult to find on the webpage and/or are displayed in a complicated way.

⁴⁹ The ESMA (2019) study examines the cost and past performance of retail investment products, such as UCITS, Alternative Investment Funds (AIFs) and Structured Products (SRPs). However, the data are not yet fully comparable.

⁵⁰ ESMA (2019) proxies ongoing costs using the total expense ratio (TER), obtained by Thomson Reuters Lipper, but its different components are not available (e.g. performance fees).

⁵¹ Availability, quality and heterogeneity in the way costs and fees are computed across markets pose significant challenges for assessing and comparing retail investment products. This is also confirmed by EIOPA’s study (EIOPA, 2019) on the costs and past performance of insurance-based investment products (IBIPs) and personal pension products (PPPs).

7. Capital market regulation and oversight

Much of the debate on CMU has an implicit or explicit bias towards equity capital markets. Debt capital markets are equally vital, and larger, as they form a key source of funding for governments and large corporates (ICMA, 2013). Much of the activity in these markets is among wholesale market counterparties, but often the money being invested is for the benefit of the retail side, through pension or investment funds (UCITS). Crucially, bond markets are the source of high-quality liquid assets which are utilised as collateral, both to enable financing in the secured finance based financial market system, in securitisation transactions, to underpin the operation of derivative markets and to comply with the LCR for banks. The repo market is the key enabler of the efficient movement of collateral and its proper functioning is a pre-requisite to the efficiency of secondary cash market trading, which in turn provides liquidity for investors that helps lead to the minimisation of costs to be borne by issuers.

With Brexit looming, the question of regulatory competition remains acute, as the UK may favour a 'lower burden' once it leaves the EU.⁵² Services are not part of the draft Withdrawal Agreement (WA) between the EU and the UK, as the UK is a net exporter of services, and thus sufficiently competitive on its own. But pressure will be high to stay in line with the EU, because of the need for equivalence with the EU's regulatory framework as a condition for access to the EU's market. The same applies *ceteris paribus* for the UK with the US. On the other hand, calls are also emerging in mainland Europe to adapt parts of the EU regulatory framework such as MiFID II, as it was mainly drafted with the City securities trading landscape in mind.⁵³

In a transatlantic context, the biggest advantages for the US are: i) the size of its single market, ii) the existence of a single supervisor (with the proviso that futures markets are covered by the Commodity Futures Trading Commission (CFTC)), and iii) tough enforcement in case of non-respect, which strengthens the confidence of the buy side, and thus increases the supply of capital, and liquidity. The initial costs for capital raising exercises are much higher in the US, certainly for equity issuance (Oxera, 2006), but economies of scale matter, and there is also the international appeal of the US market.

7.1. The regulatory framework for EU securities markets

The EU has gone through several waves of capital market regulation, and certainly with success. This covers as well the markets as the infrastructures, intermediaries and products that are available on the market. The ambition should now be to render capital markets truly European. A significant local bias remains in government bond markets and equity markets, as a result of incomplete rulemaking. In investment fund markets, regulatory action should be focused on reducing fees. Market disclosure rules need to be rendered more effective through integrated data source tools.⁵⁴ And work remains to be done on post-trade infrastructure.

⁵² See for example the speech by Andrew Bailey on the Financial Conduct Authority's (FCA) vision for post-Brexit regulation on 23 April 2019, as reported by the Financial Times (FT): <https://www.ft.com/content/62097db4-65c1-11e9-9adc-98bf1d35a056>.

⁵³ As said, for example, by a representative of the German ministry of finance during the CEPS Ideas Lab on 22 February 2019, but also something other associations are starting to argue.

⁵⁴ The centralisation of trading data and a consolidated tape for equities trading are currently missing from European capital markets. End-users' ability to access quality data is hampered by the fragmentation of trading venues, data publishers (i.e. approved publication arrangement – APA), and transaction reporting mechanisms (i.e. approved reporting mechanism – ARM). A consolidated tape would improve transparency for market participants, smooth out inefficiencies in price formation and reduce the cost of market data.

The most effective EU rules for market infrastructures were the ISD and its successor MiFID, which allowed for reciprocal remote access to regulated markets in the EU, and created tight competition between exchanges; UCITS for its single authorisation for investment fund sales; and the prospectus regime for corporate bond markets. The market conduct rules governing service providers in the sector, mostly contained in MiFID, were more complex and are still a work in progress. They raise the problem of home versus host country rules, and have led to calls for a single rulebook. This was translated into a very elaborate set of secondary legislation in MiFID II, probably the most elaborate of all EU financial regulation measures, with 45 different texts of implementing standards.

Brexit made the European Commission realise that the prudential regime for these investment service providers was not sufficiently aligned, which was tackled in the IFR. It now provides special rules for investment firms, and not the banking rules as was the case in many member states. The licensing of data providers also took more time, and had to wait for MiFID II and a solution to the problem of a lack of harmonised market data framework, and a single financial data source. The financial crisis furthermore highlighted the importance of regulating credit rating agencies, custody and settlement, and the over-the-counter (OTC) derivatives markets, all largely unregulated before. Table 4 gives an overview of the different segments of securities markets, the actors or products, and the applicable rules.

Table 4. EU securities markets basic rules

	ACTORS	RULES
PRIMARY MARKET	IPOs and listings	Prospectus Regulation
SECONDARY MARKET	Exchanges, trading facilities, Disclosure	MiFID II/EMIR/TD
PRODUCTS	Investment funds Alternative funds Derivatives Securitisation	UCITS/EuVECA/ELTIFs AIFMD EMIR STS
INTERMEDIARIES	Brokers, investment firms Market abuse and short selling Data providers Rating agencies Benchmark agencies Trade repositories	MiFID II/CRD IV/IFR MAD/MAR, SSR MiFID II CRA Regulation Benchmark Regulation EMIR
CLEARING	Brokers, investment firms	EMIR
INFRASTRUCTURES	CCPs, settlement & custody	EMIR, CSDR

Source: Authors' elaboration.

So what is missing in this fairly complete and elaborate regulatory framework? And why is a single market finance framework so difficult to realise? Important components are missing, which have maintained market fragmentation. It concerns:

- no harmonised primary government bond markets issuance procedures and no genuine euro bonds;
- limited transparency of (or in) price formation and lack of central price sources in bond and equity markets;
- a 'sovereign' nexus in equity markets;
- the diversity in disclosure rules for market participants;
- unclear rules for start-ups in different definitions for SME Growth Markets;

- a lack of a single source of sensitive corporate information.

Bond markets, a key component of capital markets in Europe, have been less regulated overall than equity markets at EU level. Harmonised issuance rules only apply for corporate debt, not for government debt, and price transparency rules in secondary markets have only applied to very liquid bonds since the implementation of MiFID II – 987 bonds in the latest count by ESMA.⁵⁵ More disclosure on price formation in bond markets was long overdue, and has been on the agenda since the early 2000s, but market participants argued successfully that liquidity would be affected, and hence price formation.⁵⁶ Some countries, like Italy, see strong participation by households in the government bond markets, and also have efficient trading platforms. But this has apparently not been easy to replicate, even with the acquisition of the Italian regulated market by the LSE, driven as it is by specific local features, as for example Italian tax rules.

