



# International Monetary Fund

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

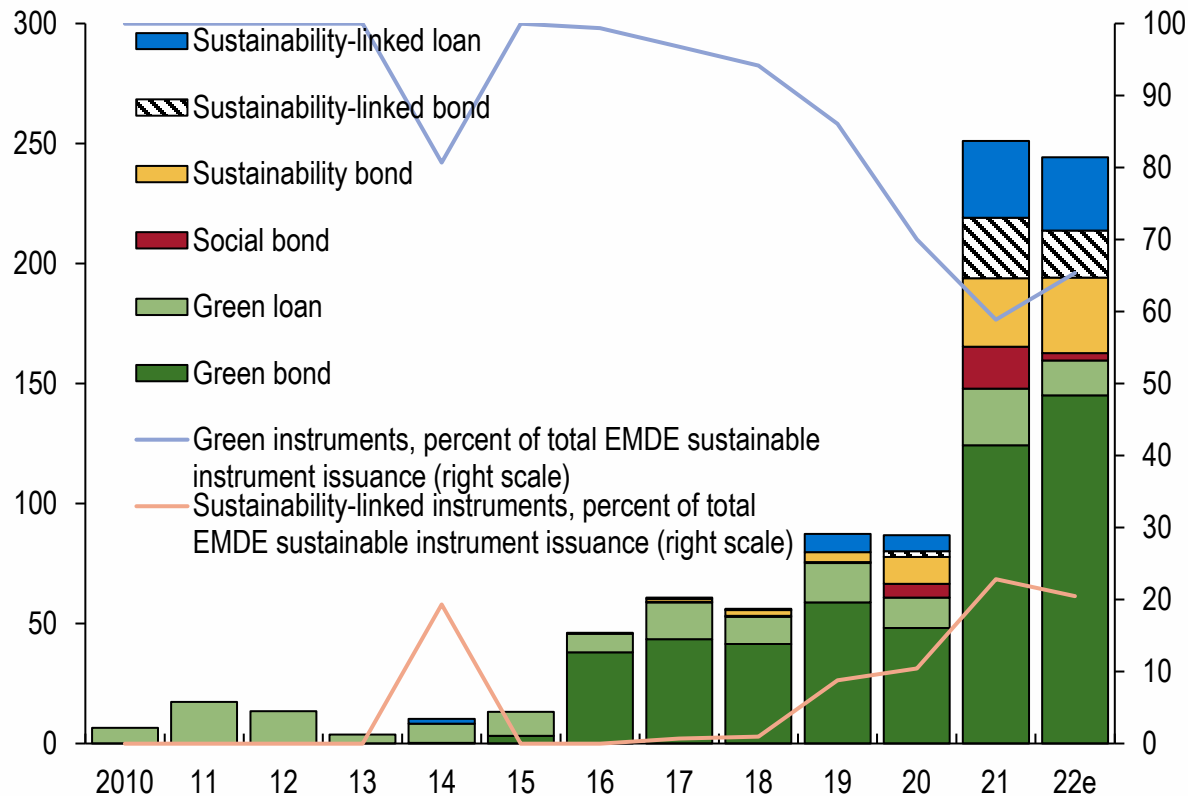
# Overview

- **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 ...

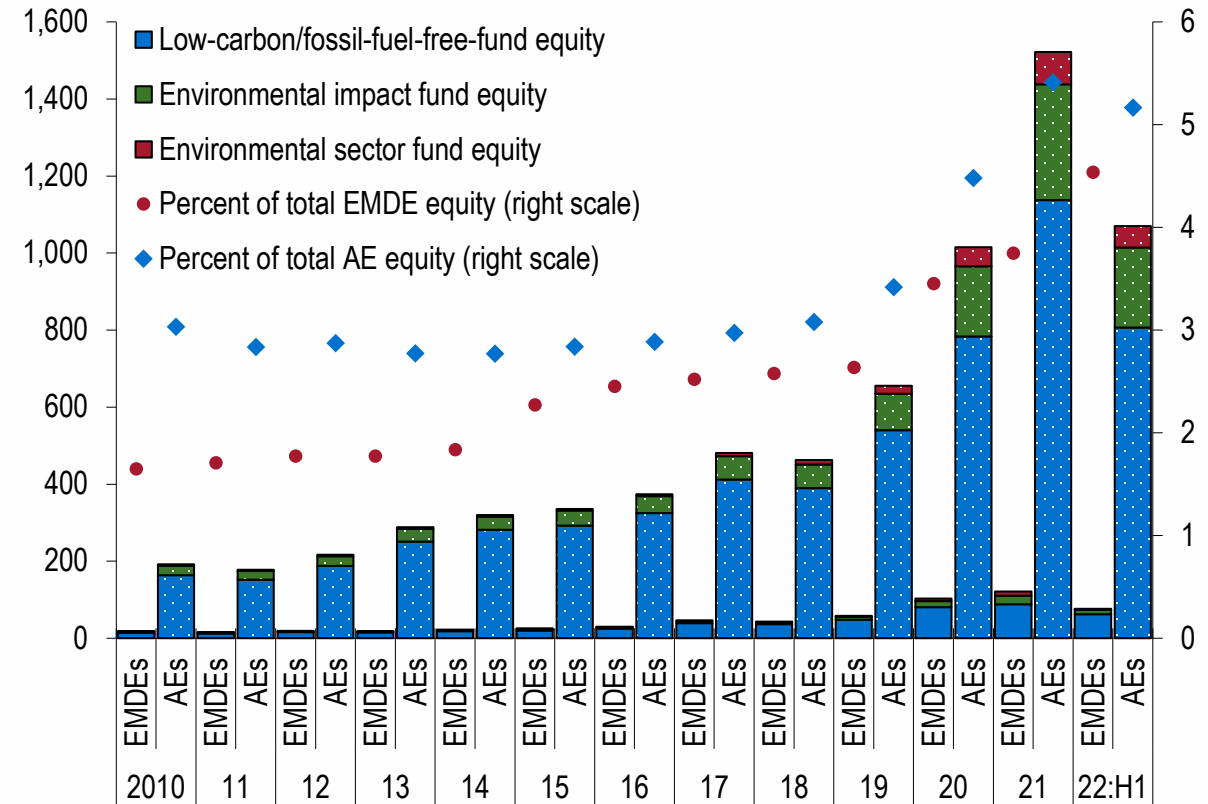
*Sustainable debt issuance in EMDEs grew strongly in 2021, with a notable rise in sustainability-linked instruments*

