Scaling Up Private Climate Finance in EMDEs: Challenges and Opportunities
Overview

- **Main topic:** how to scale up private climate finance in EMDEs

- **Challenges:** a combination of impediments related to both demand for and supply of private climate finance to EMDEs
  - Climate finance = adaptation + mitigation finance

- **Opportunities:** new types of financial instruments that can overcome some of the challenges, better utilization of MDB resources, transition taxonomies

- **Collective action by the public sector, IFIs, MDBs and the private sector** is needed:
  - Development of innovative instruments for risk-reduction and impact verification
  - Expansion of investor base
  - Provision of risk-absorption capacity and better leveraging MDBs’ balance sheets
  - Strengthening of climate information architecture (transition taxonomies)
  - Catalytic role of the IMF
Strong momentum for sustainable finance in EMDEs …

**Sustainable debt issuance in EMDEs grew strongly in 2021, with a notable rise in sustainability-linked instruments**

**Despite recent increases, sustainable equity investments in EMDEs remain small**

### 1. Sustainable Instrument Issuance in EMDEs, by Type
(Billions of US dollars; percent)

- **Sustainability-linked loan**
- **Sustainability-linked bond**
- **Sustainability bond**
- **Social bond**
- **Green loan**
- **Green bond**

- **Green instruments, percent of total EMDE sustainable instrument issuance (right scale)**
- **Sustainability-linked instruments, percent of total EMDE sustainable instrument issuance (right scale)**

### 2. Sustainable Equity Assets under Management, by Selected Climate Fund Types
(Billions of US dollars; percent)

- **Low-carbon/fossil-fuel-free-fund equity**
- **Environmental impact fund equity**
- **Environmental sector fund equity**

- **Percent of total EMDE equity (right scale)**
- **Percent of total AE equity (right scale)**

Sources: Bloomberg Finance L.P.; Morningstar Direct; and IMF staff calculations.

Note: Data for 2022 in figure 1 are annualized based on the first half of 2022 (2022e).
... but climate finance flows are still falling short of targets

1. Global Climate Finance Flows in Mitigation and Infrastructure Investment Needs by Region (Billions of US dollars)

   Sources: Climate Policy Initiative (2021); Notre Dame Global Adaptation Index; World Bank (2019); World Economic Outlook database; and IMF staff calculations.

   Note: In figures 1 and 2, the infrastructure needs for mitigation include the energy and transport sectors, and infrastructure needs for adaptation include the water and sanitation, irrigation, and flood protection sectors. In figure 2, the GDP-weighted average vulnerability score measures a country’s exposure, sensitivity, and capacity to adapt to negative effects of climate change.

... and even more so for adaptation finance despite large vulnerabilities to climate change

2. Global Climate Finance Flows in Adaptation, Infrastructure Investment Needs, and Vulnerability Score by Region (Billions of US dollars)

The overall gap vis-à-vis mitigation needs is high across regions ...
Matching supply and demand is a complex task; the climate information architecture is still weak, though improving.

**Lack of markets upstream**, underpinned by weak institutional capacity

**Lack of pipelines of projects** with bottlenecks in project preparation and development

**Variety of market participants** with diverse objectives, time horizons, scale requirements, and risk appetite levels

Climate-related **data** lacks granularity, availability and accessibility (Africa, Asia, small island developing states)

Role of the Fund in the NGFS Bridging Data Gaps report (July 2022) and the design of the Climate Data Directory

The European and Chinese experiences have propelled a series of EMDEs to develop **regional and/or national taxonomies** (Asia and Latin America)

The Fund leads a joint project with the WB, the OECD and the BIS on a guidance on sustainable finance alignment approaches, including taxonomies

Climate-related corporate **disclosures** progressively expanding, but lack standardization, completeness, and reliability (mostly in Asia and in Turkey, South Africa, Chile and Peru)

Role of the Fund in the ISSB and NGFS
The distribution of ESG scores is dominated by firms listed in advanced economies. This skewing cannot be explained by the size of EMDE firms, which on average does not differ from advanced economy firms.

