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In collaboration with euroclear

Scaling the sustainable finance market

A cross-border financial market infrastructure-driven approach

Executive report

September 2021

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Euroclear group is the financial industry's trusted provider of post trade services. Euroclear provides settlement and custody of domestic and cross-border securities for bonds, equities and derivatives to investment funds. Euroclear is a proven, resilient capital market infrastructure committed to delivering risk-mitigation, automation and efficiency at scale for its global client franchise.

The Euroclear group comprises Euroclear Bank, the International CSD, as well as Euroclear Belgium, Euroclear Finland, Euroclear France, Euroclear Nederland, Euroclear Sweden and Euroclear UK & International. The Euroclear group settled the equivalent of EUR 897 trillion in securities transactions in 2020, representing 276 million domestic and cross-border transactions, and held EUR 32.8 trillion in assets for clients by end 2020.

For more information about Euroclear, please visit www.euroclear.com

FOREWORD

PwC's ambition is to build trust in the climate transition and help our clients create sustainable value to meet ESG goals. We do this by helping organisations transform sustainably; build the credibility of reporting, particularly around non-financial metrics and climate reporting; develop and implement investment strategies for the future; and support their people through a fair transition. We're also continuing to make sure that our own business is ready to meet the challenge, too.

We are delighted to have collaborated with Euroclear to produce this report which develops a cross-border financial market infrastructure approach to scaling the sustainable finance market. This approach is centred on creating transparency and trust and is designed to include finance raisers and investors from around the globe. We will continue to support the development of sustainable finance markets in this way, and expect this approach to deliver a meaningful impact on the environmental and societal challenges we face today.

My thanks to the Strategy& and Euroclear teams who worked tirelessly to produce this report.

Peter Gassmann
PwC's ESG Leader and
Global Strategy& Leader

As a financial market infrastructure (FMI), Euroclear is committed to the stability and smooth running of the financial markets. Given Euroclear's systemically important role, our responsibility is to create a more stable and more sustainable world for the benefit of us all. One of the ways we can do this is by looking at how we can facilitate the growth of sustainable finance markets. Demand for sustainable securities is growing, as is the supply. We must ensure that investors are able to identify and compare such securities and that they can invest in them easily and securely.

We are extremely pleased to create this report with Strategy& which examines these issues and provides a series of possibilities to overcome the challenges in sustainable finance to ensure the development of a greener global economy.

Euroclear has been sustaining financial markets for many years; now we want to help those markets become sustainable.

Lieve Mostrey
Euroclear Group Chief Executive Officer

Vision for a well functioning sustainable finance market:

1. Investors increase their demand for sustainable securities;
2. Issuers increase their supply of sustainable securities;
3. Investors can more easily identify and compare sustainable securities;
4. Investors are better able to invest in sustainable securities; and
5. Market participants trust in the sustainable finance market.

A cross-border financial market infrastructure (FMI) driven approach:

1. Encouraging greater sustainable finance issuance, through reducing infrastructure, regulatory and informational barriers to issuance;
2. Processing ESG information flows including ESG metrics, disclosure and assurance; and
3. Expanding the market to more asset classes and participants.

Potential impacts of a cross-border FMI driven approach:

$25 tr

additional capital mobilised in global sustainable finance market by 2030, noting some displacement from mainstream capital markets

1.1 years

saved in financing the UN's Sustainable Development Goals by 2030

1.3 %

current global annual CO_2 equivalent emissions saved by additional capital mobilised by 2030*

*If all expected environment finance is directed at reducing CO_2 emissions

430 million

low and lower-middle-income children afforded primary school education**

**If all expected social finance by sovereign, supranational, agency and municipal issuers is directed at funding education

CONTENTS

INTRODUCTION

The market for sustainable finance is rapidly growing in response to the climate emergency

Sustainable finance is a subset of the overall financial market, which offers a structured way to channel capital to economic activities and projects that deliver sustainable outcomes. Importantly, the sustainable finance market contributes directly and indirectly to progressing the United Nations' Sustainable Development Goals (SDGs), which face an annual financing shortfall of US$ 2-4 trillion. The COVID-19 crisis is providing fresh impetus to the Environmental, Social and Governance (ESG) and Net Zero agendas, leading to an acceleration in demand for sustainable finance.

> "Importantly, the sustainable finance market contributes directly and indirectly to progressing the United Nations' Sustainable Development Goals (SDGs), which face an annual financing shortfall of US$ 2-4 trillion."

Despite impressive recent growth, however, the sustainable finance market has a long road to maturity. While there exists a proliferation of sustainable finance initiatives, a number of obstacles remain which are preventing the effective scaling up of the market for sustainable finance.

Therefore, the purpose of this study is threefold:

- First, this study sets out the key challenges in the sustainable finance market and why it is not currently delivering to wider societal needs. It also defines a set of five necessary characteristics which, if met, would deliver an efficient and well-functioning sustainable finance market.
- Second, this study explores the avenues for financial market infrastructures (FMIs) and related partners to address key market gaps. A number of opportunities are set out for how a cross-border FMI-driven approach can drive the continued development of a successful sustainable finance market.
- Third, this study quantifies the potential economic and sustainable impact of addressing key challenges in the sustainable finance market through a cross-border FMI-driven approach.

Ultimately, this study aims to raise awareness of the unique role that cross-border FMIs can play in scaling the global sustainable finance market. A cross-border FMI-driven approach uses the trusted, central and neutral position of FMIs to address fundamental obstacles in the growth of the sustainable finance market globally through greater transparency on sustainable securities and the ESG information which underpins the sustainable finance market. The insights contained in this study should encourage a coordinated effort across financial market participants – driven by FMIs – to support the sustainable finance market to reach its full potential.

This executive report is accompanied by a longer report, which contains further details of how cross-border FMIs can develop the global sustainable finance market with supporting information and exhibits.

> “A cross-border FMI-driven approach uses the trusted, central and neutral position of FMIs to address fundamental obstacles in the growth of the sustainable finance market globally through greater transparency on sustainable securities and the ESG information which underpins the sustainable finance market.”

CHALLENGES IN THE SUSTAINABLE FINANCE MARKET

Fundamental challenges on both the supply and demand side of the market are preventing the scaling of sustainable finance to its full potential

On the supply side, there is a misalignment of incentives to participate in the sustainable finance market. Today, the market is experiencing strong investor demand but an insufficient supply of sustainable securities to meet this demand. This is largely due to the significant barriers that small and new issuers face in issuing sustainable securities, which include insufficient market infrastructure use or involvement in regions that lack capital market depth, unclear issuance processes and high costs of meeting and disclosing ESG standards due to global fragmentation. Investor demand is set to grow even further, following the COVID-19 crisis. However, without the necessary support for issuers, society stands to lose the opportunity to seize this inflection point.

> “Investor demand for sustainable finance is set to grow even further, following the COVID-19 crisis. However, without the necessary support for issuers, society stands to lose the opportunity to seize this inflection point.”

On the demand side, while sustainable finance remains oversubscribed, unstructured information leads to difficulties in making informed investment decisions. In general, it is based on miscommunication and misalignment between issuer and investor expectations. The differences in taxonomy and criteria for ESG performance have also led to different asset classifications and ESG scores, all with varying methodologies that, at best, further complicate comparability or, at worst, contribute to perceptions of 'greenwashing'. Greenwashing refers to instances where there is a gap between expectations of issuers and investors with regard to what is considered 'green' or 'sustainable'. In general, it is based on miscommunication and there are misperceptions between issuers' and investors' expectations.

