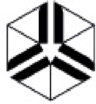

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Green finance: market adaptation and green innovation

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Panel presentation at the United Nations University World Institute for Development Economics Research (UNU-WIDER) and the Bank of Finland Institute for Emerging Economies (BOFIT) conference on Debt and innovative finance in developing countries.

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Market adaptation of Green Finance

- Green finance has experienced significant growth over the past decade from a low base. However, it remains a small part of overall financing activity dominated by green bond issuance and only 6% of total issuance amounts in ODA-recipient countries.
- Developing countries differ from advanced economies as the local ecosystem is still more concentrated, with a significant risk premia, and is dominated by the financial sector. Developing countries also face a number of challenges including data disclosure quality, data standards and credibility of ESG scores.
- We observe variation of product mix in emerging markets, green bonds are dominant in China, Indonesia and Poland; social bonds are dominant in Chile; sustainability-bonds are dominant in Malaysia and Peru and sustainability-linked loans are dominant in Russia and Turkey.

➢ Green finance products designed and administrated by Development Finance Institutions benefit from preferred creditor status, longer maturities, smaller size eligibility, higher propensity to consider long term projects and credible impact monitoring.

➢ Low profile activities such as green trade finance and energy efficiency products deserve more attention in the policy discourse.

➢ Green finance adaptation depends on international coordination. Financial interlinkages of institutional sectors within financial networks could result in significant indirect exposure to climate policy shocks and banks may be willing to replace lost capital market funding in the context of increased climate policy risk with increasing cross-border lending.

➢ Liquidity constraints could amplify the adverse impact of tighter financing conditions in the less liquid credit and structured finance markets, including green bonds with higher risk profile (small issuances, unrated).

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Facilitating Green Innovation

- Patent activity for low-carbon technologies surged in the first decade of the 21st century, but has slowed significantly since 2013.
- While patenting in the area of low-carbon energy supply has declined, patenting in end-use technologies has remained relatively stable.
- The share of co-invented technologies reveals potential missed opportunities for shared learning.
- The bank lending channel has limited material effect on the development of patented green technologies because banks do not materially contribute to innovation in new technologies.
- To the extent that bond financing is a form of debt and not of equity, purchasing green bonds would also achieve little in the way of stimulating green innovation.

➢ Further support for clean innovation with higher R&D subsidies for green applied science and dedicated risk capital, and accelerated diffusion via investments in the appropriate clean infrastructure assets and effective regulation are required if a zero carbon transition is to be achieved.

➢ Policies that promote clean innovation in high-income countries may not lead to socially optimal emission reduction unless there are additional interventions that support the transfer and deployment of clean technologies elsewhere.

➢ Long-term development finance institutions will boost upstreaming investment capacity and reduce the cost of capital, by sharing and reducing risk.

➢ “Intermediate” or “bridge technologies” may warrant support as long as it does not crowd out support for fully clean alternatives.

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