1. Smoothed Distribution Function of ESG Scores (Probability)

2. ESG Scores and Firm Size

Sources: Morningstar; Refinitiv; and IMF staff calculations.
EMDE allocations by ESG funds are relatively small

Allocations to EMDEs by ESG funds are lower than those by non-ESG funds...

1. Share of EMDE Allocations by ESG vs. Other Funds (up to Q2 2022) (Percent)

![Graph showing the share of EMDE allocations by ESG vs. other funds up to Q2 2022.]

...which is driven partly by the relatively small size of ESG funds dedicated to EMDEs

2. EMDE-Dedicated ESG Funds vs. EMDE Non-ESG Funds (up to Q2 2022) (Billions of US dollars; percent)

![Graph showing the global AUM of EMDE-dedicated ESG funds, share of EMDE-dedicated funds within ESG funds, and within non-ESG funds up to Q2 2022.]

Sources: Morningstar; Refinitiv; and IMF staff calculations.
Innovative financing instruments are needed

<table>
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<tr>
<th>Type of instrument</th>
<th>Examples</th>
<th>Use case</th>
<th>Fundamental challenges addressed</th>
<th>Targeted private investors</th>
<th>Mechanism to ensure climate benefits</th>
<th>Public sector / MDB involvement</th>
<th>Design challenges</th>
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<tr>
<td>Structured finance – EMDE (closed-end)</td>
<td>IFC-Amundi, Axa-Blue Like an Orange green bond funds</td>
<td>Emerging markets with existing bank loans to green projects</td>
<td>Credit risk-reduction (investment grade), scaling, potentially currency risk reduction through pooling</td>
<td>Institutional investors incl. pensions funds and insurance companies</td>
<td>Section of eligible bank loans, usual green bond certification</td>
<td>De-risking (purchase equity tranche / first loss guarantee); technical assistance</td>
<td>Requires already existing bank loans and technical assistance for banks to issue green bonds</td>
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<td>fixed-income funds</td>
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<td>Blended finance for infrastructure and other complex projects</td>
<td>Mezzanine / first-loss finance for infrastructure projects</td>
<td>Green-field infrastructure projects (e.g., energy sector), use of new types of technologies</td>
<td>Mitigation of political risks, credit risk, mitigation of information asymmetry problems</td>
<td>Specialist investors and investment funds, local investors</td>
<td>Project selection</td>
<td>Own resources for equity / mezzanine investment, provide specialist expertise for project design</td>
<td>Complex contractual agreements, extensive equity/mezzanine investment can moral hazard issues, limits returns for other potential equity investors</td>
</tr>
<tr>
<td>Outcome-based sustainable debt instruments</td>
<td>Sustainability-linked instruments (bonds, loans, etc.)</td>
<td>Support firm or government-level alignment with sustainability targets</td>
<td>Information asymmetry (“green-washing”)</td>
<td>All</td>
<td>Penalty (or bonus) provides incentive to fulfill sustainability target</td>
<td>None, sovereigns could issue to support market development and set standards</td>
<td>Sustainability targets may not be sufficiently ambitious, penalties must be high enough to create necessary incentives for issuer</td>
</tr>
<tr>
<td>Private finance for public sector projects (pay for success)</td>
<td>Environmental impact “bonds”</td>
<td>Adaptation finance, non-bankable transition finance</td>
<td>Potential inefficiencies in public-sector investment</td>
<td>Specialized funds, donor funds, MDBs</td>
<td>Project selection, due diligence</td>
<td>Direct investment, technical assistance</td>
<td>High financial and political risks for private investors</td>
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## The IFC-Amundi deal and the role of MDBs

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>Due diligence, monitoring of Bank 1 (in EMDE)</td>
</tr>
<tr>
<td>2</td>
<td>Issue green bond (green loan) by Loan firm 1</td>
</tr>
<tr>
<td>3</td>
<td>Pooling of green bonds</td>
</tr>
<tr>
<td>4</td>
<td>MDB (or provide guarantee)</td>
</tr>
<tr>
<td>5</td>
<td>Transaction for institutional investors</td>
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</table>

### Existing finance for climate-beneficial projects
- Firm 1 with climate-beneficial projects in sector i (in EMDE)
- Firm N with climate-beneficial projects in sector j (in EMDE)

### Structured climate finance to attract institutional investors
- Banks 2…N with climate-beneficial loans issuing green bonds (in same or other EMDE)
- Use of proceeds
- Green bond 1
- Green bond 2
- Green bond N

### EMDE green bond fund
- A (First loss tranche (high credit risk))
- L (Senior tranche (low credit risk))
Most sustainability-linked bonds have either a greenhouse gas or another environmental target ...

