

Climate Finance Innovation in a High Interest Rate World

Opportunities to Unlock Climate Finance in Emerging Markets

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The End of Low Interest Rates Globally

As 197 countries descend on Egypt for the United Nations' 27th climate summit, COP27, climate finance will be on everyone's mind. When will the already delayed USD\$100 billion annual goal be achieved? Will countries make progress toward a new long-term finance goal? How will the trillion-dollar commitments announced at COP26 in Glasgow be delivered?¹

These questions come at an inflection point for climate finance. In advanced economies where governments responded to the economic crisis with sizeable rescue packages—totaling USD \$20 trillion—the post-COVID economic recovery is now accompanied by steep price inflation. In the last few months, central banks in advanced economies have responded to price inflation by significantly raising interest rates² and have signaled they will continue to do so until inflation is under control.³ Increased interest rates in advanced economies are already translating into higher interest rates in many emerging

markets as central banks there act to minimize capital flight and currency depreciation.⁴ At this point, experts agree that high global interest rates are likely to stay for the foreseeable future.

This is a considerable change from the low interest rate world in which climate finance has developed since at least 2010. The global volume of climate transactions has steadily grown during the last decade with climate investments increasing from USD\$364 billion in 2012 to USD\$640 billion in 2020⁵ and directed towards primarily climate mitigation and some adaptation projects. Two key trends fueled this growth: sustained demand for climate finance, coupled with a period of extraordinarily low interest rates and cheap capital. However, even during these relatively favorable macro-economic conditions, climate finance flows fell far short of the minimum USD\$4.5 trillion climate funding needed annually to achieve the transition to a net zero emissions and resilient world.⁶

In this new high-interest rate environment, climate financiers will again be asked to find new ways to catalyze significantly greater investment than the

CLIMATE FINANCE is defined throughout this paper as including any investment with climate-specific outcomes—toward both mitigation and adaptation projects that will address climate change.

CLIMATE FINANCIERS are in this paper considered any public and private investor placing capital or helping de-risk transactions to support climate investments. This includes, among others, commercial climate investors seeking market returns, development finance institutions (DFIs), and public and private providers of concessional debt, equity, and insurance. Donors may also be part of this group if their grants directly or indirectly support the financiers above.

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funding levels currently available to support Paris-aligned actions. COP27 can play a key role in building awareness of the challenges and opportunities from this new economic environment among public and private actors and ultimately ensure that COP27 delivers on action-oriented, coordinated, and financeable solutions to the climate crisis.

How Will Increased Rates Impact Public and Private Finance in Emerging Markets?

Increased interest rates in emerging markets will impact a broad range of economic activities. Financiers will need to realign investment decision-making and their risk-return appetites; governments will have to rebalance spending choices; and households will adjust their budgets and demand for external finance. The following cover the most relevant expected financial impacts in emerging markets:

1. Private investment activity will fall.

Higher interest rates will increase the cost of financing for all prospective climate investments, and is expected to reduce overall investment activity.⁷ The demand for private finance in emerging markets may further decrease due to food and energy inflation, both of which represent a significant and growing portion of households' disposable income.⁸

2. Private sector distressed debt levels will grow.

In emerging market economies, private sector debt as a percentage of GDP has grown from 74% in 2010 to nearly 111% in 2021⁹ driven by prolonged low interest rates, and in the last few years exacerbated by pandemic-era debt payment moratoriums and subsidized credit lines.¹⁰ Due to both increasing rates and the high inflation preceding them, many private borrowers in emerging markets may not have sufficient cash to continue servicing their debt and may be forced to delay payments and potentially, default on their debt.¹¹

3. Developing countries will face limited discretionary budgets and challenges to raise additional funding internationally.

Fueled by low interest rates, developing countries have also increased their public debt as a percentage of GDP from 41% in 2010 to nearly 66% in 2021.¹² Now, rising interest rates will increase the costs of servicing sovereign debt payments.¹³ Currently, the International Monetary Fund (IMF) estimates that 60% of low-income countries are either at high risk of debt distress or already experiencing it—up from 30% in 2015.¹⁴ Higher debt payments will constrain governments' discretionary budgets, and it will restrict their ability to raise additional funding internationally. In some cases, countries will simply be unable to pay their debts. Countries such as Sri Lanka, Zambia, and Lebanon are already in the grip of crises and are seeking international help to restructure their debts.



