Capital Markets Union
Key Performance Indicators – Fourth Edition
European Capital Markets – a turning point?
October 2021

In conjunction with:
Disclaimer

The AFME "Capital Markets Union: Key Performance Indicators" (the “Report”) is intended for general information only, and is not intended to be and should not be relied upon as being legal, financial, investment, tax, regulatory business or other professional advice. AFME doesn’t represent or warrant that the Report is accurate, suitable or complete and none of AFME, or its respective employees shall have any liability arising from, or relating to, the use of this Report or its contents.

Your receipt of this document is subject to paragraphs 3, 4, 5, 9, 10, 11 and 13 of the Terms of Use which are applicable to AFME’s website (available at https://www.afme.eu/About-Us/Terms-of-use) and, for the purposes of such Terms of Use, this document shall be considered a “Material” (regardless of whether you have received or accessed it via AFME’s website or otherwise).

October 2021
## Contents

Acknowledgements 2  
Foreword 3  

**Executive summary and overview of indicators** 4  
Main policy recommendations for 2021-22 11  

**Access to Capital** 15  
1. Market Finance Indicator 16  
2. Pre-IPO Risk Capital indicator 23  

**Pools of Investment Capital** 28  
3. Household market investment indicator 29  
4. European Long-Term Investment Funds (ELTIFs) Indicator 34  

**Transition to Sustainable Finance and Digitalisation** 37  
5. ESG finance indicator 38  
6. Fintech indicator 45  

**Integration and Efficiency of Capital Markets Ecosystem** 51  
7. Loan Transfer Indicator 52  

Special Feature: Withholding Taxes 58  
8. Cross-border finance indicator 61  

Appendix 1: Key performance indicators by countries and components: Comparison of progress between 2021 and 2019 66  
Appendix 2: Key performance indicators by countries and components: Comparison of progress between 2021 and 2015 67  
Appendix 3: Methodology and Data Sources 68  
Bibliography 71  
Contacts 72
Acknowledgements

The content of this report has greatly benefitted from discussions with the following organisations. The institutions support the objective of developing capital markets in Europe while having individual views on particular aspects of certain issues.
European capital markets have experienced another eventful year marked by the recovery from the economic stress caused by the Covid-19 pandemic and the end of the Brexit transition period, among other developments. While last year’s edition of the industry’s Capital Markets Union (CMU) KPIs report showed there has been significant progress on the development of the CMU since the launch of the project in 2015, I am pleased to observe that the positive trajectory has continued this year.

Due to the impact of COVID-19, there has been a greater need for corporates to raise funds through capital markets. On this front our latest report points to positive developments, as capital markets have further increased the provision of funding to corporates. However, there is no room for complacency: a structural and pandemic-induced “equity gap” remains and equity-type finance still needs to be expanded in Europe. It also remains to be seen to what extent these record market-based financing levels can be sustained in more normal economic and market conditions, or whether they are a temporary result of the extraordinary support measures of the past year.

There is also significant progress concerning sustainability. EU ESG debt markets have shown rapid growth in the first half of 2021, with ESG issuance and investment no longer representing a niche sector but constituting a sizeable segment of overall debt markets. Similarly, Fintech companies have seen a substantial surge in investment in the first half of 2021. Most European countries have improved their local FinTech ecosystems over the last two years, which could prove instrumental in European job creation and growth.

However, while the overall results are positive, there are still long-standing issues hindering the potential of Europe’s capital markets. For instance, securitisation markets have declined with issuance reaching lower volumes than the levels shown before the introduction of the Simple, Transparent, and Standardised (STS) regime in 2018. A well-functioning securitisation market is fundamental to the capacity of the European financial system to facilitate risk transfer and provide further funding options for financial institutions. Meanwhile, the varying approaches to withholding tax across the EU and the lack of a relief-at source mechanism in some Member States continues to have a significant negative impact on cross-border investment, cost of capital and GDP.

With the findings of this fourth edition of the industry’s CMU KPIs report, we hope it helps identify through evidence-based measures where Europe has been doing well and where it can improve.

We would like to thank the 10 other trade associations and international organisations representing various global and European capital markets stakeholders for their support in co-authoring this report.

These organisations include the Climate Bond Initiative (CBI), and nine European trade associations representing stock exchanges (FESE), fund and asset management (EFAMA), retail and institutional investors (European Investors), pension funds (PensionsEurope), venture capital and private equity (Invest Europe), private credit and direct lending (ACC), business angels (BAE, EBAN), and crowdfunding (ECN).

Adam Farkas
Chief Executive
Association for Financial Markets in Europe

“Due to the impact of COVID-19, there has been a greater need for corporates to raise funds through capital markets”

There are still long-standing issues hindering the potential of Europe’s capital markets
This CMU KPI report is the fourth edition in a series of annual reports which tracks the development of the European capital markets ecosystem.

The report assesses Europe’s progress in improving the depth of its capital markets against 8 key performance indicators, as well as providing an industry perspective on some of the enablers of European capital markets growth and ongoing barriers to integration and development.

We group our 8 indicators into four key areas which seek to measure the various features needed to develop an efficient, deep, and interconnected capital market. These areas are: (1) access to capital; (2) availability of pools of capital for investment; (3) transition to sustainable finance and digitalisation; and (4) efficiency of capital markets ecosystem and integration.

A summary of each indicator and what it measures is shown below:

**Key Performance Indicators measuring the progress of the Capital Markets Union:**

**Access to capital**
1. **Market Finance Indicator**: measures how easy it is for companies in the EU to enter and raise capital on public markets (initial public offerings, bonds, secondary equity offerings);

2. **Pre-IPO Risk Capital Indicator**: assesses how well start-ups, small and medium enterprises (SMEs) and non-listed companies can access risk capital finance;

**Pools of investment capital**
3. **Household Market Investment Indicator**: measures the amount of savings from retail investors deployed in capital market products and instruments like bonds, equity shares, investment funds and pension funds;

4. **ELTIF Indicator**: measures the availability of European Long-Term Investment Fund (ELTIF) products financing long-term projects and SMEs;

**Transition to sustainable finance and digitalisation**
5. **ESG Finance Indicator**: quantifies the labelling of new ESG bond issuance;

6. **FinTech Indicator**: assesses to what extent national countries are able to host an adequate FinTech ecosystem;

**Efficiency of capital markets ecosystem and integration**
7. **Loan Transfer Indicator**: measures the capacity to transform bank loans into capital markets instruments such as securitisations and loan portfolio transactions;

8. **Cross-border Finance Indicator**: measures capital markets integration within Europe and with the rest of the world.

We have updated our indicators calculated with data for the first half of 2021 (H1 2021). In this edition, we have also produced a new indicator quantifying the availability of European Long-Term Investment Fund (ELTIF) products to allocate resources into SMEs and projects that require long-term financing. A special feature looks in detail at the withholding tax barrier as an impediment for cross-border investment and further integration.
Our CMU KPI indicators have also been complemented with analytical comment boxes discussing recent market developments in Europe. These comment boxes include the contribution of SPACs to the EU funding ecosystem; the importance of tracking the business angel market; recent progress in Europe’s Simple, Transparent and Standardised (STS) securitisation framework; existing discrepancies in ESG ratings; new digital trends with the development of Central Bank Digital Currencies (CBDCs) and of Distributed Ledger Technology (DLT) pilot programmes; practical aspects to consider for the development of pension tracking systems and dashboards in the EU; and the importance of measuring and comparing the quality of EU insolvency regimes.

The fourth edition of this report was prepared following the publication of the European Commission’s Staff Working Document Monitoring progress towards a Capital Markets Union: a toolkit of indicators, by tracking areas that may have not been sufficiently covered in the Commission’s report (e.g. evolution of early-stage funding, FinTech, ESG markets, fund vehicles for long-term investment, loan portfolio disposals, or EU integration within Europe and the rest of the world, among others), and by comparing the most recent evolution (as of H1 2021) with non-EU jurisdictions. Some of the findings in this report reflect the areas covered in the Commission’s Working Document including the growth of venture capital and green bond markets, or deterioration of the size of securitisation markets. Other findings benefit from the timeliness and coverage of this publication by offering a more recent evolution during the economic recovery process.

Inclusion of UK and other third country comparisons

We have continued to include indicators for the UK in our analysis following the end of the Brexit transition period and the United Kingdom’s withdrawal from the single market. While the main purpose of our report is to track the evolution of EU capital markets and the advancement of the CMU objectives, we believe that the analysis benefits from the inclusion of the UK as an additional point of comparison for EU Members States, in addition to other countries included in our analysis. The comparison also helps to identify the areas where the EU and some of its Member States are leading the development of the European capital markets ecosystem—most notably in ESG finance.

Main findings

Most of the indicators as of H1 2021 show a positive trajectory compared to pre-pandemic levels and five years ago, as capital markets continue to support the economic recovery from the COVID-19 pandemic.

The recent evolution of the securitisation market is the main exception to this positive trend.

The positive progress across most of the indicators can be attributed in part to the favourable economic context and greater need for corporates to raise funds through capital markets.

European primary capital markets continued to expand during H1 2021 for the third consecutive year, with the proportion of markets-based funding for EU corporates rising to 16.8%. However, other economies like the United States continue to display more prominent support from market-based funding with US issuance of capital markets instruments being 2X larger than EU issuance during H1 2021.

The various government and monetary support measures introduced following the pandemic stabilized markets and contributed to reduce the cost of access to capital. Bankruptcy risks have not materialized to the extent initially anticipated as European default rates declined to 4% in June 2021 against initial expectations which were anticipated to reach 8.5% by H1 2021. In this context, it is crucial that viable businesses be protected against a sharp withdrawal of support measures in the near future.

In this document we therefore refer to the EU, which encompasses the CMU, and to “Europe” understood to mean the European region (including the UK and Switzerland).

See Reuters “Coronavirus will double the default rate for Europe’s junk debt by June 2021 - S&P” https://www.reuters.com/article/uk-europe-debt-s-p-idUKKCN25F15M
Executive summary and overview of indicators

The growth of Special Purpose Acquisition Companies (SPACs) IPOs and subsequent De-SPAC acquisitions were a new feature in European and global equity markets over the last 12 months. In Europe, however, growth in this form of capital raising has not been as sizeable as in the United States, representing 10% of total IPOs in H1 2021 vs 54% in the US. Most recently, US SPAC IPOs have seen a significant decline during H2 2021. The recent trends in this area are discussed in a comment box.

European SMEs have benefited from funding availability from equity risk capital. Europe is the fastest-growing major region in private capital investment with investment in European SMEs having grown by 2.4X YoY in H1 2021 (on an annualised basis). However, despite recent accelerated growth, the availability of risk capital in the EU continues to be relatively small with investments of EUR 35.8bn in H1 2021 compared with EUR 239.7bn in the United States.

European households have increased their amount of capital markets savings over the last two years, predominantly driven by valuation gains of existing products. EU households savings rates have increased from 12% in 2019 to 19% in 2021 relative to disposable income. However, bank deposits continue as the default option for many households to store fresh savings. Countries that entered the COVID-19 crisis with low capital markets savings have increased their bank deposit holdings the most, possibly due to a lack of understanding of the advantages and disadvantages of the different capital market instruments available and the impact of inflation on bank deposits.

There is significant unrealised potential in the ELTIF which is a fund product that channels debt and equity investments into long-term projects and unlisted SMEs. The ELTIF Regulation was established in 2015 but there are only 49 funds currently marketed in the EU managing around €2bn. Capital invested through ELTIF vehicles is far below the EU’s infrastructure needs or the expectations of the private sector’s contribution to the EU’s transition to a green economy. Reforming the ELTIF can unlock its potential as a source of long-term finance within the EU.

EU ESG debt markets expanded rapidly during the H1 2021, with total issuance of ESG-labelled bonds reaching EUR 201.4 bn or 21.5% of total EU bond issuance during H1 2021. ESG debt markets no longer represent a niche sector but rather a sizeable and growing component of overall debt markets. The European Commission’s SURE scheme of social bonds and continued growth in sovereign and corporate green bond issuance have contributed to significantly expand this market segment. There has also been a greater shift in the market towards social issuance which has largely been observed since the onset of the Covid-19 pandemic.

The rapid growth in the ESG market is generating new challenges for investors and various market participants, including the availability of consistent ESG ratings and data. We discuss this challenge in more detail in a comment box.

Local FinTech ecosystems continued to improve in the EU, with the launch of new regulatory sandboxes in Austria, Spain, Hungary, and Greece over the last year only. According to the BIS, sandboxes are associated with a significant increase in investment in FinTech companies in the years after their establishment. The EU has also benefitted from a record increase in funding which has resulted in a rapid surge in the number and valuation of FinTech unicorns (i.e. growth companies valued above $1bn). This is a promising trend for the digital transition.

The depth of the EU securitisation market has declined over the last three years. Unlike the US, the proportion of EU securitised products and loan disposals relative to total loans outstanding has consistently declined over the last 3 years, demonstrating the limited capacity of the banking sector to transform loans into tradeable securities. While European outstanding loans have grown 9.1% since 2018, annualised securitisation issuance in H1 2021 was 29% lower than it was in 2018FY (the last year before the introduction of the STS regime).

Our indicators show a slight deterioration in intra-European integration over the last year, mostly driven by a decline in intra-European private equity and M&A activity as these activities have been undertaken at a greater scale cross-border with non-European companies.
Withholding Taxes continue to represent a major barrier for cross-border fixed income and equity flows. In 10 of the 27 EU Member States there is a lack of a relief-at-source mechanism which frequently results in long delays in tax reclaim reducing investor return on equity (RoE) and internal rate of return (IRR).

Going forward, we hope that the positive evolution seen in most of our results can be sustained, including once the various government-support measures have been withdrawn.

