

# **Capital Markets Union**

# Key Performance Indicators – Third Edition

**European Capital Markets – challenges and progress in 2020** 

October 2020



In conjunction with:





















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# October 2020

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# **Foreword**

Since the foundation of the European Union, Europe has sought to fulfil its potential of creating a single market for capital. The introduction of the Capital Markets Union (CMU) project in 2015 by the European Commission looked to accelerate this process by deepening and further integrating the capital markets of EU member states. The success of this ambitious project is not only important to investors and businesses but all EU citizens as it will help savings and investments flow across the continent and support economies.

However, the path for Europe's progress has not been a straight one. From 2018 AFME with the support of nine other trade associations began releasing an annual report on the development of Europe's capital markets. The reports provide policymakers, market participants and other stakeholders with valuable insights on Europe's progress and identify areas for improvement.

Over recent years, these CMU reports have evidenced that while progress has been made in advancing the role of capital markets in Europe, there is still much work to be done to reduce Europe's overwhelming reliance on bank lending for funding its economy.

This year's report arrives during an extremely challenging period for European economies. Engulfed by the challenges of coronavirus, now more than ever Europe needs well-functioning capital markets to channel funding to businesses. Equally, Europe is also at a juncture where it needs to establish itself as being at the forefront of both green and digital agendas that will define future business models.

"Now more than ever Europe needs wellfunctioning capital markets to channel funding to businesses in need of support"

In light of the latest challenges and trends, in September the Commission published its new CMU Action Plan where it proposed 16 sets of legislative and non-legislative actions to advance the CMU's objectives. These objectives include creating a true single market for capital, helping EU savers in the short and long-term, as well as supporting a green, digital, inclusive and resilient economic recovery from the pandemic.

To that end, we hope this report provides the necessary context and evidence on how Europe's capital markets have performed in the first half of 2020, in order to help fuel industry discussion and assist policymakers across Europe.

We would like to thank ten 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 (InvestEurope), private credit and direct lending (ACC), business angels (BAE, EBAN), and crowdfunding (ECN).



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# **Capital Markets Union**

Key Performance Indicators – Third Edition

**European Capital Markets – challenges and progress in 2020** 



# Executive summary and overview of indicators

# Executive summary and overview of indicators

This report is the third edition in a series of annual reports which tracks the development of a European capital markets ecosystem. The report assesses Europe's progress in improving the depth of its capital markets against 7 key performance indicators, as well as providing an industry perspective on some of the challenges and barriers that might impede its development.

The Capital Markets Union (CMU) is a flagship European financial sector project which seeks to develop and integrate capital markets in the EU. Efficient and well-developed capital markets are essential to meeting the financing and risk management needs of European citizens, enterprises and public authorities. Importantly, an integrated and well-functioning CMU can help strengthen EU competitiveness and contribute to accelerating the post-pandemic economic recovery.

2020 is a crucial year for EU capital markets. On 24 September, the European Commission launched a new Action Plan for CMU featuring 16 sets of actions with their respective timelines. Additionally, the European co-legislators are in the final stages of agreeing on the size and composition of the EU budget for 2021-2027 which includes unprecedented initiatives to facilitate recovery from the impact of the COVID-19 pandemic. Their success requires deep and fully functioning capital markets to assist with the origination and investment of the EUR 750bn of EU bonds to fund the COVID-19 recovery. Capital markets will also have a key role to play in facilitating the funding of new green projects (including through green bonds) which will represent 30% of the EU budget; and in supporting the move towards a digital economy— one of the main pillars of the EU budget.

2020 will also mark the end of the transition period for the UK's withdrawal from the EU. This report takes into consideration the performance of capital markets in EU member states and the UK across several areas.

EU capital markets will be pivotal in promoting long-term economic growth and a recovery from the severe impacts of the COVID-19 crisis.

"The report provides an opportunity for policymakers, market participants and other stakeholders to review the CMU's progress and to assess the challenges ahead"

The report provides an opportunity for policymakers, market participants and other stakeholders to review the CMU's progress and to assess the challenges ahead. We have updated our indicators calculated with data for the first half of 2020, to try and capture some of the initial impact of the pandemic on capital markets. A summary of each indicator and what it measures is shown below:

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

- **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. 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;
- **3. Loan Transfer Indicator:** measures the capacity to transform bank loans into capital markets instruments such as securitisations, covered bonds and loan transactions;
- **4. FinTech Indicator:** assesses to what extent national countries are able to host an adequate FinTech ecosystem;
- **5. Sustainable Finance Indicator:** quantifies the labelling of sustainable new bond issuance;
- **6. Pre-IPO Risk Capital Indicator:** assesses how well start-ups, small and medium enterprises (SMEs) and non-listed companies can access risk capital finance; and
- **7. Cross-border Finance Indicator:** measures capital markets integration within Europe and with the rest of the world.

# Main findings

We have updated our indicators with data covering the first half of 2020 (H1 2020) to capture the impact of the pandemic on European capital markets. We have annualised H1 2020 issuance figures for the various asset classes to adequately compare them with the market performance of recent years.

Most of the indicators as of H1 2020 show a positive or neutral trajectory compared to five years ago, with some deterioration in the majority of indicators over the last year due to market fluctuations caused by the COVID-19 pandemic.



**Resilience of market-based funding.** Throughout the first half of 2020, EU27 corporates have benefited from an unprecedented amount of funding from capital markets instruments, predominantly fixed income securities. The large volume in capital markets financing together with an increase of a smaller magnitude in bank lending has led to some rebalancing of the EU's non-financial corporate funding structure resulting in an increase in the proportion of market finance for EU corporates from 11% in 2019 to 14.5% in H1 2020.

There are some notable exceptions across EU Member States. In Italy, public corporate equity and bond issuance have both fallen to historic lows, with the proportion of market finance for Italian corporates falling to 4% in H1 2020 (vs 7% in 2019 and 2015).

Corporate funding from private markets in H1 2020 (private equity and private debt) has remained resilient, with funding levels that are close to or above those observed in previous years.

Prior to the COVID-19 pandemic, our indicators had shown minor progress at diversifying the EU's corporate funding structure with a minor increase in the proportion of market finance for EU corporates from 10% in 2015 to 11% in 2019.



European households have significantly increased their proportion of savings in the form of deposits. Households have increased at record levels their savings rate to 16% of their disposable income in 1Q 2020 (vs. 12% in 2019). However, most of those savings have been invested into low-yielding bank deposits.

Households' deposits have sharply increased since the COVID-19 outbreak from an annual growth rate of 5.4% in 2019 to 7.3% in June 2020 in the euro area and from 3.9% in 2019 to 7.5% in June 2020 in the UK.



Loan transfers increased significantly in 2020, but predominantly in the form of covered bonds. Securitisation and loan portfolio sales remain subdued. In H1 2020, there has been a dramatic increase in covered bond issuance in the EU27 driven by the large increase in new lending stemming from the COVID-19 pandemic and the ongoing central bank purchases of covered bonds. This has more than offset reductions in securitisation issuance and loan portfolio sales, propelling the Loan Transfer Indicator to unprecedented levels in H1 2020.

Progress over the last five years in the capacity of banks to transfer loans into tradeable securities has been limited. Securitisation volumes have fallen year-on-year since the start of the Simple Transparent and Standardised (STS) securitisation regime in January 2019. Loan portfolio sales have declined steadily since a peak volume was recorded in 2018 as banks continued to shed NPLs from their balance sheets.

Throughout the first half of 2020, EU27 corporates have benefited from an unprecedented amount of funding from capital markets instruments

Households' deposits have sharply increased since the COVID-19 outbreak

Securitisation volumes have fallen year-onyear since the onset of the Simple Transparent and Standardised (STS) securitisation regime



Positive public sector initiatives to facilitate FinTech innovation. Seven European countries launched innovation hubs for at least one financial services activity over the last year (BG, HR, CZ, EE, GR, SK, and SI). Of the EU27 member states only Malta has not yet established an innovation hub although the initiative is currently under consideration. These national developments, in addition to the EU-level "European Forum for Innovation Facilitators" (EFIF) between EU supervisors, are set to improve the EU FinTech ecosystem.

Investment into EU27 FinTech companies continue to be significantly below that of other major regions like the US

Investment into EU27 FinTech companies continues to be significantly below that of other major regions like the US. EU27 FinTech companies benefited from EUR 1.5bn in investments in H1 2020 vs. EUR 7.4bn in the US and EUR 2.1bn in the UK over the same period.



**Decline in the proportion of newly originated bonds labelled "sustainable" due to record issuance in overall corporate and sovereign bonds.** Although sustainable bond issuance has remained robust in H1 2020, the proportion of EU27 bonds labelled "sustainable" relative to total bond issuance declined from 5.6% in 2019 to 4.3% in H1 2020 as corporates and sovereigns expand total primary market issuance to navigate the impact of COVID-19.

2020 has seen the emergence of COVID-related social bonds

2020 has also seen the emergence of COVID-related social bonds. Throughout H1 2020, 27% of sustainable bond issuance in Europe was categorised as social, the largest proportion of the sustainable market in any half year to date.

There has been a substantial progress in the area of Sustainable Finance over the last 5 years. Europe has established as the global leader in ESG markets with 52% of global sustainable bond issuance in 2020.



Bank lending consolidates as the main source of funding for SMEs. The proportion of new equity risk capital as a share of total funding for EU SMEs declined from 2.5% in 2019 to 1.8% in H1 2020 (and from 2.0% in 2015). The decline in H1 2020 was driven by the large increase in bank lending for SMEs possibly due to borrowers drawing down on facilities as the impacts from the COVID-19 pandemic began to be felt, with volumes of risk capital relatively unchanged compared to those observed in recent years.

Bank lending to EU27 SMEs totalled EUR 573bn in H1 2020 compared with only EUR14.1 bn in risk capital investment

Bank lending to EU27 SMEs totalled EUR 573bn in H1 2020 compared with only EUR 14.1bn in risk capital investment (venture capital, private equity, business angel and equity crowdfunding).



**Resilience in European integration.** The COVID-19 crisis has not significantly disrupted intra-European cross-border funding flows. Companies have sought to raise finance within Europe to navigate the pandemic. Corporates increased the proportion of debt marketed within Europe (as opposed to being marketed only within their local jurisdiction) with 96% of new NFC debt marketed in Europe, vs. 93% in 2019 and 60% in 2007.

The COVID-19 crisis has not significantly disrupted the intra-European cross-border funding flows

Our indicators show a consistent increase in intra-European integration over the last 5 years, which was not reversed by the COVID-19 pandemic. However, integration with the rest of the world slightly deteriorated in H1 2020.

Table 1 compares the progress made over the last 5 years at EU level against each of the key performance indicators.

Table 1: Progress of EU27 Capital Markets Against Key Performance Indicators<sup>1</sup>

	Indicator	What this indicator measures	2015	2019	2020 H1*	National Findings
	Market Finance NFC Equity and Bond issuance as % of total NFC annual financing	Capacity for companies to raise finance on public markets	10.4%	11.5%	14.5%	The Netherlands led European countries in the proportion of market-based funding for NFCs after record bond issuance during H1 2020.  In Italy, equity and debt issuance have both fallen to historical lows, with the market finance indicator falling to 4% in H1 2020 (7% in both 2019 and 2015).
<b>\$</b>	Household Market Investment Household financial assets saved in financial instruments (excluding cash, deposits and unlisted equity) as % GDP	Availability of savings from retail investors to support capital market financing	101%	104%	103%	The Netherlands continued to lead the indicator ranking in Q1 2020 with household capital markets savings at above 250% of GDP.  Sweden saw the largest relative decline in the indicator value during Q1 2020, driven by a decline in households' listed shares holdings (-22% QoQ) and investment fund shares (-23% QoQ).
	Loan Transfer Securitisation, covered bond issuance and loan portfolio transactions as % of outstanding bank loans	Capacity to transform bank loans into capital markets instruments (securitisation, covered bonds and loan transactions)	6.1%	5.8%	8%	Sweden, the Netherlands and Finland significantly improved indicator positions in H1 2020 as covered bond issuance, rather than loan portfolio sales and securitisations, becomes the dominant factor in the country rankings.
	FinTech Composite indicator of funding for FinTech companies, talent pool, regulatory environment, and innovation. Range 0-1	Ability of EU countries to enable an adequate FinTech ecosystem	-	0.18	0.31	BG, HR, CZ, EE, GR, SK, and SI set up innovation hubs for at least one financial services activity over the last year.  Malta is the only EU 27 country that has not established an innovation hub although the initiative is currently under consideration.

<sup>1</sup> For purpose of estimating trends, this table compares the respective indicators for the period 2015 (as the baseline of pre-CMU initiatives) against the most recent performance in 2019 and 2020.

	Indicator	What this indicator measures	2015	2019	2020 H1*	National Findings
Ø	Sustainable Finance Sustainable bond issuance as % of total bond issuance	Labelling of sustainable bond markets	0.7%	5.6%	4.3%	Luxembourg has the highest indicator value in 2020 H1, with 27.9% of bonds issued in the country being labelled sustainable.  France and the Netherlands remain the leaders in absolute terms accounting for 55% of total EU27 sustainable finance issuance in H1 2020 (39% in 2019).
	Pre-IPO Risk Capital Equity crowdfunding, Business Angel Growth Private Equity investment, and venture capital investment as % of loan and risk capital financing	How well start- ups and non- listed companies are able to access finance for innovation	2.0%	2.6%	1.8%	Ireland leads in risk capital availability with a large participation of private equity and venture capital of EUR 300mm in H1 2020 vs EUR 1.6bn in SME lending.
	Cross-border Finance Composite indicator of cross-border M&A transactions, equity & bond issuance, Private Equity, and portfolio holdings. Range 0-1	Capital markets integration within Europe	0.21	0.24	0.24	Luxembourg and the UK continued to lead as the most interconnected capital markets in Europe.  Luxembourg's top position is driven by the interconnectedness of its fund management industry.
		Capital markets integration with the rest of the world	0.25	0.30	0.28	The UK 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.