Corporate bond markets on the other hand grew enormously in the early years of the euro, with growth rates above 200% (Casey and Lannoo, 2005). This was a clear sign that the euro and a large currency pool mattered. But price transparency rules only apply to a very limited segment of the very large corporate issuers, even under MiFID II. And a single publicly available data feed does not exist, as it does in the US with the Trade Reporting and Compliance Engine (TRACE).⁵⁷

In the equity markets, a barrier to integration is the requirement under the Prospectus Regulation (Article 2m) for issuers to have the prospectus approved in their home market, or in the market where the company has its registered office. Companies can list in another market, subject to the authorisation of its supervisor, to benefit from passporting rights. An EU-wide capital raising is still not possible, even after the latest review, and requires notification in the host market. For bond markets, issuance in the market of preference in the EU is standard practice since the emergence of the Eurobond market.

Disclosure is core to the proper functioning of a capital market, but it has been less in the limelight recently, with the exception of sustainability reporting. Much of the debate in the past was about the pros and cons of quarterly reporting, and about simplification of disclosure requirements, certainly for smaller firms. These matters have been tackled to various degrees in the meantime, but the framework has become very diverse and complex, with different sets of rules applying for different markets, with unclear definitions and different degrees of enforcement (Table 5). The full option applies for listed companies on the regulated market (but quarterly reporting is no longer obligatory), but less for smaller firms, or alternative markets, resulting in a difficult to navigate structure, and in inconsistencies.⁵⁸ It should be added that likewise in the US, further to the 2012 Job Act and its updates, reduced disclosure requirements apply for newly listed small companies.

⁵⁵ See <https://www.esma.europa.eu/press-news/esma-news/mifid-ii-esma-makes-new-bond-liquidity-data-available-3>.

⁵⁶ See for example the ECMI report on “Europe’s hidden capital market” of 2005, as well as the studies the European Commission ordered on the subject.

⁵⁷ However, consolidated market data are already available via individual data vendor offerings.

⁵⁸ See, for example, the position of European Issuers on the review of MAR, 3 April 2019. Available at: <http://www.europeanissuers.eu/positions/files/view/5ca5f9d0a07f9-en>.

Table 5. EU disclosure rules framework

	IPO/listing	Ongoing disclosure	Market abuse	Short selling
Regulated market	Prospectus Regulation	Transparency Directive Shareholder Rights Directive	MAD/MAR	Short selling Regulation
MTF/Alternative markets	Simplified prospectus rules	NA	Simplified rules MAD/MAR	Short selling Regulation

Source: Authors' elaboration.

The question of tools to access sensitive information in a timely way remains unresolved. The Transparency Directive (TD) requires each EU country to establish a storage mechanism to ensure the public can access the information disclosed by listed companies. However, access to such information on a pan-European basis is currently complicated and involves using different national databases that are not sufficiently interconnected. ESMA is working on a European Electronic Access Point (EEAP) providing access to the different storage mechanisms, to be operational from 2020 onwards.

Another part that is missing is the post-trade infrastructure, where significant barriers remain. What is needed here is the removal of the 'Giovannini' barriers – named after the late Alberto Giovannini – which have been a subject of debate for 20 years. The latest report, published by the European Post Trade Forum (EPTF) demonstrates that, despite progress made in a number of areas during previous years, there are still many barriers that remain to be tackled.⁵⁹ Hence, markets continue to have siloed infrastructures, and liquidity is tied-up locally. For participation in primary bond markets, for example, local collateralisation requirements apply. Efficient and integrated post-trade markets are essential for EU financial markets and for a properly functioning CMU, given which there is a pressing need to find the best solutions to remove all these barriers. This will require a range of actions, several of which are challenging to deliver and require changes to be made by member states. The ECB has started to address this with the European Distribution of Debt Instruments (EDDI) initiative, to facilitate issuance and distribution of debt securities.⁶⁰

7.2. Supervision of securities markets

The different waves of EU rulemaking in securities markets largely contributed to the creation of supervisory authorities in the member states, and to the alignment of their competencies. Until the early 1990s, supervision for the different aspects of securities markets was organised in different ways in the member states, with an important role for self-regulation. Gradually, the issue of European cooperation in supervision appeared on the agenda. This was addressed by the Lamfalussy Committee in 2001 and by the Delarosi re Committee in 2009, with the creation of a securities markets committee (the Committee of European Securities Regulators, CESR) whose powers were expanded in the creation of ESMA in 2010. But the ESAs review highlighted that more remains to be done.

Capital markets union raised the expectation that a single European capital market supervisor would be created, analogous to that for the banking union. The ESA review and EMIR 2.0 were moves in this direction, but neither were sufficiently well calibrated and had to be watered down because of unwillingness on the part of the member states. The problem is that capital markets, more than banking,

⁵⁹ See latest report of the EPTF (2017) and earlier publications: https://ec.europa.eu/info/publications/170515-eptf-report_en.

⁶⁰ The ECB decided to launch a market consultation on a potential Eurosystem initiative regarding a European mechanism for the issuance and initial distribution of debt securities in the EU: <https://www.ecb.europa.eu/press/govcdec/otherdec/2019/html/ecb.gc190524~3d8a51b867.en.html>.

are at diverse stages of development in the EU. For several supervisory tasks, such as IPOs of start-ups or market conduct, local presence is required, as well as knowledge of local rules (e.g. accounting, taxation or governance, company law). For others, such as the supervision of infrastructures, large players, large listed enterprises, a single capital market needs a single set of rules, and this would benefit market finance in the EU in general. How can this circle be squared?

The problem with the ESAs review was that it tried to kill too many birds with one stone. The ESAs review can no longer be carried out by the three authorities at the same time. Since their establishment in 2010, the ESAs have started to take different paths. The role of the European Banking Authority (EBA) was changed by the creation of the Single Supervisory Mechanism (SSM) in 2012, and it has mainly become a standard-setting agency for the EU-28/31, whereas the responsibilities of ESMA have further grown with CMU and Brexit, in addition to the specific supervisory tasks it already had. As regards the European Insurance and Occupational Pensions Authority (EIOPA), it will take on its first quasi-supervisory task with the PEPP, where it can refuse to register the licence of a European pension product provider.

In particular, as regards ESMA's new areas of supervision, the transfer of powers to the EU level should be the result of a dynamic process following an assessment of the degree of market integration based on objective key indicators (e.g. cross-border nature of the business, uniform set of rules, number of market players, standardisation of products, economies of scale, risk of regulatory arbitrage, cross-border nature of risk and contagion, etc.) when product- or market-specific legislation is periodically evaluated or a new regulation is established. At the same time, as competencies are centralised, overlaps need to be eliminated, and local rules need to be pared back to suit.