Table 1 compares the progress made over the last 5 years and against 2019 as a pre-pandemic benchmark at EU level against each of the key performance indicators.
### Table 1: Progress of EU Capital Markets Against Key Performance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>What this indicator measures</th>
<th>2015</th>
<th>2019</th>
<th>2021 H1*</th>
<th>National Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to capital</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market Finance</td>
<td>NFC Equity and Bond issuance as % of total NFC annual financing</td>
<td>Capacity for companies to raise finance on public markets</td>
<td>10.4%</td>
<td>11.5%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Pre-IPO Risk Capital</td>
<td>Equity crowdfunding, Business Angel Growth Private Equity investment, and venture capital investment as % of loan and risk capital financing</td>
<td>How well start-ups and non-listed companies are able to access finance for innovation</td>
<td>2.0%</td>
<td>2.8%</td>
<td>5.6%</td>
</tr>
<tr>
<td><strong>Household Market Investment</strong></td>
<td>Household financial assets saved in financial instruments (excluding cash, deposits and unlisted equity) as % GDP</td>
<td>Availability of savings from retail investors to support capital market financing</td>
<td>101%</td>
<td>105%</td>
<td>113.3%</td>
</tr>
<tr>
<td>ELTIF Products</td>
<td>Number of European Long-Term Investment Fund (ELTIF) products marketed in the EU</td>
<td>Availability of ELTIF fund products financing long-term projects and SMEs</td>
<td>5</td>
<td>16</td>
<td>49</td>
</tr>
</tbody>
</table>

---

3 For the purpose of estimating trends, this table compares the respective indicators for the period 2015 (as the baseline of pre-CMU initiatives) and pre-COVID levels (2019) against the most recent performance in 2021.
**Executive summary and overview of indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>What this indicator measures</th>
<th>2015</th>
<th>2019</th>
<th>2021 H1*</th>
<th>National Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transition to sustainable finance and digitalisation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESG Finance</td>
<td>Labelling of ESG bond markets</td>
<td>0.7%</td>
<td>5.6%</td>
<td>21.5%</td>
<td><strong>France</strong> leads European countries in 2021 H1 with 18.7% (EUR 61.3 bn) of total bond issuance having ESG labelling, compared to 12.9% in 2020FY and 1.1% in 2016. <strong>Germany</strong> issued the largest volumes of green bonds of any European country in both 2021 H1 (EUR 24.1 bn) and 2020FY (EUR 37.2 bn).</td>
</tr>
<tr>
<td><strong>FinTech</strong></td>
<td>Capacity to enable an adequate FinTech ecosystem</td>
<td>-</td>
<td>0.16</td>
<td>0.19</td>
<td><strong>Austria, Greece, Hungary and Spain</strong> launched regulatory sandboxes for at least one financial services activity over the last year. <strong>Malta</strong> is the only EU country that has not established an innovation hub</td>
</tr>
<tr>
<td><strong>Loan Transfer</strong></td>
<td>Capacity to transform bank loans into capital markets instruments (securitisation and loan transactions)</td>
<td>2.1%</td>
<td>2.1%</td>
<td>2.8%</td>
<td><strong>Greece</strong> leads European countries in the Loan Transfer Indicator during H1 2021, with loan portfolio sales volumes accounting for 48.2% of outstanding bank loans. <strong>Ireland</strong> achieved a Loan Transfer Index of 20%, driven by both loan portfolio sales and securitisation issuance.</td>
</tr>
<tr>
<td><strong>Cross-border Finance</strong></td>
<td>Capital markets integration within Europe</td>
<td>0.2</td>
<td>0.24</td>
<td>0.22</td>
<td><strong>Luxembourg and the UK</strong> continued to lead as the most interconnected capital markets in Europe. <strong>Luxembourg</strong>’s top position is driven by the interconnectedness of its fund management industry.</td>
</tr>
<tr>
<td></td>
<td>Capital markets integration with the rest of the world</td>
<td>0.31</td>
<td>0.36</td>
<td>0.4</td>
<td><strong>The UK</strong> continued to be the most globally interconnected European capital market driven by its large role at intermediating global flows of interest rate derivatives and FX transactions.</td>
</tr>
</tbody>
</table>

*Data as of 2021 H1 except for the Household Market Investment indicator which is based on Q1 2021 data.*
The table below shows country rankings for EU member states and the United Kingdom across the indicators included in this report. We have continued to include the UK in the analysis below following its withdrawal from the EU and the end of the transition period to provide readers with an ongoing comparison point. The comparison also helps to identify the areas where the EU and some of its Member States are leading the development of the European capital markets ecosystem—most notably in ESG finance.

The country rankings continue to show the prevalence of Northern European countries (SE, IE, NL) across most of the indicators. The largest Euro area economies (DE, FR, IT and ES) continue to show a mixed performance across the range of indicators. Austria has recently improved the local capital markets ecosystem as measured by our indicators, predominantly in FinTech (on the back of a new regulatory sandbox) and a more significant presence in the ESG market. Sweden has scaled to the top 5 countries during the last year from recent growth in the local pools of capital and the continued progress in developing the local FinTech ecosystem. Central and Eastern European countries continue to occupy the lower tier of the rankings, although Estonia and Lithuania stand out as leaders in the risk capital indicator.

NA: data not available to produce the indicator.
Countries with no capital markets activity in a given indicator are ranked 28th.
Main policy recommendations for 2021-22

We have identified the following key policy recommendations for policymakers to consider in the coming year. These broad policy recommendations are not exhaustive and summarise the views supported by the 11 organisations co-branding this publication.

### Access to capital

1. **Recapitalisation of European businesses in response to the pandemic:** Industry studies have estimated that European businesses need to bridge a gap of €450-600bn in equity to prevent widespread business defaults and job losses as COVID-19 state support measures are gradually reduced. Financial pressure is likely to increase for many businesses as various forms of government support and relief are phased out in the coming period. In this context, equity markets and alternative types and sources of funding, such as hybrid instruments, can play an important role in providing fresh capital to companies to help mitigate debt burdens or to invest in growth and innovation.

   A European model for equity-accounted hybrid debt instruments could be an attractive option for many mid-size and SME corporates that do not wish to give up control of their business. At the EU level, Member States could consider the development of a common recapitalisation instrument framework with features and incentive mechanisms that could be rolled out across the EU. Alternatively, if a common EU framework is not possible, individual Member States could establish in their jurisdiction forms of equity-accounted debt instruments that can comply with required national and international accounting, tax and insolvency requirements, as well as EU state aid considerations.

2. **The IPO environment and access to public markets for SMEs:** The EU should prioritise policies that support SME listings and improve the overall attractiveness of IPOs and the listings environment for all companies. The report by the Technical Expert Stakeholder Group (TSEG) on SMEs provides a good base for discussion to facilitate access to capital for SMEs.

   Building on the Capital Markets Recovery Package adopted in 2021, consideration should be given to well-calibrated alleviations to listing requirements, simplifying the applicable documentation, and revising the legal frameworks especially for Growth Markets (GM) to enhance the attractiveness of public markets and allow cost-efficient access to capital.

   Future legislative work on listing should also focus on the environment for non-SME issuers and consider targeted alleviations as well as broader, forward-looking policies that would enhance the attractiveness of EU primary markets. In a competitive international landscape, the EU should also be seeking to attract larger-sized listings from European or international companies seeking to benefit from the advantages of the single market.

3. **Pre-IPO risk capital:** The European Crowdfunding Service Provider Regulation, which will come into effect in November 2021, provides a harmonised legal framework for crowdfunding with tradable securities, certain admitted instruments, and business loans. The European Commission shall appropriately evaluate the impact of the new law and any relevant adjustments must be applied on a timely basis. The new law will lead to significant adjustments in national markets for public offerings below the prospectus threshold.

   Policymakers can consider setting the regulatory framework to facilitate the inception of pan-European business angel fund structures to promote cross-border investment syndication and reducing the existing complexity of cross-border business angel investment. Policymakers can also consider ways to streamline a legal entity structure for start-ups with a commonly recognised limited liability legal entity structure under which EU-based start-ups could incorporate.

   The future SME IPO Fund, under the InvestEU project, also has the potential to facilitate equity investments into SMEs thanks to its support on all the three phases of the IPO process.

---


5 AFME, in partnership with PwC and Linklaters, will be publishing a report in Q3/Q4 2021 discussing potential key features and attributes of a hybrid instrument model that could be envisaged in this context.
Executive summary and overview of indicators

**Pools of Investment Capital**

4. **Turning citizens into active retail investors:** The success of the European Commission’s upcoming “retail investment strategy for Europe” will depend on the following essential elements: (1) easy access to financial advice for retail investors to ensure that investments are suited to their individual needs and preferences; (2) no dismantlement of the existing EU distribution model that would make it harder for less affluent citizens to access much-needed financial advice; (3) greater efforts to strengthen financial literacy and foster a better understanding of capital markets; (4) alignment of financial disclosures across various regimes, to provide meaningful – rather than conflicting – information, including on ESG factors.

5. **Long-term pools of capital and private funds:** It is encouraging that the European Commission is currently undertaking a review of the regulatory framework of European long-term investment funds (ELTIFs). The existing framework has restrictive operating, marketing, and distribution requirements. It is hoped that the revised legislation will support the growth of ELTIFs in three key areas: (1) Broadening the range of eligible assets to support the scalability of ELTIFs; (2) Better align the structuring of the ELTIF with the needs of investors; and (3) Improve the distribution of ELTIF to retail investors.

It is also important that banks’ equity investments are not unduly penalised in the capital requirements framework. The recommendations of the CMU High-Level Forum in this area should be implemented in the upcoming EU implementation of Basel III in the EU (CRR3), particularly by clarifying the definition of speculative investments so that the 400% RW is only applied to genuinely speculative exposures.

Finally, the European Commission should consider improving the applicable investor marketing rules to broaden the opportunities for sophisticated investors to invest in financial markets by better tailoring the applicable investor marketing rules and access products that meet their needs.

**Transition to Sustainable Finance and Digitalisation**

6. **An ESG recovery:** A key priority is to finalise a comprehensive and well-sequenced framework for reporting of sustainability information to ensure that financial institutions and investors have the necessary data to allocate capital to support transition plans, and to support their own disclosures and risk management. Improved quality and consistency of ESG data is also a vital tool to help combat greenwashing and improve the quality and comparability of ESG ratings. The adoption of a well-designed Corporate Sustainability Reporting Directive (CSRD) is urgent. It is very important to ensure appropriate sequencing of disclosures for the financial and non-financial sector; and for the scope of requirements to be considered in the international context, including ensuring a proportionate approach for internationally active firms. At the same time, the EU should ensure that its foreseen mandatory sustainability reporting standards provide financial market participants with the information they need from investee companies to comply with the Sustainable Finance Disclosure Regulation (SFDR), the Taxonomy regulation, bank Pillar 3 disclosures and other requirements to ensure coherence of the framework as a whole. Another immediate priority is the extension of the EU Taxonomy to support companies with credible transition plans, but whose activities do not yet make a substantial contribution to environmental objectives.

The EU Taxonomy should recognise both activities and companies that are already low carbon, but also be forward-looking and include companies that demonstrate the commitment and potential for transition. The industry would also benefit from more clarity on how to design and assess transition plans aligned with the “Fit for 55” package and with sector-specific decarbonization milestones.

European authorities should keep global regulatory cooperation at the forefront of the implementation of the renewed sustainable finance strategy. International convergence in ESG reporting is particularly important in the further development of the European reporting framework – the EU should ensure as coordinated an approach as possible with the work of the IFRS Foundation in this area.

ESG securitisation can also make an important contribution to financing the green transition. The securitisation review should also seek to support the development of the nascent ESG securitisation market through well-designed common standards and appropriate incentives and safeguards.
7. Digital transformation: The European Commission’s Digital Finance and Retail Payments Strategies, as well as its legislative proposals on crypto-assets and digital resilience, are raising expectations, notably by defining crypto-assets as a new asset-class within the proposed Markets in Crypto Assets (MiCA) regulation.

The EU framework for adoption of innovative technologies with EU financial services needs to be globally consistent and based on global standards to sufficiently mitigate risks and support the competitiveness of the EU. The EU framework must also remain technology-neutral, principles-based and proportionate to support technology adoption. A competitive and level-playing field is needed to ensure all firms involved in capital markets adhere to the principle of ‘same activity, same risk, same regulation’. In addition, it will be important to promote interoperability across all relevant platforms and participants to reduce the risk of fragmentation.

Efficiency of Capital Markets Ecosystem and Integration

8. Market making and banks’ capital market activities. The impact of prudential regulation on the further development of the CMU is critical. The upcoming CRR3 proposals constitute a unique opportunity to ensure that banking reforms and the CMU become complementary and mutually-reinforcing projects. The CRR3 should adhere to the commitment not to significantly increase capital requirements and aim for consistent and equivalent outcomes across jurisdictions, enabling banks to operate on a global level-playing field whilst also reflecting the specific financial and economic circumstances of Europe. This is particularly important with respect to the new capital framework for market risk (the FRTB) which is due to become a binding capital requirement. Its implementation should be globally consistent and simultaneous to avoid temporarily fragmenting bank capital pools and markets. Calibration and operational challenges in this framework still need to be addressed and should be considered in terms of the impact on banks’ ability to provide capital market services to the economy. It is also important to reflect the better risk capture under the FRTB framework (compared to the current Basel 2.5) in any supervisory Pillar 2 capital charges to avoid duplication of capital charges.

The considerations of the CMU High Level Forum on the impacts of other areas of the prudential framework on corporates’ capacity to hedge their risks at a reasonable price should also be taken into account. These include urgent design and calibration issues within the Standardised Approach for Counterparty Credit Risk. Finally, policy-makers should extend their reflection beyond minimum capital requirements and ensure they have an overall view of how other elements of the prudential framework, such as the EBA’s stress testing exercise, impact banks’ market activities.

9. The functioning of securitisation. Securitisation is uniquely placed to contribute to a sustainable recovery from the pandemic through its ability to transfer risk while enhancing banks’ capacity to manage their balance sheets efficiently to continue to lend to businesses and households. While securitisation can be used as a funding and risk transfer tool, the risk transfer aspect is particularly important today as banks in Europe have relatively easy access to funding from central banks and other sources. Securitisation can also play a key role in the management of increases in the volumes and ratios of non-performing loans which could materialise in 2022 or 2023.

Securitisation issuance has fallen significantly in Europe and continues to decline as shown in this report. The primary factors leading to these trends are the overly-conservative calibrations in the capital and liquidity regimes and the easy availability of alternative low-cost central bank financing, both of which advantage other fixed income products over securitisation. Meanwhile, the upcoming implementation of the Basel III output floor threatens the efficiency of securitisation transactions for banks as it will further increase the capital required to be held against any retained exposures due to the layering of conservative parameters embedded in the calculation of the risk weights.

The upcoming review of the framework should place a much greater emphasis on proportionality, usability and practical incentives for participants to make use of, and invest in, securitisations. The regulatory treatment of securitisation – particularly the prudential calibrations for banks under the CRD/CRR and insurance company investors under Solvency 2 – should be made more proportionate and comparable to other fixed income products and “whole loan” investment, taking into account the many safeguards embedded in the STS framework and the impact of Basel III and other regulations.
10. **Withholding Tax procedures:** The procedures currently in place to allow the refund of withholding tax and to prevent double taxation of income are slow, costly, and obstruct cross-border investment. It is encouraging that the Commission intends to propose the introduction of a common, standardised, EU-wide system for withholding tax relief at source, accompanied by an effective exchange of information and cooperation mechanism among tax administrations. Technology may play a role in removing the existing tax barriers through a solution that would not necessarily require harmonisation of tax codes or rates.

11. **Legal and operational consistency in the single market:** A truly integrated single EU capital market must be founded on harmonised definitions of and approaches to fundamental legal and operational concepts that underpin the functioning of capital markets and cross-border activities.

The Commission initiative expected in the coming year for minimum harmonisation or increased convergence in targeted areas of non-bank insolvency law is a key measure in the CMU Action Plan. It is important to pursue an ambitious initiative that can lead to improvements in the efficiency and predictability of insolvency frameworks, therefore enhancing economic value in the Union and bolstering confidence in cross-border financing.