1. Sustainability Target, by Share of EMDE Issuance Amount (Percent)

- Greenhouse gas only
- Greenhouse gas and other non-environmental
- Other environmental
- ESG score
- Multiple E, S, and G
- Social

2. Coupon Penalties, by Share of Issuance Amount (Percent)

... but the (small) penalties are unlikely to be high enough to create strong-enough incentives for issuers to fulfill the pre-agreed target

Sources: Bloomberg Finance L.P.; and IMF staff calculations.
Broadening the investor base is necessary but challenging

Matching supply and demand for climate financing is challenging given the variety of market participants

Global Climate Finance Flows in 2019 and 2020 by Source and Instrument

Sources: Climate Policy Initiative; World Bank Data; Notre Dame Global Adaptation Initiative; IMF Calculations.
MDBs and climate finance for EMDEs

**MDBs only crowd-in private finance on average of only about 0.3 times the resources they commit themselves...**

1. **MDB Climate Finance from Their Own Resources and Private Investors (Private Co-Finance), 2021**
   (Billions of US dollar, left scale; ratio, right scale)

<table>
<thead>
<tr>
<th>Instrument</th>
<th>MDB</th>
<th>Total co-finance</th>
<th>Private co-finance</th>
<th>Multiplier total co-finance (right scale)</th>
<th>Multiplier private co-finance (right scale)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grant</td>
<td>0.1</td>
<td>0.5</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Guarantee</td>
<td>0.5</td>
<td>2.5</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Investment loan</td>
<td>1</td>
<td>7.1</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Results-based financing</td>
<td>2.2</td>
<td>14.9</td>
<td>14.9</td>
<td>14.9</td>
<td>14.9</td>
</tr>
<tr>
<td>Other instruments</td>
<td>2.8</td>
<td>17.6</td>
<td>17.6</td>
<td>17.6</td>
<td>17.6</td>
</tr>
</tbody>
</table>

**Note:** ADB = Asian Development Bank; AfDB = African Development Bank; AIIB = Asian Infrastructure Investment Bank; EBRD = European Bank for Reconstruction and Development; EIB = European Investment Bank; IDBG = Inter-American Development Bank Group; IsDB = Islamic Development Bank; MDB = multilateral development bank; WBG = World Bank Group.

**...in part because they invest a small share in equity instruments or guarantees**

2. **Use of Instruments: Total Commitments of MDBs' Own Resources, 2021**
   (Percent)

- Mitigation finance - outer circle ($33.1 billion total)
- Adaptation finance - inner circle ($17.6 billion total)

Sources: EBRD, 2021 Joint Report on Multilateral Development Banks' Climate Finance; and IMF staff calculations.
Sovereign sustainable bond issuance could help boost private markets

Sovereigns have been latecomers in sustainable debt markets……

1. Lag between First Corporate Sustainable Bond Issuance and Sovereign Sustainable Bond Issuance (Months)

2. Annualized Average Corporate Sustainable Bond Issuance before and after First Sovereign Sustainable Bond Issuance (Percent of GDP)

Sources: Bloomberg Finance L.P.; IMF, World Economic Outlook database; and IMF staff calculations.
Policy Implications

Fostering improvements across a complex ecosystem

- ESG scores and funds
- New financing instruments
- Role of MDBs and DFIs
- Role of the IMF (RST)
- Potential of international carbon markets
- Climate information architecture & transition taxonomies
- Better assessment of needs and supply
- Sovereign sustainable debt issuance as a catalyzer