On the basis of these indicators, Table 6 provides an overview of the appropriate level of regulation. As regards the level of supervision, given the heterogeneity of market players and products, a variable geometry is required, with large markets, listed companies, infrastructures and providers supervised at EU level. Control of conduct rules will continue to require strong local presence, but the spread of fintech and robo-advice will increasingly call for a highly coordinated European approach. Evidence-based measurement should be used to determine the appropriate level of supervision.

Table 6. Appropriate level of regulation for securities markets rules

	National	EU/EEA	Global
PROSPECTUS (IPOs)	X (local players)	X (EU-wide offers)	
MARKETS (listed companies)	X (local players)	XX	X
PRODUCTS	X	X	
PROVIDERS: PRUDENTIAL RULES	X (local players)	X	
PROVIDERS: CONDUCT RULES		XX	
INFRASTRUCTURES		XX	X

Source: Authors' elaboration.

Related to the above is the structure for governance and accountability, which should be aligned with the level of integration that will result from more EU-wide supervisory action, and the need for supervisory convergence. A standard-setting authority has a less developed governance and accountability structure than an entity that is becoming a fully fledged supervisory body. In the roles considered for ESMA, it requires full voting powers for the permanent executive members in the Board of Supervisors on supervisory issues, as is the case for the SSM or the Single Resolution Board (SRB). In the same vein, the permanent executive members should be expected to "act in the interest of the

Union as a whole". It requires, furthermore, a different appointment procedure for the chairperson and the executive board members, and higher administrative grades. And it also implies more regular formal appearances for a supervisory body before the European Parliament.

As a result of the ESAs review and Brexit, the supervisory powers of ESMA were extended to benchmarks, data providers and third-country CCPs, apart from the supervision of credit rating agencies and trade repositories for which it was already responsible. But the compromise maintains the status quo in the governance structure, and it is only for CCP supervision as part of EMIR 2.0 that a management board will be operational (as was proposed in the original ESAs review for ESMA in general). This means that no decision can be taken against the will of a majority of national supervisors, each of which has one vote on the Board of Supervisors. The Meroni doctrine may still act as a brake on the further strengthening of powers of the ESAs, and another way will have to be found to restructure the supervision of EU securities markets.

8. Conclusion

Since 2015, when the Capital Markets Union Action Plan was launched, much progress has been achieved on the legislative front. Some rules have already been adopted, and a political agreement was reached on several others. The Regulations on Simple, Transparent and Standardised (STS) securitisations, on Prospectus, on European Venture Capital Fund (EuVECA) and European Social Entrepreneurship Funds (EuSEF) were adopted. For the Pan-European Personal Pension Product (PEPP), covered bonds, the cross-border distribution of collective investment funds, the Investment Firm Review (IFR), the review of the European Supervisory Authorities (ESAs), the market infrastructure rules (EMIR 2.0), the SME Growth Markets, and the disclosure and benchmarks for sustainable finance, political agreements were reached between the co-legislators, and final adoption is expected in the coming months. A few less important pieces are still under negotiation, such as the regulation on crowdfunding, the third-party effects on assignment of claims, or the sustainable finance taxonomy.

While it is early days to make an assessment of the impact of these rules, opinions are mixed at best. On some of the key measures, such as the STS, Prospectus, PEPP and the ESAs review, the view is that rules are too complex and/or that member states had too much of a hand in the final outcome. This raises a fundamental problem for CMU: the political momentum was never comparable to that for banking union. Banking union was part of the reaction to the financial and sovereign crisis, embedded in several high-level 'Presidents' reports, and followed up at the highest level. CMU has never received the same treatment, so far.

With capital markets regulatory matters judged an issue for experts, decision-makers lost sight of the broader picture, and the outcome of the rulemaking process in Brussels was often a too complex piece of regulation. The PEPP is a case in point: this important proposal has been rendered very complex and, as a result, possibly unattractive for providers. Another example of the lack of perspective in CMU was the listing of the European firm Spotify on Wall Street in April 2018. What could have been a showcase for CMU went totally unnoticed by EU policy makers and followed the traditional route towards the US capital markets.

In fact, most CMU measures are focusing on the development of capital markets rather than on creating a union of them. In particular, four out of the six areas of intervention identified by the CMU Action Plan (i.e. expanding the financing options available to European firms; easing access to public markets for firms; encouraging long-term and sustainable investment; fostering greater participation of retail and institutional investors) are related to the development of capital markets, while only one of the six (i.e. facilitating cross-border distribution of investments) focuses on removing cross-border obstacles to the creation of a single capital market in the EU. Moreover, the last area of intervention (i.e. enhancing banking capacity) is about the development of bank financing capacity. This clearly illustrates that the CMU project so far has indeed been more about enhancing the financing of the economy and less about achieving the ultimately goal of a fully integrated European capital market. Hence, it is imperative that minds now become properly focused on a clear objective.

The EU primarily needs to enhance market finance in several of its markets before its capital markets union can be unified. Diversity and adaptation to specific local circumstances will thereby need to continue to co-exist with more integration. Rules will need to allow for growth of local markets while ensuring high standards of regulation and effective of supervision.

It is therefore necessary that the CMU Action Plan focuses on the importance of market finance, not only for the competitiveness of Europe's enterprises, but also for the growth outlook of the European

economy. Moreover, there is need to highlight the significance of risk sharing for the proper functioning of capital markets and monetary union. Certain parameters/indicators should be established, which will be followed up closely to track progress towards a more balanced and integrated financial system. Last but not least, it should detail the regulatory and institutional infrastructure needed to build a genuine capital markets union. For these reasons, this report proposes to call it a Market Finance Action Plan.

Developing properly functioning capital markets that can support economic growth across Europe requires a comprehensive approach. Policies to stimulate individual ownership of traded shares, such as reducing the tax advantage of debt over equity or enhancing financial literacy, can have a material effect on public equity markets in Europe. Harmonising corporate, insolvency and securities laws, taxation (in particular, cross-border/double taxation) and reporting across jurisdictions would be major steps towards supporting capital markets. This is critical for mobilising finance via capital markets, as it would create incentives and favourable conditions for institutional investors to overcome the home bias in their investment strategies. However, progress in these matters is naturally difficult to achieve as they are complex long-term objectives for which political willingness and coordination is necessary.

A more in-depth plan is therefore needed. Rebalancing EU's economic structures towards more market-based finance is necessary for creating integrated capital markets. The Market Finance Action Plan should start by prioritising one of the core components of capital markets – government bond markets, which have not received the attention they deserve. It should also focus on those aspects of the equity and bond markets where union is lacking and concentrate on stimulating markets and competition.

