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MACRO RESEARCH FOR DEVELOPMENT
An IMF-FCDO Collaboration



Published Paper: Economic and Food Insecurity Impacts of Climate Change and Mitigation Policies – Insights from Nigeria

The paper [*Economic and Food Insecurity Impacts of Climate Change and Mitigation Policies: Insights from Nigeria*](#) was published in the Environmental & Resource Economics journal. Co-authors Luis Escalante, Pierre Mamboundou, Carine Meyimdji, and Oluwasola E. Omoju explore how climate disasters affect Nigeria's economy and food systems. They find that climate shocks significantly reduce crop output, triggering broader economic disruptions and a 2.11% decline in real GDP. These shocks disproportionately impact northern Nigeria, where the probability of food shortages rises by 6.5%.

The paper also evaluates the effectiveness of mitigation strategies. A policy mix combining rural cash transfers and urban tax cuts emerges as the most effective in supporting consumption and employment, though it increases food imports and vulnerability. The authors stress the importance of complementing these measures with targeted investments and subsidies to bolster agricultural resilience and reduce vulnerability to climate shocks.

IMF Training: DIG-Labor Model

On May 1, 2025, the Inclusion and Gender Unit of the IMF's Strategy, Policy, and Review Department (SPR) conducted a training session on the [*DIG-Labor 1 model*](#)—an MRLIC-supported tool tailored to low-income countries (LICs).

The training aimed to strengthen IMF staff's capacity to assess the macroeconomic effects of fiscal and labor market policies in contexts with high unemployment, informality, and labor market segmentation. The presentation, *Public Investment and Human Capital with Segmented Labor Markets*, highlighted the benefits of embedding non-classical labor markets into traditional Debt, Investment, and Growth (DIG) models. This enhanced framework improves analysis of poverty and inequality impacts of large-scale public investment. By providing practical modeling tools, the training helped expand the pool of IMF economists equipped to apply the model to country-specific issues related to fiscal policy, employment, and inclusive growth.

Working Paper and External Presentations: The Urgency of Conflict Prevention – A Macroeconomic Perspective

Authored by Hannes Mueller, Christopher Rauh, Benjamin Seimon, and Raphael Espinoza, the IMF Working Paper (WP)

[The Urgency of Conflict Prevention – A Macroeconomic Perspective](#) emphasizes the role of macroeconomic policies in helping to prevent armed conflicts. It highlights two key criteria for the long-term benefits of prevention: policies must outweigh the costs of uncertain forecasts, and their design must directly contribute to conflict prevention. Using machine learning and dynamic optimization, the authors find that returns on prevention policies range from \$26 to \$75 per \$1 spent in peaceful countries, and up to \$103 in countries recently affected by violence. The study offers practical recommendations for global and national policymakers, international financial institutions, and multilateral organizations to promote peace and stability through economic policy.

The paper was presented at key organizations, including:

- The United Nations Department of Political and Peacebuilding Affairs (January 2025)
- The European Commission Directorate-General for International Partnerships (DG INTPA) Fragility & Transformation Hub (March 2025)
- The Bank of Spain, International Economics Department (March 2025)
- The World Bank, Development Economics, Fragility, Conflict & Violence (FCV) (April 2025)

It was also featured in a policy commentary by the [International Crisis Group](#), an analysis article by [ONE Data](#), and an [IMF blogpost](#) titled *How Sound Economic Policy Can Help Prevent Conflict*.

External Presentation: Changing Global Linkages: A New Cold War?

Petia Topalova presented the MRLIC-supported paper [Changing Global Linkages: A New Cold War?](#) at the *Asia Pacific Sustainable Trade Forum – Globalization 2.0: Navigating the Challenges of International Trade*, held in Bangkok on May 21-23, 2025. The closed-door event—organized by the Asian Development Bank, Paris School of Economics, World Bank Group and World Trade Organization—focused on the challenges of the evolving global trade landscape and explored pathways for sustainable re-globalization.

Senior policymakers from the region, including representatives from fragile Pacific Island economies, participated in candid discussions on rising trade tensions. The paper's insights on the roles of “connector” and “bystander” economies were of particular interest to countries navigating shifting global linkages.

External Presentation: MRLIC-Supported Research Papers at The State of Globalization Conference

Globalization is rapidly changing due to technological change, the return of trade and industrial policy activism, and growing geopolitical tensions. A two-day conference on [The State of Globalization](#)—co-organized by the IMF and the Center for Advanced Research in Finance at the University of Tokyo—provided a platform to discuss the latest research and practical implications for the current state of globalization. It brought together leading academics from around the world and featured three recent MRLIC-supported research papers:

- i. [Changing Global Linkages: A New Cold War?](#) by Gita Gopinath, Pierre-Olivier Gourinchas, Andrea Presbitero, and Petia Topalova;
- ii. An upcoming paper, *Policies to Facilitate Adjustment to Globalization*, by Prachi Mishra, Lorenzo Rotunno, Michele Ruta, Petia Topalova, and Robert Zymek; and
- iii. An upcoming study, *Goeconomic Fragmentation in Services? Evidence from a New database*, by Nan Li and Robert Zymek.

External Presentation: Global Financial Flows Revisited — Trends and Dynamic Interactions

The upcoming paper *Global Financial Flows Revisited: Trends and Dynamic Interactions* by Povilas Lastauskas and Baoping Shang was presented at the Finance Research Cluster workshop on *Contemporary Issues in Banking Regulation and Financial Sector Dynamics* at Queen Mary University of London in April 2025. The event brought together academics and policymakers from the Bank of England and leading UK institutions, including the Universities of London, Warwick, Cambridge, and Loughborough.

