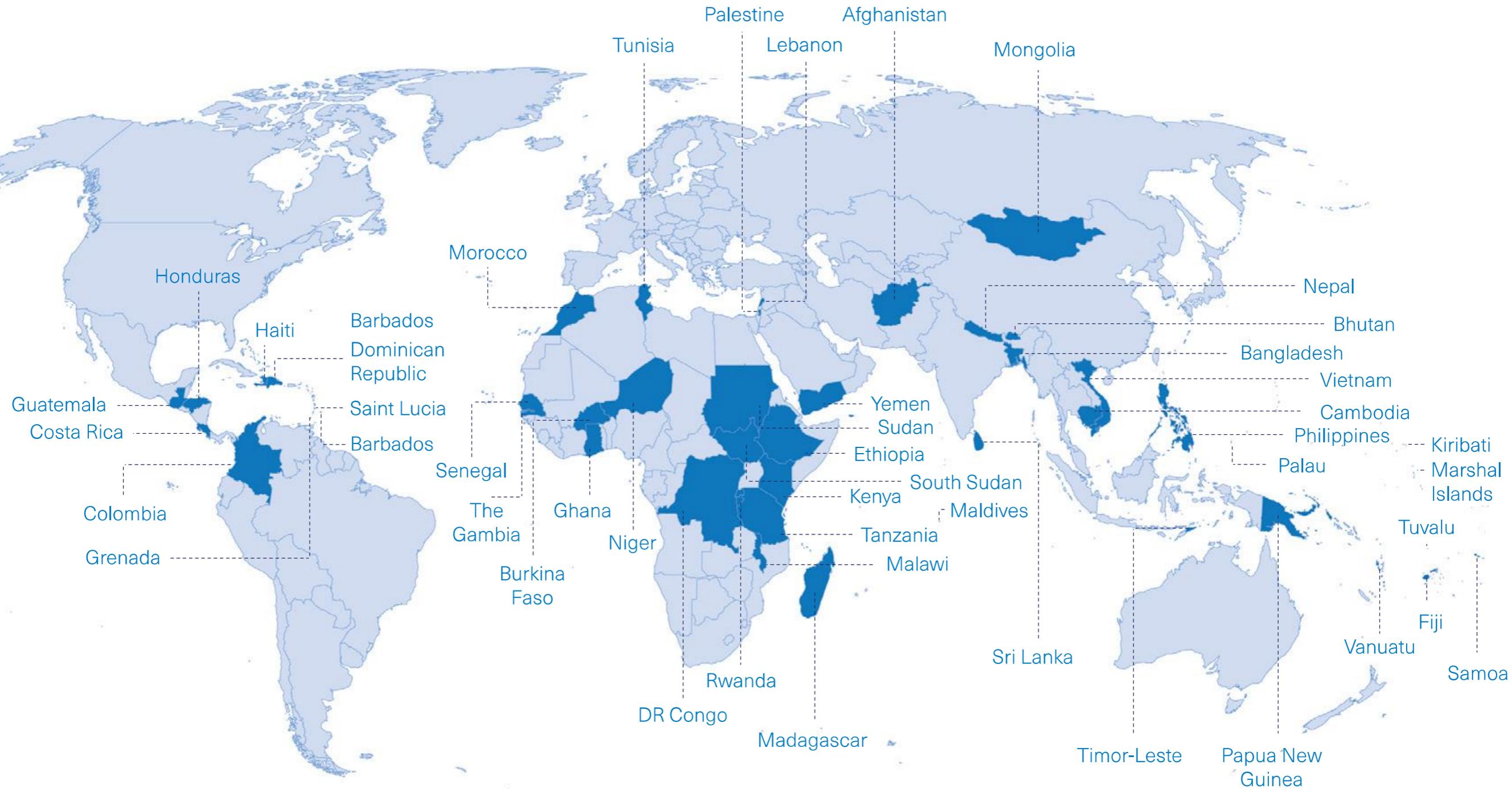


# Climate Change and the Cost of Capital in Developing Countries

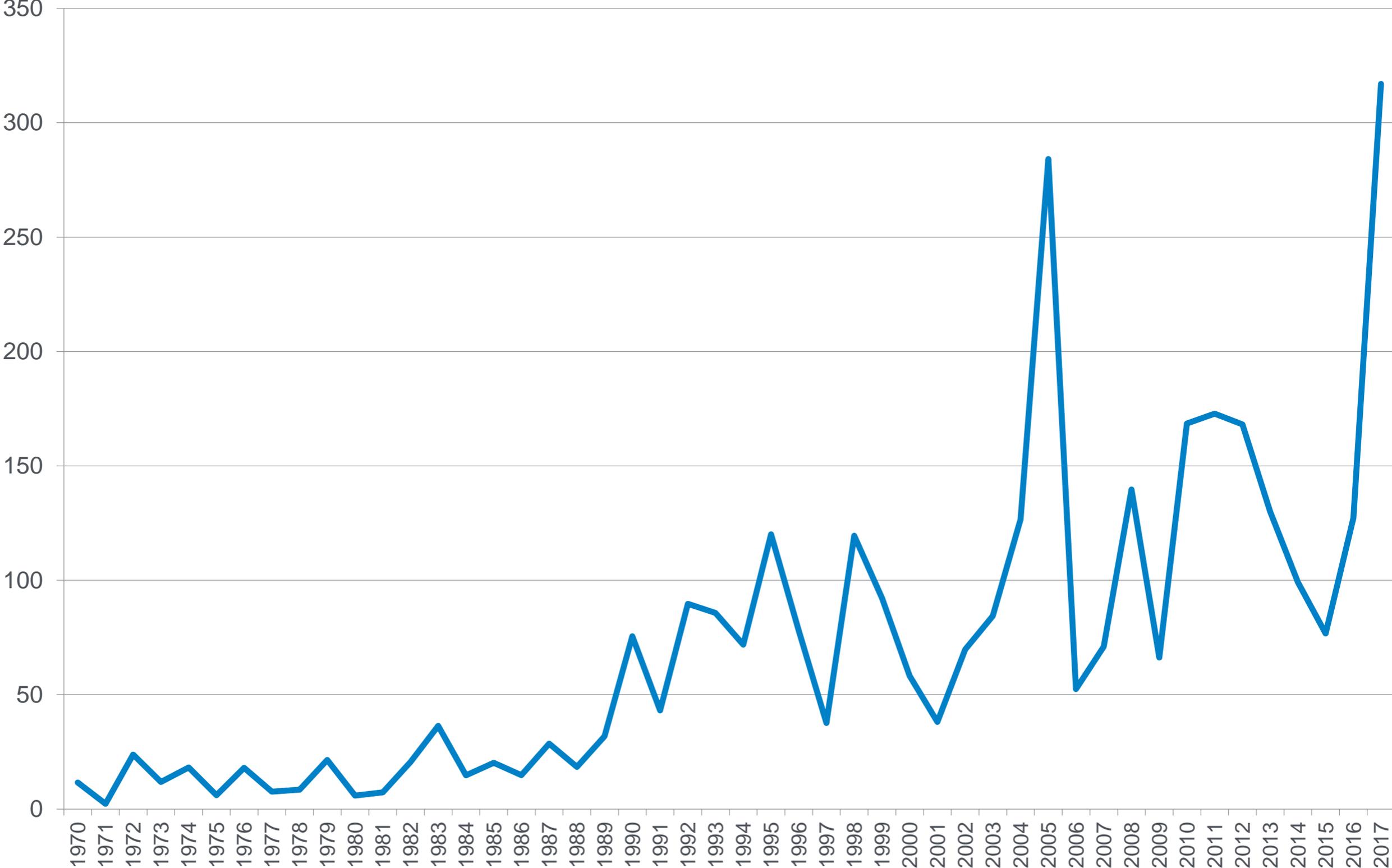


Assessing the  