4. Economic growth and adaptive capacity will decrease.

In response to increasing interest rates and inflation, and their impact in public and private sector activities, in June 2022 the World Bank cut its economic growth forecast in developing economies to 3.4% for 2022—down from 6.6% in 2021, and well below the annual average of 4.8% experienced between 2011 and 2019.¹⁵ Limited public and private spending will also reduce countries' adaptive capacity to adjust to the negative impacts of climate change.

Climate Financiers: Agents of Transformation

Climate financiers now have the opportunity to become agents of transformation for climate action and innovate in the face of the opportunities and challenges presented by higher interest rates in emerging markets. COP27 can play a key role in helping climate financiers adjust to this new high-interest rate environment and open a pathway to close the climate funding gap. Based on conversations with partner financial institutions, investors, and climate finance experts, we see at least three strategic opportunities for climate financiers to navigate increased interest rates in emerging markets:

1. Restructure distressed private debt and link new terms to climate action.

As private borrowers seek solutions to avoid defaulting on their existing loans, **climate financiers** (especially those that focus on investing in financial institutions in emerging markets such as DFIs and a range of private commercial investors)

can partner with lenders in emerging markets to replace distressed debt with new climate-linked loans. These loans may include climate covenants tailored to borrowers' economic activities (e.g., adoption of climate smart agriculture practices for farmers), while the lender agrees to write-off a portion of that debt. The new climate-linked debt should be designed to increase the probability of full repayment, reduce borrower exposure to climate-related risks, and increase borrower profitability by encouraging investments in climate adaptation and mitigation projects. Climate financiers may also explore debt reduction plans with borrowers to reduce their leverage to more manageable levels and improve the borrower's economic resilience.

In some cases, **lenders may also** find their volume of distressed debt and total write-offs too large to manage,¹⁶ and may **need to explore additional support from climate financiers to strengthen their balance sheets.** As with downstream borrowers, the same climate financiers mentioned above may help recapitalize these lenders contingent on the latter's commitment to increase their climate-linked debt portfolio.

Depending on their financial and impact return expectations, climate financiers may have multiple financial mechanisms to support both borrowers and lenders. For example: climate financiers may offer junior capital or guarantees to reduce the overall risk of new climate-linked portfolios; extend bridge financing to support short term solvency needs and additional climate-related investments; or provide technical assistance to support capacity building of climate-related best practices.



2. Develop climate-linked portfolios with microfinanciers and supply chain financiers, especially targeting marginalized populations.

The projected slowdown in investment activity is unlikely to be uniform across all economic activities. Households and businesses with higher investment risk or less available collateral will be disproportionately impacted. Importantly, borrowers in rural areas or those belonging to **disadvantaged and marginalized populations** (many of which often have limited access to external financing) **may be especially affected by the decrease in investment activity**. Some of these **new financing gaps may be filled by local microfinanciers or by supply chain financiers**,¹⁷ thanks to their typically deeper local networks and understanding of prospective borrowers.

However, a significant portion of these local investors do not offer financial products purposefully designed to generate positive climate-outcomes.¹⁸ **Climate financiers** (such as those specialized in financing microfinance institutions as well as national and international working capital lenders, including banks) **should explore partnerships with local microfinanciers and supply chain financiers to develop climate-linked portfolios and, where possible, help improve the adaptive capacity of marginalized communities**. To support that effort, these climate financiers may offer some of the following support:

- Advisory services to co-design climate-linked investment products that align with the financiers' business model. This may include

micro-loans for climate resilience, sale of climate-smart inputs on credit (e.g., drought resistant seeds), lease-to-own equipment (e.g., drip irrigation), or warehouse receipt financing for climate-smart produce, to name a few.

- Blended finance solutions (e.g., grants, junior capital, guarantees) to reduce the financial downside of a lender's climate portfolio and/or to partially offset higher interest rates to prospective borrowers.¹⁹
- Technical assistance to borrowers to support their adoption of climate-related best practices and financial literacy, and to financiers to develop or upgrade their credit systems and impact monitoring systems.

Additionally, DFIs and local and international insurance companies may also help design and provide financing to roll out climate insurance solutions for the underlying borrowers, as well as, where possible, "meso-level" climate insurance products²⁰ for microfinanciers and supply chain financiers.

Importantly, recognizing that in many emerging markets network connectivity increasingly covers rural areas, there are opportunities to **support the growth in tech-enabled platforms and fintech solutions**. These stakeholders offer a range of products and services that often include short term loans to finance purchases. Climate financiers such as venture capital and private equity investors may be best positioned to provide the right combination of finance and advisory support and help develop financial solutions **with positive climate outcomes for these platforms**.