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



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

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



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

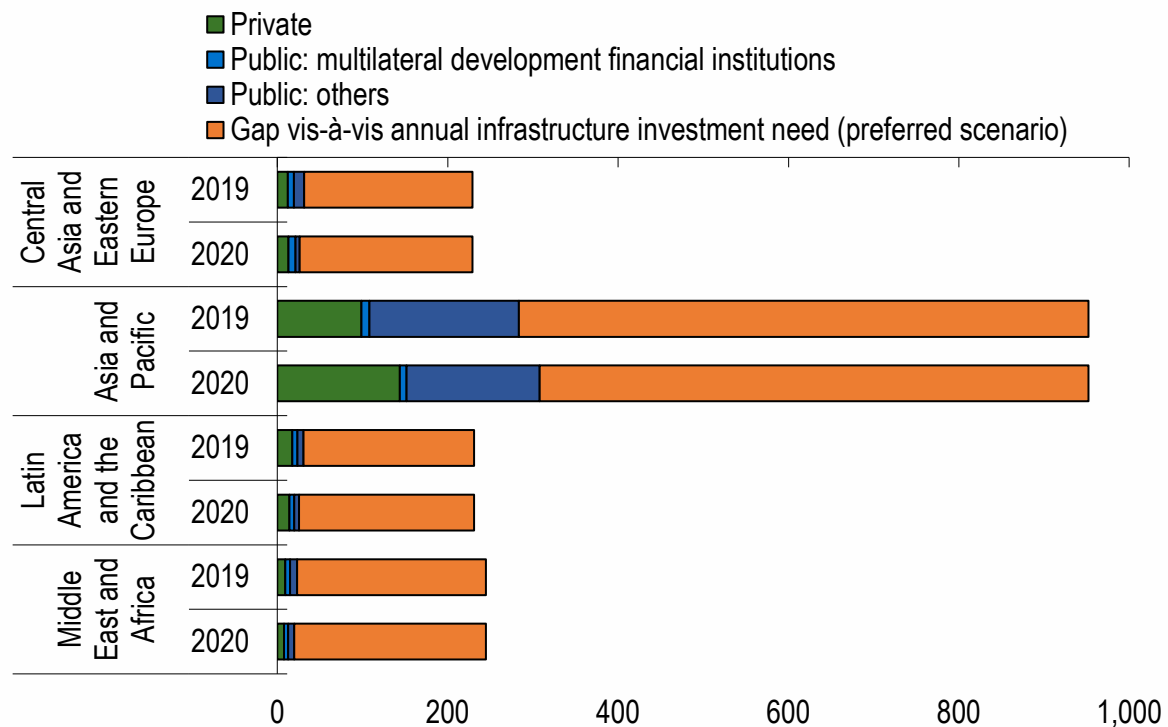
Note: Data for 2022 in figure 1 are annualized based on the first half of 2022 (2022e).

# ... but climate finance flows are still falling short of targets



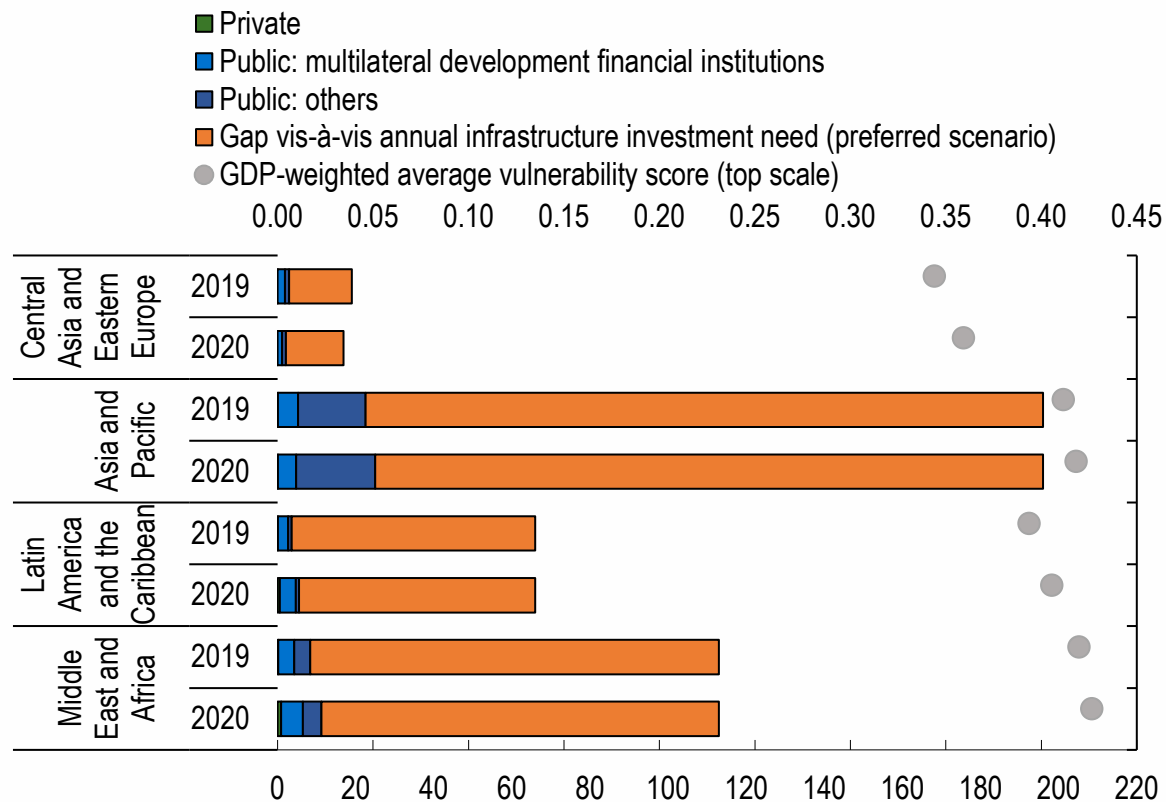
The overall gap vis-à-vis mitigation needs is high across regions ...