<sup>\*</sup>Data as of 2020 H1 except for the Household Market Investment indicator which is based on Q1 2020 data.

# **Table 2: European Country rankings by indicator**

The table below shows country rankings for member states across the indicators included in this report.

The country rankings continue to show the prevalence of Northern European countries (UK, IE, SE, DK, NL) across most of the indicators. Central and Eastern European countries continue to occupy the lower tier of the rankings.

	Market Finance Indicator	Households Market Investment Indicator	Loan Transfer Indicator	FinTech Indicator	Sustainable Finance Indicator	Risk Capital Indicator	Intra- European Integration	Global Integration Indicator	Average ranking 2020	Average ranking 2019	Average ranking 2018
Austria	13	10	13	13				18	7	12	10
Belgium	14	5	28	15		14	12		12	6	11
Bulgaria	28	24	28	25	28	16	27	15	25	23	26
Croatia	28	16	28	23	28	28	28	17	27	28	28
Cyprus	28	17	15	27	28	20	4	2	18	13	24
Czech Republic		20	28	21	28	21	22	25	22	23	15
Denmark	16	3	1	4	28	9	17	11	9	4	3
Estonia	19	22	7		28	2	2	24	14	17	19
Finland	5	14			28	4	5	20	10	9	7
France	4		11	12	5	12	19	12	5	8	5
Germany			10			13	16	14	6	11	8
Greece	17	26	3	14	13	28	15	22	17	18	14
Hungary	28	18	28	19	28	5	25	13	19	25	22
Ireland	2	13		10	28	1		3	4	2	6
Italy	18		5	28	12	19	14	21	16	16	12
Latvia	28	23	28	17	28	7	20	26	24	21	17
Lithuania	11	27	28	3	10	11	10	19	15	10	20
Luxembourg	15	12	28	11	1	15	1	5	7	7	13
Malta	28	- 11	28	20	28	28	21	4	20	20	21
Netherlands	1	1	4	5	2	8	8	8	2	3	2
Poland	20	25	28	6	28	NA	24	16	20	19	18
Portugal	10	15	14	16	4	18	7	23	13	15	15
Romania	7	28	28	26	28	22	23	9	22	21	23
Slovakia	28	19	28	22	28	28	13	28	26	27	27
Slovenia	28	21	28	24	28	28	26	27	28	26	25
Spain	12			18		17	11	10	10	13	9
Sweden		4	2	2	3	10	18		3	5	4
UK	3	2	12	1	11	3	3	1	1	1	1

Ranked 1

Higher rankings

Lower rankings

NA: data not available to produce the indicator.

Countries with no capital markets activity in a given indicator are ranked 28th.

# **Policy recommendations**

The European Commission has recently unveiled its long-awaited new Action Plan for CMU. The Action Plan outlines the strategy for the next phase of the CMU and expected legislative initiatives for capital markets through 2023.

In light of the new Action Plan, we have identified the following key policy recommendations for policymakers to consider. These broad policy recommendations summarise the views supported by the 11 associations co-branding this publication.

**1. Promoting investment and recapitalisation:** Recapitalisation of Europe's companies and the financial landscape is an immediate priority in the face of the COVID-19 crisis. The increased levels of debt in the corporate sector as a result of government sponsored liquidity schemes may generate a debt overhang which will act as a drag on recovery. Measures to recapitalise businesses through additional equity or the resizing of debt should be at the forefront of policymakers' considerations.

Public schemes designed to support businesses in the current crisis, in particular new EU mechanisms, should seek to unlock equity capital.

The upcoming review and simplification of listing rules will be fundamental to promote access to public markets, particularly for SMEs. This is especially important as Initial Public Offerings (IPOs) of equity remain subdued and under-sized in the EU, in some cases losing ground to other jurisdictions.

It is encouraging that the European Commission will review the legislative framework for European long-term investment funds (ELTIFs) to promote investment into unlisted corporates and infrastructure projects.

Measures aimed at facilitating long-term investment by institutional investors, such as addressing the regulatory obstacles to insurance companies investing long-term, reducing barriers faced by non-bank lenders and reforming the prudential treatment of long-term SME equity investment by banks, are steps in the right direction.

Member States can continue to consider policy measures that help bridge financing for viable SMEs that were planning to issue IPOs before the COVID-19 outbreak. The EU should also continue its efforts to support "junior exchanges2", including the inception of an EU IPO fund as proposed by Commission President von der Leyen.

**2. Pre-IPO SME funding:** bank lending has continued to consolidate as the main source of funding for SMEs. The EU should support investment in risk capital through venture capital, private equity and private credit funds and continue to pursue efforts towards creating a single market for business angel investing.

The new ECSP (European Crowdfunding Service Provider for Business) regulation aimed at stimulating a pan-European community of early stage investors and creating a single market for crowdfunding platforms is a step in the right direction.

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 EU27 based start-ups could incorporate.

<sup>2 &</sup>quot;Junior" exchanges are stock markets where companies sell new shares to institutional investors, and sometimes to the public, to raise equity capital. "Junior" exchanges usually have less onerous obligations in terms of financial costs and disclosures, both at admission to trading and throughout the company's public life.

# Executive summary and overview of indicators

**3. Restoring a well-functioning European securitisation market:** It is now more important than ever to support high-quality securitisation and deliver a more proportionate and attractive framework for issuers and investors. Securitisation can play an important role in supporting financing to the economy, particularly for SMEs, and in the management of the expected increase in levels of non-performing exposures (NPEs), among other functions. It can also be an important tool in supporting ESG investment.

It is very positive to see the Commission's intention to carry out a comprehensive review of the EU securitisation framework for both Simple, Transparent and Standardised (STS) and non-STS securitisation in order to scale-up the securitisation market in the EU.

The CMU High-Level Forum provided well targeted and prudentially sound recommendations to adjust the securitisation framework. They should be implemented to their full extent as soon as feasible. This will allow capital market investors to play their full role supporting the real economy make it easier for banks to undertake new lending to consumers and SMEs.

**4. Developing deep pools of capital:** It is crucial that CMU continues to encourage households to save via long-term instruments that provide financial security for retirement. Policymakers should take steps to help households overcome the short-term uncertainty and liquidity constraints from the COVID-19 pandemic which could affect their long-term retirement savings decisions.

Tax incentives to promote retirement savings and savings in the pan-European occupational pension plan (PEPP), green investment products, ELTIFs and other long-term, less liquid assets should also be considered, along with a holistic review of existing regulation to provide meaningful and consistent disclosures for investors at the retail point-of-sale. The European Commission's intention to develop best practices to stimulate participation in occupational pension schemes is a welcome initiative; this could facilitate the development of occupational pensions in Europe, including pan-European occupational pension plans.

The European Commission should consider improving the capacity of sophisticated investors to invest in financial markets by better tailoring the applicable investor marketing rules.

**5. A green recovery:** The development of the CMU is a pre-condition for the success of the sustainable finance agenda and, therefore, the fulfilment of the EU's climate change objectives. The EU should continue to build on its global leadership in sustainable finance through the completion of its existing initiatives followed by an effort to encourage international convergence in this field.

We look forward to the publication of the European Commission's renewed Sustainable Finance strategy to implement Europe's long-term sustainability objectives.

- **6. A digital level playing field.** It is essential that the recently launched European Commission Digital Finance package leads to the development of an EU regulatory framework that is fit for the digital age and applies the principle of 'same activity, same risk, same regulation' to allow market participants to innovate, in a risk- and principles-based manner.
- **7. Improving legal and operational consistency in the single market:** European authorities must redouble efforts to bring to fruition aspirations such as the introduction of a common EU-wide system for withholding tax relief at source. The fragmentation of withholding tax claim processes and insolvency laws are key impediments to a single and truly integrated EU capital market and a significant impediment to investors. We commend the ambition shown by the European Commission and the initiatives proposed to address these challenges.

The introduction of an EU definition of 'shareholder' and further clarification on the rules governing the interaction between investors, intermediaries and issuers is a welcome initiative.

We hope that these recommendations provide a useful contribution to develop further a Capital Markets Union.

The rest of the report is organised as follows. Chapters 1-7 present the recent evolution of each of the seven Key Performance Indicators at the EU and Member State level. Appendices 1 and 2 summarise in a scorecard table recent progress for EU Members States in each of the KPIs, and Appendix 3 describes the data sources and methodology used to produce the indicators.

"We hope that these recommendations provide a useful contribution to develop further a Capital Markets Union"

### Market Finance Indicator

# 1. Market Finance Indicator

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)<sup>3</sup>, 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<sup>4</sup>.



Flow measures<sup>5</sup> (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.

# Central Bank support at the centre of capital markets resilience

Throughout 2020, European corporates have benefited from an unprecedented amount of funding from capital markets instruments, predominantly fixed income securities. The large volume of capital markets support has led to some rebalancing of the EU's non-financial corporate funding structure.

In 2019, capital markets instruments (public equity and bonds) represented 11.5% of the total new flow of finance for EU27 non-financial corporates (30.7% in the US) with the 88.5% remaining from bank lending. In H1 2020, the proportion of markets-based funding for EU27 corporates rose to 14.5% as shown on Chart 1.1.

During the COVID-19 outbreak, which began to affect EU countries from mid-March of 2020, the record volume in investment grade bond issuance and the increase in secondary equity offerings resulted in a larger proportion of capital markets funding for EU NFCs. Bank lending has also rapidly increased albeit at a lower rate than that of bond issuance, therefore increasing the value of the Market Finance Indicator for the EU and Europe (EU+UK).

In H1 2020, the proportion of markets-based funding for EU27 corporates rose to

14.5%

- 3 Non-financial corporations produce goods and services for the market and do not, as a primary activity, deal in financial assets and liabilities.
- 4 The indicator does not consider NFC finance provided by unlisted equity and trade credit.
- 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.

# EU27 + UK — EU27 — United States 30% 30.7% 16.1% 14.5%

# 1.1: Market Finance Indicator (NFC equity and bond issuance as a % of total NFC annual financing)6

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

During the initial outbreak of COVID-19 in Europe, from late February to mid-March, markets were effectively closed to capital raising for many companies, in particular for smaller and non-investment grade firms. Due to the monetary policy interventions of central banks, such as the ECB Pandemic Emergency Purchase Programme, markets partially reopened in subsequent weeks.

Between March and May, the European Central Bank (ECB) purchased 19.5% of the new flow of euro area bond issuance with purchases of EUR 39bn of corporate bonds compared with EUR 179bn of euro area IG bond issuance. The role of central bank intervention highlights the resilience of markets which appears to be largely conditional on central bank support.

In the US, issuance volumes of both corporate bonds and public equity instruments have also surged throughout 2020 as companies deal with the effects of the pandemic. However, as data for bank loan issuance is unavailable at the time of release of this report, we are unable to accurately predict the value of the indicator for 2020 and instead show the indicator value for 2019, where 30.7% of funding for US NFCs was derived from capital market instruments.

# EU capital markets reach unprecedented heights

Throughout 2020, the issued amount of market-based finance in Europe (EU+UK) totalled EUR 380bn by the end of June 2020, which represented an annualised growth rate of 44% YoY.

While there has been increased origination of new bank loans in H1 2020 with annualised growth of 14% YoY, this has been below the large relative increase in follow-on equity issues and investment grade bonds, pushing the Market Finance Indicator for Europe to the highest level on record as of June 2020.

Between March and May, the European Central Bank (ECB) purchased

19.5% of the new flow of euro area bond issuance

2020H1

## 1. Market Finance Indicator

As can be seen from Chart 1.2, Europe's corporate market-based funding landscape is dominated by bond financing, which in 2019 accounted for 90.6% of total market-based funding.

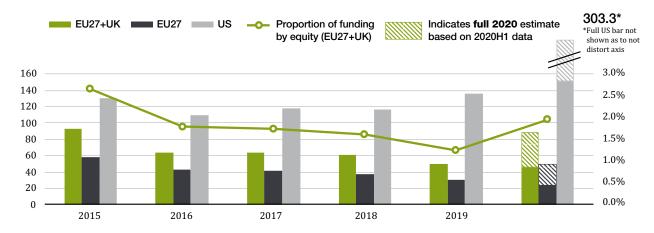
# 1.2: Breakdown of European (EU+UK) market finance (EUR bn) and Market Finance Indicator (MFI)



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

Equity markets have rebounded during 2020H1 with EUR 45.8bn issued as of the end of June, which is only 8% lower than the full-year issuance volume seen in 2019. See chart 1.3.

# 1.3: Evolution European and US equity funding (EUR bn)

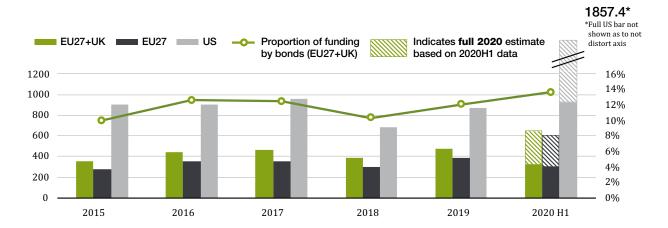


Source: Dealogic, US FED, ECB, BoE and other European central banks

Equity volumes so far in 2020 have been driven from record-breaking follow-on issuance, which has accounted for 90% of equity funding volumes. The IPO market, on the other hand, is currently at a record-low with only EUR 4.8bn being raised in H1 2020, the lowest H1 volume in any year AFME currently holds data for.