Work should also continue on initiatives to facilitate shareholder engagement, including the possibility of introducing an EU-wide, harmonised definition of ‘shareholder’, and improving the rules governing voting rights and corporate action processing.

12. **Settlement discipline without undermining EU markets:** If maintained, mandatory buy-in requirements under the Central Securities Depositories Regulation (CSDR) present a risk to market liquidity (secondary bond markets in particular) and are likely to lead to higher transaction costs and reduced market access for European issuers and investors. Importantly, they will disproportionately impact the trading and issuance of less-liquid securities. We recommend that cash penalties on failed transactions are implemented as planned, but the initiation of the buy-in process should be a discretionary right of the receiving party, not a mandatory obligation. The upcoming review of CSDR will be important to address this fundamental issue and pursue other improvements to the settlement environment in the EU, including measures to increase competition between CSDs and to facilitate the ability of CSDs to provide services on a cross-border basis.

We believe these recommendations for 2021-22 will significantly contribute to the further development of the Capital Markets Union.
Access to Capital
The Market Finance Indicator measures the capacity for companies to raise finance on public markets. The indicator does this by quantifying the proportion of total finance for Non-Financial Corporates (NFCs), which is provided by capital markets instruments (equity and bonds). The indicator is calculated as annual gross NFC equity and bond issuance as a percentage of the sum of annual gross lending (new loans) to NFCs and equity and bond issuance.

Flow measures (annual new issuance), rather than stock measures (outstanding amounts) are used in this indicator to allow a better comparison between equity markets and bonds and loans, and to more accurately analyse changes in activity in a given year.

**Capital markets facilitate company recapitalisation**

EU NFCs utilised capital markets for funding during 2020-2021 H1 to a greater extent than ever before, partially reducing the historic reliance on bank loan financing. EU capital markets continued to expand throughout H1 2021, achieving the highest Market Finance Indicator value to date, of 16.8%, up from 11.8% during 2020FY which was itself a previous record high. See Chart 1.1.

Whilst volumes in 2020 were spurred by an increasing demand for cash by corporates to cushion themselves from the economic effects of the pandemic, in 2021 corporates are recapitalising and preparing for the more stable economic circumstances.

> In 2021, corporates are recapitalising and preparing for the more stable economic circumstances

---

6. Non-financial corporations produce goods and services for the market and do not, as a primary activity, deal in financial assets and liabilities.

7. The indicator does not consider NFC finance provided by unlisted equity and trade credit.

8. It should be noted that there is not a publicly available data source for US lending to NFCs which is directly comparable to the statistic for EU countries. For the EU, bank lending has been used as a proxy for total lending, due to the comparatively small amount of non-bank lending. This is not the case in the US, so we have estimated bank and non-bank lending to NFCs in the US using the methodology in Appendix 2.
1. Market Finance Indicator

1.1: Market Finance Indicator (NFC equity and bond issuance as a % of total NFC annual financing)\(^9\)

Source: Dealogic, US FED, ECB, BoE and other European central banks

Large equity origination driven by record IPO and follow-on issuance

EU primary capital markets continued to expand during H1 2021, driven predominantly by an increase in equity issuance, of 131% YoY (annualised), while bond issuance increased 3%, resulting in an increase of 16% in total market-based funding.

Whilst bond issuance dominated 2020 market funding dynamics in Europe, during H1 2021 equity markets have seen the largest relative gains and now account for 3.4% of NFC financing, significantly higher than the 0.6%-1.9% range observed since 2002. In this context, IPO issuance increased 430% YoY (annualised) and follow-on issuance expanded 59%. See Chart 1.2.

Bank lending for EU NFCs decreased 13% (YoY) during H1 2021, when half-year figures are annualised. As bank loans are a component within the denominator of the Market Finance Indicator, this has boosted indicator values in H1 2021. The fall in EU bank loan origination may have been partially driven by the reduced use of state loan guarantees, which was a prominent feature last year in several European countries. France and Italy saw significant annual declines in new bank loan issuance during H1 2021 following record-loan origination during the 2020. In Germany and Spain, there were declines in new bank loan origination in H1 2021, compared to both 2020 and 2019 (pre-pandemic). Simultaneously, market-based finance issuance in both countries has surged since 2019.

1.2: Breakdown of EU market finance (EUR bn) and Market Finance Indicator (MFI, %)

Source: Dealogic, US FED, ECB, BoE and other European central banks

\(^9\) For the US, this indicator aggregates lending provided by banks and non-banks.
1. Market Finance Indicator

**Bond markets shift to higher yield bonds**

Investment grade (IG) bond issuance, the largest category in terms of market volumes (EUR 160.1 bn for EU countries), was down -8% YoY during H1 2021. This was however offset by a boom in High Yield (HY) bond issuance, which was up 68% YoY, with volumes reaching EUR 54.5 bn.

This diversification of funding streams for NFCs, with relative gains in issuance observed in the IPO, equity follow-ons and HY markets has meant the proportion of total market finance accounted for by IG issuance has fallen to 57% during H1 2021, down from 72% in 2020FY, and representing the lowest proportion recorded since 2007.

**Lower cost of equity facilitates equity capital raising**

The increased issuance in European equities has been driven by the reopening of European economies, lower cost of equity, in tandem with lower market volatility, which have provided favourable market conditions.

As shown on chart 1.3, AFME estimates indicate that the cost of equity funding has declined c150bps for Euro Area NFCs over the last year, with some recent adjustment observed during the last part of H1 2021. KPMG also finds a decline of similar proportion at c125bps in equity risk premia during the same period\(^{10}\). The cost of market-based debt has continued at similar levels (albeit with some monthly fluctuations), while the cost of bank lending continues at roughly below 2% for NFC loans with a 10Y maturity.

According to KPMG, the recent decline in cost of equity has been driven by lower equity market risk premia. The various government and monetary support measures announced following the pandemic stabilized equity markets, reduced the cost to access market-based finance, and have contributed to support the road towards future growth. Bankruptcy risks have not materialized to the extent initially anticipated when some Credit Ratings Agencies were forecasting default rates to reach 8.5% by June 2021 but in reality only reached 4% as of Q2 2021. In this context, viable businesses may still require assistance and a too sharp withdrawal of support measures could be severe and highly damaging.

1.3: **Euro area NFC cost of funding: 10Y NFC bank lending interest rate, coupon rates for newly originated NFC 10Y bonds, and estimated cost of equity**

![Cost of Equity](chart.png)

Source: ECB, Dealogic, Eikon, and AFME. Monthly averages. Cost of equity estimated as an average of multiple models based on P:E and dividend yield models

---

Companies reduce net funding needs from public markets

As seen on chart 1.4, within the Euro Area, there has been a net increase in the uptake of bond financing for NFCs which has been in part offset (on a net basis) by a record volume of share buybacks. Net issuance of listed shares was EUR -154.3 bn, down 430% from 2019 when net issuance was EUR -29.1 bn. This may have reflected temporary limited opportunities to deploy excess capital for some businesses at above the cost of capital. See chart 1.4.

In the UK, this trend has been most apparent during 2021, with net capital markets issuance equal to GBP -6.2 bn during January-April 2021 as companies are starting to repay the funding acquired during the early stages of the pandemic. See chart 1.5.

EU issuance levels remain much lower than US levels, although the gap has reduced

The US has also experienced a considerable surge in capital markets issuance since 2018, but volumes have not kept up pace in 2021 H1, with total volumes down 16% compared to last year once half-year figures are annualised. The fall observed during 2021 H1 has been driven by a decrease in issuance of IG bonds (-36% YoY), and follow-on issuance (-7% YoY), of which have been partially offset by an increase in IPO issuance (104% YoY, predominantly from SPAC IPOs), HY bond issuance (22% YoY) and convertibles (0.2% YoY). This has reduced EU-US issuance gap somewhat, with US issuance being 2X larger than EU issuance during H1 2021, down from 2.6X larger in 2020FY.

11 Buybacks reward shareholders by decreasing the companies’ shares outstanding, boosting per share earnings and driving down price-to-earnings ratio
1. Market Finance Indicator

In addition to public market-based issuance, European NFCs have also benefited from private markets sources for additional funding, with total private equity (ex-buyouts) equal to EUR 25.3 bn during 2020 and EUR 41.6bn in H1 2021 alone, representing 11% of public markets contribution (EUR 356bn) but a larger portion of funding for SMEs as discussed in the pre-IPO risk capital indicator chapter. Additionally, private credit funds have raised $44.8bn in Europe in H1 2021 and $49.7bn in 2020, consolidating as a source of funding for SMEs in Europe. The size of European private equity and private credit funds continue to be below that for the US, particularly in private equity where US investments amount represents 5x Europe’s. See chart 1.7.

1.7: Private funding sources in Europe and US

Source: Prequin Pro, Invest Europe and Dealroom

Country Analysis

There has been a broad uptake in capital markets instruments during H1 2021 and 8 countries\(^\text{12}\) now have their highest Market Finance Index to date.

The Netherlands and Sweden lead the EU with 34% of total NFC financing derived from bonds or equity. Sweden has had a significant uptake in capital markets issuance since 2016, when the proportion of total NFC funding was 12%. Sweden, Finland, Denmark, Czech Republic have all experienced rapid gains in the market finance index due to increased securities issuance during 2020-2021 H1, and are now at positions, either double or greater, than that of 2016.

France and Belgium have both recorded declines in the market finance indicator due to a drop in bond issuance partially offset by an increase in equity funding.

1.8: 2021 H1 Market Finance Indicator by country and comparison with 2020 and 2016 (NFC bond and equity issuance as % of total NFC funding)

Source: Dealogic, US FED, ECB, BoE and other European central banks

\(^{12}\) Denmark, Finland, Germany, Italy, Netherlands, Poland, Spain and Sweden. Czech Republic, Portugal and the UK also near historic maxima.
Recent trends in European SPACs

Special Purpose Acquisition Companies ("SPACs") are companies formed to raise capital in an initial public offering ("IPO") with the purpose of using the proceeds to acquire one or more unspecified businesses or assets to be identified after the IPO. A SPAC is generally intended to permit the target company to go public without engaging in a traditional IPO.

In the United States, SPAC IPO transactions grew at an accelerated pace within a few quarters reaching 70% of the US IPOs in Q1 2021. In Q2 2021, SPAC IPOs on US exchanges declined both in volume and as a share of total IPOs to 22% of total IPO transactions. Market analysts indicate that the deceleration is related to greater regulatory scrutiny by US authorities of this type of deals.

In Europe, SPAC IPOs have gained market presence and most recently represented 15% of the total European IPOs originated during Q2 2021. The rise in SPACs has been most concentrated in Germany and the Netherlands, with wide sector coverage including e-commerce, technology, financials, ESG, and renewables.

De-SPACs to access US market liquidity

SPACs are formed with the sole intention of acquiring a target company in a De-SPAC transaction. In the United States, De-SPACS accumulated a total of EUR121bn in deal value in Q2 2021 (or 15% of the total US M&A, from 26% of the total in Q1 2021).

In Europe, De-SPACS represented 6% of the total M&A value announced during Q2 2021. This proportion, however, has significantly increased over the last year (see chart 1.12).

70% of the announced SPAC acquisitions of European companies are De-SPACs of US-headquartered SPACs from 29 deals (8 in 2020, 5 in 2019). These European companies will be effectively listed on US exchanges via their SPAC parent company. This adds to the 70 European companies that have listed on US exchanges since 2007 via traditional IPOs.
1. Market Finance Indicator

1.11: De-SPAC M&A USA

Source: Dealogic

Regulators are giving a close inspection to the functioning of, transparency, and accounting treatment of SPAC vehicles. ESMA has issued a statement on SPACs to draw attention to the importance of the proper application of MiFID II product governance requirements by manufacturers and distributors of SPAC shares. ESMA has also warranted that it is fundamental for investor protection a sound implementation of the existing rules and careful scrutiny of such products in firms’ product approval processes.\(^{13}\)

In the UK, following the Lord Hill’s UK Listing Review, the Financial Conduct Authority (FCA) has removed the suspension of a SPAC’s shares if the SPAC has certain features and provides certain disclosures designed to protect investors and maintain a smooth operation of the market once an acquisition is announced. In the United States, the Securities and Exchange Commission (SEC) has increased scrutiny of the sector, from SPAC marketing and fees to disclosures, conflicts of interest, and accounting treatment. It is yet to be seen how, over the long-term, SPAC vehicles will continue to contribute as a funding vehicle for equity capital raising.


---

1.12: De-SPAC M&A in Europe

Source: Dealogic
The Risk Capital Indicator quantifies the availability of pre-IPO risk capital financing for SMEs. The ratio is estimated as the aggregate amount of annual risk capital investments (i.e. venture capital, private equity growth funds, business angel investment\(^{14}\) and equity crowdfunding) relative to total annual new issuance of SME bank loans and risk capital finance. SME lending is measured as the flow of new gross bank loans of size below €1m to non-financial corporates.

In 2020, bank lending led the funding flow to SMEs resulting in a decline in the EU indicator value from 2.8% in 2019 to 2.4% in 2020. The past year, however, contrasts with the rapid acceleration in funding flows from private capital sources, predominantly venture capital (VC) and private equity growth funds. As a result, the EU indicator for H1 2021 grew to 5.6%, the highest on records.

**2.1: Evolution of Pre-IPO risk capital index (EU): 2016-21 (investment from VC, Growth PE, Business angel and equity crowdfunding as % of risk capital and bank lending)**

*Source: EBAN, Invest Europe, Eikon, Dealroom, ECB, BoE and other national central banks*

---

\(^{14}\) Measuring the size of the Business Angel investment activity is a difficult task due to underreporting of private investments to a business angels network or association, which is the current way of gathering data. In Europe, EBAN uses a multiplier of x10 applied to the “visible” market (the actual investment volume reported to business angel associations) to estimate the overall market.
2. Pre-IPO Risk Capital indicator

Resilience of capital markets equity funding for SMEs

In 2020, risk capital investment in Europe (EU and the UK) accumulated a total of €31.6bn to SMEs, a decline of €3.6bn from €35.2bn in 2019.

Although investment data is currently available only for H1 2021, data sources indicate that total risk capital stands to more than double in invested amount in 2021.

The increase has been predominantly driven by venture capital and private equity growth funds. Europe is the fastest growing major region by venture capital investment (outpacing both the US and China) with investment in European SMEs having grown by 2.9x YoY in the first six months of 2021.

Several European countries have observed record venture capital flows in H1 2021. In the UK, France, Germany, Sweden, Netherlands, Spain, Finland, Denmark, and Austria, SMEs have been recipients of more fresh funding from venture capital in the first six months of 2021 than in any other full-year period. If current trends persist, funding flows stand to more than double in 2021 compared to 2020.