impact of climate  
risks on sovereign  
borrowing costs

# V20 Countries (Members of the Climate Vulnerable Forum)



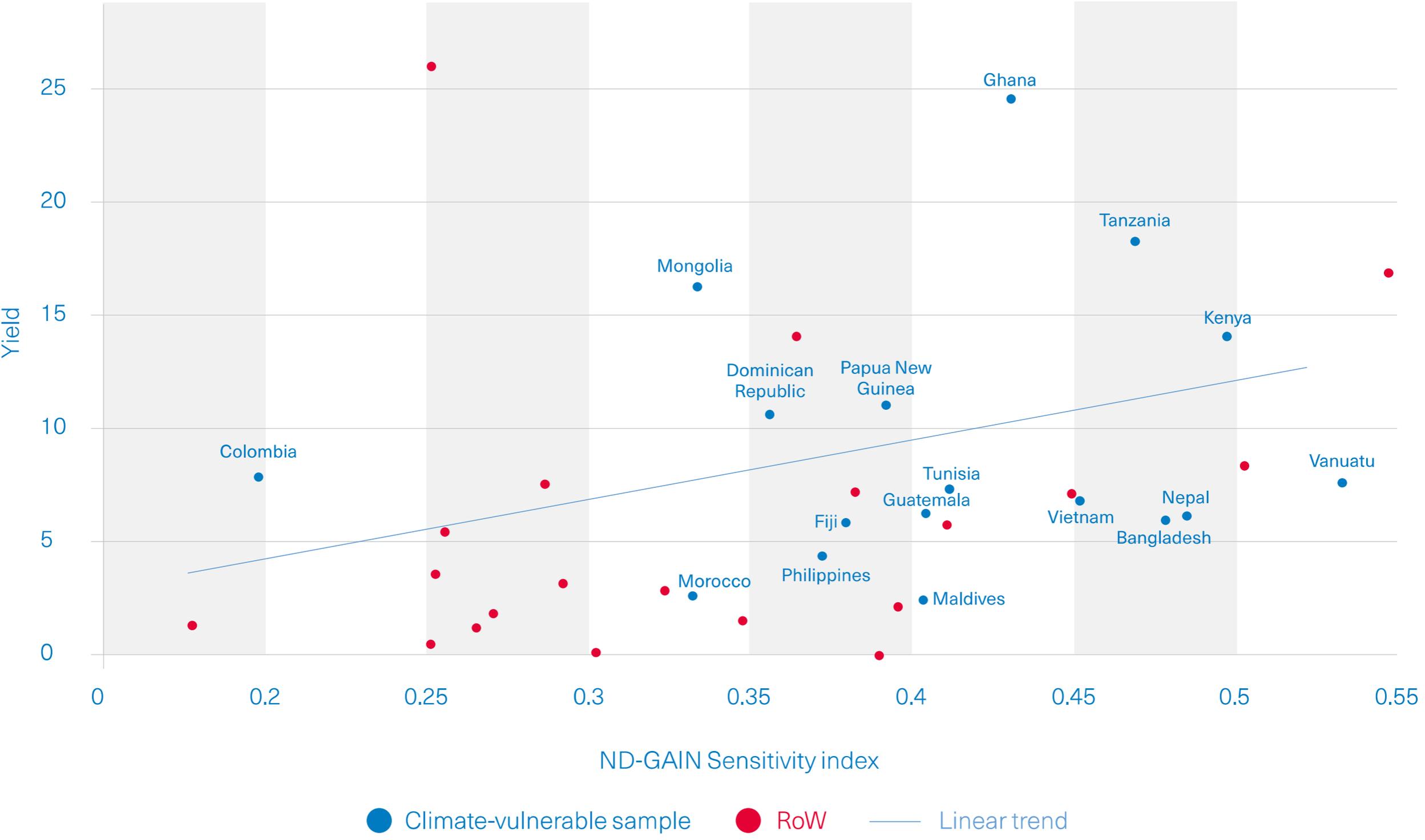
# Total economic losses due to major weather-related events (insured and uninsured), USD inflation adjusted 1970-2017



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.