3. Support cash-constrained developing country governments to adopt climate finance solutions that require minimal cash outflows.

As mentioned, many developing countries currently face very high, sometimes unsustainable, levels of public debt. Increased debt payments limit the budget available for social expenditures such as healthcare and education, and reduce local adaptive capacity to climate change. As a result, a significant number of governments will need to narrow their support to a smaller set of climate adaptation and mitigation priorities. Many countries are likely to choose to focus on ensuring food security, which is a key need for their constituents and a potential source of unrest,²¹ and on developing climate-resilient food systems.

Also due to limited funding, many governments will likely need to move away from traditional cash mechanisms to incentivize investment in climate action, such as tax rebates, subsidies, and concessional or grant financing to blend with and catalyze private finance. Instead, balance sheet mechanisms that minimize cash outflows, such as portfolio guaranties, collateral support mechanisms, and public climate insurance and

reinsurance solutions, are likely to become more common alternatives for the public sector to catalyze climate finance.

A broad range of climate financiers (including insurance companies, investment banks, and public sector investors and donors) and the national public sector can work together to design and implement innovative financial mechanisms that can respond to limited public sector cash available. The following two mechanisms are particularly promising:

- **Design sovereign catastrophe bonds ('Cat Bonds') tailored to specific climate-related risks.** A Cat Bond is an insurance-linked security. Until recently Cat Bonds were mostly issued by private insurers and reinsurers to raise money from investors in the event of a natural disaster, including extreme climate events (e.g., a hurricane).²² Sovereign Cat Bonds, such as Jamaica's 2021 USD\$185 million bond against tropical cyclones,²³ may become more prevalent in developing countries as a relatively quick source of liquidity for immediate local needs (e.g., water, food, emergency healthcare) after an extreme



climate event. These bonds are increasingly structured based on parametric triggers and do not require significant upfront public cash disbursements. However, they have two key limitations: a) issuance is generally limited to development banks or countries with good risk ratings²⁴; and b) average bond maturity is three to five years, so the bond needs to be reissued frequently. Climate financiers mentioned above can play a key role in the design, underwriting, issuance, and purchasing of these securities. They may also help circumvent the risk rating limitation by offering to pay to bond buyers if there is no extreme climate event and thus help reduce payment default risks.

- **Restructure sovereign debt through debt-for-climate swaps or including climate-related triggers to sovereign bonds.** Debt-for-climate swaps would reduce pressure on public budgets by freeing up public funds dedicated to repaying debt and reallocating a portion of that amount to climate-linked budget expenditures.²⁵ This financial mechanism may be especially relevant for developing countries that are at high risk of defaulting on their debt, especially if the value of emerging market sovereign bonds continues to fall due to higher interest rates and increasing repayment risks. Alternatively, climate financiers may also include some elements of a Cat Bond when restructuring existing sovereign debt by, for instance, requesting parametric trigger clauses that allow for the suspension of bond payments in the event of a catastrophic event such as in Barbados' 2018 and 2019 public debt restructuring.²⁶

There are many more opportunities for climate financiers in emerging markets to become agents of transformation by driving new approaches better suited to a new economic environment of higher interest rates. Many solutions will need to be tailored to specific regional social, business, or economic trends. For example, multinational corporations and global investors are increasingly required to measure, report, and reduce their exposure to financially material climate-related risks as defined by public supervisory authorities in many developed countries²⁷. Without the support of climate financiers, higher interest rates may encourage corporations and investors to abandon productive assets and supply chains that are highly exposed to climate-related risks rather than investing to adapt and build their resilience.²⁸

The impact of carbon offsets as a driver to reduce emissions is another space which may be affected by increased interest rates. In most jurisdictions, carbon offset prices, although in an upward trend, are currently valued well below the minimum price that would drive climate-aligned investment decisions.²⁹ Increased interest rates may further raise the minimum carbon price needed to drive corporate action, ultimately limiting climate mitigation investments.

Additionally, as rates increase, currency volatility is likely to grow in some emerging markets and especially in countries with a high volume of imported goods or with comparatively illiquid capital markets.³⁰ Demand for long-term currency hedging in emerging markets is already high, and often unmet due to high costs. Higher interest rates may increase the costs of even relatively short-term hedging in some markets.