European (EU and UK) business angel investment\(^{15}\) has accumulated a total of €9.1bn in H1 2021 compared to €5.9bn in 2020. Anecdotal evidence suggests that a larger percentage of recent deals were undertaken in later stage rounds and in syndicated format with either public venture capital funds or private market venture capital funds. Likewise, more “super angel” deals, with rounds of €3-5mm, were undertaken entirely by these types of investors which illustrates the important synergies between angel investors and venture capital funds.

Equity crowdfunding has accumulated a total of €180mm in H1 2021, above the €137mm raised in 2020FY.

In H1 2021, bank lending has continued to lead by total source of funding for SMEs, but at a rather slower pace than in 2020 when the government supported loan guarantees facilitated record amounts in the EU and the UK. See charts 2.3.

2.2: EU and UK: Business angel, Private Equity, Venture capital and equity crowdfunding investment (EURbn)

2.3: SME new gross lending (EURbn)

Public markets have also contributed to SMEs financial resilience. A total of 136 IPOs have been originated on European junior exchanges\(^{16}\) during the first eight months of 2021, the highest volume since 2011. Likewise, a total of 276 IPOs were issued during the first eight months of 2021 on European exchanges, the highest volume since 2007.

15 2020 data is sourced from EBAN. H1 2021 data is sourced from Dealroom.

16 Junior exchanges are markets with less onerous listing requirements intended to facilitate SMEs access to equity capital.
2. Pre-IPO Risk Capital indicator

2.4: Number of IPOs on European exchanges and on European Junior exchanges: Jan-Aug in 2007-2021

Source: Dealogic

The growing appetite for SME funding has resulted in a rapid increase in company valuations during H1 2021. According to industry sources, in H1 2021, pre-money valuations of companies based in Europe (EU and the UK) have grown predominantly for late-stage VC funding rounds from €10m in 2020 to €15m in 2021.

In the US, risk capital flow has also rapidly accelerated although not at the same pace on a relative basis as in Europe. While European risk capital has surpassed 2020FY deal volumes, in the US H1 2021 deal flow was just marginally behind 2020FY but stands to finalise the year with almost 2x the amount observed in 2020.

2.5: Risk capital investment in the United States and Europe (EU and UK) (EURbn)

Source: NVCA. Angel & seed, Early VC and Late VC

Risk capital contributes to company new registrations and keep companies afloat

The rapid growth in virtually all forms of risk capital, in conjunction with the ongoing lending flow from traditional bank sources has contributed to keep companies afloat and even facilitated new company registrations.

According to Eurostat data, declarations of bankruptcies continue below pre-COVID levels following the various changes at the Member State level on the suspension to mandatorily commence insolvency proceedings in case of financial distress.

Eurostat data also indicates that in Q2 2021, the number of registrations of new businesses in the EU rose 5% QoQ and 53% YoY, with quarterly levels above those observed before the pandemic.
2. Pre-IPO Risk Capital indicator

2.6: Registrations of new businesses and declarations of bankruptcies in the EU (2015=100, seasonally adjusted)

Source: Eurostat

Country performance

Smaller Member States had the highest indicator value in Europe in 2021—Estonia, Malta and Lithuania. This is predominantly due to relatively few VC deals that represent a sizeable amount compared to the size of the economy.

Noticeably there is a wide dispersion in pre-IPO funding across jurisdictions, with some CEE countries like SI and SK benefiting the least from risk capital financing during H1 2021. Among large Member States, Italy stands as the country with the highest potential to increase the presence of funding from risk capital sources.

2.7: Country Evolution of Pre-IPO risk capital index (EU): 2021 (investment from VC, Growth PE, Business angel and equity crowdfunding as % of risk capital and bank lending)

Source: CBI, Dealogic, ECB, SIFMA, ECBC and AFME
Tracking the Pulse of the European Angel Market

Business Angels are individuals who invest equity into small companies with significant growth opportunities. Business Angels invest predominantly in the “early-stage” investment rounds when companies have little to no market presence and can’t access bank or Venture Capital funding. There are ongoing data challenges to keep consistent track of the size and performance of this relevant market sector.

Existing data sources and the accuracy challenge

Measuring the size of the Business Angel investment activity is significantly challenging due to underreporting of private investments to business angels’ networks or associations.

In Europe, the European Business Angel Network (EBAN) uses a multiplier of x10 applied to the “visible” market (the actual investment volume reported to business angel associations) to estimate the overall market investment amount. The data is collated from surveys to +32k investors from 404 networks and associations in 37 countries covering all EU Member States and other non-EU jurisdictions. The data tracked by EBAN covers number of deals, location, and size of investment. See chart 2.8. This CMU KPI report uses the EBAN data to construct the pre-IPO indicators.

Business Angels Europe (BAE) has gathered data of their “BAE Club” since inception, with some legacy data starting from 2011. BAE tracks three major features: membership, deal amounts, and invested amounts. This Club of angel networks represent the depth and diversity of the European angel landscape with membership requirements based on annual invested amounts and leading country presence. See chart 2.9.

Other European countries and trade associations members of BAE collate national data, namely the United Kingdom (through the Chancellor of the Exchequer’s gathering of (S)EIS data), France Angels, and IBAN (Italy).

Other alternative data sources such as Dealroom or CBinsights offer market size comparisons, albeit with the same coverage challenges faced by other data sources.

The EIF business angel investment survey tracks market sentiment across Europe on an annual basis, leveraging from the experience of producing other sentiment surveys covering debt funds and venture capital.

The European Commission, as part of the annual CMU indicators report, can consider the various sources available in the market to keep consistent track of this relevant source of funding and evaluate policy intervention where needed.

A key challenge is avoiding survey fatigue in the market as the same market participants may be requested to disclose investment and sentiment information simultaneously to various sources.

---

17 The countries include Austria, Belarus, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia Finland, France, Germany, Greece, Hungary, Ireland, Italy, Kosovo, Latvia, Lithuania, Luxembourg, Malta, Montenegro, The Netherlands, North Macedonia, Norway, Poland, Portugal, Romania, Russia, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, Ukraine, and the United Kingdom.
Pools of Investment Capital
The household market investment indicator measures the availability of savings from retail investors to invest in capital markets instruments. This ratio is estimated as household financial assets (excluding cash, deposits and unlisted equity) as a percentage of GDP. The asset classes aggregated as “Household financial assets” in this indicator include listed equity shares\textsuperscript{18}, investment fund shares, bonds, life insurance reserves and pension fund holdings.

\textbf{3.1: Evolution of Household market investment indicator:}

\textbf{Household market financial assets (excluding cash, deposits and unlisted equity) as \% of GDP}

\textit{Source: Eurostat, US FED, and OECD}

\textbf{COVID crisis contributes to boost capital markets savings}

European households increased the amount of capital markets savings since the end of 2019, predominantly driven by valuation gains of existing products.

The amount of EU households’ savings in capital market instruments has increased from 104.8\% of GDP in 2019 to 113.3\% in 2021 Q1. Most asset classes have contributed to the gain as shown on chart 3.2 (except for direct bond holdings).

Holdings of insurance and retirement savings have increased by 4.4\% of GDP, of which most of the variation can be attributed to valuation gains. According to ECB data for euro area pension funds, 87\% of pension funds’ portfolio increase between 2020 Q2 and 2021 Q1 is explained by asset revaluations and FX effects. See chart 3.3.

\textsuperscript{18} Unlisted shares, which are not necessarily a capital markets instrument, are not included in the indicator.
3. Household market investment indicator

Anecdotal evidence also suggests that there has not been a rise in the requests for early pension fund withdrawals due to successful communication campaigns by pension plans to inform members about the negative financial consequences of early withdrawals.

### 3.2: Variation in EU Household market investment indicator by components (2019-2021 Q1 variation)

<table>
<thead>
<tr>
<th>Component</th>
<th>2019</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listed Equity</td>
<td>104.8%</td>
<td></td>
</tr>
<tr>
<td>Shares</td>
<td>2.0%</td>
<td></td>
</tr>
<tr>
<td>Bonds</td>
<td>2.4%</td>
<td></td>
</tr>
<tr>
<td>Insurance &amp; Pensions</td>
<td>-0.3%</td>
<td>4.4%</td>
</tr>
<tr>
<td>Insurance &amp; Pensions</td>
<td>113.3%</td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD and Eurostat

### 3.3: Change in Euro Area pension funds’ portfolios by component (EURbn)

<table>
<thead>
<tr>
<th>Component</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reclassification</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revaluation and FX adjustments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: ECB

Although data is not available for the EU aggregate, country statistics and anecdotal evidence suggests that retail investors’ participation in trading activities has recently increased. In France, AMF data\(^\text{19}\) shows that the number of new equity retail investors rose from a quarterly average of 47,000 before the pandemic to 162,000 per quarter between Q4 2019 and Q4 2020, although most recently moderating to 63,000 per quarter in H1 2021. According to Belgian authorities\(^\text{20}\), retail equity trading also increased 5x during the first lockdown on spring 2020 as new investors entered the retail market. Market press\(^\text{21}\) highlighted the large stock price gains of several German retail brokers, significantly above those observed for the financial sector, on the back of improvement in trading activity and orders processed which resulted in a temporary 10-fold rise in these brokers’ annual profits.

**Household deposits continue to expand**

EU households have increased their savings rates from 12% in 2019 to 19% in 2021 relative to disposable income, as households were unable to spend during the lockdowns and likely as a measure of precautionary savings during the crisis.

Although a portion of the new flow of savings has been allocated into capital markets instruments, bank deposits continue as the default option for many households.

The EFAMA CMI index, calculated as the ratio of households’ capital markets investments to deposits, continues below pre-COVID levels notwithstanding the increase in households’ holdings of capital markets instruments as shown on previous charts. This decline of the indicator value indicates that the new flow of household savings has been predominantly allocated into deposits instead of capital markets instruments since the start of the pandemic. See chart 3.4.

---

\(^{19}\) New investors are defined as investors who had not carried out at least one transaction since 2018. See AMF Active retail investor Dashboard [https://www.amf-france.org/sites/default/files/private/2021-07/tb_investors_r3_july_2021.pdf](https://www.amf-france.org/sites/default/files/private/2021-07/tb_investors_r3_july_2021.pdf)


\(^{21}\) See Reuters “Retail trading boom sparks 500%-plus rally in small German brokers” [https://www.reuters.com/article/us-retail-trading-germany-idUSKBN2AI2AN](https://www.reuters.com/article/us-retail-trading-germany-idUSKBN2AI2AN)
3. Household market investment indicator

3.4: EFAMA CMI index: Households’ capital markets investments as % of household deposits: EU

Source: Eurostat

A closer inspection to the country trends suggests that countries that entered the crisis with low pools of capital from retail investors have increased their deposit holdings the most during the pandemic.

As shown on chart 3.5, countries such as Lithuania, Latvia, Romania, and Estonia had the shallowest pools of capital from retail investors as characterised by a low household market investment indicator in 2019. These countries have also increased their deposit holdings the most between 2019 and 2021. Countries that entered the crisis with deep pools of capital also increased their deposit holdings but at a lower magnitude.

This suggests that households in countries with a more developed fund and pension system have invested at a greater extent their fresh savings into capital markets instruments and diversified their portfolio allocations with the use of a wider set of financial instruments. Countries where retail investors have limited access to capital markets have predominantly channelled their fresh savings into low-yielding deposits. Bank deposits have not been subject to the substantial valuation gains observed over the last year compared to those from equity shares and other diversified instruments.

3.5: Countries with low capital markets savings have increased bank deposits the most: Change in household deposits 2019-21 and household capital markets assets % GDP in 2019

Source: Eurostat. As noted earlier, the household market investment indicator is measured as household financial assets (excluding cash, deposits and unlisted equity) as a percentage of GDP.
3. Household market investment indicator

Indicator ranking by countries

The country-by-country rankings have not materially changed over the last two years.

The countries that entered the crisis with deeper pools of capital have benefited from the recent market valuation gains and a larger flow of new retail investors as characterised by an increase in the indicator values for all the countries ranked at the top 10. The countries ranked at the bottom have not observed the same positive variation over the last two years. See chart 3.6.

3.6: Household market investment indicator by European countries

Source: Eurostat and OECD
European public pension systems are facing the dual challenge of preserving financial sustainability while providing Europeans with an adequate retirement income. Economic and demographic trends are pressing European governments to consider various strategies to close the emerging pension gap between state pensions and citizens’ retirement income needs. In this context, promoting better household understanding and wider engagement in occupational and personal pensions decisions is needed.

Tracking the evolution of retirement savings at an individual and Member State level

In December 2020, the European Commission sent to EIOPA a Call for Advice, requesting technical advice on the development of best practices on individual Pension Tracking Systems (PTS) and national pension dashboards. This request builds on one of the recommendations of the June 2020 report of the High-Level Forum on the Capital Markets Union.

The Commission is seeking to develop best practices to the set-up of national PTSs facilitating access to personal pensions information where individuals can have an overview in one single place of all savings sources for retirement. The Commission is also considering if any additional measures would have to be envisaged at national level to ensure interconnectivity with the European Tracking Service (ETS), which is currently under development.

The Commission is also aiming to fill a gap in the current monitoring of pension adequacy in EU countries by establishing pension dashboards covering indicators of future pension entitlements aggregated at the Member State level and for all sources of retirement income.

Some practical elements for an effective PTS tracking tool

A simple system that provides an overview of all retirement savings sources in one place can be an effective tool to engage households on an otherwise complex financial topic.

The information on PTSs should be kept to the minimum and with an accessible format. Additional information not linked to the primary objective of the PTS (e.g. ESG factors) could also be made available via pension providers or could be placed in the third or further layer of the PTS.

As the PTS should be independent, objective, and free of charge, public funding from national budgets may be the most suitable option, at least in the construction phase of PTSs. Although the creation of a PTS by private initiative and cooperation between pension providers is not unfeasible (see for instance the Danish experience), it nevertheless could be highly complex. Some form of compulsion both to provide and share the necessary data, as well as to achieve an equitable distribution of costs, might be necessary.

Pension dashboards to evaluate long-term pension adequacy

The EU countries jointly with the Commission have been projecting age-related public expenditures since 2006 and future pension adequacy since 2012. Complementing the economic and budgetary projections in the Ageing reports and adequacy projections in the Pension Adequacy Reports with information from non-public pensions would provide a more accurate assessment of future pension adequacy.

Pension dashboards could provide an up-to-date assessment of progress made towards an adequate and sustainable retirement income across Europe. As populations age, comparable information about the role of occupational and personal pension schemes would also be valuable for benchmarking, identification of best practices, and possibly the formulation of policy recommendations in the EU semester.

---

22 EIOPA launched in July 2021 two consultations on the development of pension tracking services and pension dashboards. The final advice to the European Commission will be submitted in December 2021 together with impact assessments as well as feedback statements on the consultation responses of stakeholders.
In this edition of the CMU KPI indicators, we have included a new indicator that seeks to track the availability of European Long Term Investment Funds (ELTIFs) in the EU.