Regional nuances further complicate the sustainable finance landscape. Europe is by far the most developed and diverse ESG market, accounting for 82% of the global sustainable fund universe. The leading position of Europe has been furthered during the COVID-19 pandemic by the European Commission's intention to issue EU SURE bonds of up to €100 billion as social bonds under the ICMA Social Bond Principles.[1] Emerging and developing economies have smaller sustainable finance markets, but have strong sustainable finance ambitions and growth to date. For example, China alone accounted for over 80% of social bond issuance in 2020[2] and Egypt, the first Middle Eastern sovereign to issue a green bond, saw five times oversubscription of its debut issuance in September 2020.[3] However, blended finance initiatives struggle to mobilise sustainable finance for low-income countries. In 2018, US$ 46.4 billion was mobilised from the private sector by official development finance interventions but only 5.3% of private finance mobilised went to least developed and other low-income countries. Research has found that there is an inverse relationship between the fragility of the recipient country and the private finance mobilised.[4]

> "While Europe is by far the most developed and diverse ESG market, emerging and developing economies have strong sustainable finance ambitions and growth to date."

1 European Commission, European Commission to issue EU SURE bonds of up to €100 billion as social bonds, 7 October 2020.
2 Climate Bonds Initiative, 'Sustainable Debt Global State of the Market 2020', April 2021.
3 Pictet Asset Management, 'Why EM bond investors can no longer ignore ESG', March 2021.
4 OECD (2020), Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet, OECD Publishing, Paris, https://doi.org/10.1787/e3c30a9a-en, p. 91.

Additionally, there is uneven maturity across sustainable finance products and asset classes. Equity investors are ahead of fixed-income investors in their inclusion of sustainability considerations, despite rapid growth in the size and maturity of the sustainable debt market. However, fixed-income issuers are ahead of equity issuers on disclosing the use of proceeds for sustainable purposes, with sustainable equity issuers lacking an equivalent requirement that ensures all investment achieves positive sustainability impact. While there has been a heavy focus on green bonds with the rapid rise in issuance over recent years, green bonds are not the only sustainable finance instrument and, in fact, make up a minority share of the market. Therefore consistent improvement across all asset classes and sustainable finance products is needed to ensure a range of diversified products are available in the sustainable finance market.

Finally, the market faces a particular challenge around misaligned expectations for different sustainability themes financed within the sustainable finance market. Energy, buildings and transport are the use of proceeds categories which have dominated the green debt market, with climate change mitigation as the preeminent sustainability theme. These three categories accounted for 87% of the use of proceeds of green bonds issued in H1 2020,[5] while renewable energy and power account for 70% of green loans.[6] However, other sustainability themes – including biodiversity and agriculture, forestry and other land use – have struggled to gain traction in the sustainable finance market. In 2019, green securities raised only US$ 6 billion for biodiversity conservation, less than 4% of total funding, despite there being a biodiversity financing gap of between US$ 598 billion and US$ 824 billion per year.[7] Sustainable agriculture and forestry is another sustainability theme that is overlooked, with less than 3% of green-bond funding going towards this purpose in 2019.[8] There is substantial unmet sustainable financing demand in the agricultural sector, which accounts for 27% global greenhouse gas emissions and is one of the most cost-effective sectors in which to mitigate emissions.[9]

To address these challenges and devise a plan for equal access to and benefit from sustainable finance globally, we identify five necessary characteristics for the successful scaling of the sustainable finance market:

1. Investors increase their demand for sustainable securities;
2. Issuers increase their supply of sustainable securities;
3. Investors can more easily identify and compare sustainable securities;
4. Investors are better able to invest in sustainable securities; and
5. Market participants trust in the sustainable finance market.

> “Consistent improvement across all asset classes and sustainable finance products is needed to ensure a range of diversified products are available in the sustainable finance market.”

[5] Climate Bonds Initiative, Sustainable Debt Global State of the Market H1 2020, October 2020.
[6] Open Insights by Nordea, The sustainable loan market: A snapshot of recent developments, 29 October 2020.
[7] Paulson Institute, The Nature Conservancy and Cornell Atkinson Center for Sustainability, Financing Nature: Closing the Global Biodiversity Financing Gap, 15 September 2020.
[8] MSCI, Green bonds: Growing bigger and broader, 14 April 2020.
[9] McKinsey & Company, Agriculture and Climate Change, April 2020.

Table 1: Overview of challenges and necessary characteristics

Challenges	Necessary characteristics
• Strong primary market demand is undermined by weaker secondary market demand for sustainable securities. • Demand for sustainable securities is concentrated towards established issuers, major currencies, dedicated platforms and developed markets.	**Investors increase their demand for sustainable securities** • There is a latent high level of investor demand for sustainable securities across geographies and sectors • Investors see clear benefits from investing in sustainable securities
• Unclear sustainability project pipelines are a common barrier to scaling up investment in sustainable development. • It can be difficult for issuers to create securities that meet investor needs on ticket size and risk-return profile. • Investor requirements on ticket size and risk-return profile constrict the sustainability thematic areas and issuer mix that can participate in the market. • Different investor preferences on ESG thematics make it difficult for issuers to assess demand. • Complexities and timescales of issuing sustainable products can dissuade issuers from moving away from vanilla issuances.	**Issuers increase their supply of sustainable securities** • There are sufficient incentives for issuers to develop sustainable securities • There is a supply of sustainable securities of suitable ticket sizes and risk-return profiles • Issuing sustainable securities is possible for a variety of issuers
• Disclosure standards are unclear for corporates, preventing investors from comparing securities on an equal basis. • ESG scores have unclear methodologies, poor correlations between the scores of research firms and a lack of real-time data. • Standards for sustainable securities are slowly emerging, but are currently insufficient to support investor and issuer confidence in the market. • Use of proceeds and post-issuance reporting is insufficient – in some cases – for investors to fully understand how their investments achieve sustainable outcomes. • External verification, second-party review and post-issuance reporting can be important stages in verifying the sustainability credentials of products, but increase transaction costs for issuers and should not be considered sufficient nor necessary. • ESG data has improved over recent years, but continues to have patchy coverage by market and asset class.	**Investors can more easily identify and compare sustainable securities** • Investors are able to differentiate between sustainable and unsustainable securities • Investors can compare and contrast sustainable securities
• Investor demands for liquid securities with narrow spreads are not being met by the sustainable finance market due its small size and sector skew. • A lack of investor knowledge and understanding prevents engagement with sustainable finance. • Growth of passive investing could undermine the early growth of sustainable finance, given the need for greater engagement with issuers and higher analytical burden and cost. • Traditional risk factors such as sovereign, currency and political risks apply to sustainable finance. While instruments such as derivatives can hedge these risks, often they are not commercially viable for investors bearing emerging market risks.	**Investors are better able to invest in sustainable securities** • The process of investing in sustainable securities is simple and inexpensive • Investors do not have increased transaction and expertise costs when investing in sustainable securities
• The lack of global standards or recognised legal definition and market criteria based on voluntary compliance can result in reputational and legal risks for issuers and investors. • The voluntary nature of the market leaves investors without a contractual basis to ensure that securities sold as sustainable remain sustainable for their lifetime. • Underdevelopment of local regulatory frameworks and general FMI impedes functioning and growth in sustainable finance across emerging markets.	**Market participants trust in the sustainable finance market** • There is counterparty trust that the market will function correctly • There are sufficient assurance steps and checks and balances to promote this trust and improve transparency

The tools and resources to scale the market exist, but have yet to be deployed in an effective way. Doing so, however, will ultimately improve the sustainability of overall financial markets. In the future, sustainable finance will not be a distinct market; rather, sustainability will need to be a key feature across all financial decision making, globally. Therefore, instead of a sustainable finance market, there will be a financial market which is sustainable.