# 117 basis points

**Climate vulnerability has already raised the average cost of debt in a sample of developing countries by 117 basis points.**

# US\$ 1

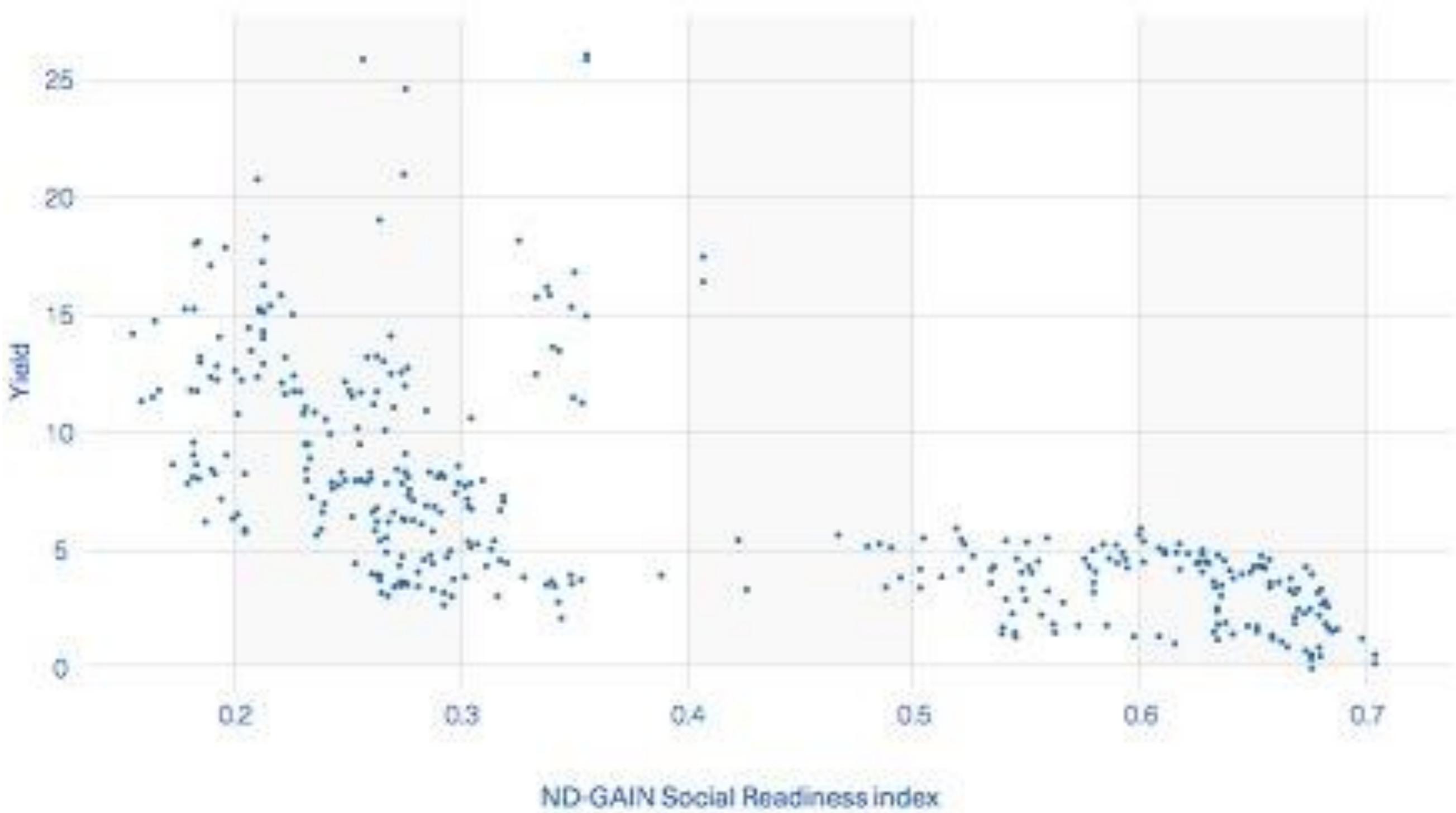
**For every ten dollars paid in interest by developing countries, an additional dollar is spent due to climate vulnerability.**