References

- Acedo Montoya, L. and M. Buti (2019), "The euro: From monetary independence to monetary sovereignty", VOX, CEPR Policy Portal, 1 February. Available at: <https://voxeu.org/article/euro-monetary-independence-monetary-sovereignty>.
- AFME (2015), "Raising finance for Europe's small & medium-sized businesses: A practical guide to obtaining loan, bond and equity funding", September, Association for Financial Markets in Europe.
- AFME (2017), "The Shortage of Risk Capital for Europe's High Growth Businesses", March, Association for Financial Markets in Europe.
- AFME (2018), "Capital Markets Union: Measuring progress and planning for success", September, Association for Financial Markets in Europe.
- AFME (2019), "Securitisation Data Snapshot Q1 2019", May, Association for Financial Markets in Europe.
- Akerlof, G. (1970), "The Market for 'Lemons': Quality, Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, 84(3): 488-500.
- Alcidi, C., P. D'Imperio and G. Thirion (2017), "Risk-sharing and Consumption-smoothing Patterns in the US and the Euro Area: A comprehensive comparison", CEPS Working Document, No. 2017/04, Centre for European Policy Studies.
- Allen, F. and D. Gale (1999), "Diversity of Opinion and Financing of New Technologies", *Journal of Financial Intermediation*, 8(1-2): 68-89.
- Allen, F. and D. Gale (2000), *Comparing Financial Systems*, Cambridge, MIT Press.
- Allen, F., L. Bartiloro, X. Gu and O. Kowalewski (2018), "Does economic structure determine financial structure?", *Journal of International Economics*, 114: 389-409.
- Anderson, N., M. Brooke, M. Hume and M. Kürtösiová (2015), "A European Capital Markets Union: implications for growth and stability", Financial Stability Paper, No. 33, February, Bank of England.
- Asdrubali, P., B. Sorensen and O. Yosha (1996), "Channels of interstate risk sharing: United States 1963-1990", *Quarterly Journal of Economics*, 111(4): 1081-1110.
- Bavoso, V. (2018), "Market-Based Finance, Debt and Systemic Risk: A Critique of the EU Capital Markets Union", Accounting, Economics, and Law: A Convivium, 26 October.
- Bayoumi, T. and M. Klein (1997), "A Provincial View of Economic Integration", IMF Working Paper, WP/97/41, International Monetary Fund.
- Beck, T. and R. Levine (2004), "Stock markets, banks, and growth: Panel evidence", *Journal of Banking and Finance*, 28(3): 423-442.
- Benassy-Quéré, A., M. Brunnermeier, H. Enderlein, E. Farhi, M. Fratzscher, C. Fuest, P. Gourinchas, P. Martin, J. Pisani-Ferry, H. Rey, I. Schnabel, N. Veron, B. Weber di Mauro, J. Zettelmeyer (2018), "Reconciling risk sharing with market discipline: A constructive approach to euro area reform", CEPR Policy Insight, No. 91, Centre for Economic Policy Research.
- Best, K. (2018), "Shared Scepticism, Different Motives: Franco-German Perceptions of a Common European Safe Asset", 26 October, Jacques Delors Institut Berlin and Bertelsmann Stiftung.
- Bishop, G. (2012), "A proposal for a two-year refinancing for all € bills/optional refinancing of bond maturities until 2015, 27 January. Available at: <http://www.grahambishop.com/StaticPage.aspx?SAID=281>.

- Bishop, G. (2013), “Bolstering the Still-Fragile Euro: A Plan for a Temporary Eurobill Fund”, 11 February. Available at: <http://www.grahambishop.com/StaticPage.aspx?SAID=412>.
- Black, B. (2000), “The Core Institutions that Support Strong Securities Markets”, *Business Lawyer*, 55(4): 1565-1607.
- Bond, P. and H. Zhong (2016), “Buying High and Selling Low: Stock Repurchases and Persistent Asymmetric Information”, *Review of Financial Studies*, 29(6): 1409-1452.
- Brennan, M. and A. Kraus (1987), “Efficient Financing Under Asymmetric Information”, *Journal of Finance*, 42(5): 1225-1243.
- Brunnermeier, M., S. Langfield, M. Pagano, R. Reis, S. Van Nieuwerburgh and D. Vayanos (2017), “ESBies: safety in the tranches”, *Economic Policy*, 32(90): 175-219.
- Brutscher, P-B and C. Hols (2018), “The Corporate Equity Puzzle”, EIB Working Papers, No. 03, European Investment Bank.
- Caballero, R., E. Farhi and P. Gourinchas (2017), “The Safe Asset Shortage Conundrum”, *Journal of Economic Perspectives*, 31(3): 29-46.
- Casey, J-P. and K. Lannoo (2005), “Europe’s Hidden Capital Market: Evolution, Architecture and Regulation of the European Bond Market”, Centre for European Policy Studies, Brussels.
- CFA (2019), “MiFID II: One Year On – Assessing the Market for Investment Research”, CFA Institute, Chartered Financial Analyst
- Cimadomo, J., O. Furtuna and M. Giuliodori (2018), “Private and public risk sharing in the euro area”, ECB Working Paper Series, No. 2148/May, European Central Bank.
- Constâncio, V. (2019), “European Financial Architecture and the European safe asset”, Speech at the Conference on European Financial Infrastructure in the Face of New Challenges, 25 April, Florence. Available at: <https://macroviews.net/wp/2019/05/05/european-financial-architecture-and-the-european-safe-asset/>.
- Cournède, B. and O. Denk (2015), “Finance and economic growth in OECD and G20 countries”, OECD Economics Department Working Papers, No. 1223, Organisation for Economic Co-operation and Development.
- De Grauwe, P. and W. Moesen (2009), “Gains for All: A proposal for a common Eurobond”, CEPS Commentary, 3 April, Centre for European Policy Studies.
- De Grauwe, P. and Y. Ji (2018), “Financial engineering will not stabilise an unstable euro area”, VOX, CEPR Policy Portal, 19 March. Available at: <https://voxeu.org/article/financial-engineering-will-not-stabilise-unstable-euro-area>.
- Delpla, J. and J. Von Weizsäcker (2010), “The Blue Bond Proposal”, Bruegel Policy Brief, Issue 2010/03, May. Bruegel.
- Demarigny, F. (2015), “Investing and Financing Recommendations for the forthcoming Capital Markets Union”, Report for the French Minister of Finance and Public Affairs, available at: http://www.economie.gouv.fr/files/rapport_demarigny_en.pdf.
- Demarigny, F. and K. Lannoo (2018), “Navigating the minefield of the ESA review”, ECMI Commentary, No. 49, 27 February, European Capital Markets Institute.
- Dierkens, N. (1991), “Information Asymmetry and Equity Issuers”, *Journal of Financial and Quantitative Analysis*, 26(2): 181-199.
- Doidge, C., A. Karolyi and R. Stulz (2017), “The U.S. listing gap”, *Journal of Financial Economics*, 123(3): 464-487.