There has been a gradual increase in activity in European corporate bond markets from 2015 to 2020, with every year except 2018 showing YoY increases in bond issuance volumes. With EUR 333.9 bn in total bond issuance in 2020 H1, 2020 looks set to be another record-breaker in bond issuance. See chart 1.4.

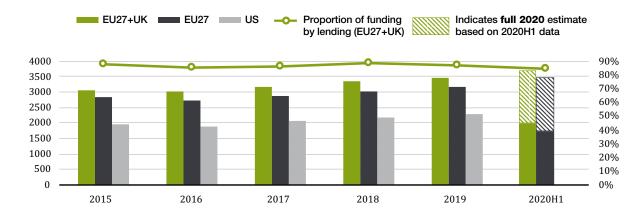
# 1.4: Evolution of European and US bond issuance (EUR bn)



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

Bank lending, the dominant funding mechanism overall for European corporates, rose by 13% from EUR 3.1tn in 2015 to EUR 3.5tn in 2019. In H1 2020, EUR 2.0tn was originated in new bank loans for corporates in Europe, which is a larger increase in absolute terms than market-based finance channels but lower in relative (percentage) terms. The 14% increase in bank lending in H1 2020 is largely driven by the state-loan guarantees issued by European governments as a policy response to the pandemic. See Chart 1.5.

## 1.5: Evolution of European and US bank new bank lending<sup>7</sup> (EUR bn)



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

The **14%**increase in bank lending is largely driven by the state-loan guarantees issued by European governments as a policy response to the pandemic

### 1. Market Finance Indicator

# **Country Analysis**

There has been a broad uptake of market-based finance across Europe in recent years with 13 countries improving their indicator values in H1 2020 compared to 2015 and 10 deteriorations in indicator position (5 countries had no observable market finance provision in both years).

Notably, the Netherlands has led EU countries in 2020 H1 with 39% of funding for NFCs stemming from market-based instruments from January to June, almost doubling its indicator value of 21% from 2019. A surge in bond market issuance meant EUR 41.5 bn of market-based finance has been issued in the Netherlands during 2020H1, which is 27% greater than in the entire volume issued in the year of 2019.

Romania, which in 2015 had only 4% of funding for NFCs stemming from capital markets, reached 12% in 2019 and 18% in 2020 H1 as there was an increase in bond market issuance. EUR 0.85 bn of bonds were issued in the country during H1 2020, which is only 29% below the full-year issuance in 2019, which was the most active year in Romanian bond markets to date.

Finland, Sweden and Germany have also seen performance in the market finance indicator increase substantially during 2020, compared to 2015, and more modestly compared to 2019. While the performance of capital markets, and specifically debt markets, in 2020 is linked to the response of European governments to COVID-19 and various central bank interventions, the boom in European bond issuance has meant many countries have reached unprecedented levels of market-based financing for NFCs.

In the Czech Republic, the market finance indicator has increased dramatically from 2015 to 2019 as debt issuance increased 106% YoY during 2019, to EUR 5.9 bn, the highest annual issuance volume to date. During 2020 H1, Czech debt markets have maintained momentum with EUR 2.8 bn issued so far, which means 2020 is already the third most active year in debt market issuance in the Czech Republic, after 2018 and 2019.

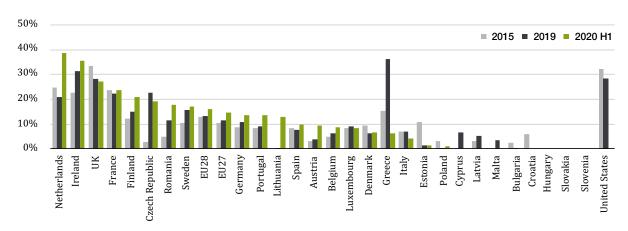
While many countries improved their uptake of capital markets instruments, some notable exceptions remain: The UK has dropped the proportion of market-based funding from 33% in 2015 to 27% in 2020, driven by an expansion in bank loan issuance (+55% YoY in H1 2020 on an annualised basis). In Italy, equity and debt issuance have both fallen to historical lows, with the market finance indicator falling to 4% in H1 2020, down from 7% in both 2019 and 2015.

The Netherlands has led EU countries in 2020 H1 with

39% of funding for NFCs stemming from marketbased instruments The UK has dropped the proportion of market-based funding from

33% in 2015 to 27% in 2020

# 1.6: 2020 H1 Market Finance Indicator by country and comparison with 2019 and 2015: NFC bond and equity issuance as % of total NFC financing



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

During 2019, Greece saw the most active year in terms of debt issuance, with EUR 4.57bn issued, up 674% compared to 2018 and 381% compared to 2015. Simultaneously, new origination of bank loans in Greece fell by 26%, from EUR 10.8 bn to 8bn, representing the largest proportional fall in bank loan issuance in Europe, pushing the proportion of funding derived from markets to record levels. Market based finance for NFCs in Greece is driven almost entirely by debt issuance, with equity markets only recording a single deal between 2015-2020H1 for EUR 5.1mm.

### 1. Market Finance Indicator

## Private markets evolution in 2019 and 2020

2020 has been an exceptional year for corporate financing through public and private markets. As noted in this chapter, in 2020 market-based finance provided a significant contribution towards helping corporates navigate the pandemic with unprecedented amounts in corporate bond issuance and robust capital raising through secondary equity offerings.

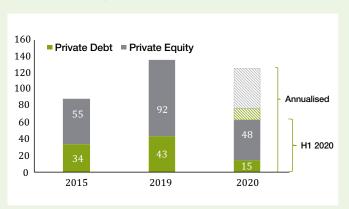
Charts 1.7 and 1.8 show the various public and private funding channels for Europe in 2015, 2019 and 2020H1. As can be seen on Chart 1.8, Corporate funding through private markets has also continued substantially resilient, with funding levels that are close or above those observed in previous years (on an annualised basis).

# 1.7: European new gross issuance of NFC bonds and equity through public markets (EURbn)

### - H1 2020

Source: Dealogic

# 1.8: European private equity investments and private debt fundraising (EURbn)

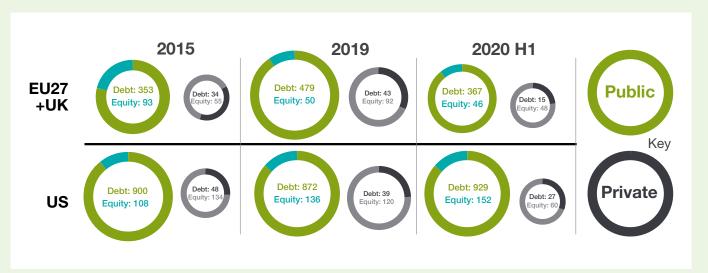


Source: Prequin, InvestEurope, Eikon

The significant increase in funding from public markets has been mirrored by a reduction in the proportion of funding derived from private markets in both Europe and the US (see Dashboard 1.9), with Europe increasing the proportion of funding for NFCs derived from public markets from 83% in 2015 to 86% in 2020H1.

The US has increased the percentage of funding for NFCs derived from public markets to 93% during 2020H1, up 8% compared to 2015. This has been driven largely by the unprecedented volumes issued in the US bond markets throughout H1 2020, with EUR 929 bn issued as of end June 2020.

# 1.9: New gross issuance of NFC debt and equity through public markets, private equity investments and private debt fundraising 2015-2020H1 (EUR bn)<sup>8</sup>



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

Access to finance for corporates is critical in the current abnormal economic circumstances and will be crucial to facilitate a smooth recovery process. A likely consequence of the pandemic will be for strong businesses to find themselves in need of bridging finance or more complex liquidity solutions that require investors with a range of risk appetites. Therefore, it is essential for policymakers to support private equity and credit funds which are typically more able to provide this type of financing. This will also free up bank capital to be deployed more effectively within the economy.

The European Commission's CMU initiative should continue to facilitate access to finance, both from public and private markets, so that companies can benefit from a wide range of sources of funding.

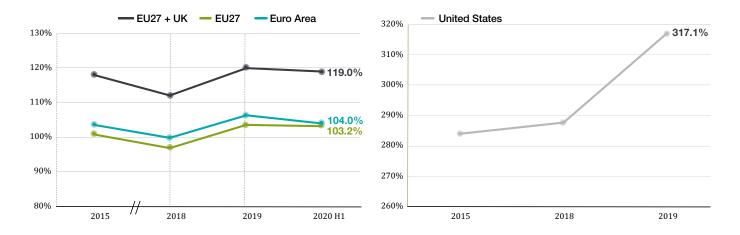
## 2. Household Market Investment Indicator

# 2. Household Market Investment Indicator

Pools of capital are at the core of successful capital markets. The household market investment indicator measures the availability of savings from retail investors to support capital markets financing. 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, investment fund shares, bonds, life insurance reserves and pension fund holdings.



# 2.1: Household Market Investment Indicator: Household market financial assets (excluding cash, deposits and unlisted equity) as % of GDP



Source: Eurostat and OECD

<sup>9</sup> Unlisted shares, which are not necessarily a capital markets instrument, are not included the indicator.

# 2019 was a successful year for European households' long-term investment allocation

Following the abrupt decline in market valuations observed at the end of 2018, European households fully recovered the losses in 2019 with an increase of 11% in savings through capital markets instruments. The net increase in savings through capital markets instruments highlights the importance of long-term investment strategies and cautious investment decisions in presence of temporary market dislocations.

In 2020, as a result of the COVID-19 outbreak, asset prices once again abruptly declined, predominantly in March with a partial recovery during the second quarter of 2020. European equity share prices declined between 13.6% YtD as of end June of 2020 (STOXX600), with large losses in Q1 2020 of 22% and quarterly gains observed in the second quarter of 2020.

# COVID-19 pandemic puts pressure on households' asset allocation

The COVID-19 pandemic has had significant repercussions on several areas of economic activity, including on households' intertemporal consumption and savings decisions.

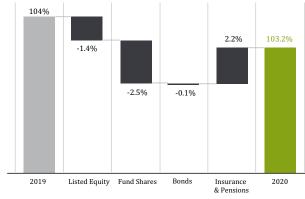
Data on European households' savings allocation is only available as of 1Q 2020, however the data already provides an initial view on asset valuations performance during 2020 and on the performance of the household market investment indicator during the COVID-19 pandemic.

As shown on chart 2.2, the decline in households' capital markets savings was roughly proportionate to the decline in GDP activity during Q1 2020. The marginal decline in the indicator value (from 104% at the of 2019 to 103.2% in 1Q 2020) was predominantly driven by a decline in listed equity and fund shares' valuations, while insurance and pension funds' holdings offset the decline as these instruments invest in long-term securities like government bonds which gained in market value during the first months of the pandemic.

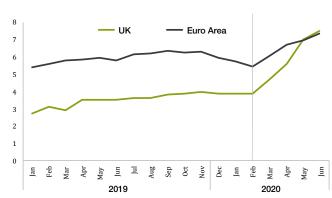
In the second quarter of the year, markets have seen an important rebound in market valuations which should be reflected in the amount of savings in capital markets instruments by households. These changes, however, have not been reflected in the indicator value constructed in this report.

# 2.2: Variation in EU27 Household market investment indicator by components (2020 Q1 variation)

# 2.3: Household deposits (annual growth rate, %)



Source: OECD and Eurostat



Source: ECB and BoE

# "Households' deposits have sharply increased since the COVID-19 outbreak"

A striking contrast between the COVID-19 crisis and the 2007-9 financial crisis or the 2013 sovereign debt crisis is the resilience in households' disposable income.

According to Eurostat, the loss in wages earned and surplus from business activities for households (-1.5% QoQ and -2.1% QoQ respectively) was more than offset by an increase

in countercyclical social transfers provided by various state entities (+2.8% QoQ). As a result, households' disposable income rose 0.86% QoQ in 1Q 2020 which, in addition to the sharp decrease in consumption of 3.2% QoQ, led to a record increase in the household savings rate to 16% (vs. 12% on average in 2019 and 12.7% during the financial crisis).

How have households allocated their fresh record savings? Not surprisingly, through bank deposits. As observed in chart 2.3, households' deposits have sharply increased since the COVID-19 outbreak from a pre-COVID annual increase of 5.4% to 7.3% in June 2020 in the euro area and from 3.9% to 7.5% in the UK during the same period.

As shown on chart 2.4, the ratio of households' capital markets investments to deposits (or CMI ratio as proposed by EFAMA<sup>10</sup>) has sharply declined as consequence of the large increase in household deposits and the decline in market valuations of capital markets instruments held by households as shown on chart 2.2.

## 2.4: EFAMA CMI index: Households' capital markets investments as % of household deposits: EU27



Source: Eurostat

Households may be seeking to allocate their fresh savings in liquid instruments as a form of precautionary savings due to the current economic uncertainty. However, it is crucial that CMU continues to encourage households to consider other forms of savings that provide long-term financial security, particularly of retirements savings which should not be neglected in the current circumstances as discussed in more detail in the Box of next page.

# Indicator ranking by countries

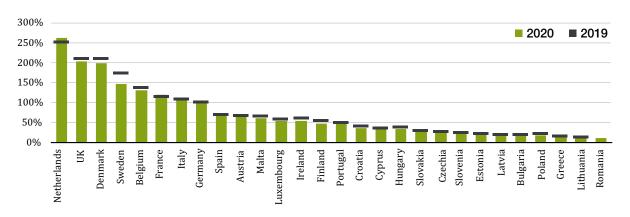
The structural competitive advantage of the Netherlands, the UK and some of the Nordic countries was not severely harmed by the COVID-19 pandemic. These countries are characterised by having deep funded pension systems that encourage citizens to save for retirement and invest savings in suitable long-term market vehicles.