**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.**

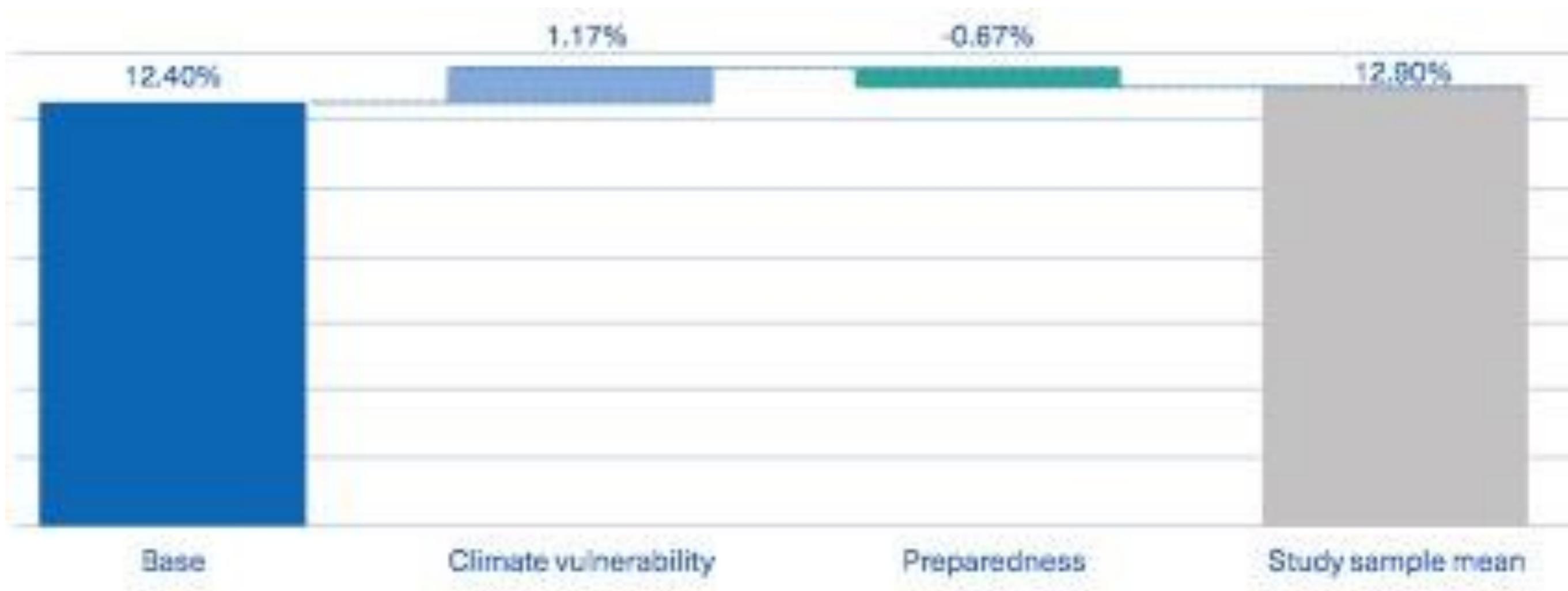
**Investments in social readiness partially mitigate the impacts of climate risk on sovereign borrowing rates.**