- EBA (2018), "EBA Report on the European Secured Notes (ESNS)", 24 July, European Banking Authority.
- EBA (2019), "EBA Report on Cost and Past Performance of Structured Deposits", 10 January, European Banking Authority.
- EC (2015a), "GREEN PAPER: Building a Capital Markets Union", SWD(2015) 13 final, 18 February, European Commission.
- EC (2015b), "Action Plan on Building a Capital Markets Union", COM(2015) 468 final, 30 September, European Commission.
- EC (2016), "Cross-border risk sharing after asymmetric shocks: evidence from the euro area and the United States", Quarterly Report on the Euro Area, Directorate General Economic and Financial Affairs (DG ECFIN), European Commission, 15(2): 7-18, July, European Commission.
- EC (2017), "Mid-Term Review of the Capital Markets Union Action Plan", Commission Staff Working Document, SWD(2017) 224-225 final, 8 June, European Commission.
- EC (2018a), "FinTech Action plan: For a more competitive and innovative European financial sector", COM(2018) 109 final, 8 March, European Commission.
- EC (2018b), "Distribution systems of retail investment products across the European Union", Final Report, 24 April, European Commission.
- EC (2018c), "10 Trends Shaping Innovation in the Digital Age", European Political Strategy Centre, 16 May, European Commission.
- EC (2018d), "Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL amending Regulations (EU) No 596/2014 and (EU) 2017/1129 as regards the promotion of the use of SME growth markets", COM(2018) 331 final, 24 May, European Commission.
- EC (2018e), "Impact Assessment – Accompanying the document: Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EU) No 596/2014 and (EU) 2017/1129 as regards the promotion of the use of SME growth markets", Staff Working Document, SWD(2018) 243 final, 24 May, European Commission.
- EC (2018f), "Feasibility Study on European Secured Notes – Final Report", July, European Commission.
- EC (2018g), "Commission Delegated Regulation of 13.12.2018 amending Commission Delegated Regulation (EU) 2017/565 as regards certain registration conditions to promote the use of SME growth markets for the purposes of Directive 2014/65/EU of the European Parliament and of the Council", C(2018) 8442 final, 13 December, European Commission.
- EC (2018h), "Towards a stronger international role of the euro", COM(2018) 796/4, 18 December, European Commission.
- EC (2019), "Capital Markets Union: progress on building a Single Market for capital for a strong Economic and Monetary Union", Staff Working Document, SWD(2019) 99 final, 15 March, European Commission.
- ECB (2016), "Economic Bulletin", Issue 5, European Central Bank.
- ECB (2018a), "Update on economic and monetary developments", Economic Bulletin, Issue 3, May, European Central Bank.
- ECB (2018b), "The international role of the euro", Interim Report, June, European Central Bank.
- EIF (2016), "The European Venture Capital Landscape: An EIF Perspective", EIF Research & Markets Analysis, Working Paper 2016/34, European Investment Fund.

- EIF (2017), “Financing Patterns of European SMEs Revisited: An Updated Empirical Taxonomy and Determinants of SME Financing Clusters”, EIF Research & Market Analysis, Working Paper 2017/40, European Investment Fund.
- EIF (2018), “EIF SME Access to Finance Index – June 2018 update”, EIF Research & Market Analysis, Working Paper 2018/49, European Investment Fund.
- EIOPA (2018), “First Report Costs and Past Performance”, December, European Insurance and Occupational Pension Authority.
- Enriques, L. (2018), “What should qualify as a ‘SME Growth Market’?”, Oxford Business Law Blog, 26 January.
- ESMA (2017), “TRV: ESMA Report on Trends, Risks and Vulnerabilities”, No. 2, European Securities and Markets Authority.
- ESMA (2019), “Performance and costs of retail investment products in the EU”, ESMA Annual Statistical Report, 10 January, European Securities and Markets Authority.
- ESRB HLTF (2018), “Sovereign bond-backed securities: a feasibility study”, ESRB High-Level Task Force on Safe Assets, Volume I: main findings, January, European Systemic Risk Board.
- EY (2017), “Why are more companies staying private?”, Meeting of SEC Advisory Committee on small and emerging companies, 17 February, Ernst & Young.
- Fama, E. (1970), “Efficient Capital Markets: A Review of Theory and Empirical Work”, *Journal of Finance*, 25(2): 383-417.
- Ferrari, A. and A. Picco (2016), “International Risk Sharing in the EMU”, ESM Working Paper Series, No. 17, European Stability Mechanism.
- Fuceri, D. and A. Zdzienicka (2015), “The Euro Area Crisis: Need for a Supranational Fiscal Risk Sharing Mechanism?”, *Open Economies Review*, 26(4): 683-710.
- Fulghieri, P., D. Garcia and D. Hackbarth (2015), “Asymmetric Information, Security Design, and the Pecking (Dis)order”, CEPR Discussion Paper, No. 10660, Centre for Economic Policy Research.
- Gambacorta, L., J. Yang and K. Tsatsaronis (2014), “Financial Structure and Growth”, BIS Quarterly Review March, Bank for International Settlements.
- Giovannini Group (2000), “Co-ordinated Public Debt Issuance in the Euro Area”, Report of the Giovannini Group, 8 November.
- Gros, D. and S. Micossi (2009), “A bond-issuing EU stability fund could rescue Europe”, *Europe’s World*, No. 11: 83-87.
- Gros, D. (2018), “Does the euro area need a safe or a diversified asset?”, CEPS Policy Brief, No. 2018/03, May, Centre for European Policy Studies.
- Hepp, R. and J. van Hagen (2012), “Interstate risk sharing in Germany: 1970-2006”, *Oxford Economic Papers*, 65(1): 1-24.
- ICMA (2013), “Economic Importance of the Corporate Bond Markets”, March, International Capital Market Association.
- IMF (2013), “Toward a fiscal union for the euro area: technical background notes”, Staff Discussion Notes, No. 13/9, International Monetary Fund.
- Infelise, F and D. Valiante (2013), “Why a More Accurate EU Definition of SMEs Matters!”, ECMI Commentary No. 35, November, European Capital Markets Institute.