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



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

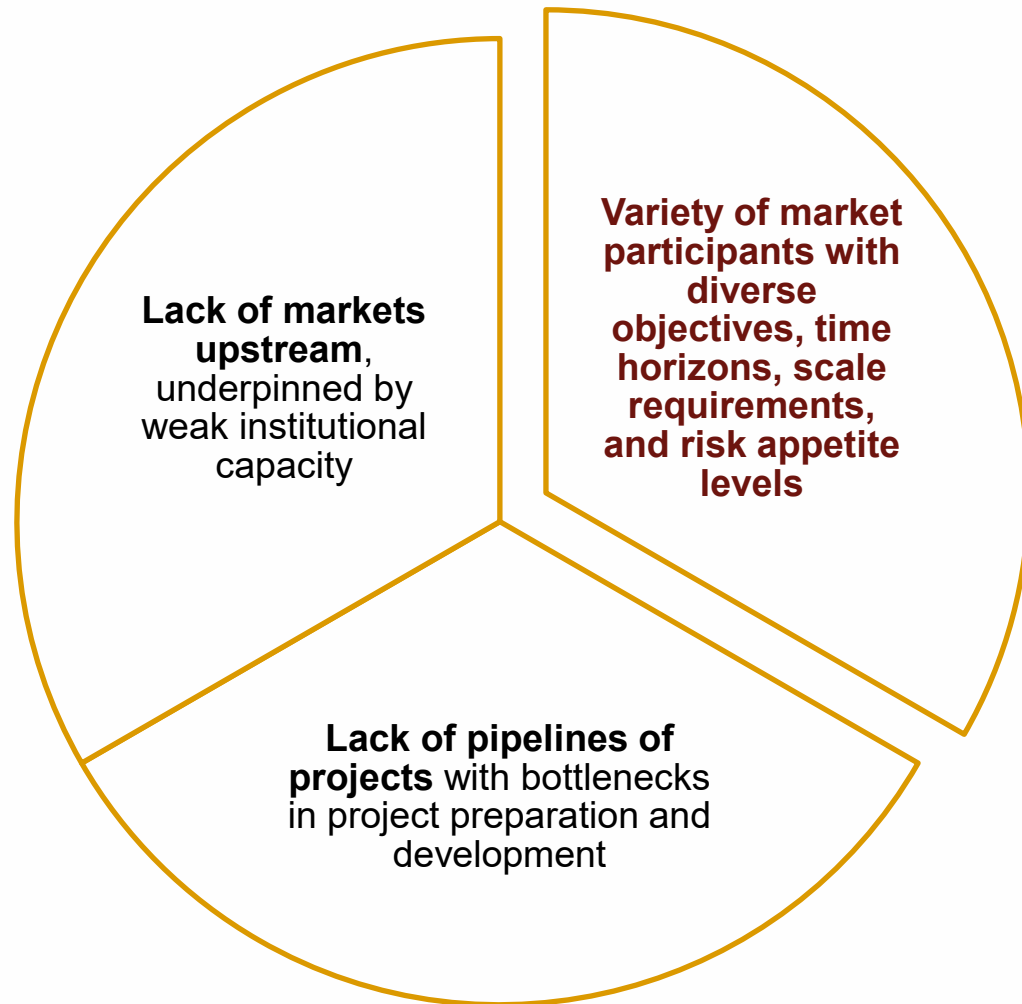
## 2. Global Climate Finance Flows in Adaptation, Infrastructure Investment Needs, and Vulnerability Score by Region (Billions of US dollars)



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.

# Matching supply and demand is a complex task; the climate information architecture is still weak, though improving



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

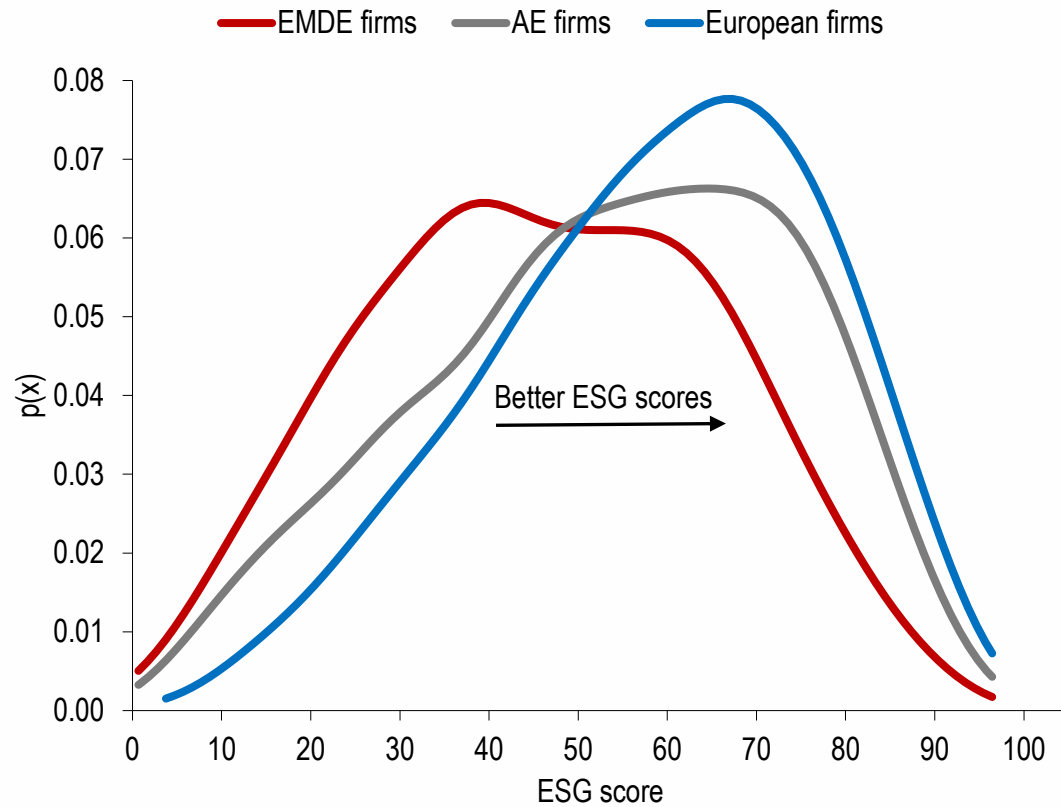
(mostly in Asia and in Turkey, South Africa, Chile and Peru)