> “In the future, sustainable finance will not be a distinct market; rather, sustainability will need to be a key feature across all financial decision making, globally.”

A CROSS-BORDER FMI-DRIVEN APPROACH

A cross-border FMI-driven approach to scaling sustainable finance

FMIs have a unique place in the financial ecosystem. FMIs hold trusted, central and neutral positions in the global financial market, and include central securities depositories (CSDs), international central securities depositories (ICSDs), payment systems, central counterparties (CCPs), security exchanges, securities settlement systems and trade repositories. They are valued for their efficient infrastructure systems and wide-reaching networks across the financial market ecosystem, with breadth across both geography and the financial services value chain. They have unique visibility of – and access to – data which underpins global financial transactions and can therefore support continued sustainable finance market development. This builds on previous successes in international capital market development, such as supporting fixed income issuance for euroclearable instruments.[10]

“FMIs hold trusted, central and neutral positions in the global financial market, and include central securities depositories (CSDs), international central securities depositories (ICSDs), payment systems, central counterparties (CCPs), security exchanges, securities settlement systems and trade repositories.”

[10] PwC Strategy&, ‘Impact of Euroclearability’, April 2019.

FMIs can be segmented by cross-border FMIs and domestic FMIs. Cross-border FMIs offer capabilities which enable and facilitate the connection of issuers and investors across borders capabilities which are inherently domestic – for example, a domestic CSD, which provides services for securities issued domestically and which are traded and settled in the same jurisdiction.

> “A cross-border FMI-driven approach to scaling the sustainable finance market can be defined as bringing together market scaling efforts in a coordinated way across the financial market ecosystem to create the right conditions and incentives to support the transition of sustainable finance to a mainstream market.”

Cross-border FMI positioning has created three distinct opportunities to foster an environment which incentivises sustainable finance at each stage of the market’s maturity. Given that some sustainable securities and regions are more active in the sustainable finance market than others, the central and neutral positioning of cross-border FMIs in the financial ecosystem allows them to support all market participants and asset classes regardless of where they sit along the market’s trajectory. Therefore, a cross-border FMI-driven approach can support the levelling up of sustainable finance market capability and activity globally, bringing everyone along the journey, whether they are a longstanding market participant or just entering the market. In doing so, a cross-border FMI-driven approach facilitates a baseline level of global transparency around sustainable finance and ESG data, which is critical to transition from sustainable finance as a subset of the market to a global financial system which is sustainable.

These opportunities include:

1. Encouraging greater sustainable finance issuance, through reducing infrastructure, regulatory and informational barriers to issuance;
2. Processing ESG information flows including ESG metrics, disclosure and assurance; and
3. Expanding the market to more asset classes and participants.

Figure 1: FMI opportunities

Opportunity 1	Opportunity 2	Opportunity 3
Encourage greater sustainable finance issuance	**Improve the processing of ESG information between market participants**	**Expand the reach of the sustainable finance market**
• Reduce infrastructure and regulatory barriers • Reduce informational barriers	• Improve ESG metrics • Improve ESG disclosure • Improve ESG assurance	• Expand the market to more participants • Expand the market to more asset classes

First, cross-border FMIs can encourage a greater supply of sustainable investment opportunities within the market by reducing key barriers to issuance. Key barriers include infrastructure, regulatory and informational barriers, all of which prevent issuers from entering or engaging with the sustainable finance market, particularly for non-EU issuers. These barriers also have implications for investors who require a steady and diversified pipeline of sustainable investments to truly integrate sustainable finance into their portfolios. Investors have to be able to make informed decisions about a security, which may fall along a spectrum of 'sustainability'; to create this space for investor choice, all potential issuers need to be able to first access and engage with the sustainable finance market.

Activities to simplify and clarify the issuance process for successful sustainable issues to trade in international capital markets include:

- Using gap analysis to identify the key improvements in each country that can be made to market infrastructure and regulation to increase access to international capital markets;
- Working with regulators to advise on policy changes and directly improve market infrastructure;
- Providing an issuance guidance tool which clearly stipulates step-by-step process flows for issuers to follow for a successful issuance on international capital markets;
- Informing and highlighting globally relevant ESG metrics common across the most used standards, principles, taxonomies and issuance guides;
- Creating standardised contract templates with use-of-proceeds / proof of impact clauses to protect investors;
- Providing a matching feature to link eligible issuers (or parties acting on their behalf e.g. underwriters, listing agents) with available support schemes (e.g. grants and subsidies to support issuance); and
- Advising support providers to guide where to concentrate support.

Reducing these fundamental barriers in the short – to medium-term will help to bolster the supply and pipeline of sustainable securities to match the strong investor demand. By reducing infrastructure and regulatory barriers to sustainable finance issuance, cross-border FMIs alongside domestic FMIs can support a baseline level of capital market depth necessary for a global sustainable financial system. By reducing informational barriers to sustainable finance issuance, cross-border FMIs can ensure that the requirements for a successful sustainable finance issue are simple and clear to all issuers from the onset, enabling issuers from both developed and developing countries to attract international investment.

Cross-border FMIs can then improve the processing of ESG information between market participants. With greater volumes of non-financial performance data incorporated into financial systems comes the difficulty of interpreting inconsistent or unreliable information. Cross-border FMIs therefore have a big role to play in facilitating use of this new language between market participants. With strong track records in managing and quality-assuring data, cross-border FMIs can improve the processing of ESG metrics, ESG disclosure and ESG assurance, to ensure that these key pieces of information flow systematically between issuers and end-investors and are commonly understood and interpreted by all financial market participants.

Activities to improve the processing and distribution of ESG information flows include:

- Creating a sustainable finance security tag which holds reference data on the sustainability elements of the security. This will identify the sustainability standards or principles to which the security is aligned and the recognition labels awarded to the security by an ESG authority, regulator or jurisdiction;
- Standardising disclosure reporting templates;
- Embedding a disclosure reporting function in asset servicing to systematise the flow of disclosure information across the security lifecycle;
- Creating performance monitoring mechanisms for disclosure communication (e.g. through corporate actions processing);
- Creating centralised ESG data files to be transmitted alongside asset transactions, accessible by the public to facilitate transparency on issuer disclosure reports;
- Recommending clear criteria for robust sustainability assurance processes; and
- Providing open access records to assurer credentials and assurance reports, which can facilitate improved competitive tendering for issuer procurement of sustainability assurance.

FMIs can create centralised ESG data files, which are transmitted with each security transaction. For example, every time a dividend payment is made, investors should be able to automatically access the latest ESG data, including 3rd party opinions and impact reports, to assess how their asset is performing on sustainability objectives. For accessibility, the data may be presented with visual aids and dashboards. Building on this ESG disclosure file at a transactional level will ensure the continuity and visibility of the data across all parties. Trade associations have recognised the need for translation of disclosure reports into a common language, so that "unstructured reporting and disclosures [can be transformed] to structured decision-relevant data".[11] The medium for translation might be a depositary receipt, cloud technology or a DLT token (see Box A below). Every time a security's ESG disclosure file is updated, the information can then be systematically transferred to a central, private-sector run platform and translated to a common format to aid comparison.