In the first quarter of 2020, the indicator value in the Netherlands increased which can be attributed to the Dutch government's COVID-19 response policy which provides for continued payment of pension contributions.

"The structural competitive advantage of the Netherlands, the UK and some of the Nordic countries was not severely harmed by the COVID pandemic"

Sweden saw the largest relative decline in the indicator value during 2020, predominantly driven by a decline in households' listed shares holdings (-22% QoQ) and investment fund shares (-23% QoQ). The decline was predominantly driven by valuation losses as the Stockholm OMX 30 index declined 23% QoQ in Q1 2020.

# 2.5: Household market investment indicator by European countries



Source: Eurostat and OECD

# Retirements savings and the continued importance of developing pools of capital in times of stress

The COVID-19 pandemic has had significant repercussions for Europe's retirement system.

In general, the existing strategies of the pension funds have stood up well to the abnormal market conditions in 2020, with pension funds rebalancing their portfolios according to their existing strategic asset allocations.

## COVID-19 and the retirement industry

The immediate impact of the COVID-19 outbreak on the retirement industry was, visibly, the valuation decline of retirement savings accounts due to the wider sudden valuation decreases in financial markets. The initial market decline, however, has been most recently offset as asset prices continue to recover. More specifically, according to the ECB euro area pension fund (PF) statistics, Pension Funds' total assets increased by 6% in Q2 2020 from €2,771 bn in Q1 2020.

Preparing for a large-scale global pandemic and its various severe consequences was not part of pension funds' core risk management plan for 2020. However, already for some years, the end of the longest bull market in history was well envisaged and considered by pension funds which are required to invest in accordance with the 'prudent person' principle. Various future scenarios and their impact on assets and liabilities are typically assessed seeking an investment strategy that balances risk, return and costs.

The market collapse was followed by job losses (EU27 unemployment rate stood at 7.2% in July 2020) and an abrupt decline in economic activity with EU27 GDP expected to contract by 8.3% in 2020 according to official estimates<sup>11</sup>. Although hard data is currently unavailable, it is expected that job losses, wage reductions, and prolonged unemployment periods will result in lower capacity for individuals to contribute to their long-term retirement savings or to their defined benefit retirement systems.

### 2. Household Market Investment Indicator

Policymakers' response to the pandemic has had direct and indirect repercussions on the functioning of the retirement market. The range of pension-specific policy measures undertaken by governments in response to the pandemic has varied across Europe. Some examples include:

- In the Netherlands, the government has continued to support individuals and the retirement system by providing employers with a compensation, which partly covers the payment of salaries and pension contributions. Similar measures were adopted in Bulgaria. Wage subsidies covering pension contributions were also implemented in Sweden, Iceland, the UK, and Slovakia. The use of contribution reserves to provide financial relief to employers while ensuring asset accrual was also implemented in Switzerland.
- Finland set lower pension contributions to temporarily reduce labour costs for companies. However, pension contributions are expected to increase in 2022-25 to compensate for the currently unpaid contributions. Finland also lengthened recovery periods, implemented deferral of contributions, and facilitated loans from pension plans.
- In other countries, governments continued to allow individuals to withdraw their retirement savings with the purpose that individuals can utilise their savings to offset the decline in labour or business income.
- Other short-term relief measures with potential long-term costs include the deferral of contributions (Austria, Luxembourg, Slovenia, Sweden, and the UK), and contribution holidays (Denmark and Estonia).

The robust macroeconomic support undertaken by the European Central Bank has extended the ultra-low interest rate environment which is expected to persist (potentially) in the mid- and long-term future. This has generated an increase in liabilities from falling interest rates in retirement savings arrangements with retirement income promises, and low yield returns for annuity issuers that predominantly invest and hold long-term fixed income products (see OECD<sup>12</sup>).

From a social policy perspective, it is crucial that governments and relevant authorities continue to encourage individuals to save for retirement. Governments can consider issuing policy measures that help individuals alleviate short-term financial constraints that could put at risk their long-term retirement objectives.

The core of liquid and deep capital markets are robust pools of capital. A successful retirement system with a growing role for the pan-European Personal Pension Product is in the best interests of a robust Capital Markets Union.

# **ELTIFs** potential to unlock non-bank financing

European Long-Term Investment Funds (ELTIFs) were introduced in 2015 to increase the amount of non-bank finance available for companies investing in the real economy. ELTIFs are collective investment vehicles that can raise capital from both retail and institutional investors who are willing to invest in smaller and mid-sized businesses (defined primarily as non-listed companies). ELTIFs are a form of Alternative Investment Fund (AIF) and must therefore be managed by an Alternative Investment Fund Manager (AIFM). This means that ELTIFs and ELTIF managers are subject to a robust EU regulatory and supervisory regime.

The ELTIF Regulation was established in 2015 to support greater debt and equity investments in non-listed European businesses and reduce the SME finance gap. Typically, many illiquid or non-traditional assets have been the sole preserve of larger institutional investors such as pension and insurance funds. The ELTIF offers retail investors and smaller institutional investors a way to access these investment opportunities and potentially realise higher returns, while also diversifying their exposure. This is particularly important for many investors in the current low interest rate environment. These investors also represent a new source of capital for European businesses.

Despite the substantial growth of capital allocated to European based lending strategies by asset managers and their investors during the last decade, ELTIFs have not been the vehicle of choice to invest this capital. There are currently only 27 active ELTIFs providing less than €10bn equity and debt finance to SMEs across Europe<sup>13</sup>. This is despite some positive elements of the ELTIF, most notably the ability to originate loans on a cross-border basis. ELTIFs have therefore fallen short of expectations and the European Commission's High-Level Forum is right to highlight the need for reform.

Despite these challenges, the potential for ELTIFs to be a vehicle for SME finance is extremely high. In the United States, investment fund vehicles known as Business Development Companies (BDC) are providing more than \$100bn worth of finance to SMEs with an estimated 12,500 businesses benefitting from this capital. ELTIFs currently provide only a fraction of that amount in Europe, despite BDCs having many similarities with ELTIFs. A reformed and well-functioning ELTIF regime has the potential to achieve similar success to BDCs within 5-10 years. Unlocking this potential will make a material difference to European SMEs and support European citizens looking to save and invest.

<sup>13</sup> See https://www.esma.europa.eu/document/register-authorised-european-long-term-investment-funds-eltifs

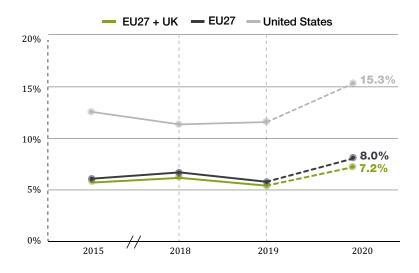
<sup>14</sup> See Houlihan Lokey, Direct Lending Update, Summer 2019 -https://hl.com/about-us/insights/insights-article/?id=17179871313

# 3. Loan Transfer Indicator

The Loan Transfer Indicator measures the capacity to transform bank loans into capital markets instruments (securitisation, covered bonds and loan transactions), which is crucial for enabling additional lending to the real economy by freeing up bank balance sheets of outstanding loans. The indicator is estimated as a simple ratio of annual placed and retained securitisation issuance, covered bond issuance 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 have been converted into capital markets instruments in a given period.



### 3.1: Loan Transfer Index: covered bond, securitisation and portfolio sales as % of outstanding loans



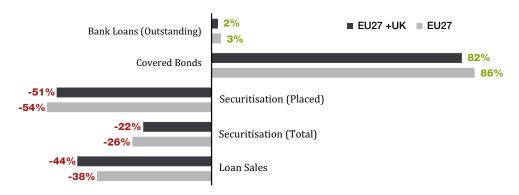
Source: AFME, SIFMA, ECBC, FDIC, ECB, US Fed, Debtwire. Indicator for 2020 an estimate based on 2020H1 volumes annualised.

## Loan transfer during the COVID-19 outbreak

From January to June 2020, there was a dramatic increase in issuance of covered bonds, which, when half year issuance volumes are annualised, represent an 82% YoY increase for the EU27. This has offset reductions in securitisation issuance and loan portfolio sales, propelling the Loan Transfer Indicator for Europe to unprecedented levels during H1 2020.

Some existing covered bond pools have expanded in size to include newly originated loans (including commercial mortgages). Likewise, ECB asset purchases, alongside ongoing negative yields have contributed to boost covered bond supply.

# 3.2: Loan portfolio sales, securitisation issuance, covered bond issuance, (2020 vs 2019)



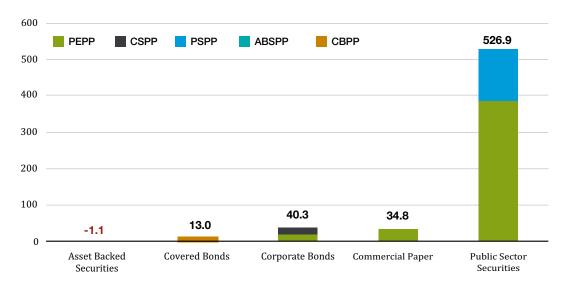
Source: AFME, SIFMA, ECBC, FDIC, ECB, US Fed, Debtwire. Changes (%) for 2020 an estimate based on 2020H1 volumes annualised.

During H1 2020, cEUR 420 bn of covered bonds have been issued<sup>15</sup>, which is only 9% below the entire volume issued in 2019. This puts 2020 on track to be the most active year, in terms of issuance volumes, in the covered bonds market in European history.

Securitisation volumes, meanwhile, have fallen year on year since the start of the STS regime in January 2019. This may be driven by various issues such as late implementation of key regulatory technical standards and failure to recognise the quality of the STS regime in other regulations. Furthermore, the securitisation market was the only major debt market where there was little to no central bank support. This is likely to have exacerbated market conditions, via a reduction in liquidity, acting as a downward force on issuance in primary markets.

"Securitisation volumes, meanwhile, have fallen year on year since the onset of the STS regime"

# 3.3: ECB net purchases, March to July 2020



Source: ECB

<sup>15</sup> Estimate of the full covered bond market based on the amount of "labelled" covered bonds issued during H1 2020 and the proportion that "labelled bonds" represent on national covered bond markets. During 2020 H1, EUR 290 bn of labelled covered bonds have been issued in Europe (UK+EU), which is 1% above the entire volume issued in 2019.



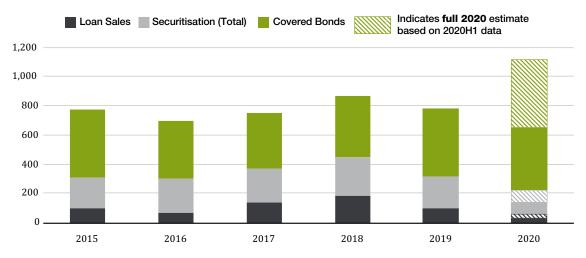
## 3. Loan Transfer Indicator

As can be seen from Chart 3.3, in practice there has been significant lack of support for the securitisation market when compared with various ECB purchase programmes. The majority of purchases (net of redemptions) allocated by the ECB during March to July 2020 were in the public sector securities market.

Loan Portfolio sales have fallen steadily since the peak volume of EUR 182.5 bn was recorded in 2018. During 2019, EUR 102.4 bn of loan portfolio sales took place which has fallen to EUR 28.7 bn during H1 2020 as banks continue to reduce the NPL levels on their balance sheets.

For a closer breakdown of the evolution of the various capital market instruments included in the Loan Transfer Indicator, see Chart 3.4.

# 3.4: Loan portfolio sales, securitisation issuance, covered bond issuance, 2015 to 2020, EUR bn



Source: ECBC, Debtwire, JP Morgan

When January to June 2020 issuance volumes for loan sales, securitisation and covered bonds are annualised, 2020 looks set to be a record year for transformation of outstanding loans into capital market instruments in Europe. However, this is driven largely by the covered bonds segment, and relies on the expectation that record volumes of issuance, as observed in H1 2020, continue throughout the second half of the year.

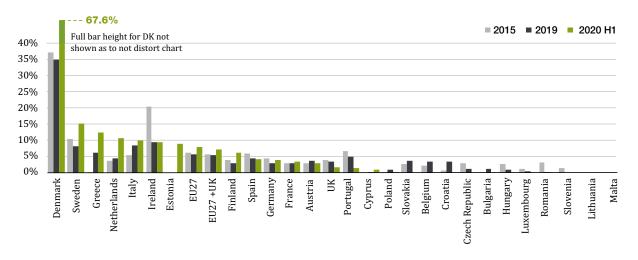
# Key findings by countries

Comparing the Loan Transfer Indicator on a country level, the ranking of a country has, to a greater extent than in previous years, been determined by the depth of that country's covered bond market in 2019 and 2020. This has meant countries such as Spain and Portugal, which have historically had high loan portfolio sales volumes as a result of NPL disposals, have seen their ranking in the Loan Transfer Indicator fall in 2020, due to the corresponding drop in loan portfolio sales.

Denmark, which has the deepest covered bond market in Europe, has retained the lead in Europe, after also coming top in the Loan Transfer Indicator for every year in which AFME collects data. Other countries with deep covered bond markets, such as: Sweden, Italy, the Netherlands and Finland have also seen the Loan Transfer Index increase in 2020 and 2019, compared to 2015.