Role of the Fund in the ISSB and NGFS

# ESG scores put EMDE firms at a disadvantage

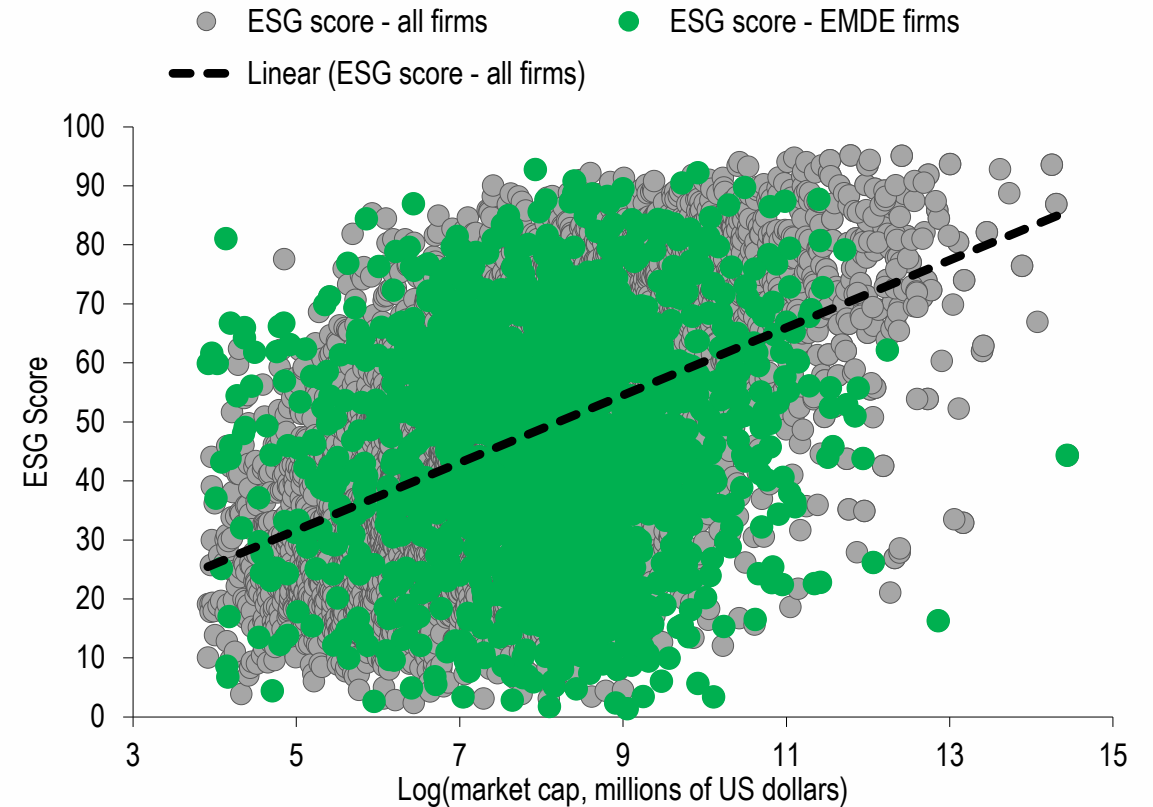
*The distribution of ESG scores is dominated by firms listed in advanced economies*

## 1. Smoothed Distribution Function of ESG Scores (Probability)



*This skewing cannot be explained by the size of EMDE firms, which on average does not differ from advanced economy firms*

## 2. ESG Scores and Firm Size



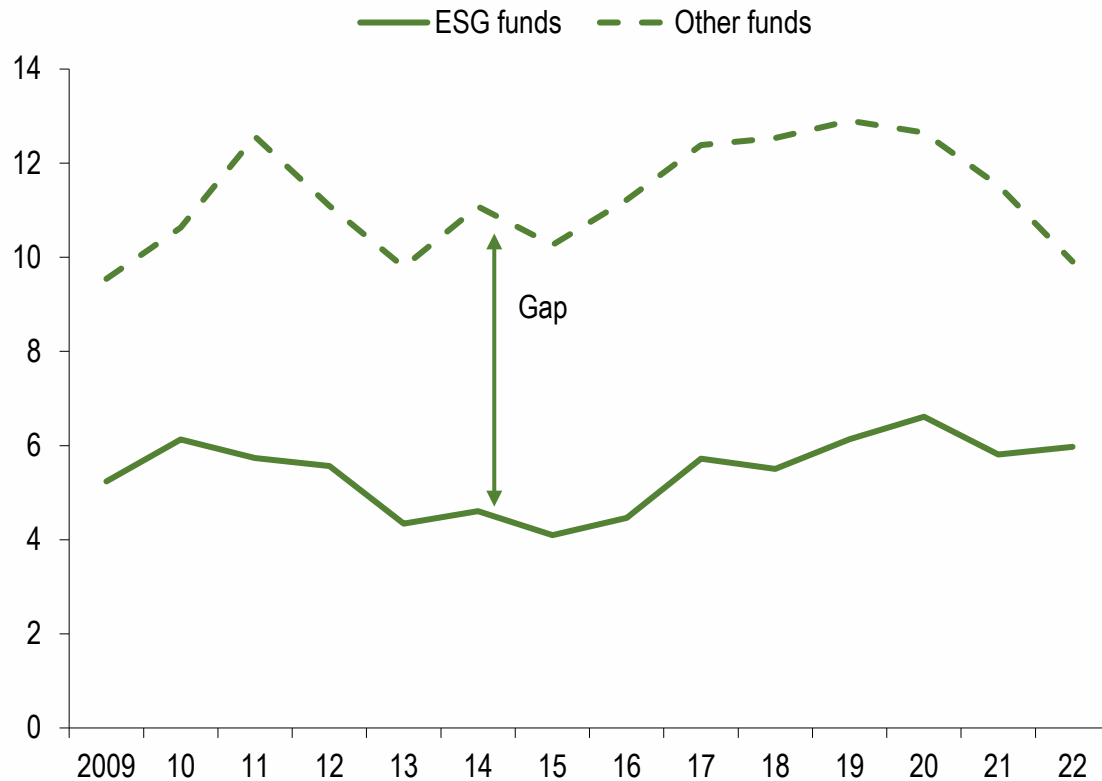
Sources: Morningstar; Refinitiv; and IMF staff calculations.

# EMDE allocations by ESG funds are relatively small

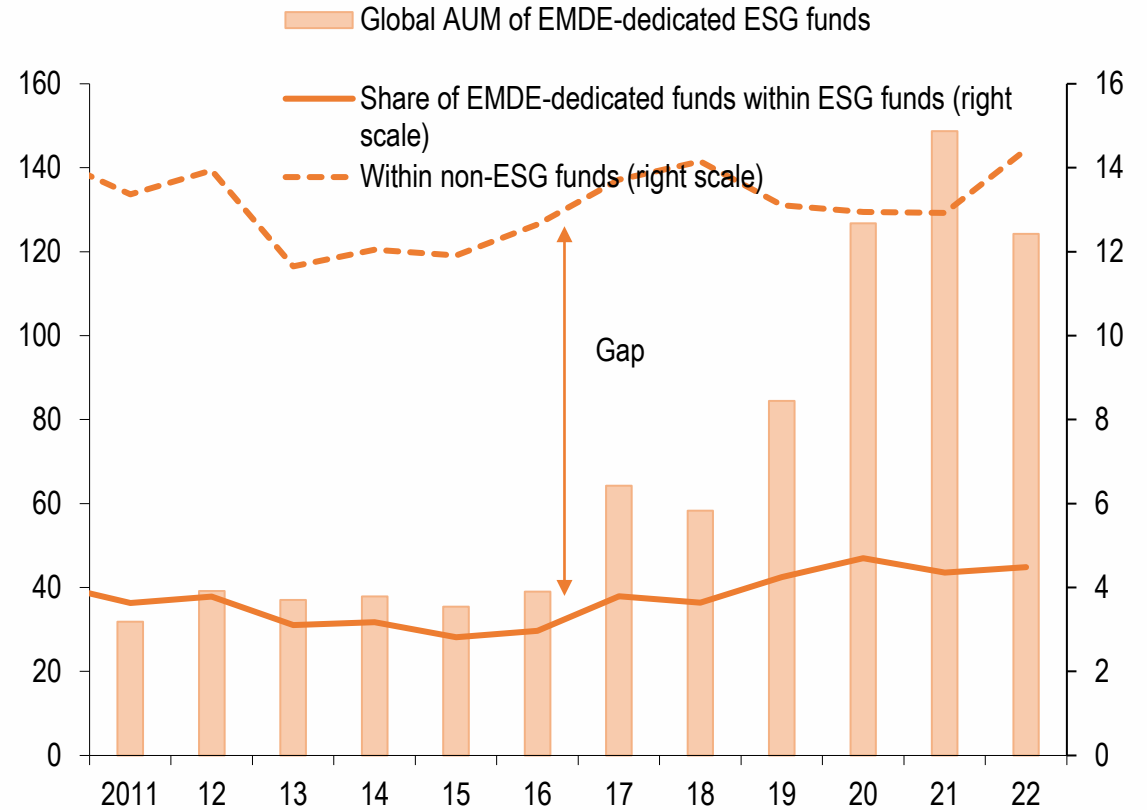
*Allocations to EMDEs by ESG funds are lower than those by non-ESG funds...*