[11] GFMA, Climate Finance Markets and the Real Economy, December 2020.

Box A: Tokenise proof of impact data

Once there is sufficient data harmonisation, proof-of-impact data tokens can be explored. Tokenisation involves using blockchain technology to create a digital representation of an asset or utility.[12] For proof of impact reporting, the impact data of a sustainable security, such as school places created, tonnes of CO_2 removed or trees planted, can be represented as an impact token. This impact token is registered on a blockchain and is able to provide investors with rapid access to impact data. Creating impact tokens could be one way to integrate proof of impact reporting into asset servicing. FMIs could create a blockchain system where issuers of sustainable securities and their investors are invited to be nodes. The FMIs' role will be to fulfil the notary function and be responsible for the creation and registering of the tokens.

Tokenising proof of impact could lead to many benefits:

- **Easier and faster access to data:** Investors can access post-issuance reporting on proof of impact as soon as the data is available on the ledger. The United Nations Development Programme (UNDP) CedarCoin initiative aims to reforest Lebanon's cedar tree forests. It uses impact tokens to immediately send investors a GPS-located photo as soon as a tree is planted.[13] This could simplify the "cumbersome" process for finding post-issuance reports.[14]
- **Automated data collection and real-time impact data:** In some cases, connecting measurement sensors to the data tokens allows for data collection to be automated and the updating of proof of impact data to occur in real time.[15] Automated reporting is particularly viable for clean energy projects, where Megawatt-Hours of clean energy produced can be measured directly. This provides investors in sustainable securities with more frequent and accurate impact data, showing them how their security performs over time.
- **More accurate attribution of impact:** Through the use of impact tokens, the impact of an investment can be tracked through supply chains, providing a more accurate view of the total impact of investments.[16] FishCoin uses blockchain technology and a peer-to-peer network to allow all parties on seafood supply chains, including consumers and governments, to track their fish all the way back to the sea.[17]
- **Immutability improves trust:** Registering impact data on a blockchain ledger creates a transparent, secure record of the impact performance of a sustainable asset. This helps to prevent greenwashing and promotes accountability in issuers of sustainable securities, thus increasing investors' trust in these assets.

[12] IISD, Impact Tokens: A blockchain-based solution for impact investing, April 2019.
[13] UNDP, Adopting a cedar tree brings diaspora money home, 7 February 2019.
[14] CBI, Post-issuance reporting in the green bond market, 2019.
[15] HSBC, Blockchain. Gateway for Sustainability Linked Bonds, 24 September 2019.
[16] World Economic Forum, 5 ways blockchain can transform the world of impact investing, 20 September 2018.
[17] IISD, Impact Tokens: A blockchain-based solution for impact investing, April 2019.

The ability to transfer rules-based information within FMI systems already exists in the market, which suggests that incorporation of ESG disclosure data files might be a relatively seamless addition to the market. For example, Euroclear's EMX Message System[18] for automatic fund management and Clearstream's OneClearstream[19] asset servicing portal could both be built upon to include this simplified reporting function.

These interventions can support investors to discern which securities are, indeed, sustainable according to the investor's own due diligence criteria and have confidence that their investments will remain in line with their sustainable investing objectives. For example, tagging the universe of sustainable finance securities offers an initial screening solution to investors, simplifying due diligence processes for both established investors grappling with the introduction of greater volumes of non-financial performance data as well as smaller investors who otherwise have low technical capacity to conduct thorough due diligence. Investors will therefore be better able to distinguish investment opportunities that deliver real and measurable impact from those which are conducted in a socially responsible manner but do not directly target ESG – and SDG-related areas.[20]

They can also benefit issuers by helping them to understand what ESG topics and metrics investors value, optimising issuer-investor engagement. For example, performance monitoring mechanisms for ESG disclosure communications will enable the creation and collection of not only issuer disclosures but also investor preferences for specific ESG topics. Issuers can then use this data to develop sustainable projects which cater to investor preferences.

Improving the processing of ESG information flows primarily through distribution and corporate actions processing will improve transparency and uphold the integrity of the sustainable finance market. This will be of critical importance as more environmental, social and sustainable metrics emerge and more data is transmitted within financial markets.

"The ability to transfer rules-based information within FMI systems already exists in the market, which suggests that the incorporation of ESG disclosure data files might be a relatively seamless addition to the market."

[18] Euroclear, Automate your order routing in the EMX Message System, 2015.
[19] Clearstream, OneClearstream, August 2017.
[20] United Nations Conference on Trade and Development, 'World Investment Report 2020: International Production Beyond the Pandemic', 2020, p. 187.

Finally, cross-border FMIs can expand the sustainable finance market to more asset classes and market participants. To catalyse greater sustainable finance flows, larger volumes on both the supply and demand side are needed. Having established clear steps for issuers at origination of a sustainability security issue and systematic processing of ESG information once a security is issued, FMIs can then use their central and neutral positioning within the financial ecosystem to 'crowd-in' more participants on both the issuer and investor sides. They can also widen the scope of sustainable finance to new asset classes or products, such as pooled small sustainable projects traditionally listed on ESG crowdfunding platforms.

Activities to expand the reach of the sustainable finance market include:

- Increasing new sustainable finance issue distribution infrastructure, particularly in emerging and frontier economies, benefitting all capital raising – not just sustainable finance;
- Creating a cross-border FMI database of ESG-screened public sector financial support – which includes reference data on the borrower, form of support, extent of ESG screening and expected wind down date of public support – in order to transition sustainable finance eligible investment opportunities to secondary markets within the private sector; and
- Creating links between the informal and formal sustainable finance markets to crowd-in participants on both the supply and demand sides. For example:
  - Facilitating the trading and settlement of pooled, sustainable crowdfunding products on platforms and exchanges, connecting new issuers with existing investors; and
  - Facilitating the trading and settlement of pooled, small sum crowdfunding investors to invest in more established asset classes, such as sustainable bonds.

Implemented over the longer term in parts of the sustainable market that are relatively mature, cross-border FMIs can facilitate diversification benefits to both issuers and investors. Without market expansion to more asset classes and market participants, there is a risk that sustainable finance remains a subset of overall financial markets, rather than supporting a sustainable transition of the global financial market. Additionally, expanding the sustainable finance market in this way will be instrumental to achieving Net Zero by 2050.

A cross-border FMI-driven approach has been levered previously to address discrete challenges in both developed and emerging markets. These include connecting domestic markets with international markets, supporting multi-currency delivery vs. payment and settling and clearing secondary market trades. **See Box B** for a case study of how FMIs have supported the eurobond market with efficient primary distribution and secondary market trading. **See Box C** for a case study of how FMIs have supported markets to become 'euroclearable'.[21]

[21] Euroclearability is defined by a set of conditions designed to establish an environment where international investors are better able to access a domestic bond market.