- Kremer, M. and A. Popov (2018), "Financial Development, Financial Structure, and Growth: Evidence from Europe", Special Feature A, Financial Integration in Europe, May, European Central Bank.
- Lamandini, M. (2018), "A supervisory architecture fit for CMU: Aiming at a moving target?", ECMI Commentary, No. 55, 9 August, European Capital Markets Institute.
- Lannoo, K. and A. Khachaturyan (2003), "Disclosure regulation in the EU: The emerging framework", CEPS Task Force Report No. 48, October, Centre for European Policy Studies.
- Lannoo, K. (2015), "Which Union for Europe's capital markets?", ECMI Policy Brief, No. 22, February, European Capital Markets Institute.
- Lannoo, K. (2018), "Spotify's US listing highlights Europe's failings", ECMI Commentary, No. 51, 3 April, European Capital Markets Institute.
- Lannoo, K. (2018), "Funds, fees and performance", ECMI Commentary, No. 54, 2 July, European Capital Markets Institute.
- Lannoo, K. (2019), "Ceci n'est pas un PEPP", ECMI Commentary, No. 60, 7 May, European Capital Markets Institute.
- Leandro, A. and J. Zettelmeyer (2018a), "The Search for a Euro Area Safe Asset", PIIE Working Paper, No. 18-3, Peterson Institute for International Economics.
- Leandro, A. and J. Zettelmeyer (2018b), "Safety Without Tranches: Creating a 'real' safe asset for the euro area", CEPR Policy Insight, No. 03, June, Centre for Economic Policy Research.
- Levine, R. (2002), "Bank-Based or Market-Based Financial Systems: Which Is Better?", *Journal of Financial Intermediation*, 11(4): 398-428.
- Levine, R. (2005), "Finance and Growth: Theory and Evidence", in Aghion, P. and S. Durlauf (eds), *The Handbook of Economic Growth*, Volume 1A, Amsterdam: North Holland.
- Levine, R., C. Lin and W. Xie (2016), "Spare tire? Stock markets, banking crises, and economic recoveries", *Journal of Financial Economics*, 120(1): 81-101.
- Minenna, M. (2017), "Why ESBies won't solve the euro area's problems", Financial Times, Alphaville, 25 April. Available at: <https://ftalphaville.ft.com/2017/04/25/2187829/guest-post-why-esbies-wont-solve-the-euro-areas-problems/>.
- Monti, M. (2010), "A New Strategy for the Single Market", Report to the President of the European Commission, Jose Manuel Baroso, May.
- Myers, S. and N. Majluf (1984), "Corporate financing and investment decisions when firms have information that investors do not have", *Journal of Financial Economics*, 13(2): 187-221.
- Nachman, D. and T. Noe (1994), "Optimal design of securities under asymmetric information", *Review of Financial Studies*, 7(1): 1-44.
- Nassr, I. and G. Wehinger (2016), "Opportunities and Limitations for Public Equity Markets for SMEs", OECD Journal: Financial Market Trends, 2015(1): 49-84.
- OECD (2017), "Entrepreneurship at a Glance 2017", Organisation for Economic Co-operation and Development.
- Oxera (2006), *The cost of raising capital: an international comparison*, July.
- Pagano, M., S. Langfield, V. Acharya, A. Boot, M. Brunnermeier, C. Buch, M. Hellwig, A. Sapir and I. van den Burg (2014), "Is Europe Overbanked?", Reports of the Advisory Scientific Committee, No. 4, June, European Systemic Risk Board.

- Perrone, A. (2018), “Small and Medium Enterprises Growth Markets”, in Busch, D., E. Avgouleas and G. Ferrarini (eds), *Capital Markets Union in Europe*, Oxford University Press, Oxford.
- Philippon, T. and C. Hellwig (2011) “Eurobills, not Eurobonds”, VOX CEPS Policy Portal, 2 December. Available at: <https://voxeu.org/article/eurobills-not-euro-bonds>.
- PwC (2015), “Capital Markets Union: Integration of Capital Markets in the European Union”, September, PricewaterhouseCoopers.
- Ringe, W-G. (2015), “Capital Markets Union for Europe: A commitment to the Single Market of 28”, *Law and Financial Markets Review*, 9(1): 5-7.
- Romano, R. (2001), “The Need for Competition in International Securities Regulation”, *Theoretical Inquires in Law*, 2(387): 387-562.
- Sala-i-Martin, X. and J. Sachs (1991), “Fiscal Federalism and Optimum Currency Areas: Evidence for Europe from the United States”, NBER Working Paper, No. 3855, National Bureau of Economic Research.
- Schammo, P. (2018), “Market Building and the Capital Markets Union: Addressing Information Barriers in the SME Funding Market”, *European Company and Financial Law Review*, 14(2): 271-313.
- Schwarcz, S. (2016), “Securitization and Post-Crisis Financial Regulation”, *Cornell Law Review Online*, 101(115): 115-139.
- Sorensen, B. and O. Yosha (1998), “International risk sharing and European monetary unification”, *Journal of International Economics*, 45(2): 221-238.
- Strauch, R. (2018), “Managing debt sustainability and safe assets in the euro area”, EconPol Europe Second Annual Conference, Speech on 20 November, Brussels.
- Tendulkar, R. and G. Hancock (2014), “Corporate Bond Markets: A Global Perspective”, Staff Working Paper of the IOSCO Research Department, Volume 1, February, International Organization of Securities Commissions.
- Thomadakis, A. (2016), “Nothing ventured nothing gained: How the EU can boost growth in small businesses and start-ups”, ECMI Research Report, No. 10, November, European Capital Markets Institute.
- Thomadakis, A. (2017), “Developing EU Capital Markets for SMEs: Mission impossible?”, ECMI Commentary, No. 46, 4 September, European Capital Markets Institute.
- Thomadakis, A. (2018), “The European ETF Market: What can be done better?”, ECMI Commentary, No. 52, 24 April, European Capital Markets Institute.
- Thumrongvit, P., Y. Kim and C. Pyun (2013), “Linking the missing market: The effect of bond markets on economic growth”, *International Review of Economics & Finance*, 27: 529-541.
- Tonveronachi, M. (2018), “European Sovereign Bond-Backed Securities: An Assessment and an Alternative Proposal”, Public Policy Brief, No. 145, June, Levy Economics Institute of Bard College.
- Valiante, D. (2016), “*Europe’s Untapped Capital Market: Rethinking financial integration after the crisis*”, CEPS Paperback, London: Rowman & Littlefield International.
- Vanguard (2017), “What’s behind the falling number of public companies?”, Vanguard Research Note, November.
- Von Weizsäcker, J. and J. Delpla (2011), “Eurobonds: The blue bond concept and its implications”, Bruegel Policy Contribution, Issue 2011/02, March, Bruegel.