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

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



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



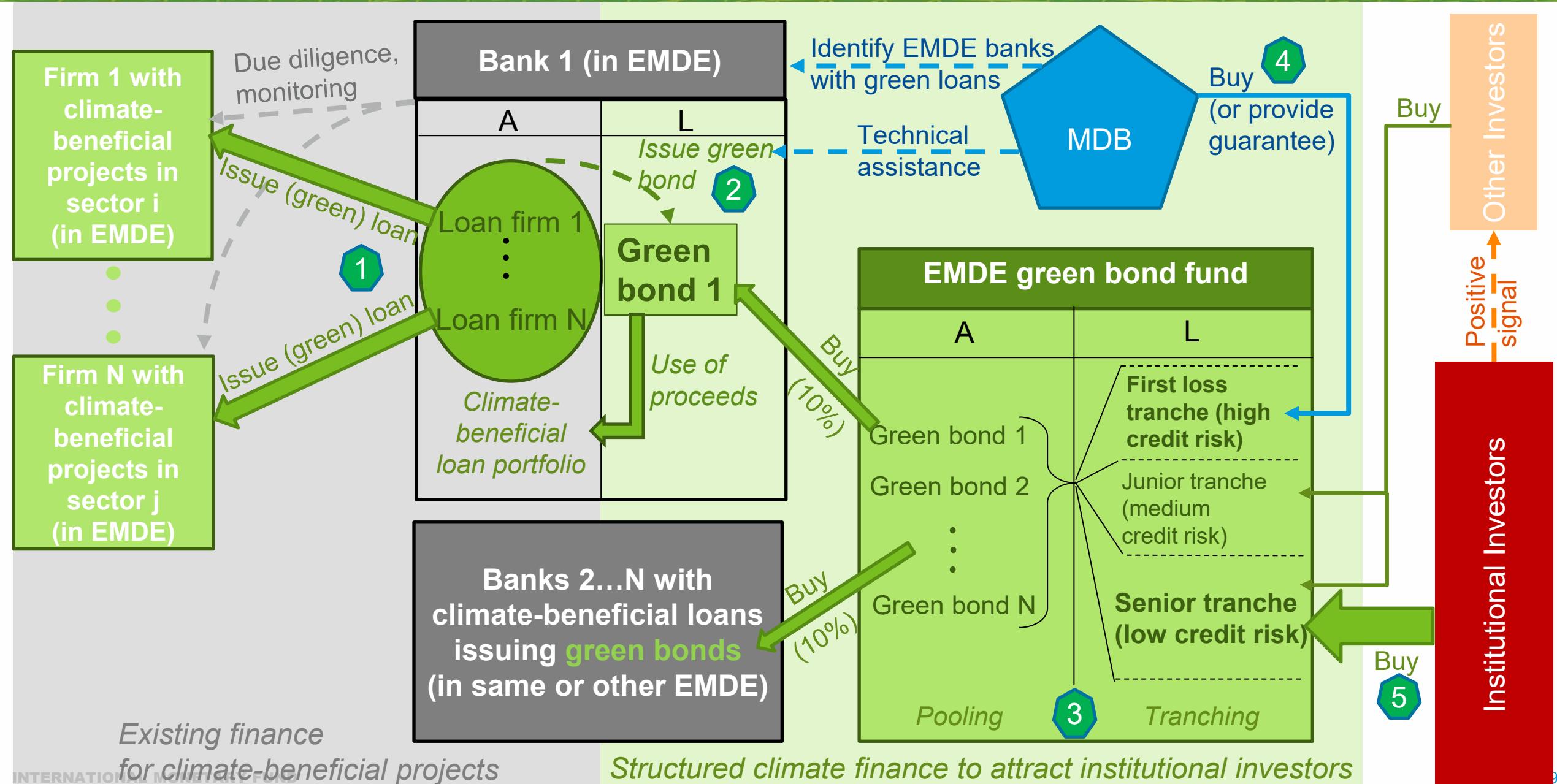
Sources: Morningstar; Refinitiv; and IMF staff calculations.

# Innovative financing instruments are needed

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



# The IFC-Amundi deal and the role of MDBs

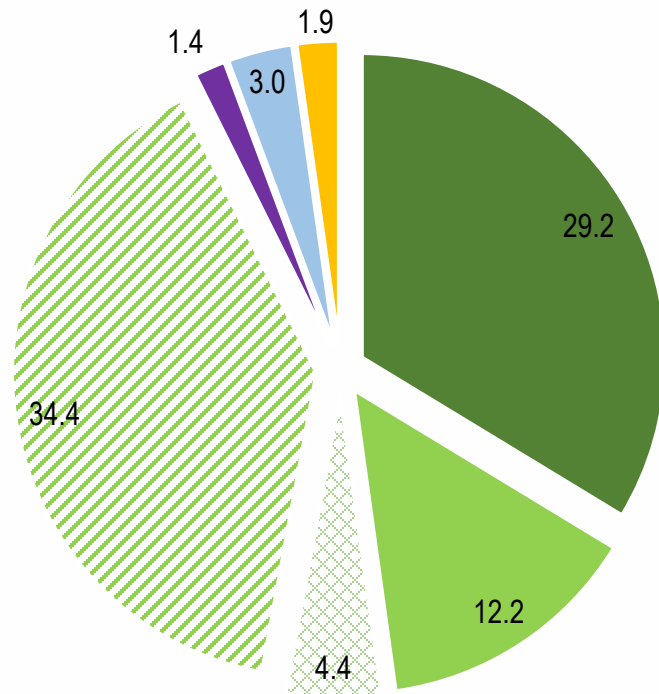


# Sustainability-linked bonds – conceptually solid instruments with practical issues

*Most sustainability-linked bonds have either a greenhouse gas or another environmental target ...*