Box B: Improving infrastructure in the eurobond market

Eurobonds are bonds denominated in a different currency to the currency of the country in which they are issued. A eurodollar bond, for example, is denominated in US dollars and can be issued in any country outside of the USA. Autostrade, an Italian company, issued the first eurobond in 1963: a US$ 15 million eurodollar bond with a 15 year maturity and a 5.5% annual coupon.[22]

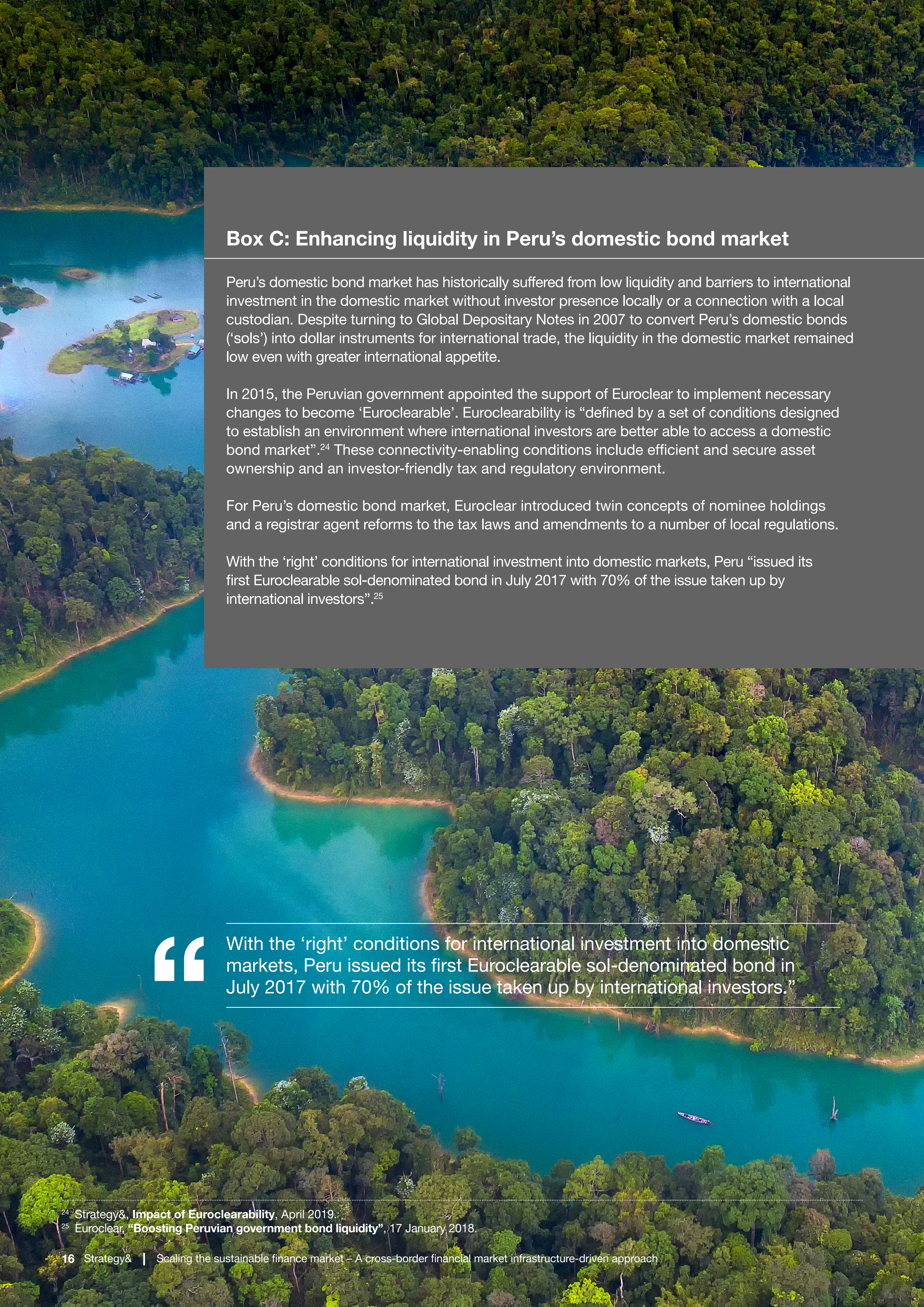
Eurobond market issuance grew quickly in the 1960s and 70s and established the market as a channel of intermediation for international capital flows. The main reason for this growth, alongside strict issuing requirements of domestic bond markets, was the establishment of an infrastructure for efficient primary distribution and secondary trading of eurobonds.[23] Eurobond issuance continued to grow significantly in the 1980s, growing from $26 billion in 1980 to $224 billion in 1989. This was driven by a rapid growth in secondary market trading of eurobonds as investors desired liquidity. This over-the-counter trading occurred through the international clearing systems of Euroclear and Cedel (now Clearstream).

Euroclear and Cedel led further improvements to the market infrastructure in the 1980s which made investing in eurobonds more attractive to institutional investors and central banks. In 1980, the two FMIs linked themselves electronically, enabling simultaneous book-entry transfers in one system to be made against payments with members on the other system. In 1989, the trade-matching and confirmation system, TRAX, was launched by Euroclear and Cedel. This was designed to increase the efficiency of settlements and reduce the risk of settlement errors.

The cooperation between Euroclear and Cedel to develop and improve the infrastructure for the secondary trading market for eurobonds shows the enabling effect that FMIs can have on the growth of financial markets.

> "The cooperation between Euroclear and Cedel (now Clearstream) to develop and improve the infrastructure for the secondary trading market for eurobonds shows the enabling effect that FMIs can have on the growth of financial markets."

[22] ICMA, History of the Eurobond market, 2021.
[23] Bank of England, The international bond market, The Bank of England Quarterly Bulletin: November 1991.



Box C: Enhancing liquidity in Peru's domestic bond market

Peru's domestic bond market has historically suffered from low liquidity and barriers to international investment in the domestic market without investor presence locally or a connection with a local custodian. Despite turning to Global Depositary Notes in 2007 to convert Peru's domestic bonds ('sols') into dollar instruments for international trade, the liquidity in the domestic market remained low even with greater international appetite.

In 2015, the Peruvian government appointed the support of Euroclear to implement necessary changes to become 'Euroclearable'. Euroclearability is "defined by a set of conditions designed to establish an environment where international investors are better able to access a domestic bond market".[24] These connectivity-enabling conditions include efficient and secure asset ownership and an investor-friendly tax and regulatory environment.

For Peru's domestic bond market, Euroclear introduced twin concepts of nominee holdings and a registrar agent reforms to the tax laws and amendments to a number of local regulations.

With the 'right' conditions for international investment into domestic markets, Peru "issued its first Euroclearable sol-denominated bond in July 2017 with 70% of the issue taken up by international investors".[25]

> With the 'right' conditions for international investment into domestic markets, Peru issued its first Euroclearable sol-denominated bond in July 2017 with 70% of the issue taken up by international investors."

[24] Strategy&, **Impact of Euroclearability**, April 2019.
[25] Euroclear, **"Boosting Peruvian government bond liquidity"**, 17 January 2018.

While the cross-border FMI-driven approach has yet to be tested, it has potential to create positive and lasting change in the sustainable finance market. FMIs have experience creating informational and connectivity efficiencies in traditional financial markets. The market can draw upon this experience to solve some of the fundamental challenges facing sustainable finance globally today.

While not an exhaustive list, the key benefits include:

- Reduced costs of issuance;
- Efficiency in investor due diligence;
- Greater trust through enhanced transparency;
- Equal access to the sustainable finance market and insights; and
- Convergence of the sustainable finance market with mainstream finance.

In particular, a cross-border FMI-driven approach can support sustainable finance in emerging and frontier economies. At its core, a cross-border FMI-driven approach offers pragmatic solutions to foster an environment which incentivises greater sustainable finance flows through an open architecture approach cross-border and support from domestic FMIs. The enablers of a cross-border FMI-driven approach are pragmatic because they address root problems in market infrastructure, which are common to emerging and frontier economies. Analysts expect that with FMI-enabled improvements in disclosure and standardisation of green labels, sustainable finance could have "an equivalent impact [in emerging markets] to the Brady bonds of the 1980s".[26] Therefore, a cross-border FMI-driven approach may offer a critical inflection point for these economies.