A New Period of Innovation for Climate Finance

Increased interest rates in emerging markets are a significant departure from the low-rate environment that has partially driven the growth of climate finance transactions since at least 2010. Some of the most significant impacts of higher interest rates in emerging markets include a decrease in private investment levels, an uptick in private distressed debt, constrained government discretionary budgets, and, overall, lower economic growth and reduced adaptive capacity to adjust to the negative impacts of climate change.

In response, as explored in this paper, climate financiers may explore partnerships with emerging market lenders to replace distressed debt with new climate-linked loans, engage local microfinanciers and supply chain financiers to develop climate-linked portfolios that target marginalized populations that





will be left behind, and support cash-constrained developing country governments to implement climate finance solutions that require minimal cash outflows such as Cat Bonds tailored to specific climate-related risks, debt-for climate swaps, or including climate-related triggers to restructured sovereign bonds.

More broadly, climate financiers are well positioned to become agents of transformation for climate action and lead the charge to identify, innovate, and adapt to the opportunities and challenges presented by higher interest rates in emerging markets. Increased interest rates may well mark the beginning of a period of exploration, and creativity for climate finance in these markets.

Much of this innovation will be needed not only in the design of climate finance products, but also in their implementation locally. These solutions will need to adjust to (and learn from) local socio-economic dynamics, specific climate-related risks, and implementing partner expertise. Importantly, many of these solutions will only be financially sustainable in the long term if they are also inclusive. Disadvantaged

and marginalized groups will often play an important role in the successful execution of climate mitigation and adaptation projects either as direct implementers or at least as key enabling stakeholders. COP27 has an extraordinary opportunity to channel and catalyze climate finance's response to this new economic environment.

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Endnotes

- 1 As per the agreement in the 2009 Copenhagen Accord, formalized in the 2015 Paris Agreement, 195 countries agreed to mobilize USD\$100 billion per year by 2020 to support developing country climate actions.
- 2 See [*Bank of England raises interest rates to battle inflation*](#). The Wall Street Journal, December 16, 2021.
- 3 See [*statements*](#) by the US Federal Reserve Chairman in September 2021.
- 4 *Global Landscape of Climate Finance*. [*Climate Policy Initiative*](#), 2021.
- 5 [*Global Financial Stability Report*](#). International Monetary Fund, April 2022
- 6 *Global Landscape of Climate Finance*. [*Climate Policy Initiative*](#), 2021. Climate Policy Initiative conservatively estimates that climate finance needs to deploy USD\$4.5-5 trillion annually through 2050 to achieve the transition to a sustainable, net zero emissions, and resilient world this decade and maintain a 1.5°C pathway.
- 7 This is because increased interest rates will raise the financing costs to investors, which in turn will increase the minimum financial returns required from investment opportunities. Some opportunities that may have originally qualified for financing will not do so any more.
- 8 Food is estimated to account for more than 20% of consumer spending across most of the emerging world and 40% in sub-Saharan Africa (Source: [*Surging food prices take a toll on poor economies*](#). The Economist, April 2, 2022.)
- 9 Bank for International Settlements, 2022. Retrieved from: https://www.bis.org/statistics/about_credit_stats.htm?m=1380
- 10 [*Global Debt Monitor COVID Drives Debt Surge—Stabilization Ahead?*](#) Institute of International Finance. February 7, 2021.
- 11 For a more detailed analysis on rising distressed debt and impact on financial institutions see the World Bank's: [*World Development Report 2022*](#) and a related article from Carmen Reinhart and Leora Klapper [*Private-debt risks are hiding in plain sight*](#) published by the World Bank. May 5, 2022.
- 12 Bank for International Settlements, 2022. Retrieved from: https://www.bis.org/statistics/about_credit_stats.htm?m=1380
- 13 [*Historic Cascade of Defaults Is Coming for Emerging Markets*](#). Bloomberg. July 7, 2022
- 14 [*IMF Warns of Economic Collapse in Poor Nations Without Debt Fix*](#). Bloomberg. December 2, 2021. IMF considers public debt to be distressed when a country is unable to fulfill its financial obligations and debt restructuring is required. For more details, see: [*Governments Need Agile Fiscal Policies As Food And Fuel Prices Spike*](#), IMF Blog. April 20, 2022.
- 15 [*World Bank slashes global growth forecast to 2.9%, warns of 'stagflation' risk*](#). Reuters. June 7, 2022.
- 16 This may especially apply to lenders in emerging markets that have also provided financing to governments. Home-country public debt now makes up about 17% of bank assets across emerging economies, up from 13% in 2010, and well above the 7.5% average in developed countries. (Source: [*Are emerging economies on the verge of another "lost decade"?*](#) The Economist, April 30, 2022)
- 17 Microfinanciers may include formal microfinance institutions as well as other microfinance providers such as cooperatives, non-governmental institutions, or commercial bank subsidiaries. Supply chain financiers include players within the supply chain that provide financial services to support their commercial transactions, such as input providers, off-takers (including international buyers), processors, traders, or equipment manufacturers, to name a few.
- 18 For example, see the analysis provided by the Central America and Caribbean Microfinance Association (REDCAMIF). It is estimated that 60% of the population of Central America and the Caribbean is exposed to climate-related risks. However, only 22% of microfinanciers providing data to the association offer any green finance products (defined as financing devoted to the promotion of renewable energy sources, energy efficiency, sustainable water management, among others) to its borrowers. For more details see their [*Microfinance Sector Study*](#). December 2021.
- 19 Interest rates charged by microfinanciers are usually higher than interest rates from local banks due to microfinanciers' higher operating costs, higher costs of financing, and higher loan default risks, among others.