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

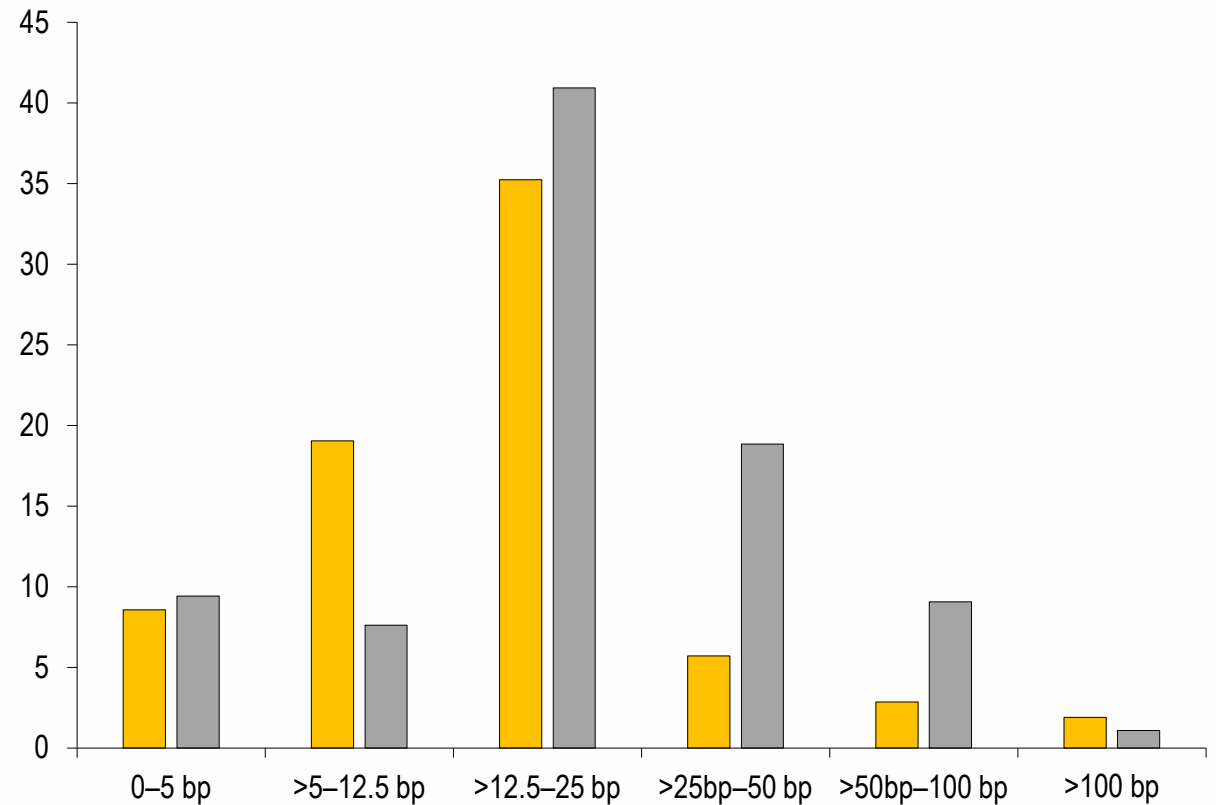
- Greenhouse gas only
- ◊ Greenhouse gas and other non-environmental
- ESG score
- Social
- Greenhouse gas and other environmental
- ◊ Other environmental
- Multiple E, S, and G



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

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

- Emerging market and developing economies
- Advanced economies

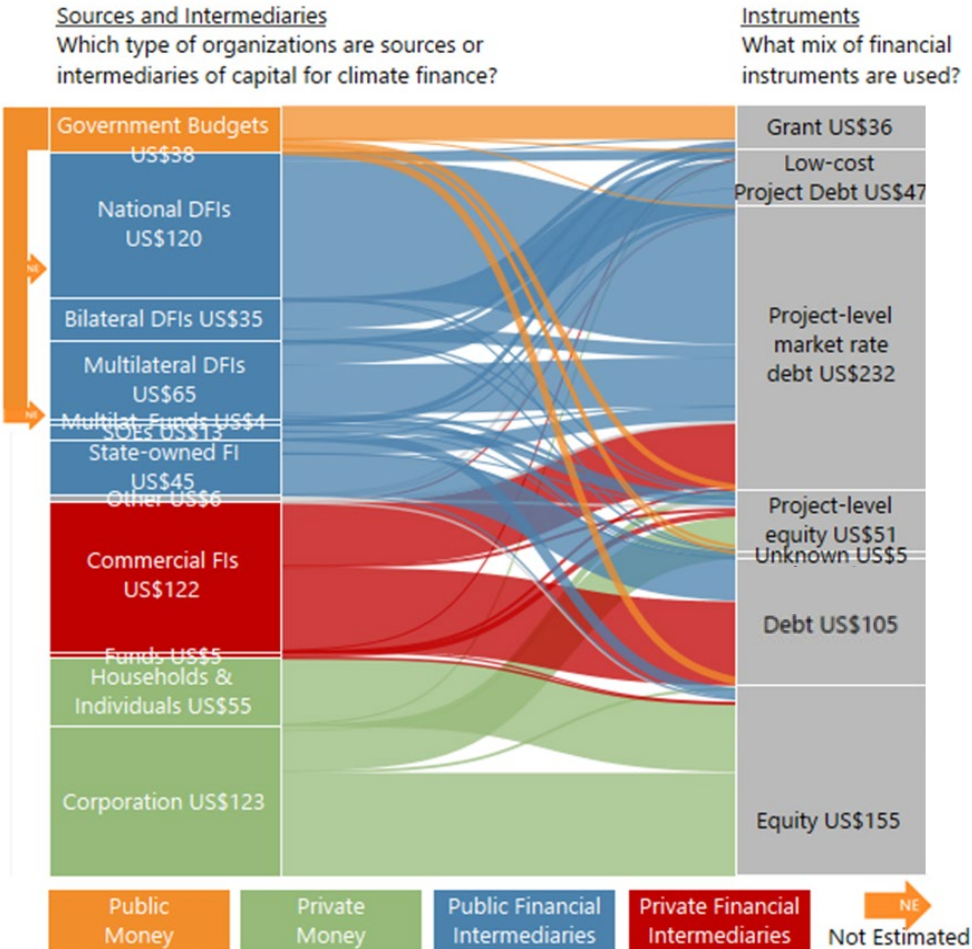


Sources: Bloomberg Finance L.P.; and IMF staff calculations.