Finally, a cross-border FMI-driven approach to scaling sustainable finance can support the convergence of sustainable finance with mainstream finance. The FMI enablers described above offer a number of knock-on benefits for traditional finance, in addition to sustainable finance. For example, addressing market infrastructure gaps in emerging and frontier economies will support greater capital market activity overall, by facilitating access to a wider investor pool and improving liquidity. Similarly, an embedded ESG disclosure function of asset servicing will benefit investors with or without ESG mandates, as other non-financial performance metrics become better integrated into financial systems. Ultimately, a cross-border FMI-driven approach to scaling sustainable finance can support a financial system which is sustainable going forward.

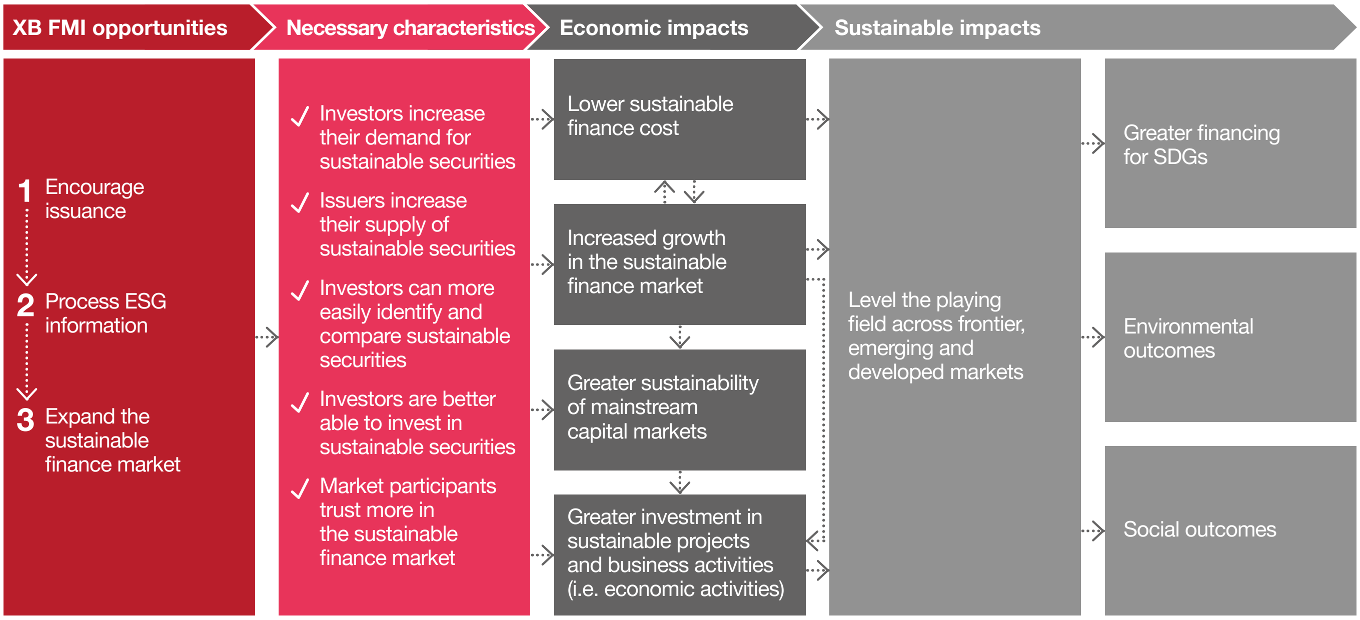
[26] Pictet Asset Management, 'Why EM bond investors can no longer ignore ESG', March 2021. Note that Brady bonds were an innovative debt reduction programme in response to the Latin American debt crisis of the 1980s, involving the issuance of US dollar denominated bonds, enabled by FMIs such as Euroclear.

POTENTIAL IMPACTS OF A CROSS-BORDER FMI-DRIVEN APPROACH

In this section, we set out the potential economic and sustainable impacts of a cross-border FMI-driven approach. The analysis presented is based on best efforts to quantify and illustrate the potential scale and scope, and therefore should be interpreted as indicative.

The framework used to assess the impacts of a cross-border FMI-driven approach is illustrated in Figure 2 below. Evidence from the literature of the benefits of FMI capabilities in other markets and the latest forecasts for the sustainable finance market growth are used to estimate these impacts.

Figure 2: Framework for assessing the impacts of a cross-border FMI-driven approach



Economic impacts

A cross-border FMI-driven approach can deliver positive economic and societal outcomes over the long-term, novel to previously tried approaches. The package of market scaling enablers proposed in this study can lead to an increased supply of sustainable securities and demand for sustainable finance, resulting in greater flows within the global sustainable finance market. While the sustainable finance market has experienced impressive growth in recent years without a cross-border FMI-driven approach, underpinning these additional flows are two arguably more important outcomes: improved efficiency of issuance processes and ESG disclosure, and enhanced comparability of sustainable securities to aid investor due diligence. These less tangible outcomes have not yet been realised through other market scaling approaches but are essential to creating a bedrock of trust in the sustainable finance market for its continued growth over the long term.

There are two channels through which a cross-border FMI-driven approach can increase the growth of the sustainable finance market:

- **Non-price channel:** FMIs can deepen capital markets in less developed economies leading to greater efficiency. They can also facilitate greater transparency through streamlined ESG disclosure and improved comparability of sustainable securities. These benefits have the effect of increasing both investor demand for sustainable finance and issuer supply of sustainable securities.
- **Price channel:** FMIs can enable the realisation of a lower cost of capital for sustainable finance issuers through a reduced yield.

The price and non-price channels are mutually reinforcing. Deep capital markets, greater transparency and improved comparability all serve to reduce transaction costs and foster a lower cost of sustainable finance. Likewise, a lower cost of sustainable finance can bolster the supply of sustainable finance from issuers, enabling greater sustainable finance flows. Greater flows will, in turn, improve the functioning of the sustainable finance market through greater liquidity, which will help to further deepen capital markets. Therefore, the price and non-price channels of sustainable finance market growth are mutually reinforcing.

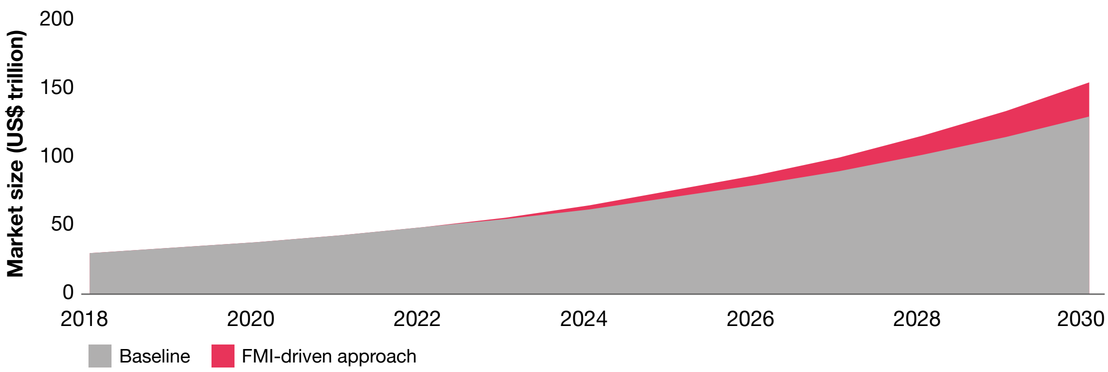
2.5%

uplift annually to the sustainable finance market growth

Drawing upon evidence of enhanced market growth in the Eurobond and global bond markets, we find that a cross-border FMI-driven approach has the potential to uplift the growth of the sustainable finance market by up to 2.5% annually through the price and non-price channels.