The indicator measures the number of ELTIF products marketed within the EU Member States and in the EU. We abstain from adjusting the indicator to country-specific characteristics (e.g. population size, depth of pension fund industry, or the number of UCITS) due to the small dimension of the existing ELTIF funds registered and marketed to investors.

**ELTIFs as a long-term vehicle to promote a sustainable recovery**

ELTIFs are collective investment vehicles that can raise capital from both retail and institutional investors who are willing to invest in projects that require long-term capital, such as infrastructure, real estate, transport, and energy, as well as in smaller and mid-sized businesses (defined primarily as non-listed companies).

The ELTIF framework seeks to establish a UCITS-equivalent that allows Alternative Investment Fund Managers to invest on a pan-European basis.

ELTIFs are an ideal vehicle to unlock long-term capital and help retail investors to diversify their retirement portfolios. They are also intended to facilitate cross-border investment within the EU and create a single market for long-term investment funds.

**ELTIFs in numbers**

The regulatory framework for ELTIFs was created in 2015. Despite the substantial growth of capital allocated into private equity and private credit funds over the last decade, ELTIFs have not been the vehicle of choice to invest.

According to the ESMA ELTIF data register, there were 52 ELTIFs in the EU as of early October 2021, of which 49 are marketed and 3 are registered but not offered to investors. These funds are typically private equity and direct lending funds and currently cumulatively invest less than €2bn which is certainly below the EU's infrastructure needs or the investment needed in Europe to achieve the ambitions set out in the Paris agreement, which industry sources estimate at $20.7tn\(^{23}\).

The limited number of ELTIF products contrasts with the growth observed in Private Equity investment and in Private credit fundraising over the last years. For example, European-focussed private credit funds have gone from investing circa €140bn to circa €250bn since the ELTIF was enacted. The total amount of private equity investments (ex-buy-out) in a single year in the EU was €18bn in 2020 and €20bn in 2019. This demonstrates there is clearly demand among investors to finance European SMEs but the ELTIF is not functioning as an effective vehicle to direct this investment.

4. European Long-Term Investment Funds (ELTIFs) Indicator

4.1: Number of ELTIFs marketed in Europe

From a marketing perspective, ELTIFs can be offered cross-border subject to previous registration requirements. In our indicator we keep track of the number of ELTIF products offered within the various EU countries.

Italy stands as the country that offers the highest number of ELTIF vehicles with a total of 26 funds, followed by France with 20 and Spain with 18. Nine EU countries (BG, HR, EE, HU, LV, LT, RO, SK, and SI) do not offer currently ELTIF products to their local market participants (see chart 4.2).

The ELTIF register also shows that Luxembourg (21), France (16), Italy (13), and Spain (2) are the most active jurisdictions for ELTIFs, with the most vehicles registered from the respective countries.

ESMA data also illustrates that despite the cross-border distribution feature, many ELTIF funds are only marketed domestically. According to ESMA data, 25 of the active ELTIFs are currently distributed in only one Member State while 16 of those products are distributed in the same country in which the product is registered.

---

24 The assets under management (AuM) for each of these funds have not been estimated as ISIN or LEI details are not available for all funds on the ELTIF register.
4. European Long-Term Investment Funds (ELTIFs) Indicator

4.2: Number of ELTIFs marketed by country

It is encouraging that the Commission is seeking to improve the regulatory framework of ELTIFs and intends to publish a legislative proposal in 2021. It is hoped that the revised legislation will support the growth of ELTIFs in three key areas: (1) Broadening the range of eligible assets to support the scalability of ELTIFs; (2) Better align the structuring of the ELTIF with the needs of investors; and (3) Improve the distribution of ELTIF to retail investors.

Source: Eurostat

It is encouraging that the Commission is seeking to improve the regulatory framework of ELTIFs.
Transition to Sustainable Finance and Digitalisation
5. ESG finance indicator

This indicator seeks to quantify the labelling of ESG bond instruments and is estimated as a simple ratio of issuance of ESG bond instruments (corporate, government, municipal, agency, securitisation and covered bonds) relative to total bond issuance. ESG is based on the Climate Bond’s Initiative proceeds-based criteria (green, social and sustainable).

The indicator does not consider sustainable equity issuance due to the difficulty in assessing and classifying entire organisations as sustainable or not but could evolve over time reflecting changes in the sustainable finance sector and data availability.

5.1: ESG Finance indicator
(ESG bond issuance as % of total bond issuance)

Source: CBI, Dealogic, ECB, SIFMA, ECBC and AFME
Consolidation of ESG as an asset class

European (EU and UK) ESG debt markets have expanded rapidly during the first half of 2021, with total ESG bond issuance reaching EUR 212.4 bn, representing 19.6% of total bond issuance in Europe during H1 2021 (201.4 bn and 21.5% for the EU). On an annualised basis, ESG issuance in Europe is up 73% compared to 2020FY, when EUR 245.7 bn was issued, representing 6.4% of total bond issuance in 2020.

In the US, ESG markets have remained relatively stable with ESG issuance making up between 0.1% to 0.9% of total bond issuance from 2014 to 2021 H1 respectively.

The ESG debt issuance market no longer represents a niche sector but rather a sizeable and growing component of overall debt markets. The encouraging growth of this market presents challenges and opportunities for policymakers in the EU and globally. Regulation can help harmonise market practices, enhance the quality of ESG data and increase confidence in the market by promoting transparency and integrity.

European regulators have widely acknowledge the relevance of ESG markets for enabling a deeper CMU. ECB President Christine Lagarde considered in a recent speech\(^{25}\) that the "green transition offers a unique opportunity to build a truly European capital market that transcends national borders – or a green CMU".

Growing presence of social bonds within ESG markets

A shift in the market towards greater social issuance has been observed since the onset of the Covid-19 pandemic. Increased social bond issuance has also been supported by the European Commission, which after entering European ESG markets in October 2020 has issued EUR 89.6 bn SURE scheme social bonds to date.

5.2: European Green, Social and Dual-Purpose bond issuance, EUR bn, 2012 – 2021 (annualised)

Green bond issuance represented 44% of total European ESG issuance during 2021 H1, down from 53% in 2020FY and significantly below the proportions observed during 2014 to 2018 when the green label represented between 96% and 78% of the entire sustainable market.

5.3: European (EU and UK) sustainable finance market activity by country, (2012-2021 H1)

Green indicates active sustainable issuers in country  Grey indicates inactivity in market to date*

Source: CBI, Dealogic. *As of H1 2021

5. ESG finance indicator

During H1 2021, corporate and sovereign issuers in 17 European countries accessed ESG debt markets for funding purposes, up from 15 in 2020FY and 14 in 2019, with 8 countries achieving their highest sustainable finance index value to date. Issuers from 6 European countries have not issued in ESG markets to date. See chart 5.3.

**Country comparison**

France leads European countries in 2021 H1, with 18.7% (EUR 61.3 bn) of total bond issuance having sustainable labelling. This has been driven by EUR 37.7 bn in social bond issuance in France during H1 2021, an annualised increase of 83% compared to 2020.

Germany issued the largest volume of green bonds of any European country in both 2021 H1 (EUR 24.1 bn) and 2020FY (EUR 37.2 bn) but due to the large size of the local non-ESG bond market and a smaller presence in social bond markets, the indicator value is of lower magnitude than that of France and other leading ESG countries.

Austria has recorded the largest increase as measured by our indicators with 9.4% of Austrian bond issuance during 2021 H1 labelled ESG, compared to 1.6% in 2020FY and 0% in 2016.

Ireland, Spain, Germany and the UK have seen significant increases to indicator values during 2021 H1, extending gains already achieved in 2020FY, and are now at a level many times greater than in 2016.

5.4: ESG finance indicator by country (2016-2021 H1)
(Sustainable bond issuance as % of total bond issuance)

Source: AFME with Climate Bond initiative and Dealogic data

Slovak ESG markets opened in H1 2021 with issuance of a EUR 0.1 bn green bond, which represented 1.8% of total bond issuance in Slovakia during H1 2021.

There were moderate declines in sustainable issuance in Portugal, Belgium, Finland and Hungary during H1 2021, compared to 2020FY.

In chart 5.5 we include the EU aggregate which aggregates the European Commission’s social bond issuance under SURE scheme as well as other EU Member States. Going forward, the European Commission’s presence in ESG markets will continue to expand with the anticipated issuance of EUR 250bn in green bonds under the NextGenerationEU (NGEU) programme.

It is important to note that our indicators do not include the recently-issued inaugural £10bn green Gilt issued by the UK government, the inaugural €5bn Spanish sovereign green bond, or any other ESG instrument issued during the second half of 2021.

26 Austria, France, Germany, Italy, Slovakia, Spain, Sweden and the UK.
5. ESG finance indicator

5.5: 2021 H1 ESG finance indicator by component

Source: CBI, Dealogic.

5.6: European (EU and UK) ESG finance issuance by issuance type, EUR bn (2019-2021 H1)

Source: CBI, Dealogic.

In terms of the breakdown by issuance type, local governments issued the greatest volume of ESG bonds, accounting for 52% of total sustainable issuance during 2021 H1, up from 27% in 2020. Issuance within this sub-category has been driven by large social volumes, which represented 73% of total local government issuance in 2021 H1, up from 51% in 2020.

5.7: ESG bond issuance by EU countries, EUR bn (2012-2018, 2019, 2021 H1)

Source: CBI, Dealogic, ECB, SIFMA, ECBC and AFME, labels denote total issuance 2012-2021 H1.

Established markets such as France, Germany, the Netherlands and Spain, which together in 2020FY accounted for 64% of issuance, accounted for 56% during H1 2021, with other significant volumes being issued by the European Commission, Italy and the UK.
5. ESG finance indicator

Over half of global ESG issuance originates from Europe

Globally, Europe continues to outpace other global regions within ESG bond markets, accounting for 54% of global issuance (incl. supranationals – predominantly the EU Commission) in H1 2021, up from 50% in 2020. Elsewhere globally, South Korea has gained ground rapidly since 2017, now accounting for 6% of global market share. In the US momentum has slowed with a moderate decline in market share during H1 2021. See Chart 5.8.

5.8: ESG bond issuance as % of Global issuance (including EU Commission issuance)

Source: Dealogic

ESG AuM continues to expand in equity assets

Global ESG funds continued to grow during H1 2021 (see Chart 5.9), across all major asset classes, with the exception of Money Market ESG funds. Funds with an ESG mandate (including mutual funds and ETFs) totalled USD 4.36 tn as of Q2 2021, an increase of USD 1.3 tn compared to Q2 2020. ESG equity funds continue to be by far the largest fund asset class with 57% of total ESG funds and over 3X larger than fixed income which represents 17% of the total.

5.9: Global ESG funds by Asset Class (2006-2020H1, USD tn)

Source: Lipper, Eikon
Europe leads global regions with 35% of Global ESG funds being domiciled there, and with 52% of global ESG funds denominated in a European currency, of which 32% of funds are denominated in EUR.

5.10: Global ESG funds by currency base and geographical location (USD tn)

Source: Lipper

ESG ratings providers

The use of ESG ratings and data products has grown considerably as investors’ focus on ESG matters continues to increase and financial institutions face growing sustainability disclosure requirements. The importance of high-quality ratings and data products was highlighted in a recent survey of 425 investors (together representing USD 25 trillion assets under management), which found that poor quality or availability of ESG data and analytics represent the biggest obstacle to sustainable investing.

The methodological approaches underlying ESG ratings and data products are very diverse with each ESG rating provider making different choices about which ESG factors to consider and there is relatively large divergence between providers’ methodologies and metrics, as well as among the products and areas covered.

5.11: Correlations of sustainability-related ratings providers’ ratings across a common sample of companies

Source: Lipper

Any uncertainty or perceived unreliability caused by incomparable ratings or data, or insufficient transparency around why the ratings are different, and what they are measuring and being used for, will mean that market participants may not always have sufficient confidence in these external ESG ratings, and therefore may spend more effort than may be necessary to undertake their own internal assessments.
5. ESG finance indicator

The industry is at an early stage in developing ESG ratings and therefore it is to be expected that different methodologies are developed. While it is encouraging that different methodologies by various market participants are developed, however, it is also crucial that there is transparency on the different methodologies so that reconciliation and understanding by market participants is possible.

5.12: ESG ratings comparison: correlations

<table>
<thead>
<tr>
<th></th>
<th>MSCI</th>
<th>S&amp;P</th>
<th>Sustainalytics</th>
<th>CDP</th>
<th>ISS</th>
<th>Bloomberg</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSCI</td>
<td>36%</td>
<td>36%</td>
<td>35%</td>
<td>16%</td>
<td>33%</td>
<td>37%</td>
</tr>
<tr>
<td>S&amp;P</td>
<td>35%</td>
<td>65%</td>
<td>35%</td>
<td>14%</td>
<td>14%</td>
<td>74%</td>
</tr>
<tr>
<td>Sustainalytics</td>
<td>35%</td>
<td>65%</td>
<td>29%</td>
<td>22%</td>
<td>22%</td>
<td>58%</td>
</tr>
<tr>
<td>CDP</td>
<td>16%</td>
<td>35%</td>
<td>29%</td>
<td>7%</td>
<td>7%</td>
<td>44%</td>
</tr>
<tr>
<td>ISS</td>
<td>33%</td>
<td>14%</td>
<td>22%</td>
<td>7%</td>
<td>7%</td>
<td>21%</td>
</tr>
<tr>
<td>Bloomberg</td>
<td>37%</td>
<td>74%</td>
<td>58%</td>
<td>44%</td>
<td>44%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Source: CFA Institute, BDO US, LLP

ESG data is an important tool for increasing market confidence and reliability of such information. Development of common industry standards or codes of conduct may be a good first step here, since at present there is often inadequate transparency, or standardisation of methodologies employed, or on the sources of data or how frequently it is updated, and by extension how reliable it is (e.g., publicly disclosed versus third party estimates or industry averages, stale ratings or data). There are currently numerous proposals relating to assurance of ratings and data both at the Global level (IOSCO) as well as the EU level including some elements of the upcoming CSRD and the European Green Bond Standard that the industry is currently engaged on.
The FinTech composite indicator seeks to rank countries by their capacity to host a vibrant FinTech ecosystem. The indicator is constructed based on four sub-indicators: (i) regulatory landscape; (ii) availability of finance for companies; (iii) degree of innovation; and (iv) talent pool. Each of the four sub-indicators is composed by individual metrics as illustrated in the figure below:

<table>
<thead>
<tr>
<th>Components</th>
<th>Sub-indicator</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory sandbox</td>
<td>Regulatory landscape</td>
<td></td>
</tr>
<tr>
<td>Innovation hubs</td>
<td>Funding availability</td>
<td></td>
</tr>
<tr>
<td>Investments on FinTech companies</td>
<td>Innovation</td>
<td></td>
</tr>
<tr>
<td>Exits (number of deals)</td>
<td>Valuation of fintech unicorns</td>
<td></td>
</tr>
<tr>
<td>FinTech M&amp;A deals</td>
<td>% tertiary degree STEM graduates</td>
<td>Talent pool</td>
</tr>
</tbody>
</table>

In this edition, we have included a new sub indicator to acknowledge the importance of incumbents growing their capacity through the acquisition of companies specialised in FinTech activities. This sub-component is now part of the “Funding Availability” sub-indicator and adds to the two existing components: (1) investment into FinTech companies; and (2) Exits from FinTech investments.