# 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.**

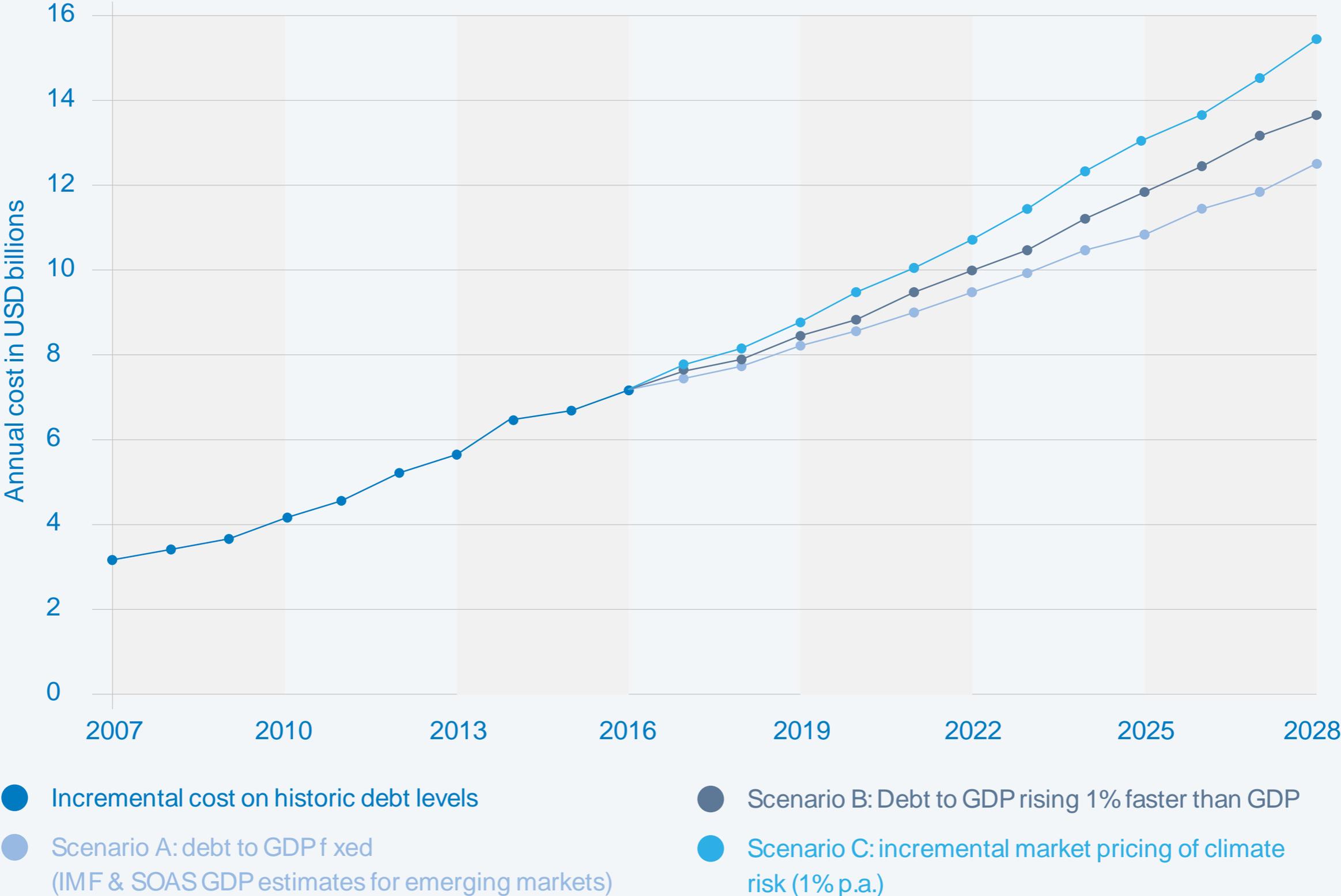
# US\$ 62 billion

**This raises to US\$ 62 billion in higher interest payments if private external debt is included.**

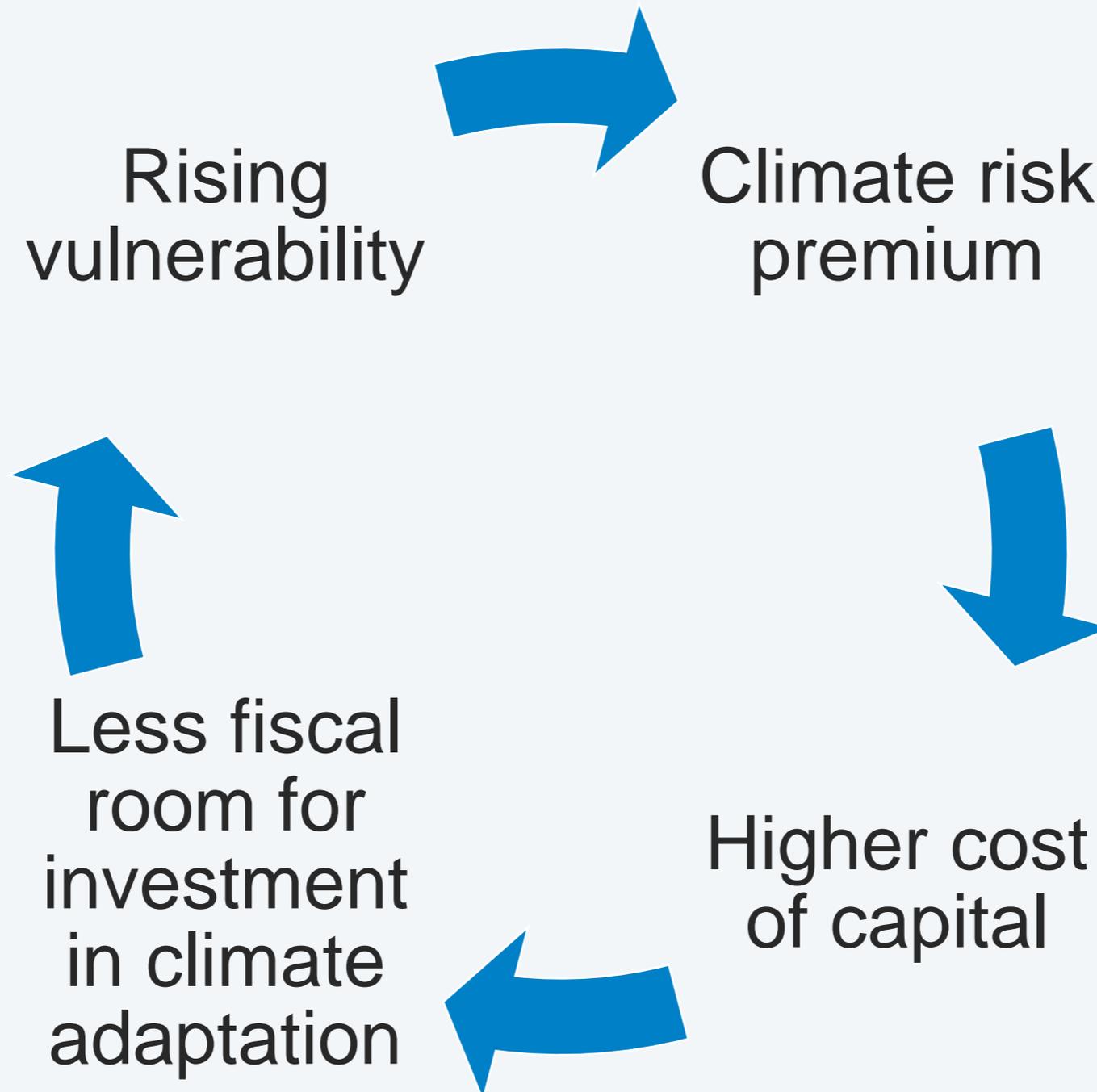
**US\$ 146bn –  
US\$ 168bn**

**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



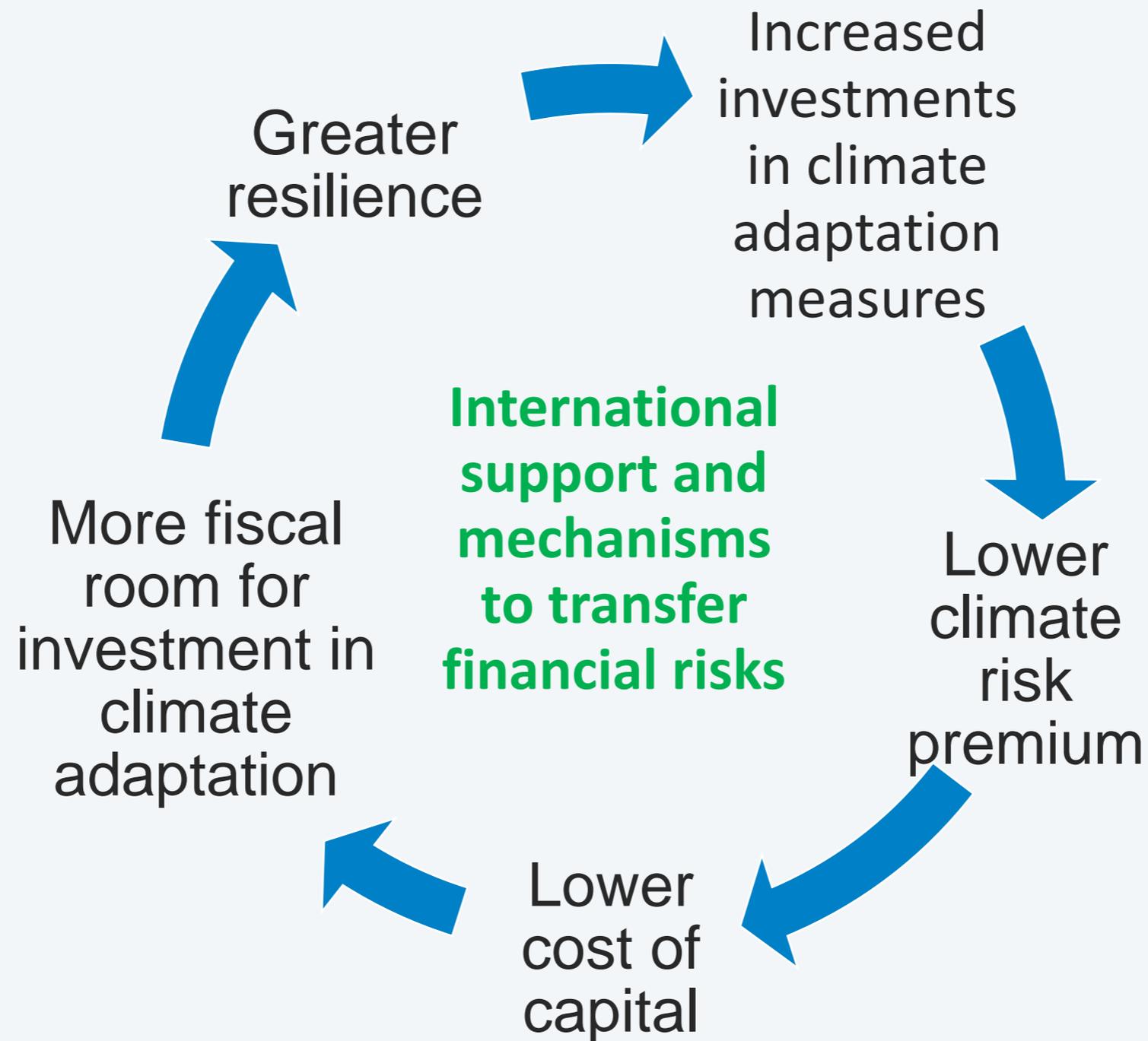
# Risk of a vicious circle



# **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



**How to break the  
vicious circle  
and set off a  
virtuous circle?**

# Join Session 12!

Thursday, 16:15–17:15



**Ulrich Volz**

Head of Department of Economics, SOAS University of London & Senior Research Fellow, German Development Institute



**Olivier Mahul**

Global Lead, Disaster Risk Financing and Insurance Program, World Bank Group



**Sili Epa Tuioti (TBC)**

Minister of Finance of Samoa

**Gloria Siri**

Director of Research, Reserve Bank of Vanuatu



**Charlotte Benson (TBC)**

Principal Disaster Risk Management Specialist, Asian Development Bank