Some countries, such as the UK, Czech Republic and Hungary, have seen the largest relative expansions in outstanding bank loans during 2019 and 2020, for European countries, depressing the value of the indicator.

# 3.5: Loan transfer indicator - national comparison of 2020 H1 with 2019 and 2015 (covered bond, securitisation and portfolio sales as % of outstanding loans)



Source: AFME, SIFMA, ECBC, FDIC, ECB, US Fed, Debtwire

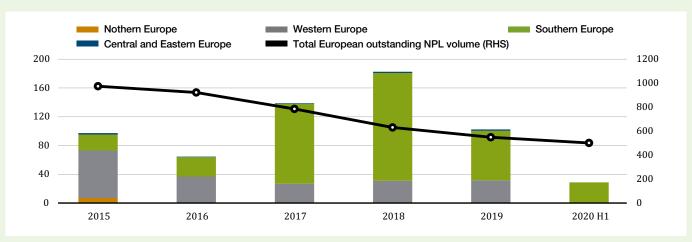
"Spain and Portugal, which have historically had high loan portfolio sales volumes as a result of NPL disposal, have seen their ranking in the Loan Transfer Indicator fall in 2020"

## 3. Loan Transfer Indicator

# The importance of off-balance sheet transfers for facilitating NPL disposals

After experiencing steady growth from 2016 to 2018, loan portfolio sales have fallen thereafter with 2020 set to be a record-low for sales activity in the market. This has coincided with a reduction in the total European NPL volume (not all loan sales relate to the NPL segment, but it makes up a large proportion of volumes).

# 3.6: Loan portfolio sales and total European oustanding NPL volume, 2015 - 2020H1, EUR bn

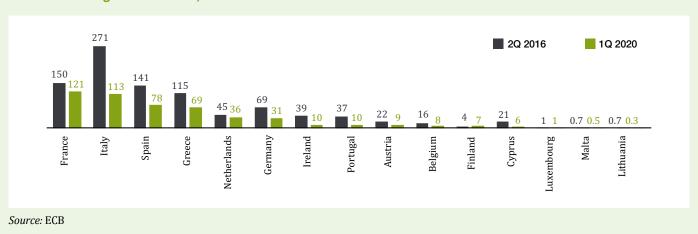


Source: Debtwire. Northern Europe: EE, LV, DK, FI, LT, SE. Western Europe: DE, BE, FR, IE, LU, NL, UK. Southern Europe: HR, GR, IT, MT, PT, ES. CEE: AT, CZ, HU, RO, PL, SI, SK, BG.

Notably, after banks in Italy reduced their high levels of NPLs, predominantly through loan disposals and internal resolution activities, France now has the highest volume of outstanding NPLs in any European country. Banks in Spain, Greece, Ireland and Portugal have also significantly reduced their NPL holdings in Q1 2020 when compared to outstanding NPL volumes in 2Q 2016.

There is some evidence to suggest several NPL deals are in the pipeline for 2020 and therefore the volume of loan portfolio sales may increase substantially by the end of the year if these deals are finalised. Additionally, there are still sizable amounts of NPLs in France, Italy, Spain, Greece, the Netherlands, and Germany, as can be seen from Chart 3.7, which require targeted attention and actions.

### 3.7: Outstanding NPL volumes, EUR bn



The effects of COVID-19 are expected, in due course, to increase the proportion of non-performing exposures. While there is little evidence of this happening at present, there is usually a time lag between the grant of a loan and deteriorating economic circumstances rendering it non-performing. This lag may be extended in the current circumstances due to the various fiscal, monetary and other support measures provided by governments, central banks and the banking industry across Europe, which continue to support a large range of business and market participants.

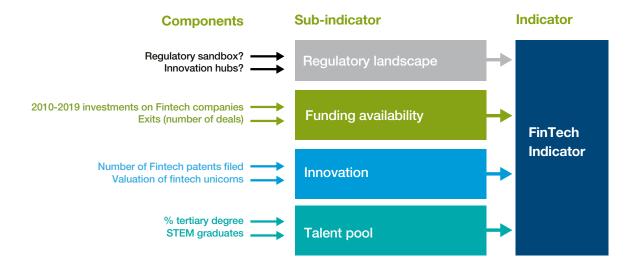
Nevertheless, with an expected increase in non-performing loans, loan portfolio sales and securitisations, as market-based methods of NPL disposals, are as important as ever. Furthermore, transformation of loans via securitisations issuance can act as a crucial tool for enabling banks to reduce large balance sheet exposures by transforming assets into capital market securities thereby freeing up balance sheet capacity for further lending.

#### 4. FinTech Indicator

### 4. FinTech Indicator

The COVID-19 pandemic has underlined the importance of FinTech for the well-functioning of capital markets and the resilience of the European economy. Business continuity relied on automation, resilient trading and post-trading activities which were supported by sound digital systems that helped the real economy endure the abnormal business disruption caused by the pandemic.

We have constructed a FinTech composite indicator which 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<sup>16</sup>; (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<sup>17</sup>:



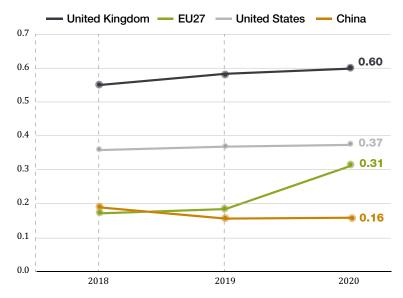
As the FinTech indicator shows, 2020 has been marked so far by a significant improvement in the indicator value for Europe underpinned by the continued adaptation of the regulatory environment and the resilience in investment activity into FinTech companies. FinTech investment in Europe, however, continues below that of other major regions like the United States.

The evolution of the indicator value in other regions like the United States and China was less significant than the observed in Europe.

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.

<sup>17</sup> Regulatory landscape: presence of regulatory sandboxes and innovation hubs in banking, insurance, and securities markets activities. Funding availability includes the amount of investments into FinTech companies and the number of investor exits. 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.

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

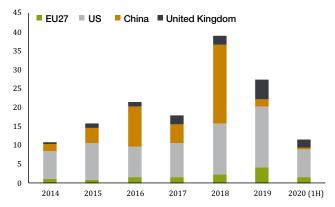


### **Global FinTech marathon**

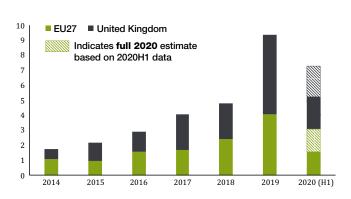
In the first half of 2020, investment into FinTech<sup>18</sup> companies stood relatively resilient notwithstanding the severe market disruption caused by the COVID-19 pandemic. A total of EUR 11.5bn was invested<sup>19</sup> into FinTech companies over the first half of 2020 in Europe, the United States and China—this is equivalent to EUR 23bn annualised assuming the same investment performance for the second half of the year (vs EUR 27.4bn in 2019FY). See chart 4.2

In the first half of 2020, European FinTech companies were recipients of an accumulated total of EUR 3.6bn in risk capital investment (annualised at EUR 7.3bn vs. EUR 9.4bn in 2019FY and vs. EUR 4.8bn in 2018FY). See chart 4.2. In Q1 2020, the investment activity stood at EUR 2.0 bn, which partially receded in Q2 2020 at EUR 1.6bn.

# 4.2: Global investment activity in FinTech: amount 2014-2020H1 (USDbn)



## 4.3: EU27 and UK: Investment activity into FinTech companies 2014-2020H1 (USDbn)



Source: Dealroom Source: Dealroom

"In the first half of 2020, European FinTech companies were recipients of an accumulated total of EUR 3.6bn in risk capital investment"

<sup>18</sup> Firms operating in financial management solutions, investing, payments, mortgages and lending, insurance, banking and crypto.

<sup>19</sup> Business angel and seed, venture capital, and private equity

### 4. FinTech Indicator

The emergence of new FinTech Unicorns (one of the subcomponents of the "innovation" sub-indicator) stood without major changes with 14 FinTech Unicorns in Europe as of June 2020. Valuations of FinTech Unicorns, however, have continued to rise accumulating a total valuation of EUR 42bn as of June 2020 (vs. EUR 33bn in 2019).

The production of innovative FinTech products, as measured by the number of FinTech patents filed across jurisdictions, continued to increase in China and the United States whose patents offices published new patents filed in the local jurisdictions. The European patents office, however, halted publication and changed oral proceedings and have resumed activities via virtual hearings only since recently.

Changes to the local FinTech talent pool (one of the components of the indicator) did not show material changes over the last year, with the UK continuing to lead in the proportion of population with a tertiary degree (42% vs 35% in the US, 32% in the EU27 and 18% in China). Going forward, the terms of the Brexit agreement between the EU and the UK will be crucial to determine the degree in which the UK will continue to benefit from attracting a global pool of talent for their local labour force and to continue to support the production of innovative products in leading research and education centres.

### Recent regulatory developments

One of the most significant FinTech developments in Europe in the last year was the continued progress in adapting the regulatory landscape for the well-functioning of FinTech companies, with seven European countries setting up innovation hubs for at least one financial services activity over the last year (BG, HR, CZ, EE, GR, SK, and SI). Of the EU27 Member States only Malta has not yet established an innovation hub although the initiative is currently under consideration as part of Malta's FinTech strategy<sup>20</sup>. See chart 4.4.

"Of the EU27 Member **States only Malta has** not yet established an innovation hub"

Progress at establishing regulatory sandboxes has been more discreet. Over the last year, only Malta formally launched a regulatory sandbox following a period of consultation with the relevant national stakeholders. Other countries like Spain, Bulgaria and Hungary have continued to formally consider the initiative and are expected to launch a regulatory sandbox in the near future. See chart 4.5.

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

#### 4.4: European countries with FinTech innovation hubs

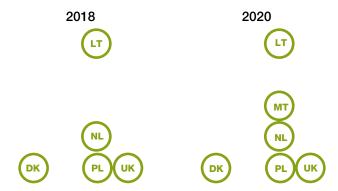




Source: EBA, ESMA, EIOPA and EFIF. Dark green denotes countries that host innovation hubs for the three major financial services activities (insurance, banking, and securities). Light green denotes countries with innovation hubs for one or two (but not all) of these activities.



### 4.5: European countries with FinTech regulatory sandboxes



Progress at the European level has also been encouraging over the last year. The joint committee of the European Supervisory Authorities (EBA, ESMA and EIOPA) launched the "European Forum for Innovation Facilitators (EFIF) which seeks to coordinate the regulatory efforts undertaken by the various financial services supervisors of EU Members States, share experiences relating to the local regulatory sandboxes and innovation hubs, and to reach common views on the regulatory treatment of innovative products, services and business models.

Admittedly, significant differences remain in the regulatory landscape within the EU27 and across Europe. For example, some companies under the European Supervisory Authorities' (ESAs) supervision will need to comply with the ESA rules while other companies comply only with the national regulations. However, the launch of the EFIF forum is the first step to help streamline and harmonise the regulatory and supervisory treatment of FinTech in the EU.

The European Commission also recently published a Digital Finance package<sup>21</sup> which seeks to harmonise rules on operational resilience and brings forward an EU harmonised framework for crypto assets. The initiative is an important step forward in creating a regulatory environment that is fit for purpose, creates legal certainty, and ensures Europe continues to lead in the digital age.

### FinTech performance by countries

The UK continued as the regional FinTech leader, followed by Sweden and Lithuania. See chart 4.6.

The UK lead is driven by a supportive regulatory environment with local sandboxes and innovation hubs across banking, insurance, and the securities markets. The UK also benefits from a deep local funding ecosystem accounting for 58% of the funding provided to FinTech companies in Europe (EU27+UK); and the emergence and growing base of multiple FinTech Unicorns with 10 of the 14 European FinTech Unicorns headquartered in the UK.

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



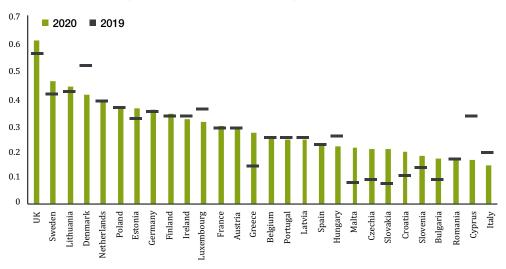
### 4. FinTech Indicator

Sweden and Lithuania rank second and third in the FinTech ecosystem ranking.

Sweden hosts an adequate ecosystem characterised with ample funding availability relative to the size of the economy, a suitable talent pool, and second to the UK in Europe in the number of FinTech patents filed. See table 4.7.

Among the main limitations for Sweden, as measured by our indicators, is the absence of a regulatory sandbox for financial services activities. When adequately implemented, sandboxes offer promising benefits for all parties engaged (supervisory authorities, consumers and clients, fintech start-ups and incumbents) and can contribute to "increase the knowledge of competent authorities about innovations and the opportunities and the risks they present", as stated by the Joint Committee of the European Supervisory Authorities (ESMA, EBA and EIOPA) in their 2018 Report.