**Funding availability and regulatory frameworks contribute to scale up FinTech activities globally**

According to our FinTech Indicator, the local ecosystems in the EU continued to benefit from improvements in the regulatory environment with the launch of new regulatory sandboxes in four EU countries. The EU has also benefitted from a record increase in funding availability which in turn translated into a rapid increase in the number and valuation of FinTech unicorns (growth companies with a valuation above $1bn).

The United Kingdom has continued to consolidate as the main global financial centre for FinTech activities on the back of record funding to FinTech companies and record M&A transactions of FinTech companies. UK FinTech unicorns also significantly gained in company valuation from a total of $30bn in 10 companies in 2020 to $82bn in 15 companies in 2021.

---

27 Some countries have multiple innovation hubs facilitating innovations in Banking, Insurance and Securities markets industries. The Belgian FSMA and NBB have two separate innovation hubs. For purposes of calculating the indicator, Belgium was assigned a score of 6 as the three financial services industries are covered by the two existing innovation hubs.

28 Regulatory landscape: presence of regulatory sandboxes and innovation hubs in banking, insurance, and securities markets activities. Funding availability includes the value of investments into FinTech companies, the number of investor exits, and the amount of FinTech M&A. Innovation measures the number of FinTech patents registered in the local patents office and market valuation of fintech companies. Talent pool measures the percentage of 25-64 inhabitants with at least tertiary degree and the percentage of Science, Technology, Engineering and Mathematics graduates. See Annex for further details on how this indicator was constructed.
6. Fintech indicator

6.1: Evolution of FinTech indicator [0: Min, 1:Max] Composite indicator based on regulatory landscape, funding availability, innovation, and talent pool

Funding availability contributes to scale up FinTech activities globally

The first half of 2021 was characterised by a substantial surge in investment flows into FinTech companies globally. Although investment into FinTech companies is typically from private markets and therefore the published amount may vary depending on the data provider, all data sources reviewed for this publication suggest that 2021 stands to end with record funding for FinTech companies.

The US continues to lead by investment flow in H1 2021 with $40bn, followed by the UK with $10.5bn and the EU with $8.5bn. This compares with $19.7bn, $6.8bn and $3.8bn respectively in 2020FY. See chart 6.2.

The rapid increase in funding availability was mirrored by the 2.4x growth in the value of FinTech companies globally over the current year. Specifically in the EU, in 2020 there were 4 FinTech unicorns valued at $11.8bn, increasing to 13 companies valued at $76bn in H1 2021.

6.2: Global investment activity in FinTech: amount 2014-2021H1 (USDbn)

6.3: Value of FinTech Unicorns (USD bn)

The EU has also continued to see an increase in the production of FinTech-related patents, which reached in 2020 a similar annual production to that observed in China and the United States. This is an encouraging trend which will contribute to accelerate the growth of FinTech companies and improve the local ecosystem.
6. Fintech indicator

6.4: FinTech M&A (EUR bn)

Source: Dealogic

6.5: New FinTech patents registered by jurisdiction

Source: Dealroom

The FinTech regulatory ecosystem

Over the last year, several European countries continued to improve their local regulatory ecosystem with the launch of new regulatory sandboxes and the expansion of the market activities covered by local innovation hubs.

Regulatory sandboxes are schemes that enable firms to test new business models or financial products in a live environment against the local regulatory environment.

In September 2020, Austria launched a regulatory sandbox assisting the three major financial services activities (insurance, banking, and securities). The Bank of Greece also opened a regulatory sandbox, but it does not cover the securities market. Hungary opened a regulatory sandbox covering the three main financial services activities, coordinated by the Hungarian National Bank (MNB). Spain also opened regulatory sandbox covering the three financial activities coordinated jointly by the Bank of Spain, CNMV and DGSFP.

In Italy, Banca d’Italia is in the process of announcing the launch date of the local regulatory sandbox for banking, securities, and insurance activities.

It is expected that the improvements in the local regulatory framework will support growth of FinTech companies and attract investment into the sector over the next years. According to the BIS\(^9\), sandboxes are associated with an economically large and statistically significant rise in investment in FinTech companies. The BIS finds that “investment as a share of GDP is, on average, around 75% higher in the years after the establishment of a sandbox than in the years before”. This remarkable evidence can continue to encourage other Member States to launch local regulatory sandboxes.

The use and testing period of regulatory sandboxes varies by countries. In Denmark, two companies have completed a test in the local sandbox and three more are currently benefiting from access to the regulatory sandbox. The typical test period is no more than 6 months with the possibility to extend the period if needed. In Lithuania, 26 official applications have been received, of which one project was tested and one is currently active\(^9\) with a testing period of 6 months extendable for up to 12 months under certain conditions. In the UK, the regulatory sandbox operated until recently on a cohort basis, which meant that firms could only apply during a specific window in the calendar year. In the latest (seventh) annual cohort, 13 firms were accepted out of 58 applications from UK and overseas firms. In August 2021, the regulatory sandbox moved to always open, allowing firms to submit their applications throughout the year with testing periods of 3 to 6 months.

---

\(^{9}\) BIS (2021) “Funding for fintechs: patterns and drivers” in BIS Quarterly Review- International banking and financial market developments. September 2021

6. Fintech indicator

6.6: European countries with FinTech regulatory sandboxes

Innovation Hubs are a dedicated point of contact for firms to raise enquiries with competent authorities on FinTech-related issues and to seek non-binding guidance on regulatory and supervisory expectations.

As shown on chart 6.7, almost all EU countries have launched an innovation hub over the last few years. Malta continues as the only EU country that does not offer an Innovation Hub facility for any of the main financial services activities.

Over the last year, the Croatian Central Bank opened a banking innovation Hub. Croatian authorities previously offered Innovation Hub facilities for the securities and insurance markets.

Additionally, the BIS opened five Innovation Hubs globally of which three are located in Europe. The BIS has established multidisciplinary innovation hub teams in Hong Kong SAR, Singapore, Switzerland, London, and Stockholm and will soon open centres in Toronto and Frankfurt or Paris. The BIS has also formed a strategic partnership with the Federal Reserve System in New York. These innovation hubs seek to identify critical trends in technology affecting central banking and develop in-depth insights that can be shared with the central banking community. This is a positive trend for the global regulatory FinTech ecosystem.

6.7: European countries with FinTech innovation hubs

Source: EBA, ESMA, EIOPA and EFIF. Dark green denotes countries that host innovation hubs for the three major financial services activities (insurance, banking, and securities). Light green denotes countries with innovation hubs for one or two (but not all) of these activities.
FinTech performance by countries

The large majority of European countries have improved their local FinTech ecosystems over the last two years as measured by our indicators. Most of the countries covered in the report have increased the FinTech indicator values between 2019 and 2021 (see chart 6.8).

The UK continued as the regional FinTech leader, followed by Sweden, Denmark, and Lithuania.

Sweden significantly improved the indicator values over the last two years on the back of a significant increase in funding flow, and from hosting Europe’s largest FinTech unicorn (Klarna). The main limitation for Sweden, as measured by our indicators, is the lack of a local regulatory sandbox.

Austria, Greece, Hungary, and Spain saw significant gains in the country rankings due to recent improvements in the local regulatory ecosystem with the launch regulatory sandboxes and innovation hubs.

6.8: FinTech indicator by countries: 2019 and 2021
Composite indicator based on regulatory landscape, funding availability, innovation, and talent pool
[0: Min, 1: Max]

Source: AFME

6.9: FinTech indicator by components. Top 5 countries (ranking 1: top; 28: bottom)
6. Fintech indicator

New digital trends: CBDCs and of DLT Pilot programmes

Central Bank Digital Currencies (CBDCs)

Although not measured by our indicators, one relevant nascent trend with relevant repercussions for capital markets and the banking system is the research and development of CBDCs by regional central banks. Sweden and Lithuania\(^{31}\) have started preliminary rollouts of their respective CBDCs, while the Bank of England\(^{32}\) has consulted market participants and stakeholders on the macro-economic impacts of introducing a digital GBP. The Eurosystem’s High-Level Task Force on Central Bank Digital Currency also launched\(^{33}\) a 24-month investigation phase into the design of a Digital Euro.

Other countries have a more agnostic position regarding the benefits of CBDCs. Research conducted by the Central Bank of Denmark\(^{34}\) concluded that the potential benefits of introducing a digital currency would not match the considerable challenges which this introduction would present.

In future editions of this report, we will keep track of this development which has the potential to increase cross-border capital mobility, and support the development of the Distributed Ledger Technology (DLT)-based securities market.

DLT Pilot Programmes

A second trend which has not been measured by our indicators is the development of DLT Pilot programmes, the first of which has been recently proposed by the European Commission in September 2020\(^{35}\).

The proposed EU Pilot Regime is similar to existing regulatory sandboxes in that its objective is to support the development of new technologies and business models (in this case relating to DLT). The key difference is that, in the proposed EU Pilot programme, the participating entities would operate in a live market environment, with specific restrictions in place such as limits to issuance size or market capitalisation.

This approach provides an interesting departure from the prevailing regulatory sandbox approach, as it goes a step further in supporting firms moving from the research and testing to launch stage, however firms are also likely to face greater restrictions designed to protect investors and reduce risks to financial stability. Therefore, these regulatory tools should not be viewed as mutually exclusive and will likely continue to provide important and complimentary options for participating firms.

\(^{32}\) https://www.bankofengland.co.uk/research/digital-currencies
\(^{35}\) https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52020PC0594
Integration and Efficiency of Capital Markets Ecosystem
7. Loan Transfer Indicator

The Loan Transfer Indicator measures the capacity to transform bank loans into capital markets vehicles (securitisation and loan portfolio transactions), which is crucial for enabling additional lending to the real economy by freeing up bank balance sheet capacity.

The indicator is estimated as a simple ratio of securitisation issuance (placed and retained) and loan portfolio sales relative to outstanding loans to NFCs and households. The indicator is calculated by dividing flow measures by stock measures to show what proportion of outstanding loans converted into capital markets vehicles in a given period.

The methodology of the Loan Transfer Indicator has been updated to exclude covered bonds, which were included in previous iterations of this report. This affects all historical periods and, as such, readers will observe changes in country positions/indicator values compared to the 2018, 2019 and 2020 iterations of this report. The exclusion of covered bonds has been done for reasons of comparability and is based on their lack of similar transformation of loans compared to that which takes place via securitisation transactions and loan portfolio sales. As the underlying loans remain on the balance books of the originator banks within covered bond transactions, they do not free up lending capacity of the originator bank in the same as securitisation and loan portfolio sales.

Minor progress to freeing-up bank lending capacity driven by loan portfolio sales

During H1 2021, EUR 117.7 bn of securitised product and loan portfolio sales were issued, representing 1.8% of total EU outstanding loans when half-year figures are annualised, up from 1.7% in 2020FY but below 2.1% in 2019. See chart 7.1

The Loan Transfer Index calculated for the EU and UK saw marginal gains during H1 2021, rising 0.2% but below 2.2% in 2019 prior to the COVID outbreak.

Whilst the EU indicator has risen slightly as of June 2021, it remains below the 2.1%-3.2% range observed during 2016-2018 when there were greater volumes of both loan portfolio sales and securitisations taking place. The marginal increase in the EU indicator over the last year was driven solely by loan portfolio sales, which totalled EUR 48.7 bn during H1 2021, up 52% YoY (annualised). This follows a significant slowdown during 2020 which represented the least active year since 2012.
7. Loan Transfer Indicator

7.1: Loan Transfer Index: securitisation and portfolio sales as % of outstanding loans


The US, on the other hand, scored the highest Loan Transfer Indicator since 2003, with 22% of US loans being transferred into capital market instruments via securitisation (US loan portfolio sales are relatively negligible). This was driven by a large amount of US agency issuance that has come on the back of a large amount of refinancing taking place within US agencies in 2020 and 2021.

Securitisation issuance remains subdued

Total securitisation issuance (placed and retained) continued to fall during H1 2021, and was down 3% YoY compared to 2020, which itself was down 9% compared to 2019. As a result, total securitisation issuance in H1 2021, is now 29% lower than it was in 2018, the last year before the introduction of the STS regime.

Outstanding European (EU and the UK) bank loans rose 4.6% (YoY) during H1 2021 and did not fully offset the increase in loan transfer instruments (+14% YoY).

While outstanding loans have grown 9.1% since 2018, loan transfer instruments have fallen 33.4% over the same period. As such, the large, and growing, amount of outstanding loans in Europe presents compelling prospects for future possible expansion in European securitisation markets, which, together with loan portfolio sales, can remove outstanding loans from the balance sheet of banks, freeing up greater lending opportunities. See chart 7.2.

7.2: Evolution of EU and UK outstanding loans (EUR tn) and loan transfer instruments (EUR bn)

Source: ECBC, Debtwire, JP Morgan

---

**Chart 7.2**

**Source:** AFME, SIFMA, ECBC, FDIC, ECB, US Fed, Debtwire. *Indicator for 2021 an estimate based on 2021H1 volumes annualised.*

The US, on the other hand, scored the highest Loan Transfer Indicator since 2003, with 22% of US loans being transferred into capital market instruments via securitisation (US loan portfolio sales are relatively negligible). This was driven by a large amount of US agency issuance that has come on the back of a large amount of refinancing taking place within US agencies in 2020 and 2021.

Securitisation issuance remains subdued

Total securitisation issuance (placed and retained) continued to fall during H1 2021, and was down 3% YoY compared to 2020, which itself was down 9% compared to 2019. As a result, total securitisation issuance in H1 2021, is now 29% lower than it was in 2018, the last year before the introduction of the STS regime.

Outstanding European (EU and the UK) bank loans rose 4.6% (YoY) during H1 2021 and did not fully offset the increase in loan transfer instruments (+14% YoY).

While outstanding loans have grown 9.1% since 2018, loan transfer instruments have fallen 33.4% over the same period. As such, the large, and growing, amount of outstanding loans in Europe presents compelling prospects for future possible expansion in European securitisation markets, which, together with loan portfolio sales, can remove outstanding loans from the balance sheet of banks, freeing up greater lending opportunities. See chart 7.2.

7.2: Evolution of EU and UK outstanding loans (EUR tn) and loan transfer instruments (EUR bn)

Source: ECBC, Debtwire, JP Morgan
7. Loan Transfer Indicator

Securitisation is used less effectively in Europe compared to the US

US market participants have widely utilised securitisation vehicles to facilitate the economic recovery. In the US, outstanding bank loans increased by 0.9% during H1 2021, with volumes of securitisation issuance growing 14.3% on the record-issuance of 2020FY. See chart 7.3.

