Climate Change and the Cost of Capital in Developing Countries

Assessing the impact of climate risks on sovereign borrowing costs
V20 Countries (Members of the Climate Vulnerable Forum)
Total economic losses due to major weather-related events (insured and uninsured), USD inflation adjusted 1970-2017

Source: Compiled with data from Swiss Re, 2018.
What impact do climate risks have on the cost of capital in climate vulnerable developing countries?
Cost of debt and ND-GAIN Sensitivity, 2016

Source: Compiled with data from Bloomberg and ND-Gain.
Climate vulnerability has already raised the average cost of debt in a sample of developing countries by 117 basis points.
US$ 1

For every ten dollars paid in interest by developing countries, an additional dollar is spent due to climate vulnerability.
Countries that have not contributed to climate change effectively end up paying twice:
For the physical damage their economies face & through higher costs of capital.
Investments in social readiness partially mitigate the impacts of climate risk on sovereign borrowing rates.
Cost of debt and ND-GAIN Social Readiness index, 1996–2016

Source: Compiled with data from Bloomberg and ND-GAIN.
Note: Excludes multilateral debt.
Estimated impact on cost of debt

Source: Authors' own work, based on own estimations with data compiled from Bloomberg, ND-GAIN, IMF and the UN.
US$ 40 billion

40 Members of the Climate Vulnerable Forum have paid US$ 40 billion in additional interest payments over the past 10 years on government debt alone.
US$ 62 billion

This raises to US$ 62 billion in higher interest payments if private external debt is included.
We estimate the additional interest payments attributable to climate vulnerability to increase to between US$ 146 – US$ 168 billion over the next decade.
Forecasted increases in annual interest costs due to climate vulnerability, 2007–2028

11. Include estimated costs for the V20 countries, which were almost USD 9 billion in 2016 alone. Our model estimates this incremental debt cost for the V20 countries was almost USD 9 billion in 2016 alone.

1. Scenario A: debt to GDP fixed (IMF & SOAS GDP estimates for emerging markets)
2. Scenario B: Debt to GDP rising 1% faster than GDP
3. Scenario C: Incremental market pricing of climate risk (1% p.a.)
Risk of a vicious circle

- Rising vulnerability
- Climate risk premium
- Higher cost of capital
- Less fiscal room for investment in climate adaptation
International support needed!

Cooperative efforts to measure, monitor, and transfer climate risks will be needed to prevent a deterioration of sovereign borrowing capacity.
A virtuous circle is possible

Greater resilience → Increased investments in climate adaptation measures → Lower climate risk premium → Lower cost of capital → More fiscal room for investment in climate adaptation → International support and mechanisms to transfer financial risks → Greater resilience
How to break the vicious circle and set off a virtuous circle?
**Join Session 12!**
**Thursday, 16:15–17:15**

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