4.6: Chart 4.6: FinTech Indicator by countries [0: Min, 1:Max]: Composite indicator based on regulatory landscape, funding availability, innovation and talent pool



Source: AFME

### 4.7: Fintech indicator by components. Top 5 countries (ranking 1: top; 28: bottom)

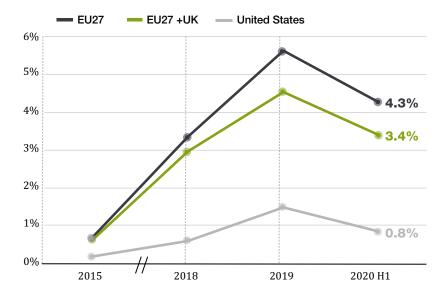
	FinTech ranking	Funding	Talent pool	Regulation	Innovation
UK	1	3	4	1	1
Sweden	2	4	3	6	2
Lithuania	3	5	6	1	13
Denmark	4	8	13	1	7
Netherlands	5	7	19	1	11

### 5. Sustainable Finance Indicator

This indicator seeks to quantify the sustainable labelling of new bond issuance and is estimated as simple ratio of issuance of sustainable securitisation, sustainable corporate bonds (financial and non-financial corporates), sustainable government, municipal and agency bonds and sustainable covered bonds relative to total issuance of placed securitisations, corporate bonds, government, municipal and agency bonds and covered bonds. The indicator does not consider sustainable equity issuance due to the difficulty in assessing and classifying organisations as sustainable or not but could evolve over time reflecting changes in the sustainable finance sector and data availability.



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



Source: CBI, Dealogic, ECB, SIFMA, ECBC and AFME

#### 5. Sustainable Finance Indicator

### Decline in 2020 indicator value due to record corporate and sovereign bond issuance

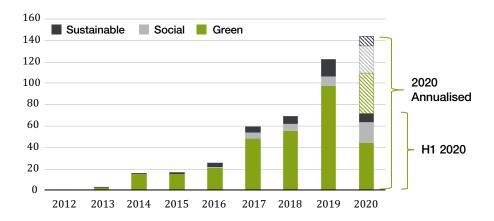
European sustainable bond issuance which includes green, social and dual-purpose bonds (i.e. bonds which match both green and social criteria) reached EUR 120.5 bn during 2019, the highest annual issuance volume to date and up 77% compared to 2018.

During H1 2020, European sustainable bond issuance has remained robust with EUR 71.8bn as of June (EUR 66.7bn in the EU27). However, the Sustainable Finance Indicator value for the EU27 has fallen from 5.6% in 2019 to 4.3% in H1 2020, as the amount of overall corporate and sovereign bond issuance (including both sustainable and 'brown' bonds) has boomed in response to COVID-19. As noted on Chapter 1, corporate bond issuance rose 42% YoY in H1 2020 while European sovereign bond issuance reached a record breaking EUR 1.4tn during Q2 2020, the largest issuance volume of any quarter to date, as countries expand primary market issuance to finance fiscal responses to the impact of COVID-19.

Nontheless, if issuance patterns in sustainable finance follow trends observed in previous years, then volumes of social, sustainable and dual-purpose bonds issued during 2020 are on track to surpass volumes observed in 2019.

While green bond issuance has dominated the market to date, 2020 has seen the emergence of social bonds as a significant sub-sector of European sustainable finance markets. Throughout H1 2020, 27% of sustainable bond issuance in Europe was categorised as social, the largest proportion in any half year to date with green bonds representing 62% of total H1 2020 issuance. See chart 5.2.

### 5.2: European Green, Social and Dual-Purpose bond issuance, EUR bn, 2012 - 2020 (annualised)



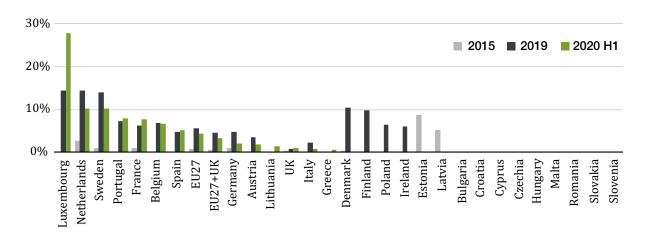
Source: Climate Bond Initiative and Dealogic

The pandemic has shifted issuer's attention to social issues, raising the profile of social bonds, among other pandemic-related funding structures.

The increased activity in the European social bond space has taken issuance volumes in this asset class category to unprecedented levels, with EUR 19.1 bn issued in Q2 2020, which is greater than the entire volume of social bonds issued in 2018-19 combined (EUR 17.3 bn).

"The Sustainable Finance Indicator value for Europe has fallen as the amount of overall corporate and sovereign bond issuance (including both sustainable and 'brown' bonds) has boomed in response to COVID-19"

# 5.3: Sustainable Finance Indicator - national comparison of 2020 H1 with 2019 and 2015: (Sustainable bond issuance as a % of total bond issuance)



Source: AFME with Climate Bond initiatie and Dealogic data

The continued expansion of sustainable finance across European countries can be seen in Chart 5.3, with many countries achieving their highest sustainable finance indicator values to date in either 2019 or 2020. For example, during 2019 there were 4 EU Member States with over 10% of financial provision which was labelled as sustainable, up from 2 in 2018 and 0 in 2017. Furthermore, 10 countries achieved an indicator value of greater than 5% in 2019, up from 6 in 2018 and 2 in 2018.

Luxembourg leads European countries in 2020 H1 with 27.9 % of bonds in the country having a sustainable label, however, this represented an issuance volume of only EUR 1.5 bn, with the high indicator value driven primarily by a fall in overall bond issuance in Luxembourg during 2020 H1.

However, countries such as Denmark, Finland, Ireland, Poland, have not recorded any sustainable issuance in 2020 January to June and as a result have experienced sharp deteriorations of the value of the sustainable finance indicator in H1 2020, when compared to 2019.

The lack of sustainable bond issuance in the UK has widened the gap in the indicator value when compared with the EU27.

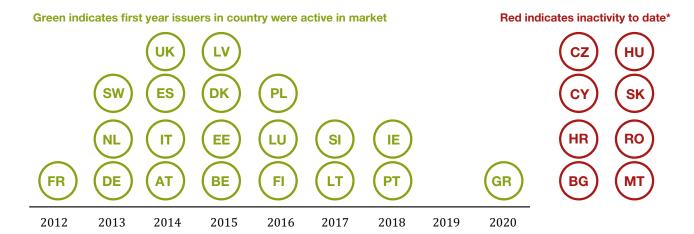
### Same market participants

As can be seen from Chart 5.4, issuers in no less than 19 European countries have been active in the sustainable finance market. New entrants are becoming increasingly rare and 2019 marked the first year on record with no new country issuers. An exception to this trend is Greece, which has seen inagural issuance of EUR 72mm in green bonds in 2020. There are 8 European countries, highlighted in red in Chart 5.4, in which issuers have not haven't yet tapped the market for sustainable finance.

Luxembourg leads European countries in 2020 H1 with **27.9%** of bonds in the country having a sustainable label

### 5. Sustainable Finance Indicator

### 5.4: Year of entry to sustainable finance markets by country of issue (2012 to 2020 H1)



Source: CBI, Dealogic. \*As of H1 2020

In addition to fewer new entrants to the market, in terms of country of issuance, there are increasingly fewer countries in which active issuance is taking place in a given year.

In H1 2020, there were 13 European countries in which sustainable bonds were issued, this is down from 15 in 2019 and 17 in 2018. This, in addition to the upwards trajectory of issuance volumes in the EU as a whole, mean that the provision of sustainable finance in Europe is becoming more concentrated across fewer countries. In particular, France, Germany, the Netherlands, Spain and Sweden make up a large proportion of the European sustainable finance market. These 5 countries accounted for 75% of sustainable volumes issued in 2020 H1, up from 66% in 2019.

The green government bond market has continued robust, with outstanding amount of EU green government bonds surpassing EUR 50bn in H1 2020, after the Dutch, Polish, Belgian and Lithuanian green bonds were reopened. The German government announced the issuance in Q3 2020 of an inaugural 10Y green Bund of EUR 6.5bn which will further contribute to an ESG post-crisis recovery.

France, Germany, the Netherlands, Spain and Sweden accounted for

of sustainable volumes issued in 2020 H1

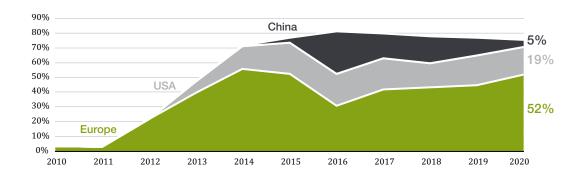
120

#### ■ 2012-2018 2019 2020 H1 France Germany 64.7 Netherlands 58.5 Spain Sweden 30.2 17.4 UK Italy **16.3** Belgium 14.0 Denmark 6.7 Ireland Luxembourg Finland Poland Portugal Austria Lithuania

### 5.5: Sustainable bond issuance by EU countries, EUR bn (2012-2018, 2019, 2020 H1)

Source: CBI, Dealogic, ECB, SIFMA, ECBC and AFME, labels denote total issuance 2012-2020 H1.

### 5.6: Sustainable bond issuance as % of Global issuance (Europe, US, China)



Source: Climate Bonds Initiative, Dealogic

Latvia Slovenia Greece Estonia

0

### Over half of global ESG issuance is in Europe

The dominance of Europe in global ESG markets continued during 2020 with 52% of global sustainable bond issuance taking place on the continent. Europe's share of ESG global markets has grown significantly since 2016, in which Europe's global market share was 31%, as the market has gained more prominence and become mainstream. This contrasts with China, which has seen its share of global ESG markets fall from 29% in 2016 to 5% in 2020, while the US has remained relatively stable decreasing market share from 22% to 19% over the same period.

The currency denomination of sustainable bond issuance (across all categories) has closely matched the proportion of issuance taking place in the various global markets, with 53% of global sustainable issuance in 2020 H1 denominated in EUR, 1% above the proportion of global issuance taking place in Europe. This is also the case for previous years and suggests that EUR is still only the currency denomination of market activity taking place within Europe, with little evidence of extra-territorial reach.

The dominance of Europe in global ESG markets continued during 2020 with **52%** of global sustainable bond issuance taking place on the continent

#### Sustainable Finance Indicator

As 2020 figures for this indicator represent half year issuance volumes, as of the end of June, the market landscape may change throughout H2 2020. Nevertheless, the recent increase in political representation of green interests in Europe, the ongoing legislative work on an EU green taxonomy, and the high importance of the market to the political agenda mean Europe is likely to remain the leader in global ESG issuance in the near-term.

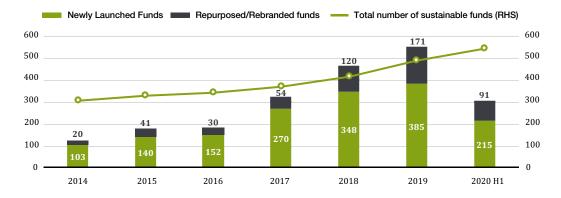
**53%** of global sustainable issuance in 2020 H1 denominated in EUR

### Sustainable assets under management

The European sustainable fund universe has continued to expand as asset managers seek to make their portfolio offerings greener. As can be seen in Chart 5.7, while the majority of sustainable funds to date have been generated as a result of new launches, over the last three years an increasing proportion of sustainable funds have been created as a result of repurposing existing funds into sustainable offerings.

The growth in the number of sustainable funds looks set to continue during 2020, with a record amount launched in H1 2020 There has also been record flows into sustainable funds in the second quarter of 2020, suggesting the COVID-19 pandemic has increased investor interest in ESG issues.

### 5.7: Number of European sustainable funds, newly launched and repurposed / rebranded



Source: Morningstar Research

However, it must be noted that depending on source, it is possible to come up with varying estimates of sustainable assets under management and corresponding fund flows associated with them based on the criteria of what is green.

In the last iteration of this report, industry research estimated the size of sustainable<sup>22</sup> assets under management in Europe as EUR 12.3 trillion. Based on a stricter definition of what constitutes green, and a higher eligibility threshold, other market research has estimated the volume of sustainable assets under management in Europe as EUR 774 bn. This highlights a remaining issue in sustainable finance markets about classification of what is 'green'. The lack of standardisation has been highlighted in a recent global survey in which 59% of respondents expressed dissatisfaction with publicly-traded companies' climate-related disclosure<sup>23</sup>.

The EUR 12.3 trillion value reflects total assets managed under sustainable investment strategies which have varying degrees of "sustainability", rather than total amount of all assets which are sustainable. Therefore, when considering the narrower definitions of sustainable finance as defined by the ICMA Green, Social and Sustainable Bond Principles, or the "green" criteria of the Climate Bonds Initiative, this value may somewhat overstate the market.

<sup>22</sup> Sustainable investing is an investment approach that considers environmental, social and governance (ESG) factors in portfolio selection and management, and in this definition include socially responsible investing (SRI). Approaches include 1. Negative/exclusionary screening 2. Positive/best-in-class screening 3. Norms-based screening 4. ESG integration 5. Sustainability themed investing 6. Impact/community investing: and 7. Corporate engagement and shareholder action.

<sup>23</sup> http://www.gsi-alliance.org/wp-content/uploads/2019/12/Global-Sustainable-Investment-Alliance-TCFD-Poll.pdf

### **Evolution of European sustainable finance to meet the Paris Climate Agreement**

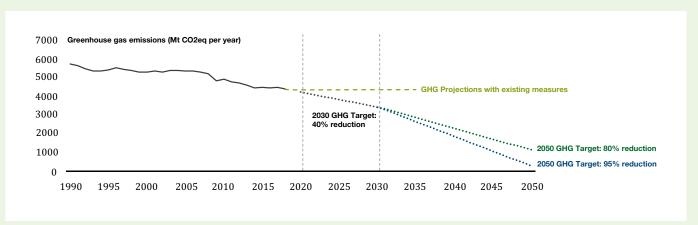
### The European Green Deal

The European Green Deal is a legislative action plan to support the move to a clean, circular economy while restoring biodiversity and cutting pollution. The plan outlines the large investments needed and financing tools available to achieve a just and inclusive transition. The deal is centred on the EU aim of becoming climate neutral in 2050, proposing a European Climate Law to turn the political commitment into a legal obligation. The magnitude of this ambition is shown relative to historical European green house gas emissions in Chart 5.8.