The 2.5% average annual market growth uplift from a cross-border FMI-driven approach translates into up to US$ 25 trillion additional capital mobilised in the sustainable finance market by 2030. Using estimates from United Nations Conference on Trade and Development (UNCTAD) (2020)[27] and Global Sustainable Investment Alliance (GSIR) (2018),[28] which value the sustainable finance market at roughly US$ 30 trillion in 2018, and a sustainable finance market growth forecast from Deutsche Bank which assumes a 13% CAGR,[29] this market growth uplift is applied from 2023.[30] This results in an estimated US$ 155 trillion market value by 2030, up from Deutsche Bank's US$ 130 trillion baseline. In other words, a cross-border FMI-driven approach can lead to an additional US$ 25 trillion mobilised in the sustainable finance market by 2030. This trajectory is illustrated in Figure 3. While some of the additional US$ 25 trillion is likely to draw across from mainstream finance sources, the increased focus on sustainable performance means incremental sustainable outcomes can be achieved from this higher growth in the sustainable financial market.

Figure 3: Additional capital mobilised in the sustainable finance market by 2030 with a cross-border FMI-driven approach



Source: Strategy& analysis, with Deutsche Bank forecast as baseline[31]

The majority of this additional capital could be channelled to emerging and developing economies. While there is currently little coverage of the sustainable finance market in these economies, there is great opportunity to grow the sustainable finance market if the right tools are deployed in an effective way. Considering improved efficiency and financial market depth are chief features of a cross-border FMI-driven approach, which is centred on developing a financial system that offers equal access to the sustainable finance market through globally reaching infrastructure, emerging and frontier markets stand to gain the most from this approach, where the need for sustainable financing is greatest and the investment of sustainable capital is the least. Therefore, the majority of this additional US$ 25 trillion capital could be channelled to emerging and frontier economies. Using the regional breakdown of the green bond market as a proxy for the sustainable finance market, we find that if a cross-border FMI-driven approach could deliver even a modest 1 percentage point increase in the relative emerging and developing economy market share each year, this could result in up to an additional US$ 17.7 trillion to emerging and frontier economies and US$ 7.4 trillion to developed economies by 2030.[32]

[27] United Nations Conference on Trade and Development (2020). 'World Investment Report 2020: International Production Beyond the Pandemic', p. 187.
[28] Global Sustainable Investment Alliance (2019), '2018 Global Sustainable Investment Review', March 2019, p. 8, Figure 1: Snapshot of Global Sustainable Investing Assets, 2016-2018.
[29] Deutsche Bank (2018). 'Big data shakes up ESG investing', Deutsche Bank Research, October 2018.
[30] Note that at the time of publication, this is the earliest a cross-border FMI-driven approach to scaling sustainable finance may be activated.
[31] Deutsche Bank (2018). 'Big data shakes up ESG investing', Deutsche Bank Research, October 2018.
[32] Note that the emerging and frontier economy share of the sustainable finance market includes sustainable finance by supranationals as these economies are most likely to benefit directly from supranational finance. Figures may not add up to US$ 25 trillion due to rounding.

With a shared, global and political will, the trajectory of the sustainable finance market could be even higher. Important commitments from global leaders have already been made. President Biden's Leaders Summit on Climate in April 2021 – which brought together leaders of the economies responsible for 80% of global greenhouse gas emissions – saw the US announce its target to reduce emissions by 50-52% by 2030, relative to 2005 levels.[33] This year's UN's Climate Change Conference of the Parties (COP26) is expected to further energise the push for a sustainable future. The recent announcement of the EU's 'Fit for 55' commitment demonstrates this increase in ambition and encouragement for other companies to do the same. However, for these commitments to turn into action, greater sustainable finance flows are needed. It is indeed possible that with greater political championship, rather than just sponsorship, the market could see a step change in sustainable finance over the coming years. This would subsequently result in even greater impact potential of a cross-border FMI-driven approach to scaling the sustainable finance market, as there would be more resources and investment to successfully seize the three FMI opportunities described above.

In addition to supporting the scaling of the sustainable finance market, the opportunities proposed in this study can support the transition of mainstream financial instruments to become more sustainable. For example, embedding ESG disclosure within asset servicing is applicable to all forms of finance and offers an avenue for issuers of financial instruments to demonstrate their sustainability improvements. Indeed sustainability improvements can have the greatest short-term impact in converting polluting industries, rather than financing new cleaner technologies with slow uptake.

This additional capital can lead to incremental sustainable outcomes. It is difficult to ascertain how much of this incremental financing will meet sustainable goals. While some sustainable projects and investment opportunities may be funded by traditional finance means without a cross-border FMI-driven approach, the benefit of FMI-enabled sustainable finance is that it facilitates a deeper focus on sustainable outcomes with greater transparency, richer ESG data and improved communication between issuers and investors. Overall, this can lead to truly incremental sustainable outcomes.

> “It is indeed possible that with greater political championship, rather than just sponsorship, the market could see a step change in sustainable finance over the coming years.”

[33] The White House, 'FACT SHEET: President Biden's Leaders Summit on Climate', 23 April 2021.

Sustainable impacts

FMIs can facilitate sustainable finance that seeks real and measurable impact, beyond socially responsible investment. The Organisation for Economic Co-operation and Development (OECD) estimates that merely 10% of sustainable finance investments definitively seek sustainable development impact.[34] This is consistent with a report by the Asian Development Bank, which finds that "the roles of [multilateral development banks (MDBs)] and UN agencies on SDG implementation appear to be compartmentalized between financing (led by MDBs) and technical advice (led by the UN)".[35] As the UN's SDG 2030 deadline approaches, greater resources will be channelled to progressing the SDGs and, as such, this share is likely to increase. The FMI market scaling enablers proposed in this study can support the development of greater impact investing. For example, by providing an initial screening tool for sustainable securities and encouraging greater clarity on use of proceeds through streamlined ESG disclosure within asset servicing, FMIs support robust investor due diligence. Investors will therefore be better able to distinguish investment opportunities which deliver real and measurable impact from those which are conducted in a socially responsible manner but do not directly target ESG – and SDG-related areas.[36]

The additional capital mobilised by a cross-border FMI-driven approach translates to global time savings of up to 0.6 to 1.1 years in financing the UN's SDGs. It is estimated that to achieve the SDGs, there is a global investment need ranging from US$ 5 to 7 trillion per year.[37] Accounting for private and public financial flows which already target the SDGs, the financing shortfall is between US$ 2 and 4 trillion per year between now and 2030.[38] If the share of the sustainable finance market which is deployed to sustainable development impact increases by just 1 percentage point over the eight years from 2023 to 2030, the additional capital mobilised by a cross-border FMI-driven approach could translate into savings of up to 0.6 to 1.1 years in financing the SDGs (or roughly 7 to 13 months).[39]

Up to

1.1

years saved
in financing
the UN's SDGs

> "The additional capital mobilised by a cross-border FMI-driven approach could translate into savings of up to 0.6 to 1.1 years in financing the SDGs (or roughly 7 to 13 months)."