# 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

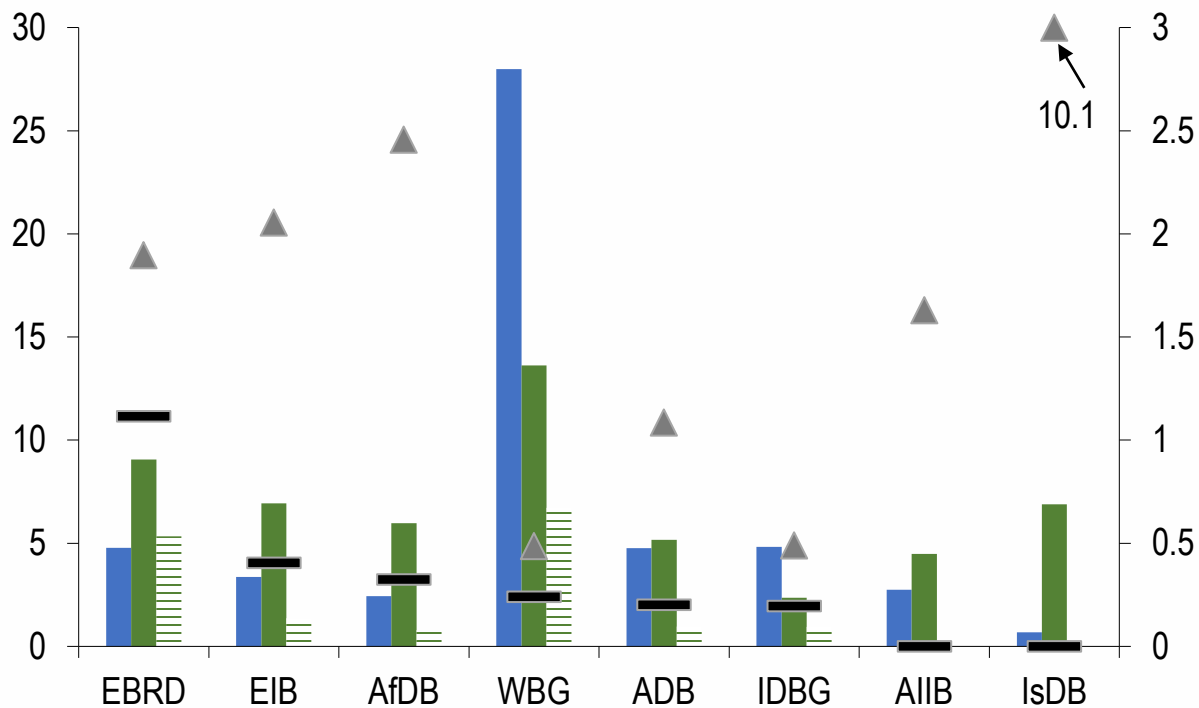
*MDBs only crowd-in private finance on average of only about 0.3 times the resources they commit themselves...*

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

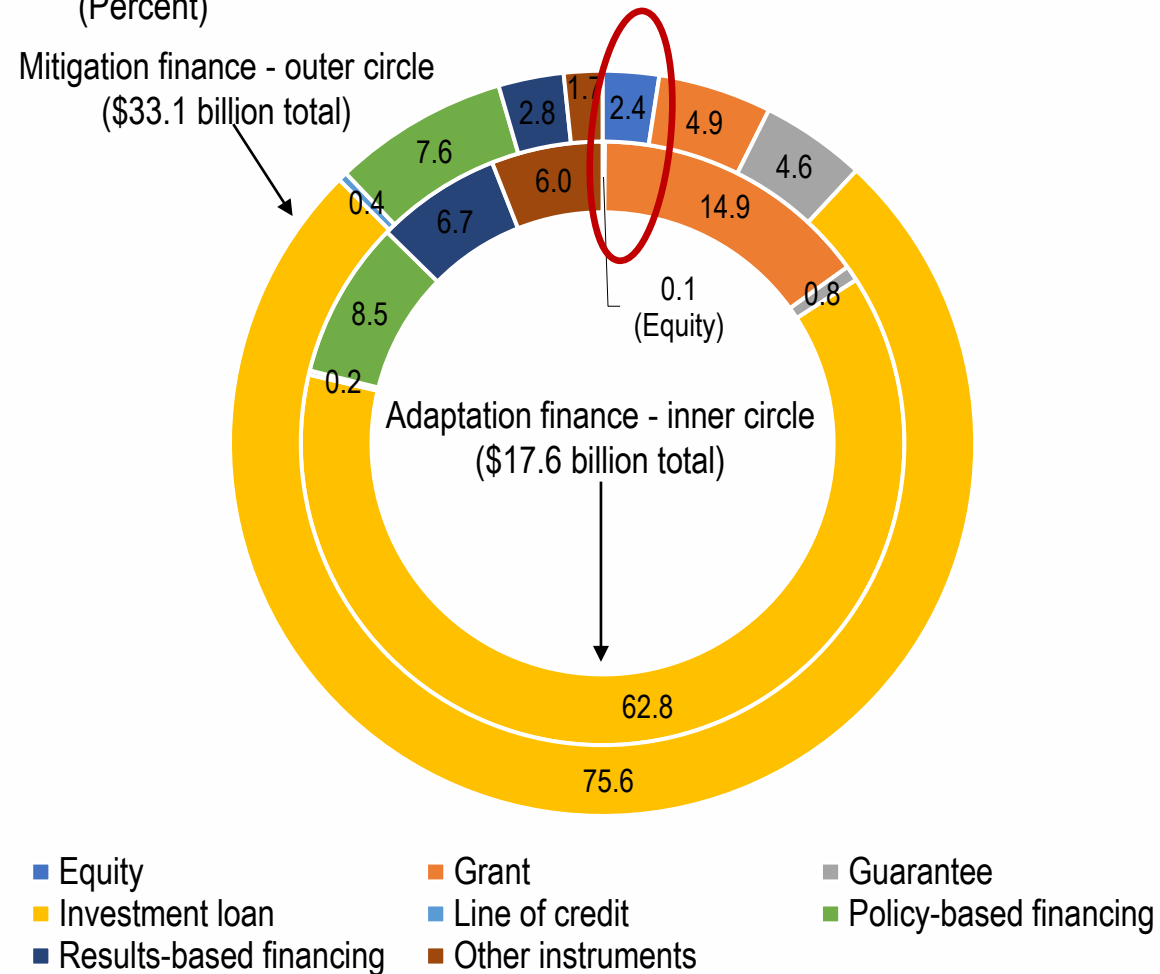
## 1. MDB Climate Finance from Their Own Resources and Private Investors (Private Co-Finance), 2021

(Billions of US dollar, left scale; ratio, right scale)

- MDB
- Total co-finance
- Private co-finance
- ▲ Multiplier total co-finance (right scale)
- Multiplier private co-finance (right scale)



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



Sources: EBRD, 2021 Joint Report on Multilateral Development Banks' Climate Finance; and IMF staff calculations.