- 20 Meso-level insurance provides portfolio or group insurance directly to the lender. Most meso-insurance products are often structured as index insurance products. They are relatively new and currently only in the agriculture space. Meso-level insurance products may, for example, allow microfinanciers to cover default risks arising from major agricultural shocks or agro-processors to cover the risk of non-recovery of inputs advanced to farmers. For more details, see [Experiences in index-based insurance for farmers: lessons learnt from Senegal and Bangladesh](#). World Bank. October 3, 2016.
- 21 [Social Unrest Is Rising, Adding To Risks For Global Economy](#). International Monetary Fund. May 20, 2022.
- 22 Cat bonds coupon and principal payments are similar to those of regular bonds, and include a ‘premium’ for the bond issuer’s catastrophe coverage. Bond payments are contingent on a pre-specified catastrophic event (the ‘trigger event’). If the trigger event occurs, the bond payments will be partially or fully eliminated. At that point, the bond issuer will receive a payout from the bond buyer, typically through an intermediary Special Purpose Vehicle. If no trigger event occurs, bond buyers receive all proceeds as with other regular bonds.
- 23 For more information on this bond see the following World Bank Case Study <https://thedocs.worldbank.org/en/doc/43a111757d3b1ff1cabde80ee7eb0535-0340012021/original/Case-Study-Jamaica-Cat-Bond.pdf>.
- 24 Buyers of Cat Bonds are paid if there is no catastrophic event. However, there is a significant risk that they may not be paid if the issuer is highly indebted. As a result, the demand for Cat Bonds from high-risk issuers is usually low.
- 25 Under this arrangement climate financiers may forgive a portion of a nation’s foreign debt in exchange for an undertaking to spend an equal amount on climate action. In many cases, a significant portion of sovereign bond owners are members of the so-called Paris Club which has traditionally been open to these debt swaps. In recent years, China has become an increasingly important owner of emerging market sovereign debt. China has traditionally sought to negotiate these agreements separately from the Paris Club, though there are signs that it is now adjusting that position. For more information see [The 53 fragile emerging economies](#). The Economist, July 20, 2022, and [Faced with an overseas debt crisis, will China change its ways?](#). The Economist, August 24, 2022.
- 26 The restructured debt makes provision for natural disasters by allowing Barbados to capitalize interest and defer principal payments for two years in the event of such events. For more details on the bond restructuring and its natural disaster clause see [Barbados’ 2018-19 Sovereign Debt Restructuring-A Sea Change?](#) IMF Working Paper. February 21, 2020.
- 27 Approximately 30-plus countries with over \$23.3 trillion in GDP, including the European Union, the United Kingdom, Switzerland, and Japan, have adopted regulations that require corporate climate-related risk disclosures. The U.S. Securities and Exchange Commission is currently exploring similar regulation for U.S companies under its supervision (Source: [SEC Proposes Rules to Enhance and Standardize Climate-Related Disclosures for Investors](#). SEC Press Release. March 21, 2022.)
- 28 The challenge posed by these “stranded assets” may especially impact businesses activities with a high proportion of assets exposed to physical climate risks and in highly disaggregated supply chains where reporting costs are higher (e.g., food and agriculture, fisheries, apparel), as well as regions that are especially vulnerable to climate-related risks (e.g., Small Island Developing States).
- 29 Credit [Relevance will increase as voluntary carbon markets grow](#). Sustainable Fitch. April 2022.
- 30 [Global Economic Prospects](#). The World Bank. June 2022.