Annex 1. Task Force Members and Observers

CHAIR

Vítor Constâncio, Former Vice-President of the European Central Bank and current President of the Council of the Lisbon School of Economics & Management (ISEG)

RAPPORTEURS

Karel Lannoo, CEO of CEPS and General Manager of ECMI

Apostolos Thomadakis, Ph.D., Researcher, ECMI and CEPS

MEMBERS

Ludovic Aigrot, Vice President, Head of EU Affairs, Nasdaq

Valentina Allotti, Manager, Capital Market Area and Listed Companies, Assonime

Zoltan Bakay, Senior Researcher, Erste Group

Sara Baldi, Senior Policy Adviser, FESE

Wim Boonstra, Special Adviser/ Economist, Radobank

Nick Collier, Managing Director, Brussels Office, City of London Corporation

James Cunningham, Senior Advisor, BNY Mellon

Antonio De Rose, Associate Partner, EY

Godfried De Vidts, Senior Advisor, ICMA European Repo & Collateral Council, ICMA

Francesco Del Signore, European Regulatory Policies Office, Intesa Sanpaolo

Bernard Delbecque, Senior Director, Economics & Research, EFAMA

Tristan Dhondt, Partner, EY

Francesco Di Lodovico, Head of Brussels Office, The European House - Ambrosetti

Diederik Dorst, Vice Chairman, FIA EPTA, Flow Traders

Jan Eger, Head of International Government & Regulatory Affairs, Refinitiv - Thomson Reuters

Carey Evans, Director, Public Policy, BlackRock

Luca Giusti, Junior Consultant, Afore Consulting

Roman Hametner, Director, Regulatory Affairs, Erste Group

Dr Carl-Christoph Hedrich, Senior Research Manager Public Affairs, Commerzbank

Piet Hemschoote, Partner, Audit, EY

David Hiscock, Managing Director, Deputy Head of Market Practice and Regulatory Policy, ICMA

Koen Holtring, Regulatory Affairs Manager Wholesale, ING

Gerhard Huemer, Economic Policy Director, SMEunited

Vincent Ingham, Director, Regulatory Policy, EFAMA

Stéphane Janin, Head of Global Regulatory Development, AXA Investment Managers

Josina Kamerling, Head of Regulatory Outreach EMEA, CFA Institute

Patrik Karlsson, Director, Market Practice and Regulatory Policy, ICMA

Morana Mavricek-Dvornik, Senior Consultant, Afore

Stefano Micossi, Director General, Assonime

Thomas Nørby Dahl, Head of EU Affairs, Finance Denmark

Nickolas Reinhardt, Co-founder and Director, Afore

Stephane Rottier, Senior Adviser - EU Affairs, HSBC

Roberto Silvestri, EU Policy Specialist, Capital Markets Policy EMEA, CFA Institute

Beata Sivak, Head of EU Representation Office, LSEG

Mark Spanbroek, Chairman, FIA EPTA

Linda Strazdina, Consultant, Afore Consulting

Piebe Teeboom, Secretary General, FIA EPTA

Anne Lina Tholen, Advisor EU Affairs, Commerzbank

Ana Uria Weis, EU Affairs Advisor, DTCC

Oscar Verlinden, Advocacy Manager, European Microfinance Network

Lea Zicchino, Partner, Head of Financial Markets and Intermediaries Analysis, Prometeia

SPEAKERS

William De Vijlder, Group Chief Economist, BNP Paribas

Fabrice Demarigny, Global Head of Financial Advisory Services and Capital Markets Activities, Mazars

Jose Leandro, Director for Policy, Strategy and Communication, DG ECFIN, European Commission

Jung-Duk Lichtenberger, Deputy Head of Unit - DG FISMA, Capital Markets Union, European Commission

Cornelius Mueller, Research Director, Invest Europe

Alex Popov, Principal Economist in the Financial Research Division, ECB

Pablo Portugal, Managing Director, Advocacy, AFME

Ulrika Renstad, Head of Business Development Listings Nordics, Nasdaq

Alexandros Seretakis, Assistant Professor of Law, Trinity College Dublin

Jean-Paul Servais, Chairman, FSMA

Martina Tambuci, Head of Regulation, CONSOB

ACADEMIC OBSERVERS

Emilios Avgouleas, Professor and Chair in International Banking Law & Finance, University of Edinburgh

Vincenzo Bavoso, Lecturer in Commercial Law, University of Manchester

Francisco Calderon, Associate Professor in Economics, University of Malaga

Pierre-Henri Conac, Professor of Commercial and Company Law, University of Luxembourg

Nathan De Arriba-Sellier, Ph.D. Student in European Law, Universities of Leiden and Rotterdam

Florencio López De Silanes, Professor of Finance and Associate Dean of International Affairs, SKEMA Business School

Jesper Lau Hansen, Professor of Financial Markets Law, University of Copenhagen

Marco Lamandini, Professor, University of Bologna

Pablo Podadera, Senior Lecturer, Chair Jean Monnet of European Economy, University of Malaga

Georg Ringe, Director, Institute of Law & Economics, University of Hamburg

John Ryan, Visiting Fellow, LSE IDEAS, London School of Economics

Michele Siri, Professor of Business Law and Jean Monnet Chair on EU Financial and Insurance Markets Regulation, University of Genoa

Rosanne Vanpee, Assistant Professor of Finance, KU Leuven

POLICY OBSERVERS

Panagiotis Asimakopoulos, Senior Research Analyst, New Financial

Stephanie Bergbauer, Economist, ECB Representative Office Brussels, ECB

Matthias Busse, Analyst, EPSC

Eivile Cipkute, Senior Policy Officer, EIF

Mirzha De Manuel Aramendía, Officer, EMU Deepening and Macroeconomy of the Euro Area, DG ECFIN, European Commission

Angelos Delivorias, Policy Analyst, European Parliament

Jean-Luc Filippini, Senior Policy Adviser, European Investment Bank

Jan-Martin Frie, Economist, IMF

Hans Geeroms, Senior Adviser EU Policy, National Bank of Belgium

Klec Gerald, Administrator, Section for Economic and Monetary Union and Economic and Social Cohesion, EESC

Gabriele Giudice, Head of Unit, EMU Deepening and the Macroeconomy of the Euro Area, DG ECFIN, European Commission

Mihai Ivascu, Member of the Diversity Europe Group, EESC

Robert Koeck, Senior Economist, European Affairs and International Financial Organizations Division, OeNB

Alex Lehmann, Non-resident fellow, Bruegel

Martina Macpherson, President, Network for Sustainable Financial Markets

Aleksandra Maczynska, Executive Director, Better Finance

Daniel Mareels, Employer's Group, EESC

Armando Melone, Policy Officer, DG GROW, European Commission

Piotr Nowak, Policy Officer, DG FISMA, European Commission

Martin Pachame, Deputy, Parliament of Catalonia

Lazaros Panourgias, Head EIF Affairs, European Investment Fund

Guillaume Prache, Managing Director, Better Finance

Felix Rutkowski, Economist, Financial Markets, German Council of Economic Experts

Alexander Schaefer, Economist, Financial Markets, German Council of Economic Experts

Cyril Schlund, Economist, ECB

Diego Valiante, Senior Economist, DG FISMA, European Commission

Geert Van Campenhout, Economist, Economic Analysis and Evaluation, DG FISMA, European Commission