The contrast between the EU-US can be explained by the significant level of quasi-governmental support, with US agencies purchasing around 80% of mortgages originated by US banks. In addition to being larger, deeper and broader, US markets are enhanced by standardisation in underwriting standards and unified capital market rules leading to greater homogeneity and the ability to generate larger portfolios. Differences in the regulatory environment have also been a factor in Europe and the US\(^{36}\).

### 7.3: Evolution of US outstanding loans (USD tn) and loan transfer instruments (USD bn)

![Chart 7.3: Evolution of US outstanding loans (USD tn) and loan transfer instruments (USD bn)](chart.png)

Source: ECBC, Debtwire, JP Morgan

The role of securitised vehicles in fostering a sustainable recovery

A nascent feature of European securitisations are ESG-labelled products. Although the ESG sub-sector of EU capital markets is at an early stage of development, investor demand is rising and issuance has surged in recent years, with EUR 5.2 bn issued during H1 2021, significantly above previous years. See chart 7.4.

### 7.4: European ESG Securitisation Issuance by Asset Class and Country of origination (2016-2021 H1, EUR bn)

![Chart 7.4: European ESG Securitisation Issuance by Asset Class and Country of origination (2016-2021 H1, EUR bn)](chart.png)

Source: Climate Bond Initiative, Credit Agricole, S&P, and European Data Warehouse

Although the ESG sub-sector of EU capital markets is at an early stage of development, investor demand is rising

---

36 See Appendix 1 of AFME’s presentation “Securitisation as an essential tool for Europe’s economy”. Available here.
**Key findings by countries**

Greece leads European countries in the transfer of loans into marketable vehicles during H1 2021, with loan portfolio sales volumes equivalent to 24.1% of outstanding bank loans (48.2% annualised if the trend continues). Volumes in Greece have accelerated since 2019, when the Hercules Asset Protection Scheme (HAPS) was introduced, which, similarly to Italy’s GACS model, has helped banks clean up their balance sheets by transforming impaired loans into asset-backed securities with state guarantee.

Ireland achieved a Loan Transfer Index of 10% (20% if annualised), driven by large volumes of both loan portfolio sales and securitisation issuance, which were up 723% and 186% respectively.

Elsewhere in Europe, the Loan Transfer Index was in a tighter range of 0-3% due to the significantly larger pool of outstanding loans which is the denominator of the indicator.

Italy, Spain, Portugal and Cyprus all exhibited declines during H1 2021, compared to 2020, due to a significant reduction in the amount of loan portfolio sales being undertaken within these regions compared to prior years. The fall may be driven by a shrinking pool of distressed assets in these countries. Yet, the volume of NPLs, which constitute a major driver of loan portfolio sales, is expected to increase in most markets in coming years, due to the economic effects of the pandemic\(^{37}\), with significant volumes of NPL portfolio sales currently in the pipeline for H2 2021.

The markets for loan portfolio sales and securitisation have become more concentrated in terms of countries with active issuance markets, with 16 countries having an index of zero during H1 2021 (compared to 14 in 2020 and 12 in 2016).

**7.5: Loan transfer indicator - national comparison of 2021 H1 with 2020 and 2016 (securitisation and portfolio sales as % of outstanding loans)**

![Graph showing loan transfer index by country](link)

\(^{37}\) According to statements by a Member of the ECB Supervisory Board quoted in the media (October 2021), an increase in NPLs is likely but will not materialise until the end of 2022 or sometime in 2023.
The STS securitisation framework and global comparison

The Simple Transparent and Standardised (STS) securitisation framework was introduced in the EU to restore investor confidence and support the recovery of the European securitisation markets which were damaged after the 2008 financial crisis when serious errors made in US sub-prime mortgage lending spread through the global financial system.

Most European securitisations have performed very well in both credit and liquidity terms, both through the 2008 financial crisis and since then, although investor confidence was damaged.

STS securitisation is therefore a sub-set of all securitisations created by the EU Securitisation Regulation. STS securitisations comply with strict criteria established by law. The Securitisation Regulation also defines universal legal requirements for all securitisations – not just STS securitisations.

However, highly conservative capital requirements mean the capital-adjusted cost of funding for banks through securitisation is often still too high to economically justify these transactions. The resulting lack of viability of securitisations for many banks constrains the European financial system by restricting banks’ ability to use their capital to support as much new lending as possible.

STS has not delivered an expansion of securitisation issuance. Although the proportion of STS instruments has increased in some Member States, this has not contributed to increase the size of the market as total securitisation issuance in H1 2021 is now 29% lower than it was in 2018, the last year before the introduction of the STS regime (See Chart 7.6).

STS has not delivered an expansion of securitisation issuance

Source: JP Morgan, Ex-CLOs
The extraordinary monetary policy conditions prevailing over the last several years, and the disproportionate central bank support given to other fixed income instruments, has made securitisation uncompetitive as a pure funding tool such that many issuers who used securitisations placed with investors to fund their assets now no longer do so. There has been a simultaneous rise of retained transactions, which offer a cheaper and easier way for issuers to issue, or issue and retain for placement with the central bank. In Europe, more than half of securitisation transactions are retained by the originator to be used as ECB-eligible collateral for funding, and as a result, the investor base for European securitisations has shrunk.

In Europe, retained issuance does not represent true investor demand but is driven by central bank funding. In the US, retained issuance does not feature in the securitisation market, and when comparing Europe to the US, government sponsored enterprises (Fannie Mae, etc. the “GSEs”) should be excluded as they are guaranteed by the US government. On this basis, US issuance varies between 3 and 6 times the EU and UK issuance, with other Global regions and China in particular, growing extremely fast.

### 7.7: International securitisation issuance comparison (EUR bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>European (EU and UK)</th>
<th>US ABS Market</th>
<th>China</th>
<th>Australia</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>97</td>
<td>17</td>
<td>119</td>
<td>31</td>
<td>676</td>
</tr>
<tr>
<td>2017</td>
<td>112</td>
<td>31</td>
<td>120</td>
<td>19</td>
<td>676</td>
</tr>
<tr>
<td>2018</td>
<td>186</td>
<td>20</td>
<td>553</td>
<td>299</td>
<td>553</td>
</tr>
<tr>
<td>2019</td>
<td>253</td>
<td>119</td>
<td>609</td>
<td>186</td>
<td>491</td>
</tr>
<tr>
<td>2020</td>
<td>359</td>
<td>81</td>
<td>337</td>
<td>112</td>
<td>17</td>
</tr>
</tbody>
</table>

Source: AFME, SIFMA, National Australian Bank, S&P
7. Loan Transfer Indicator

Special Feature: Withholding Taxes

Inefficient and fragmented procedures relating to withholding taxes (WHT) are one of the long-standing impediments to funding flows early identified as part of the so-called Giovannini Barriers. This barrier has been included in the CMU programme and is one on which EU authorities have repeatedly discussed but without any substantial progress.

National variations in WHT relief procedures

The key impediment related to WHT is the current variations between Member States in their procedures for WHT relief which has a significant negative impact on cross-border investment, cost of capital, and economic growth.

Current reclaim procedures are often highly cumbersome and costly, and may discourage greater levels of cross-border investment. We note anecdotal evidence that in certain countries reclaims have been made incorrectly due to misinterpretation, or market participants may prefer to forego WHT reclaims due to the associated operational cost.

Chart A1 seeks to illustrate the existing country differences in WHT relief procedures, in a simplified way. The chart classifies countries on the basis of the WHT rate on interest and dividend payments for non-residents on non-treaty territories and the presence of a relief-at-source (RaS) mechanism for tax reclaim for interest and dividend payments.

The information is collated on a best-efforts basis from specialised tax sources and industry information.

A1. Withholding Tax procedures in Europe for dividends and interest payments.
Based on WHT rate on interest and dividend payments for non-residents on non-treaty territories

Source: PwC, Clearstream, and AFME

As can be observed on chart A1, there are currently 5 EU countries that do not charge WHT on dividends or interest flows (MT, LV, HU, EE, and CY).

10 EU countries do not currently offer a RaS procedure for at least one of the major securities flows (interest payments or dividends). Of these, the Netherlands and Bulgaria are the only two EU countries that have WHT on dividends and interest payments and do not offer a relief at source system for such flows.
Practical consequences of lack of WHT harmonisation

The WHT barrier on an investment return can be significant, to the extent that investors may prefer to invest within national borders to avoid the existing complex and cumbersome tax relief and reclaim procedures.

For fixed income products, a delay in receiving a tax reclaim can represent an erosion to the internal rate of return (IRR) received by investors. Chart A2 illustrates an example of a 3Y bond with a 5% coupon rate and a 10% WHT rate which is reclaimed and received the same year or with 1 to 3 years of delay. As the chart shows, the IRR of the instrument declines c4bps for each year of delay in receiving the tax reclaim.

A2. Internal Rate of Return and delay in receiving tax reclaim

![Chart A2](image)

Source: AFME. Par: 100; Coupon rate: 5%; Coupon (before WHT): 5; Domestic WHT rate: 25%; Amount received: 3.75; Treaty rate: 10%; Reclaim request: 0.75; Tax credit in investor tax return: 0.5; Term (yrs): 3

An additional cost is borne by residence and source countries, as cumbersome WHT relief and reclaim procedures represent important administrative costs which may not necessarily offset the net tax revenues gains. The administrative costs can be exacerbated by the practice in many Member States to only allow domestic financial intermediaries to provide withholding agent services.

Although public data is not currently available, it would be relevant to keep track of the time that it takes for market participants to effectively receive a WHT reclaim, as well as the administration costs associated for all parties involved. This can facilitate the exchange of best practices between market participants and encourage a degree of healthy competition between Member States.

In a 2017 report by the European Commission, official estimates indicate a sizeable overall cost of WHT procedures. According to the Commission, “In January 2016, the overall cost of WHT refund procedures was estimated at EUR 8.4 billion per year in foregone tax relief (due to complex compliance procedures and costly expert advice), the costs of reclaim procedures and opportunity costs (delayed refunds mean that the money cannot be used for other purposes).”

---

38 REPORT FROM THE COMMISSION TO THE COUNCIL AND THE EUROPEAN PARLIAMENT “Accelerating the capital markets union: addressing national barriers to capital flows”, available here.
Ongoing efforts to address this long-standing barrier

The financial industry has consistently supported the European Commission's efforts to tackle this long-standing barrier.

In 2017, the European Commission published the Code of Conduct on WHT- a set of guidelines for optional use to assist Member States to simplify the procedures for investors in one EU Member State to claim WHT relief on dividend, interest, and other securities income from issuers in other Member States. The industry also supports the follow-up work with the Member States to improve the efficiency of procedures.

Most recently, the Commission's Tax Action Plan of mid-July 2020 committed to put forward proposals to introduce in the EU a withholding tax relief at source along the lines of the OECD TRACE Implementation Package. The Commission also issued an inception impact assessment and is expected to launch a consultation on Q4 2021. These are encouraging next steps in the right direction.
We have produced two indicators to quantify “intra-European” integration (understood as covering the EU and the UK) and integration of European (EU and UK) capital markets activities with the rest of the world (RoW).

The indicators consider different capital markets dimensions by estimating two composite indicators aggregating the following features: (i) cross-border holdings of equity assets and fund shares; (ii) cross-border holdings of debt assets; (iii) cross-border private equity (PE) financing; (iv) cross-border M&A transactions; (v) cross-border public equity raising; (vi) non-domestic corporate bond issuance; and (vi) participation in intermediating foreign exchange and derivatives trading. Each of these subcomponents are quantified both for cross-border transactions within Europe and with the rest of the world for purposes of producing each of the indicators. Each component is quantified with the appropriate metrics as shown on Charts 8.1 and 8.2:

### 8.1: Capital markets intra-European integration index

<table>
<thead>
<tr>
<th>Components</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-border holdings of equity assets and fund shares by European investors (non-domestic)</td>
<td>% market cap and open-ended fund assets</td>
</tr>
<tr>
<td>Cross-border holdings of debt instruments by European investors (non-domestic)</td>
<td>% outstanding bonds</td>
</tr>
<tr>
<td>Cross-border PE investment into other European countries</td>
<td>% total PE financing</td>
</tr>
<tr>
<td>Cross-border M&amp;A with another European firm</td>
<td>% total M&amp;A</td>
</tr>
<tr>
<td>Public equity issuance by a European (non-domestic) firm on the local exchange</td>
<td>% total public equity issuance</td>
</tr>
<tr>
<td>Non-domestic corporate bond issuance</td>
<td>% total corporate bond issuance</td>
</tr>
<tr>
<td>EUR and GJP average daily FX trading volume</td>
<td>% GDP</td>
</tr>
</tbody>
</table>

**Source:** AFME

### 8.2: Capital markets Global integration index

<table>
<thead>
<tr>
<th>Components</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-border holdings of equity assets and fund shares by RoW investors (non-Europe)</td>
<td>% market cap and open-ended fund assets</td>
</tr>
<tr>
<td>Cross-border holdings of debt instruments by RoW investors (non-domestic)</td>
<td>% outstanding bonds</td>
</tr>
<tr>
<td>PE investment into a RoW (non-Europe) company</td>
<td>% total PE financing</td>
</tr>
<tr>
<td>Cross-border M&amp;A with a RoW-based firm (non-Europe)</td>
<td>% total M&amp;A</td>
</tr>
<tr>
<td>Public equity issuance on the local exchange by a RoW firm (non-Europe)</td>
<td>% total public equity issuance</td>
</tr>
<tr>
<td>Global corporate bond issuance</td>
<td>% total corporate bond issuance</td>
</tr>
<tr>
<td>Average daily FX trading volume</td>
<td>% GDP</td>
</tr>
<tr>
<td>OTC interest rate derivatives turnover</td>
<td>% GDP</td>
</tr>
</tbody>
</table>

**Source:** AFME

---

39 Each of the components is standardised and aggregated in a single component by a simple average and transformed in [0-1] scale.
8. Cross-border finance indicator

Each of the components seek to measure the volume of cross-border flows across jurisdictions through different capital markets activities and asset classes. The components are proxies of cross-border flows and may have limitations of their own. This is discussed in further detail in the methodologies section in Appendix 3.

We would have liked to produce indicators that track separately the development of EU integration and integration within the eurozone, but due to data limitations, at this stage we are only able to keep track of global and European integration on the basis of joint EU and UK capital markets flows.

Capital markets integration within Europe

Our indicators show a slight deterioration in intra-European (EU and the UK) integration over the last year, mostly driven by a decline in intra-European private equity and M&A activity as these activities have been undertaken at a greater scale cross-border with non-European companies.

However, as observed in last year’s report, the COVID-19 crisis has not generated significant disruption of cross-border flows, and in some instances, companies have sought to raise funding cross-border to endure the pandemic.