### **Just Transition Fund**

The Just Transition Mechanism (JTM) is a key tool to ensure that the transition to a climate-neutral economy happens in a fair and just manner, targeting support of EUR 150 bn over 2021-2027 to the regions most affected by the transition, to alleviate any negative socio-economic impacts and to ensure political support for the deal.

#### 5.8: European greenhouse gas (GHG) emissions, trend projections and target



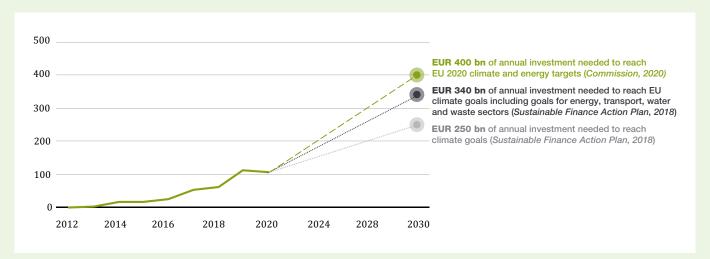
Source: European Environment Agency

### €1 trillion in funding over 10 years

The European Green Deal mobilises over EUR 1 trillion to support the transition, taking EUR 503 billion directly from the EU budget for climate and the environment, with a further EUR 25 bn from the EU Emissions Trading System (ETS) Funds. Indirectly, InvestEU will mobilise EUR 279 bn of investment triggered by the EU budget, to support public and private participation in the transition, this is in addition to EUR 150 provided by the Just Transition Mechanism and EUR 114 bn in national co-financing structural funds.

### 5. Sustainable Finance Indicator

### 5.9: European issuance of sustainable finance (ex-social), trend projections and target, EUR bn



Source: AFME, European Commission

The ambitious climate goals of The European Green Deal present large funding requirements, which have increased since the Sustainable Finance Action Plan was released in 2018. With the EU set to finance the transition with a mixture of public and private funds, the sustainable finance market in Europe is set to significantly expand over the coming years. Chart 5.9 sets out possible trajectories of the market for sustainable investment from 2020 to 2030, in line with the various projections of where investment levels need to be in order to achieve the EU climate goals.

### 6. Pre-IPO Risk Capital Indicator

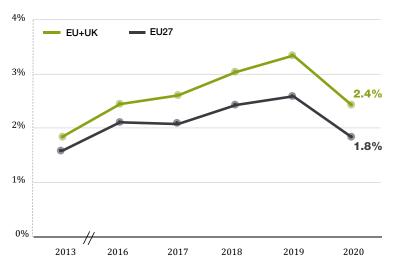
The Risk Capital Indicator quantifies the availability of pre-IPO risk capital financing for SMEs. The ratio is estimated as the aggregate amount of annual risk capital investments (i.e. venture capital, private equity investment for companies at growth stage, business angel investment<sup>24</sup> and 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.



European SMEs have endured in 2020 an abrupt change in the economic outlook and substantial short-term cash constraints derived from the sudden stop in business activity due to the pandemic. However, as discussed in detail in this chapter, the availability of finance for SMEs (including from private risk capital) has helped companies navigate business closure and overcome the initial impact of the pandemic.

In 2020, the pre-IPO risk capital indicator declined in Europe (EU+UK) and in the EU, driven by the large increase in bank lending for SMEs with volumes of risk capital that stood relatively unchanged (on an annualised basis) compared to those observed in recent years. The decline in the indicator value effectively implies that bank lending has consolidated as the main source of funding for SMEs in 2020.

# 6.1: Evolution of Pre-IPO risk capital index (EU): 2013-20 (investment from VC, Growth PE, Business angel and equity crowdfunding as % of risk capital and bank lending)



"The decline in the indicator value effectively implies that bank lending has consolidated as the main source of funding for SMEs in 2020"

Source: EBAN, InvestEurope, Eikon, Dealroom, ECB, BoE and other national central banks

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.

# Resilience of private capital markets equity funding for SMEs

Private risk capital markets have continued to contribute to funding for SMEs during the first half of 2020, accumulating a total of EUR 14.3bn in investment from private equity funds (ex-buy outs), venture capital, business angel, and equity crowdfunding. See chart 6.2.

"State-backed loan guarantees became the most frequently used policy measure to support access to finance for companies, and particularly SMEs"

As this indicator measures, although the amount in risk capital remained resilient during 1H 2020, bank lending consolidated as the main source of funding for SMEs with record loan origination in the course of the year (see chart 6.3). The record increase in SME bank lending can be attributed to the large support from state guarantees issued by European governments for new loans originated by banks in Europe.

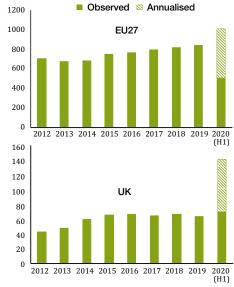
State-backed loan guarantees became the most frequently used policy measure to support access to finance for companies, and particularly SMEs, during the COVID-19 outbreak. Although the policy measure has resulted in record amounts in new gross lending, the size and uptake of the guarantees scheme has varied by countries.

Indeed, the amount of state loan guarantees announced in Slovakia was c1% of GDP which compares with above 25% of GDP in Germany and c20% of GDP in Italy. The effective uptake across the various member states has also varied, with Spain, Italy, France, and the UK as the countries that have effectively increased the most in new lending through state guarantees<sup>25</sup>.

# 6.2: EU27+UK: Business angel, Private Equity, Venture capital and equity crowdfunding investment (EURbn)



### 6.3: SME new gross lending (EURbn)



Source: AFME from EBAN, InvestEurope, Eikon and Dealroom

Source: ECB, BoE and National Central Banks

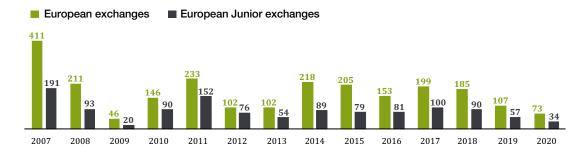
Although not covered in the pre-IPO indicator, listed SMEs on junior exchanges<sup>26</sup> have benefitted from access to equity capital in the current abnormal market environment. While the IPO market on Jr exchanges continues subdued with only 20 small ticket IPOs issued in the first half of 2020 (vs. 40 in 1H 2019), secondary equity offerings on junior exchanges significantly increased with a total of EUR 2.7bn in proceeds in Q2 2020—the largest quarterly volume since Q1 2015.

More broadly, IPOs on European exchanges have remained subdued compared to the more robust issuance volumes observed prior to the COVID-19 outbreak. Between January and October of 2020, 73 IPO deals were issued on European exchanges, which contrasts with 107 in the same period of 2019 and close to 200 in 2017-18. See chart 6.4.

<sup>25</sup> See Bruegel analysis here.

<sup>&</sup>quot;Junior" exchanges are stock markets where companies sell new shares to institutional investors, and sometimes to the public, to raise equity capital. "Junior" exchanges usually have less onerous obligations in terms of financial costs and disclosures, both at admission to trading and throughout the company's public life.

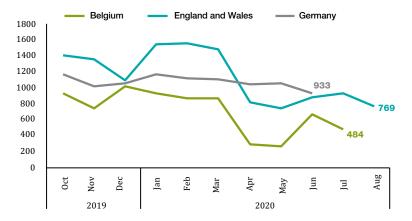
### 6.4: Number of IPOs on European exchanges and on Junior exchanges: 1Q-3Q in 2007-2020



Source: Dealogic

The wide funding availability for SMEs in the form of secondary offerings, private risk capital and bank lending has helped companies endure and successfully navigate the pandemic, which is demonstrated by the decline in fail rates compared to pre-COVID levels. As shown in chart 6.5, business bankruptcy filings in England and Wales and in Belgium abruptly declined following the COVID-19 outbreak. In other countries that publish bankruptcy statistics on a quarterly basis, the decline is also visible— in Spain, bankruptcy filings dropped from a quarterly average of 1,100 in 2019 to 714 in 2Q 2020. France reported in 2Q'20 the lowest company failure rate in 10 years.

### 6.5: Business bankruptcy filings in selected European countries (number per month)



Source: Insol Europe and national statistics agencies

Admittedly, in some European countries like Germany, the government suspended the obligation to file for business insolvency until September 2020 as a policy measure to support companies under economic stress. Once the policy measure comes to expiration, bankruptcy filings may increase—consistent with the medium-term economic outlook and with the rising trend in bond default rates observed during the year for high yield bond products.

Going forward, it is crucial to focus on how companies can shift their funding structure from a large amount of secured loans guaranteed by governments towards other diversified forms of finance such as market-based funding. Companies cannot rely ad-infinitum on government guaranteed schemes to continue to operate in the marketplace. See further detail in the Box "Policy response and funding availability for SMEs" in this chapter.

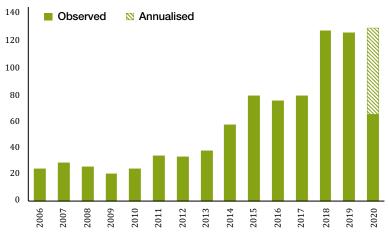
### US private risk capital resilience

Risk capital funding has also remained resilient in the United States. SMEs in the United States have benefit from large pools of capital from venture capital and private equity funds which have continued to deploy funding for the real sector.

An annualised estimate of H1 2020 private risk capital suggests that in 2020 the US venture capital industry will surpass investment flow records with more than EUR 120bn in fresh capital for companies. See chart 6.6.

### 6. Pre-IPO Risk Capital Indicator

### 6.6: Venture capital investment in the United States (EURbn)



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

Going forward, business angels, private equity fund managers and venture capital investors in Europe and in the United States will continue to face the dilemma of providing sufficient resources for their existing portfolio companies (some which are in financial distress as consequence of the COVID-19 outbreak) and exploring possible opportunistic acquisitions of companies in need of equity recapitalisation.

Private equity funds currently benefit from record amounts in "dry powder" of cEUR 300bn in Europe and above \$2tn globally which can be used to support the cash needs of current portfolio companies in distress or to explore possible opportunistic acquisitions. Dry powder refers to the amount of cash reserves or liquid assets that private equity firms have on hand to make investments.

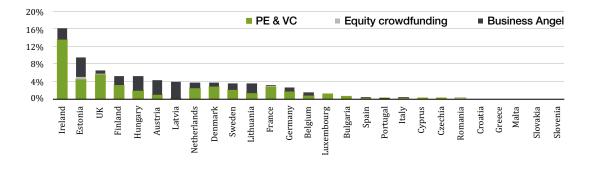
### **Country performance**

The Republic of Ireland had the highest indicator value in Europe in 2020, followed by Estonia and the UK.

Ireland's lead was driven by the continued large participation of private equity and venture capital in the economy of c EUR 300mm in 1H 2020 compared with EUR 1.6bn in new gross lending for SMEs over the same period which, unlike other euro area economies, contracted by 9% YoY (vs. an increase of 19% in the EU27).

Noticeably there is a wide dispersion in pre-IPO funding across jurisdictions, with some CEE countries like SK, SI, HR, RO and CZ benefiting the least from risk capital financing during H1 2020.

# 6.7: Country Evolution of Pre-IPO risk capital index (EU): 2020 (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

### Policy response and funding availability for SMEs

As noted in this chapter, bank lending has consolidated as the main source of funding for SMEs. This has been largely driven by the unprecedented policy support in the form of state loan guarantees issued by European governments in response to the pandemic.

As an additional policy measure to support the economic recovery and to facilitate access to finance for companies affected by the COVID-19 outbreak, the governments of Germany, France and the UK launched financial assistance programmes to support equity investments into SMEs. The size of these equity facility programmes, however, is rather limited compared to the EUR 2.6tn in state loan guarantees by European governments. In Germany, for example, the size of the Venture Capital facility totals EUR 2bn compared with EUR 900bn in state loan guarantees.

An EU-level equity facility was proposed as part of the European recovery package, but it was later abandoned in the course of the EU budget political negotiations.

Managing higher debt (particularly from bank lending) among SMEs will be critical for the recovery process. SMEs are in the process of building up a debt overhang problem which may have repercussions on the speed of recovery in coming years. For example, non-financial corporates in countries like Belgium and Sweden entered the crisis with indebtedness ratios (debt securities and loans relative to GDP) above 100% of GDP which is likely to increase as a result of the company balance sheet adjustments during the pandemic.

Equity risk capital, appropriate debt refinancing, hybrid instruments, convertible securities, trade sales, M&A and other capital markets solutions will be crucial for SMEs as firms navigate the pandemic with a funding structure that provides enough cash buffers to endure business uncertainty and that is optimal from a corporate finance and taxation perspective.

"Some CEE countries like SK, SI, HR, RO and CZ benefited the least from risk capital financing during H1 2020"

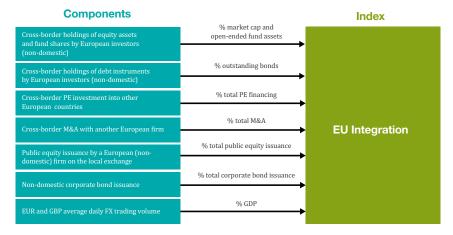
### 7. Cross-Border Finance Indicator

### 7. Cross-Border Finance Indicator

We have produced two indicators to quantify EU capital markets integration within Europe ("intra-European") and integration of European capital markets activities with the rest of the world (RoW).