Antoine Van Cauwenberge, Coordinator International Affairs, FSMA

Jorik Van Zanden, Policy Advisor, European Parliament

Oscar Verlinden, Advocacy Manager, European Microfinance Network

Stefan Voicu, Research Officer, Better Finance

Judith Vorbacj, Workers' Group, EESC

Michael Wedow, Adviser, Financial Regulation and Policy Division, ECB

Joost Wensveen, Manager Strategy, Policy and International Affairs, AFM

George Zavvos, Senior Advisor, Economy and Finance, CEPS

Annex 2. List of Regulations/Directives

AIFMD	Directive 2011/61/EU
BMR	Regulation (EU) No 2016/1011
CRA	Regulation (EU) No 462/2013
CRD IV	Directive 2013/36/EU
CRR	Regulation (EU) No 575/2013
CSDR	Regulation (EU) No 909/2014
ELTIF	Regulation (EU) 2015/760
EMIR	Regulation (EU) No 648/2012
EuSEF	Regulation (EU) No 346/2013
EuVECA	Regulation (EU) No 345/2013
ISD	Directive 93/22/EEC
MAD	Directive 2014/57/EU
MAR	Regulation (EU) No 596/2014
MiFID	Directive 2004/39/EC
MiFID II	Directive 2014/65/EU
MiFIR	Regulation (EU) No 600/2014
PD	Directive 2003/71/EC
PR	Regulation (EU) 2017/1129
PRIIPs	Regulation (EU) 1286/2014
Solvency II	Directive 2009/138/EC
SRD	Directive 2007/36/EC
SRD II	Directive 2017/828/EC
SSR	Regulation (EU) No 236/2012
STS	Regulation (EU) 2015/2365
TD	Directive 2004/109/EC
UCITS	Directive 2009/65/EC

Annex 3. List of Abbreviations

AFME	Association for Financial Markets in Europe
AIF	Alternative Investment Fund
AIFMD	Alternative Investment Fund Managers Directive
AP	Action Plan
APA	Approved Publication Arrangement
ARM	Approved Reporting Mechanism
BMR	Benchmarks Regulation
BU	Banking Union
CCCTB	Common Consolidated Corporate Tax Base
CCPs	Central Counterparties
CCTB	Common Corporate Tax Base
CEPS	Centre for European Policy Studies
CESR	Committee of European Securities Regulators
CFTC	Commodity Futures Trading Commission
CMU	Capital Markets Union
CRA	Credit Rating Agencies
CRD	Capital Requirements Directive
CRR	Capital Requirements Regulation
CSDR	Central Securities Depositories Regulation
DMOs	Debt Management Offices
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
ECJ	European Court of Justice
ECMI	European Capital Markets Institute
EDDI	European Distribution of Debt Instruments
EEAP	European Electronic Access Point
EFSI	European Fund for Strategic Investments
EIBIS	European Investment Bank Investment Survey
EIF	European Investment Fund
EIOPA	European Insurance and Occupational Pensions Authority
EJBies	European Junior Bonds
ELTIF	European Long-Term Investment Fund
EMIR	European Market Infrastructure Regulation
EMU	European Economic and Monetary Union
EPTF	European Post Trade Forum
ESAs	European Supervisory Authorities
ESBies	European Safe or Senior Bonds
ESG	Environmental, Social and Governance
ESM	European Stability Mechanism
ESMA	European Securities and Markets Authority
ESN	European Secured Note

ESRB	European Systemic Risk Board
ETFs	Exchange-Traded Funds
EU	European Union
EuSEF	European Social Entrepreneurship Funds
EuVECA	European Venture Capital Funds
FCA	Financial Conduct Authority
FESE	Federation of European Securities Exchanges
FRED	Federal Reserve Economic Data
FSAP	Financial Services Action Plan
FT	Financial Times
GDP	Gross Domestic Product
GP	Green Paper
GSEs	Government Sponsored Enterprises
IBIP	Insurance-Based Investment Product
ICMA	International Capital Market Association
IFR	Investment Firm Review
IMF	International Monetary Fund
IP	Investment Plan
IPO	Initial Public Offering
ISD	Investment Services Directive
LCR	Liquidity Coverage Ratio
LSE	London Stock Exchange
LSEG	London Stock Exchange Group
MAD	Market Abuse Directive
MAR	Market Abuse Regulation
MiFID	Markets in Financial Instruments Directive
MTFs	Multilateral Trading Facilities
NCAs	National Competent Authorities
NFCs	Non-Financial Corporations
NVCA	National Venture Capital Association
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OTC	Over-the-counter
PD	Prospectus Directive
PE	Private Equity
PEPP	Pan-European Personal Pension Product
PPP	Personal Pension Product
PR	Prospectus Regulation
PRIIPs	Packaged Retail and Insurance-based Investment Products
SBBS	Sovereign Bond-Backed Securities
SE	Stock Exchange
SME	Small and medium-sized enterprise
SME GM	SME Growth Market
SRB	Single Resolution Board
SRD	Shareholder Rights Directive

SRF	Single Resolution Fund
SRO	Self-Regulatory Organisation
SRP	Structured Retail Product
SSM	Single Supervisory Mechanism
SSR	Short Selling Regulation
STS	Simple, Transparent and Standardised
TD	Transparency Directive
TER	Total Expense Ratio
TRACE	Trade Reporting and Compliance Engine
UCITS	Undertakings Collective Investment in Transferable Securities
UK	United Kingdom
US	United States
VC	Venture Capital
WA	Withdrawal Agreement
WFE	World Federation of Exchanges

European Capital Markets Institute

ECMI conducts in-depth research aimed at informing the debate and policy-making process on a broad range of issues related to capital markets. Through its various activities, ECMI facilitates interaction among market participants, policymakers and academics. These exchanges are fuelled by the various outputs ECMI produces, such as regular commentaries, policy briefs, working papers, statistics, task forces, conferences, workshops and seminars. In addition, ECMI undertakes studies commissioned by the EU institutions and other organisations, and publishes contributions from high-profile external researchers.



Centre for European Policy Studies

CEPS is one of Europe's leading think tanks and forums for debate on EU affairs, with an exceptionally strong in-house research capacity and an extensive network of partner institutes throughout the world. As an organisation, CEPS is committed to carrying out state-of-the-art policy research that addresses the challenges facing Europe and maintaining high standards of academic excellence and unqualified independence and impartiality. It provides a forum for discussion among all stakeholders in the European policy process and works to build collaborative networks of researchers, policy-makers and business representatives across Europe.



The European Union needs an action plan to stimulate market finance across EU markets. As the EU is setting its priorities for the next five years, a rigorous assessment of Capital Markets Union (CMU) and a new focus is required. The CMU has been successful in terms of legislation, but much less so in its impact on markets, which remain highly fragmented. Risk capital has barely grown and Europe now finds itself even further behind the United States. This is undermining the competitiveness of the European economies and corporations, as well as the credibility of the project.

Set up in December 2018 to examine how to address these failings, a CEPS-ECMI Task Force brought together a broadly balanced working group of industry experts, academia, EU institutions and national authorities for research and discussions over a period of 6 months.

This timely report stresses the need for political support at the highest level if CMU is to achieve its objectives. It recommends focusing action on the core bond and equity markets, and on promoting the participation of individuals in capital markets while introducing a set of indicators to measure progress towards more market-based finance.