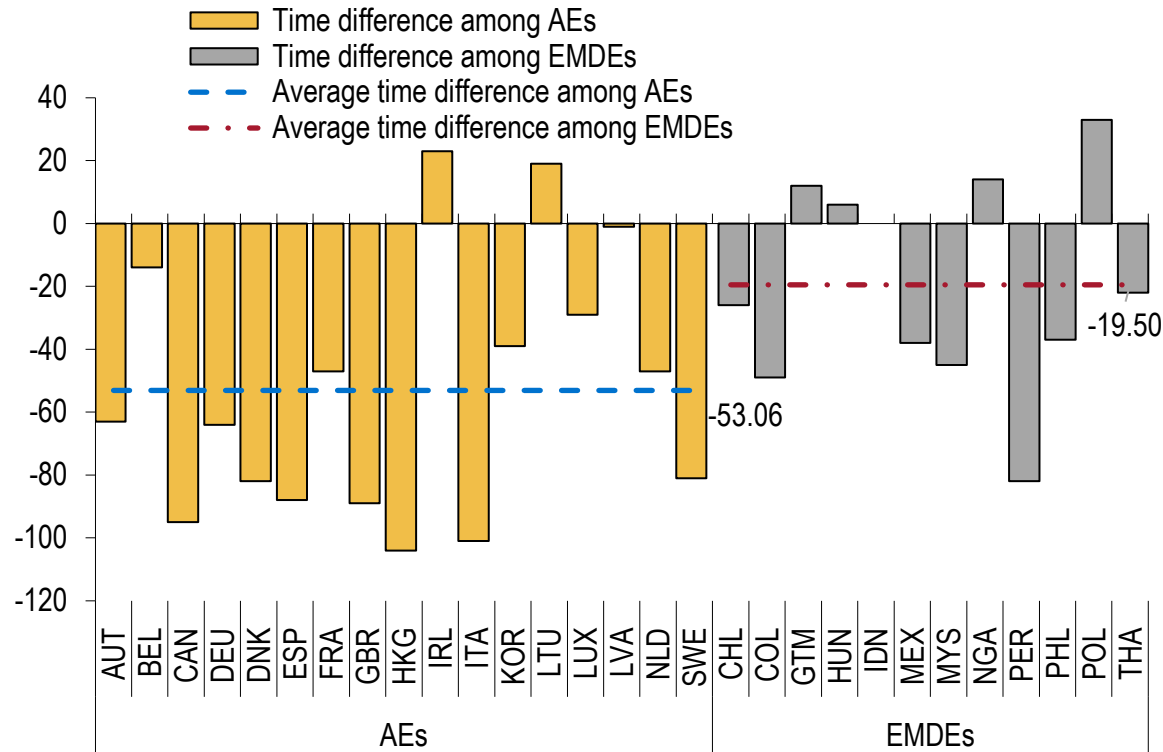
Note: ADB = Asian Development Bank; AfDB = African Development Bank; AIIB = Asian Infrastructure Investment Bank; EBRD = European Bank for Reconstruction and Development; EIB = European Investment Bank; IDBG = Inter-American Development Bank Group; IsDB = Islamic Development Bank; MDB = multilateral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

# Sovereign sustainable bond issuance could help boost private markets

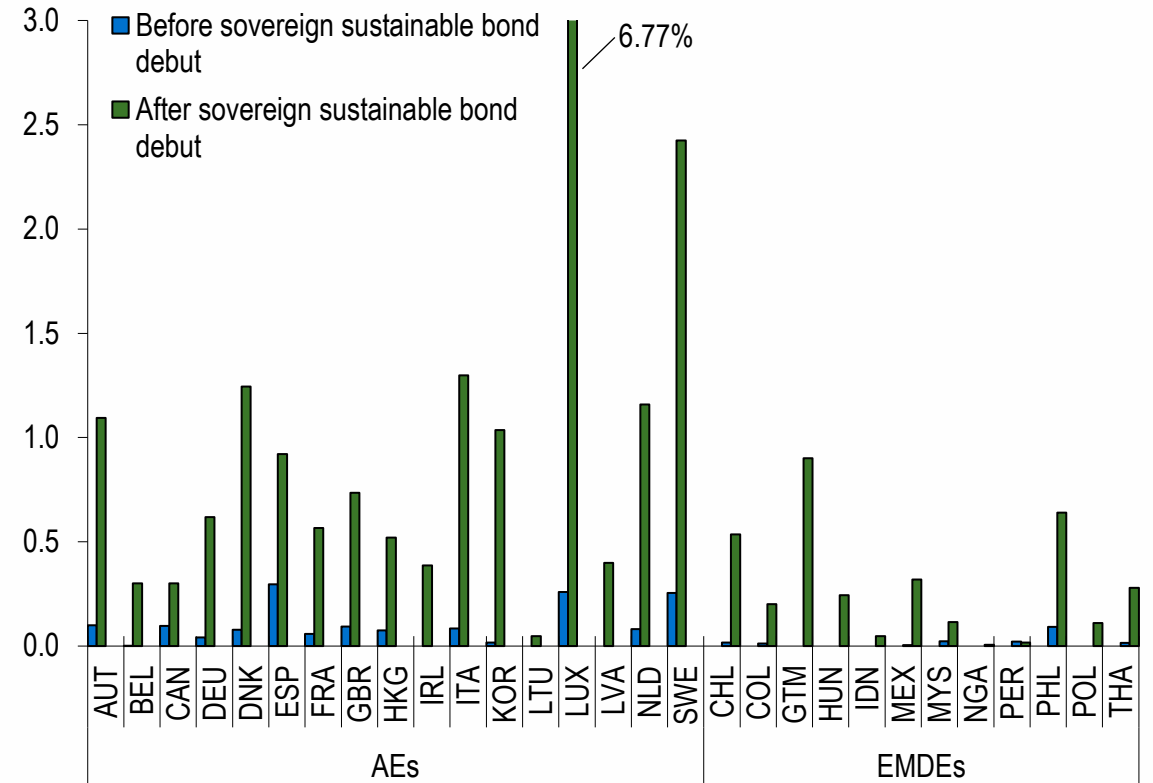
*Sovereigns have been latecomers in sustainable debt markets.....*

*...but usually have had a positive impact on private issuance.*

**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