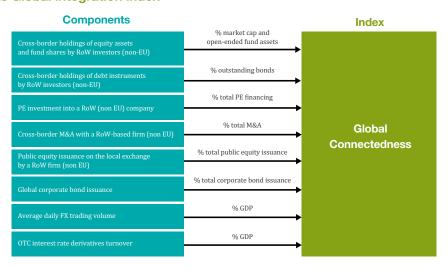
The indicators consider different capital markets dimensions by estimating two composite indicators aggregating the following features: (i) cross-border holdings of equity assets and fund shares, (ii) cross-border holdings of debt assets; (iii) cross-border private equity (PE) financing; (iv) cross-border 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<sup>27</sup>. Each component is quantified with the appropriate metrics as shown on Charts 7.1 and 7.2:

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



Source: AFME

### 7.2: Capital markets Global integration index



Source: AFME

<sup>27</sup> Each of the components is standardised and aggregated in a single component by a simple average and transformed in [0-1] scale.

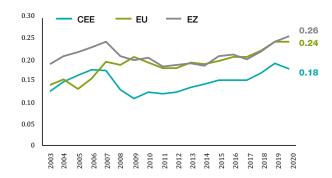


Each of the components seek to measure the volume of cross-border flows across jurisdictions through different capital markets activities and asset classes. The components are proxies of cross-border flows and may have limitations of their own. This is discussed in further detail in the methodologies section in Appendix 2.

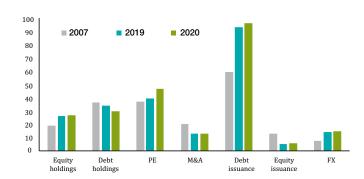
### Capital markets integration within the EU

Economic crises typically result in large repatriation of funds into the domestic market and disruption of funding flows across jurisdictions. However, 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.

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



7.4: Intra-European integration index by components and evolution<sup>28</sup>



Source: AFME from multiple sources

Source: AFME from multiple sources

As estimated by the intra-European integration index, the degree of integration within Europe was resilient during the first half of 2020 with an indicator value that stood relatively unchanged compared with that observed in 2019. This was driven by an increase in the proportion of debt marketed within Europe, an outflow of equity instruments that was smaller than the decline of its market size, a continued increase in cross-border private equity activity within Europe, offset by a decline in cross-border holdings of debt assets . See chart 7.4.

From an equity perspective, outflows from Europe's international investment position (portfolio investment according to balance of payments accounts) declined by 8% in the first quarter of 2020, which however, was smaller than the decline in the equity market capitalisation and the market value of Europe's open end funds during the same period.

Corporates increased the proportion of debt marketed within Europe (as opposed to being marketed only domestically within the jurisdiction) with 96% of new non-financial corporate debt marketed in Europe, which compares with 93% of total new debt in 2019 and 60% in 2007.

"The degree of integration within Europe was resilient during the first half of 2020"

of new non-financial corporate debt marketed in Europe, which compares with

of total new debt in 2019 and

60% in 2007

<sup>28</sup> 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.

### 7. Cross-Border Finance Indicator

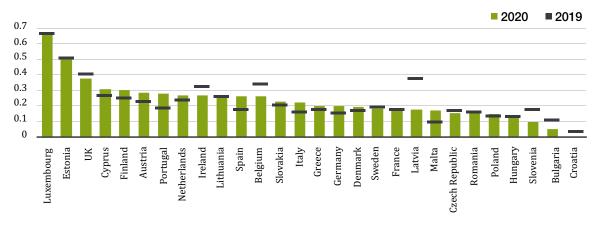
Trading of European currencies (another component of the indicator) rose c1% YoY during H1 2020 which, however, masks the record monthly trading amount observed in March 2020 (18% YoY).

The reduction in cross-border debt holdings can be in part attributed to the large increase in market volatility. During the months of March and April of 2020, corporates and institutional investors rebalanced their portfolios seeking to increase their holdings of liquid high-grade assets. This generated an outflow from high risk assets of c12% of the European high yield assets under management (AuM) and 6% of the European investment grade AuM, according to the ECB. The outflows were re-directed predominantly to money market funds.

No visible changes were observed in cross-border equity issuance (outside the country's exchange) or in cross-border M&A.

Luxembourg and the United Kingdom continued to lead as the most interconnected capital markets in Europe. Luxembourg's top position is driven by the interconnectedness of its European fund management industry, while the UK position is predominantly driven by its sizeable role at intermediating FX trading activity of European currencies. Estonia also ranks among the top 3 countries due to a large size of equity issued by Estonian companies held cross-border within Europe.

7.5: Intra-European capital markets integration by countries: 2019 and 2020 [0: Min, 1: Max]



Source: AFME

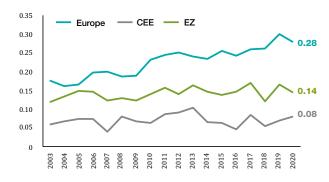
"Luxembourg and the United Kingdom continued to lead as the most interconnected capital markets in Europe"

### European capital markets integration with the rest of the world

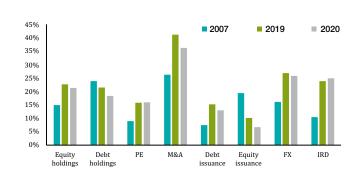
Capital markets integration with the rest of the world slightly deteriorated in 2020.

Investors located outside Europe reduced the total portion of equity and debt assets during the first half of the year; M&A with companies located outside Europe declined from 41% to 36% of the total. Equity issuance on EU exchanges by non-EU companies also declined from 10% of total equity raised in 2019 to 7% in H1 2020. The decline in the indicator value was only partially offset by a large increase in interest rate derivatives and FX transactions (predominantly in the UK). See chart 7.7.

### 7.6: Global integration index [0: Min, 1: Max]



#### 7.7: Global integration index by components<sup>29</sup>



Source: AFME from multiple sources

Source: AFME from multiple sources

Outbound M&A (i.e. acquisitions of non-European companies by European companies) saw a reduction in deal volume from 12% of the total number of deals in 2019FY to 9% of the deals announced between March and June of 2020. The decline in cross-border M&A with the rest of the world may be driven by the existing mobility restrictions as companies reassess their appetite to expand businesses outside their local markets in the current global uncertain environment.

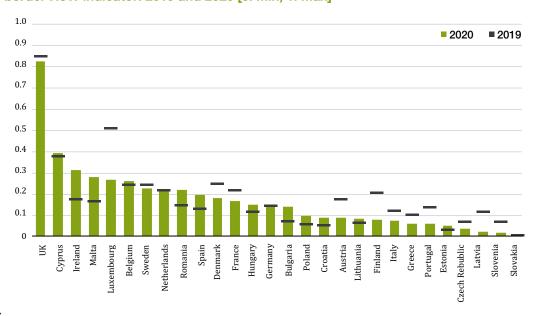
The UK continued as the most globally interconnected European capital market, followed by Cyprus and Ireland. The UK's leading position is driven by its large role at intermediating global flows of interest rate derivatives and FX transactions. Cyprus' global interconnectedness is driven by the large portion of equity and fund shares originated by Cypriot companies held outside Europe, predominantly by funds domiciled in Switzerland and China. See chart 7.8.

"The UK continued as the most globally interconnected European capital market, followed by Cyprus and Ireland"

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.

### 7. Cross-Border Finance Indicator

### 7.8: Cross-border RoW indicator: 2019 and 2020 [0: Min, 1: Max]



Source: AFME

# Appendix 1: Key performance indicators by countries and components: Comparison of progress between 2020 and 2019<sup>30</sup>

	Market Finance	Households Market Investment	Loan Transfer	Sustainable Finance	Risk Capital	Intra-EU integration	Integration with the rest of the world	FinTech
Austria								
Belgium								
Bulgaria								
Croatia								
Cyprus								
Czech Republic								
Denmark								
Estonia								
Finland								
France								
Germany								
Greece								
Hungary								
Ireland								
Italy								
Latvia								
Lithuania								
Luxembourg								
Malta								
Netherlands								
Poland								
Portugal								
Romania								
Slovakia								
Slovenia								
Spain								
Sweden								
UK								

Green: Increase in 2020 vs 2019
Red: Decrease in 2020 vs 2019

**Yellow:** No variation between 2020 and 2019

30 Risk capital indicator not available for Poland for 2020 due to loan data unavailable.

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.

# Appendix 2: Key performance indicators by countries and components: Comparison of progress between 2020 and 2015<sup>31</sup>

	Market Finance	Households Market Investment	Loan Transfer	Sustainable Finance	Risk Capital	Intra-EU integration	Integration with the rest of the world
Austria							
Belgium							
Bulgaria							
Croatia							
Cyprus							
Czech Republic							
Denmark							
Estonia							
Finland							
France							
Germany							
Greece							
Hungary							
Ireland							
Italy							
Latvia							
Lithuania							
Luxembourg							
Malta							
Netherlands							
Poland							
Portugal							
Romania							
Slovakia							
Slovenia							
Spain							
Sweden							
UK							

Green: Increase in 2020 vs 2015

Red: Decrease in 2020 vs 2015

**Yellow:** No variation between 2020 and 2015

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.

### Appendix 3: Methodology and Data Sources

### Scope of data collection

We have constructed seven 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 (€) 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 [left unchanged as this amount includes banks and non-banks]

C&I: \$501bn / 0.3 = \$1.7tn

Farm: \$90.1bn / 0.3 = \$300bn

### Appendix 3: Methodology and Data Sources

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), Covered Bonds (ECBC), Portfolio sales (KPMG for Europe; 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 bonds (Climate Bonds Initiative), social and sustainable/dual purpose bonds (Dealogic), 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 on 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); 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.

### 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 (InvestEurope, 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.

#### 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 (InvestEurope 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 2020 H1 values to assess how the 2020 H1 values have changed with respect to longer term averages. There can though be significant volatility in the 2020 H1 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**

### **Bibliography**

Anderson, J., F. Papadia and N. Véron (2020) 'Government-guaranteed bank lending: beyond the headline numbers', Bruegel Blog, 14 July, available at <a href="https://www.bruegel.org/2020/07/government-guaranteed-bank-lending-beyond-the-headline-numbers/">www.bruegel.org/2020/07/government-guaranteed-bank-lending-beyond-the-headline-numbers/</a>

Accenture (2013) "The Power of Three" https://www.accenture.com/cn-%C2%A0en/\_acnmedia/accenture/cn-en/pdf/accenture-the-power-of-three.pdf

European Commission (2020) Summer 2020 Economic Forecast https://ec.europa.eu/commission/presscorner/detail/en/ip\_20\_1269

European Commission (2020) A Capital Markets Union for people and businesses-new action plan <a href="https://ec.europa.eu/finance/docs/law/200924-capital-markets-union-action-plan\_en.pdf">https://ec.europa.eu/finance/docs/law/200924-capital-markets-union-action-plan\_en.pdf</a>

European Commission (2020) Digital Finance Strategy for the EU https://ec.europa.eu/transparency/regdoc/rep/1/2020/EN/COM-2020-591-F1-EN-MAIN-PART-1.PDF

European Crowdfunding Network (2020) "Early Impact of CoVid19 on the European Crowdfunding Sector" https://eurocrowd.org/2020/04/14/early-impact-of-covid19-on-the-european-crowdfunding-sector/

European Council (2020) Political agreement of the Special European Council of 17-21 July 2020 https://www.consilium.europa.eu/media/45109/210720-euco-final-conclusions-en.pdf

EFAMA (2020) Household Participation in Capital Markets. Assessing the current state and measuring future progress. https://www.efama.org/Publications/KPI%20Report\_FINAL%20version.pdf

FESE (2020) FESE blueprint: 'Capital Markets Union by 2024 – a vision for Europe' https://fese.eu/blog/fese-blueprint-capital-markets-union-by-2024-a-vision-for-europe/

Global Sustainable Investment Alliance (2019) "Sustainable Investor Poll on TCFD Implementation" <a href="http://www.gsi-alliance.org/wp-content/uploads/2019/12/Global-Sustainable-Investment-Alliance-TCFD-Poll.pdf">http://www.gsi-alliance.org/wp-content/uploads/2019/12/Global-Sustainable-Investment-Alliance-TCFD-Poll.pdf</a>

InsolEurope (2020) Défaillances et sauvegardes d'entreprises en France https://www.insol-europe.org/technical-content/national-insolvency-statistics-france

Joint Committee of the European Supervisory Authorities (ESMA, EBA and EIOPA) (2019) "FinTech: Regulatory sandboxes and innovation hubs" https://www.esma.europa.eu/sites/default/files/library/jc\_2018\_74\_joint\_report\_on\_regulatory\_sandboxes\_and\_innovation\_hubs.pdf

Lehmann, A. (2020) 'Emerging Europe and the capital markets union', Policy Contribution 2020/17, Bruegel https://www.bruegel.org/2020/09/emerging-europe-and-the-capital-markets-union/

Lewin, Amy (2020) "What's happened to the angels?" https://sifted.eu/articles/angel-investing-startups-europe-covid/

OECD (2020) Retirement savings in the time of COVID-19. 15–17 June 2020 https://www.oecd.org/coronavirus/policy-responses/retirement-savings-in-the-time-of-covid-19-b9740518/

PensionsEurope (2020) Statement on the Covid-19 Crisis 2020 – 9 April 2020 https://www.pensionseurope.eu/system/files/PensionsEurope%20Statement%20-%20COVID%2019%20CRISIS%202020%20%20-%20FINAL%20-%202020-04-09\_0.pdf

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