34 OECD, Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet', 2020. Doi: 10.1787/e3c30a9a-en
35 Asian Development Bank – Independent Evaluation, '2021 Annual Evaluation Review: Supporting the Sustainable Development Goals', March 2021, p. 13.
36 United Nations Conference on Trade and Development, 'World Investment Report 2020: International Production Beyond the Pandemic', 2020, p. 187.
37 [1] United Nations Association UK (2019). 'Filling the financing gap', 19 June 2019. [2] UNEP Finance Initiative, 'Rethinking Impact to Finance the SDGs: A Position Paper and Call to Action prepared by the Positive Impact Initiative', November 2018, p. 3.
38 United Nations Association UK (2019). 'Filling the financing gap', 19 June 2019.
39 Assuming linear growth of the sustainable finance market and progress against the SDGs

A cross-border FMI-driven approach can help to balance progress on sustainability globally. Emerging and frontier economies currently face the largest SDG financing shortfall – the UN's Sustainable Development Solutions Network estimates a funding gap between US$ 1.4 trillion and US$ 3 trillion per year for low-income countries.[40] COVID-19 has only exacerbated this problem, putting emerging and frontier economies on "the brink of a balance-of-payments crisis that has been exacerbated by capital outflows and the collapse of commodity prices," which has reduced sustainable finance issuance greatly in these countries.[41] However, these economies stand to gain the most from a cross-border FMI-driven approach, which caters for the pooling of expertise and resources across market participants such as development banks.

A cross-border FMI-driven approach to scaling sustainable finance could lead to an average annual global CO_2 equivalent (eq) emissions savings of up to 0.1-1.3% of current emissions. Environmental finance is likely to retain the majority share of the sustainable finance market in the period to 2030. Financing positive environmental outcomes has historically been a priority for the sustainable finance community, relative to the social and governance categories of ESG. Within environmental finance, most investment is earmarked for climate change mitigation and adaptation, with CO_2 eq savings being the clearest impact metric. Gibon et al. (2020) estimates the aggregated life-cycle assessment based impacts of green bonds issued by the European Investment Bank between 2015 and 2018 and finds a savings range of 29-359 tonnes CO_2 eq per million euro.[42] Applying this range to the potential environmental share of the additional capital mobilised by a cross-border FMI-driven approach by 2030 leads to an average annual global CO_2 eq emissions savings of up to 0.1-1.3% of current emissions.[43] To put this into context, to achieve the Paris Climate Agreement's 1.5°C goal, global emissions need to fall by 11.7% annually.[44] To achieve the 2°C goal, they need to fall by 7.7% annually. While the 0.1-1.3% average annual emissions savings estimate uses European baselines – which are notably more advanced than a global baseline would be – even the midpoint of an additional 0.7% in CO_2 eq savings would contribute substantially to progressing global climate goals.

Up to 430 million children could be afforded primary school education through the additional capital mobilised by a cross-border FMI-driven approach. Social finance is expected to account for roughly one fifth of the sustainable finance market by 2030. A similar approach is used to estimate the social share of the sustainable finance market in the period to 2030, proxied by the 2019 sustainable bond market SDG breakdown. This suggests that around 20% of sustainable finance will target positive social outcomes.[45] This breakdown is used to estimate the potential financing that might target equal access to education by 2030. Of the additional capital mobilised to emerging and developing economies from a cross-border FMI-driven approach, an annual average US$ 232 billion could be channelled to financing education. This compares to the US$ 193 billion annual financing gap for SDG 4 – "to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all"[46] – in lower and lower-middle-income countries. In other words, if the entire expected social share of the additional capital mobilised by a cross-border FMI-driven approach by 2030 was to target positive educational outcomes, up to 430 million children could be afforded primary school education.

[40] United Nations Association UK (2019). 'Filling the financing gap', 19 June 2019.
[41] Kuchtyak, M., Ghosh, R., Conner, S., Davison, A. and Cahill, B.(2020). 'Coronavirus Fallout Dampens Q1 2020 Green Bond Volumes While Spurring Social Bonds'. Moody's, 2020.
[42] Gibon, T. et al (2020). 'Shades of green: life cycle assessment of renewable energy projects financed through green bonds', Environmental Research Letters, Vol. 15, 2020.
[43] Assuming all expected environment finance by 2030 targets reducing CO_2 eq emissions
[44] PwC, Net Zero Economy Index 2020, p. 6, Figure 1.
[45] Environmental Finance, 'Sustainable Bonds Insight 2020', 2020, p. 24.
[46] United Nations Department of Economic and Social Affairs – Sustainable Development, Goal 4.

CONCLUSION

The central and neutral positioning of FMIs within the financial ecosystem offers three important opportunities for FMIs to further support the scaling of the sustainable finance market. Cross-border FMIs in particular have a coveted reach across financial markets connecting developed, emerging and frontier markets.

The neutrality and reach of cross-border FMIs means they are in a prime position to:

1. Encourage greater sustainable finance issuance, through reducing infrastructure, regulatory and informational barriers to issuance;
2. Improve the processing of ESG information flows including ESG metrics, disclosure and assurance; and
3. Expand the market to more asset classes and participants.

> "Cross-border FMIs can provide the driving force, but committed collaboration across financial market participants is important to creating the interlinkages necessary for a truly global financial market that is sustainable."

A cross-border FMI-driven approach to scaling the sustainable finance market offers significant economic and sustainable impacts over the long term. Our high-level assessment indicates the cross-border FMI-driven approach can uplift the current projected trajectory of the sustainable finance market, contributing up to US$ 25 trillion in additional capital to the sustainable finance market. While some of this capital will inevitably be capital transitioning from traditional financial markets to sustainable financial markets, ultimately it will support the development of a financial system which is sustainable through greater ease and transparency for both issuers and investors. Additionally, the approach caters to emerging and frontier markets, where the need for sustainable financing is greatest and the investment of sustainable capital is the least.

Collaboration across the financial market ecosystem is necessary to succeed in scaling the sustainable finance market through a cross-border FMI-driven approach. The intention of a cross-border FMI-driven approach is to bring together market-scaling efforts in a coordinated way across the financial market ecosystem to create the right conditions and incentives to increase the growth of the sustainable finance market. Cross-border FMIs can provide the driving force, but committed collaboration across financial market participants is important to creating the interlinkages necessary for a truly global financial market that is sustainable. Otherwise, the financial industry risks devoting time and resources to another siloed effort, which may exclude small issuers and underdeveloped markets.

Time is of the essence. At the time of publication, there are just over nine years left to progress and achieve the UN's SDGs by 2030. There is still a long way to go in a short amount of time. However, with swift endorsement and coordination, several of the market scaling enablers proposed in this study can be activated over the next year. Additionally, adapting existing initiatives supporting sustainable finance can help to minimise activation time and cost.

There is an action for all market participants willing to get involved. To ensure a coordinated approach, it is imperative that FMIs, multilateral organisations, development banks and global banks co-design the way forward. Euroclear and its partners have already begun the development of a number of prototypes to set an FMI-driven approach into action. For ease and speed, activation might begin with cross-border FMIs, drawing upon their important relationships with sovereign and corporate issuers across developed, emerging and frontier markets. Collaboration across the financial ecosystem is needed to ultimately create a global financial market which is truly sustainable.

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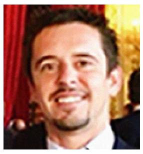

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