Debt issuance marketed cross-border within Europe continues at 95% of total European bond issuance, and consistently above 90% since 2015.

Over the last year, corporates have increased their appetite for issuing equity cross-border on non-domestic exchanges within Europe. In H1 2021, 11% of total equity issuance was raised cross-border within Europe, an increase from 5% in 2019 and 9% in 2020.

No visible changes were observed in cross-border debt holdings, although cross-border equity holdings slightly deteriorated in 2021.

8.3: Intra-European integration index [0: Min, 1: Max]

8.4: Intra-European integration index by components and evolution

Source: AFME from multiple sources

---

40 Equity holdings: cross-border holdings within the European of equity shares and fund shares issued by European companies as percentage of market capitalisation of listed shares and assets of open-end investment funds; Debt holdings: cross-border holdings within the European of bond instruments issued by European companies as a percentage of outstanding public and corporate bonds; PE: cross-border private equity investment by European funds into European companies (non-domestic) as percentage of total PE investment; M&A: cross-border M&A transactions with European companies (excluding domestic transactions) as percentage of total M&A activity; Debt issuance: issuance of corporate Eurobonds as percentage of total issuance of corporate bonds; Equity issuance: issuance of public equity in the national exchange by European companies (excluding domestic companies) as percentage of total public issuance; FX: average daily turnover of EUR and GBP as percentage of GDP.
Luxembourg continues to lead in intra-European integration as the EU's hub for the cross-border distribution of investment vehicles with the largest domicile of UCITS and AIFS in the EU. The UK continues to be among the most interconnected countries in Europe driven by its sizeable role in intermediating FX trading activity of other European currencies. According to the Bank of England, FX trading from London trading desks rose 24% YoY in H1 2021.

8.5: Intra-European capital markets integration by countries: 2021 and 2020 [0: Min, 1: Max]

Source: AFME

European capital markets integration with the rest of the world (RoW)

Capital markets integration with the RoW improved during the last year, predominantly due to an increase in private equity and M&A activities undertaken with non-European companies. The sizeable increase in non-European presence in these activities offset other minor contractions observed in other activities.

According to Dealogic, 44% of Europe’s (EU and UK) M&A deals were undertaken with companies outside Europe, a sizeable increase from 25% in 2020 but marginally above the proportion observed prior to the COVID outbreak (41% in 2019).

No major changes were observed in RoW holdings of debt issued by European companies compared to a year ago. However, debt issuance marketed globally has for a second year declined (albeit a small magnitude) from 15% of the total in 2019 to 12% in 2021.

Equity issuance on European exchanges by non-European companies declined from 7% of total equity raised in 2020 to 5% in H1 2021. See chart 8.7.
8. Cross-border finance indicator

8.6: Global integration index [0: Min, 1: Max]

8.7: Global integration index by components

The UK continued as the most globally interconnected European (EU and UK) capital market, followed by Luxembourg. The UK’s leading position is driven by its large role in intermediating global flows of interest rate derivatives and FX transactions. Luxembourg’s global interconnectedness is driven by the large portion of global equity and fund shares registered in Luxembourg. See chart 8.8

8.8: Cross-border RoW indicator: 2021 and 2020 [0: Min, 1: Max]

Source: AFME

---

Equity holdings: cross-border holdings in the RoW of equity shares and fund shares issued by European companies as a percentage of market capitalisation of listed shares and assets of open-end investment funds; Debt holdings: cross-border holdings in the RoW of bond instruments issued by European companies as a percentage of outstanding bonds (public and private); PE: cross-border private equity investment by European funds into RoW companies as a percentage of total PE investment; M&A: cross-border M&A transactions with RoW companies as percentage of total M&A activity; Debt issuance: issuance of global corporate bonds as percentage of total corporate bond issuance; Equity issuance: issuance of public equity in the national exchange by RoW companies as percentage of total public equity issuance; FX: average daily turnover of FX instruments as percentage of GDP; IRD: average daily interest rate derivatives trading as percentage of GDP.

---

Capital Markets Union: Key Performance Indicators
Page 64
BENCHMARKING THE QUALITY OF EU INSOLVENCY REGIMES

Reforming Europe’s disparate insolvency laws is a long-standing single market project. Currently, sub-optimal and inconsistent insolvency regimes are holding back European financial markets and growth in the real economy. This situation causes uncertainty among investors, discourages cross-border investment, and leads to delays in the restructuring of companies facing financial difficulty. They can also make it harder to address the potential increase in levels of non-performing loans, which can represent a challenge for the path to economic recovery.

According to an AFME study43, improvements in insolvency frameworks across the EU could increase EU GDP by between 0.3% and 0.55% over the long-term.

Various initiatives have been undertaken in this area at the EU and Member State level, with the most significant policy development the 2019 EU Directive on Restructuring and Second Chance. The Directive was a step in the right direction but further ambition is certainly needed. Successful implementation of minimum standards will require consistent adoption at member state level with a closer harmonisation of insolvency standards across the EU to embed key elements of effective insolvency laws and practices into national systems.

CONTINUED DISPARITY IN INSOLVENCY OUTCOMES AND DATA COMPARABILITY

In 2020, the EBA presented a detailed EU benchmarking exercise on recovery outcomes regarding bank loans. The study was a commendable achievement as comparison of hard-data insolvency outcomes in the EU.

The study also evidenced the continued disparity in insolvency outcomes across the EU when measured by average recovery rates (chart 8.9) or time to recovery (chart 8.10).

The exercise included certain limitations relating to methodology and scope. The study, for example, was not intended to measure insolvency proceedings for other important forms of credit agreements like bond instruments. The report also lacked data representativeness for some countries such as Germany, Ireland, or Belgium in certain key metrics for the corporate sector.

The World Bank Doing Business annual report consistently produced one of the only global comparison metrics for insolvency regimes, which, with some limitations, was a useful instrument to track evolution in this area. The World Bank is unlikely to continue this publication due to recent governance issues that compromised the accuracy of the report.

Going forward, in the absence of other metrics, it is crucial that EU authorities continue to measure the evolution of insolvency outcomes at a Member State level. EU authorities can evaluate various alternatives to introducing performance reporting by national insolvency agencies (e.g. on costs, timescales and asset recovery percentage) that assist policymakers to compare and keep track of insolvency outcomes and helps evaluate the need for reform.

43 AFME (2016) Potential economic gains from reforming insolvency law in Europe
Appendix 1: Key performance indicators by countries and components: Comparison of progress between 2021 and 2019

We have produced the above scorecard chart which seeks to assist in keeping track of evolution of the key performance indicators at the Member State level. Each cell shows in colour coded form if a country has increased, decreased, or shown no change in the indicator value over the last year.

The variation in the Loan Transfer Indicator takes into consideration the recent methodology changes as noted in section 7.
We have produced the above scorecard chart which seeks to assist in keeping track of evolution of the key performance indicators at the Member State level. Each cell shows in colour coded form if a country has increased, decreased, or shown no change in the indicator value over the last five years.

The variation in the Loan Transfer Indicator takes into consideration the recent methodology changes as noted in section 7.

44 Risk capital indicator not available for Malta and Poland for 2015 due to loan data unavailable.
Appendix 3

Appendix 3: Methodology and Data Sources

Scope of data collection

We have constructed eight Key Performance Indicators (KPI) in the form of composite indicators and ratios to assess progress across the seven political priorities of the CMU action plan.

The focus of the study is primarily European, although we have tried to compare EU capital markets with other non-EU jurisdictions on a best efforts basis where data is available.

The data is drawn from a wide range of sources, including contributions from trade associations, data platforms, Central Banks, Eurostat, and other international organisations.

All data is expressed in euros (€) unless otherwise stated and translated using period-end exchange rates as reported by the ECB.

Data collection and methodology

Market Finance Indicator

Data sources - IPOs, Secondary Offerings, Investment Grade and High Yield Bonds (all Dealogic), NFC loans new issuance (ECB, National Central Banks, Federal Reserve, OECD, Mortgage Bankers Association).

For the EU, NFC loans are estimated using bank loans to NFCs due to the relatively low participation of non-bank lenders. For some EU countries in which data provided by the ECB for bank loans to NFCs is incomplete, issuance is estimated using central bank data or longer-term trends. In the US, there is significant participation of non-banks in the loan market and so lending from non-banks needs to be accounted for in the indicator.

A recent OECD study published the amount of commercial and industrial (C&I) lending originated by banks in the US, using data originally sourced from the US Federal Reserve. The aggregation does not include loans originated by non-banks such as finance companies and insurers, and doesn’t include commercial real estate (CRE) or farm lending. Data from the Kansas City Fed was used to account for bank lending to farms and the Mortgage Bankers Association to account for bank and non-bank lending for CRE.

After adding the farm and CRE lending with C&I lending, this provides an estimate total US bank lending to NFCs, however the comparison of lending between EU and the US is not complete as non-bank lending to farms and C&I in the US needed to be accounted for (CRE lending data already included non-banks).

The Federal Reserve website states that bank lending represents c30% total outstanding lending to NFCs. This proportion is stable over the last 3 years and was used to estimate the total amount of C&I and farm lending originated by banks and non-banks. This gives the following breakdown and comparison:

US Bank lending = €2.28tn
CRE: $584bn
C&I: $501bn / 0.3 = $1.7tn
Farm: $90.1bn / 0.3 = $300bn

US bonds = €872bn
US equity = €136bn

Total financing for US NFCs = €3.29tn

EU bank lending = €3.5tn
EU bonds = €479bn
EU equity = €50bn

Total financing for EU NFCs = €4.1tn

The indicator does not consider NFC finance provided by unlisted equity and trade credit.
Loan Transfer Indicator
Data sources - Securitisation (AFME/SIFMA, JPMorgan), Portfolio sales (React News, FDIC for the US), outstanding loans (ECB, Federal Reserve).

As was the case with the Market Finance indicator, outstanding loans in Europe are estimated using outstanding bank loans, due to the relatively low participation of non-banks in the lending market in Europe. For the US, both bank and non-bank lending is considered when calculating outstanding loan volumes.

Sustainable Finance Indicator
Data sources – Green, social and sustainable/dual purpose bonds (Climate Bonds Initiative), securitisation (AFME/SIFMA, JPMorgan), NFC and Financial bonds (Dealogic), government bonds (ECB, SIFMA, national central banks), municipal and agency bonds (Dealogic), covered bonds (ECBC).

FinTech indicator
Data sources— Regulatory sandbox and innovation hubs (ESMA, EBA and EIOPA), investments in FinTech companies (Crunchbase); exits (Crunchbase); number of patents filed with the following key terms: "G06Q", "G07F", "G07G", "finance", “banking”, "fintech", "crypto", "insurance", “asset management” (google patents); valuation of FinTech unicorns (CB insights); M&A activity (Dealogic); percentage of working age population with tertiary degree (US FED, World Bank, Eurostat); STEM graduates (OECD, UNESCO, World Bank and Accenture).

Household market investment indicator
Data sources – Household financial assets for EU countries (Eurostat and OECD), and household financial assets for the US (US Federal Reserve, Balance Sheet of Households and non-profit organisations) and for non-EU countries (OECD), GDP (Eurostat and World Bank). Cash, deposits and unlisted shares are excluded from the aggregation to include only capital markets instruments. Includes equity shares, mutual fund shares, bonds, life insurance reserves and pension fund holdings.

ELTIF indicator
Data sources – ESMA ELTIF register.

Risk capital indicator
Data sources – SME loans new issuance (ECB, National Central Banks), Business Angel (EBAN, Crunchbase, and University of New Hampshire), Equity Crowdfunding (Crunchbase), and Private Equity (Invest Europe, Crunchbase and NVCA)

SME loans in this context are loans to NFCs with amount below €1m

Invest Europe private equity (PE) statistics do not include infrastructure funds, real estate funds, distressed debt funds, primary funds-of-funds, secondary funds-of-funds and PE/VC-type activities that are not conducted by PE funds. The aggregation basis for these statistics are the location of the private equity firm where the resources are invested.

Business angel statistics are EBAN estimates which assume that survey results (i.e. "visible market") represent 10% of the total market. This report includes both visible and non-visible market based on EBAN’s methodology.
Appendix 3

Cross-border finance indicator
Data sources – cross-border holdings of equity shares and fund shares issued by European companies (IMF); cross-border holdings of bond instruments issued by European companies (IMF); cross-border private equity investment based on the location of the fund (Invest Europe and Eikon); cross-border M&A transactions (Dealogic); issuance of global corporate bonds (Dealogic); issuance of corporate Eurobonds (Dealogic); cross-border issuance of public equity in the national exchange (Dealogic); FX average daily turnover (BIS); average daily interest rate derivatives trading (BIS).

Both the European integration indicator and the global integration indicator are estimated as weighted averages of the standardised value of the different inputs. The results are later normalised into an index that ranges from 0-1 subtracting from each score the minimum score value from the sample divided by the maximum and minimum values: (X-min/max-min)

The results were validated using principal components analysis, with minor differences in trends and rankings. A sensitivity analysis was also undertaken by removing FX and cross-border equity issuance (using principal components analysis), which resulted in a significantly lower integration level in 2017 compared to that pre-crisis— the country rankings also exhibited variation compared to those presented in the report.

Considerations on the indicators

In the report we have compared average values for 2015 to 2019 with 2021 H1 values to assess how the 2021 H1 values have changed with respect to longer term averages and to pre-pandemic levels. There can though be significant annual volatility in the values especially for countries with relatively small capital markets.

For the construction of the cross-border composite indicators, it is important to consider that each of the components are proxies of the cross-border flow they intend to measure and may have limitations of their own.
Bibliography


BIS (2021) "Funding for fintechs: patterns and drivers" In BIS Quarterly Review- International banking and financial market developments. September 2021 https://www.bis.org/publ/qtrpdf/r_qt2109.pdf


Contacts

Julio Suarez
Director, Research
Julio.Suarez@afme.eu
+44 (0)20 3828 2726

Matt Johnston
Analyst, Capital Markets
Matt.Johnston@afme.eu
+44 (0)20 3828 2702

Pablo Portugal
Managing Director, Advocacy
Pablo.Portugal@afme.eu
+32 2 788 39 74

Rick Watson
Managing Director, Head of Capital Markets
Rick.Watson@afme.eu
+44 (0)20 3828 2737
About AFME

The Association for Financial Markets in Europe (AFME) is the voice of all Europe’s wholesale financial markets, providing expertise across a broad range of regulatory and capital markets issues.

We represent the leading global and European banks and other significant capital market players.

We advocate for deep and integrated European capital markets which serve the needs of companies and investors, supporting economic growth and benefiting society.

We aim to act as a bridge between market participants and policy makers across Europe, drawing on our strong and long-standing relationships, our technical knowledge and fact-based work.

Focus
on a wide range of market, business and prudential issues

Expertise
deep policy and technical skills

Strong relationships
with European and global policy makers

Breadth
broad global and European membership

Pan-European
organisation and perspective

Global reach
via the Global Financial Markets Association (GFMA)