The paper introduces the FIMIDa database, which covers 181 countries and all major types of financial inflows—foreign direct investment (FDI), portfolio debt and equity, remittances, and official flows—within a Balance-of-Payments framework. It documents a post-2011 decline in private inflows and highlights remittances as an increasingly important stabilizer, especially in LICs. The findings underscore rising fiscal vulnerabilities in LICs due to shrinking official aid and reliance on remittance-driven consumption.

External Presentation: Mobile Internet, Collateral, and Banking

The IMF WP [*Mobile Internet, Collateral, and Banking*](#) by Angelo D'Andrea, Patrick Hitayezu, Kangni R Kpodar, Nicola Limodio, and Andrea Presbitero was presented at *The Macroeconomics of Digital Payments Conference* in Uganda.

Using administrative data from Rwanda on credit, construction, and land reform, the paper shows that the complementarity between technology and legal frameworks can ease financial frictions and boost investment. Leveraging quasi-experimental variation in 3G rollout, the authors find that mobile connectivity shifts borrowers from microfinance to banks, improving loan terms without increasing default rates. 3G also facilitates broader access to land titles and supports construction investment. Mediation and structural analyses reveal that land titles explain 30–37% of mobile internet's effect on bank lending and 75–80% on collateralized loans.

External Presentation: Gender-Inclusive Growth at the 2025 Social Development Conference

In March 2025, the U.K. Foreign, Commonwealth and Development Office (FCDO) organized the Social Development Conference in London. IMF staff and external experts briefed FCDO Social Development Advisers (SDAs) on the latest insights into economic growth and its links to female labor force participation, shared prosperity, and economic policy. The event explored how data, tools, and partnerships can enhance growth outcomes by integrating micro-level evidence to account for distributional impacts.

Lisa Kolovich from the IMF's SPR Department presented a macroeconomic perspective on how women's economic empowerment is macro-critical, highlighting the role of human capital accumulation, efficient resource allocation, and macro-level policy levers in fostering inclusive growth. A panel discussion with senior FCDO leadership emphasized how SDAs can apply these insights, using practical tools and inclusive economic frameworks to inform policy, strategy, and operational delivery across FCDO posts. The IMF also led a tailored workshop during the conference showcasing tools to quantify the economic gains from increased female labor force participation. This session led to follow-up workshops in May 2025, which presented the underlying research and introduced additional tools to FCDO staff.

FCDO Seminar: Building Resilient Economies: Insights from the IMF's DIGNAD Model

On May 15, 2025, the FCDO hosted an internal seminar on the MRLIC-financed [DIGNAD \(Debt-Investment-Growth and Natural Disasters\) model and toolkit](#). The DIGNAD toolkit helps assess policymaking on the macro-fiscal impacts of natural disasters and resilience investments, offering a comprehensive approach to evaluating debt sustainability risks and the effectiveness of adaptation policies.

As climate change intensifies the frequency and severity of extreme weather events, building resilient infrastructure has become a priority for vulnerable emerging and developing economies. Led by Azar Sultanov from the IMF's Research Department (RES), the seminar introduced DIGNAD's core framework, illustrating how the model integrates country-specific data, captures the economic impacts and mechanisms of natural disasters, and analyzes the trade-offs of adaptation investments. Participants reviewed prior country applications of the model and gained insights into debt sustainability and resilience strategies.

FCDO Workshop: Linking Macroeconomics to Women's Economic Empowerment and Distributional Considerations in Country Work

In May 2025, the IMF and FCDO co-organized a virtual workshop showcasing how macroeconomic policy can help reduce economic disparities and improve human capital allocation. The three morning sessions featured a mix of evidence-based presentations, country case studies, and applied examples of IMF tools to analyze growth implications of closing economic opportunity gaps.

The workshop explored how inefficiencies in labor markets, tax systems, and public spending can hinder development outcomes, and how targeted macro-fiscal reforms can enhance both efficiency and equity. Practical applications of analytical frameworks to countries such as Niger, Somalia, and Mexico highlighted the links between demographic trends, informality, education, and economic diversification. The interactive format, which included breakout discussions and live tool demonstrations, encouraged strong engagement between IMF and FCDO staff and fostered a shared understanding of policy priorities.

Internal Presentation: Evaluating Saving-Investment and Resilience Building Strategies for Palau

On March 18, 2025, at the IMF's SPR Small Development States Seminar Series—chaired by SPR Advisor Jarkko Turunen—Elif Ceren Arbatli Saxegaard, Irina Yakadina, Kavita Ram, and Ricardo Davico (from the Asia and Pacific Department), together with Azar Sultanov (from the Research Department), presented the application of the [DIGNAD toolkit](#) to Palau.

Following the pandemic-induced collapse in tourism revenues, new financing from the U.S. Compact Review Agreement (CRA) offers Palau an opportunity to rebuild. As the country remains highly vulnerable to climate risks, including sea-level rise, storms, and droughts, the study uses DIGNAD simulations to assess the impact of building climate-resilient infrastructure and fiscal buffers. Results show that prioritizing climate adaptation investment leads to stronger long-term outcomes: it mitigates disaster-related growth losses, supports faster recovery, and preserves fiscal space for debt reduction.

Internal Presentation: Bilateral Trade in Services (BiTS) Database

Nan Li and Robert Zymek presented the upcoming *Bilateral Trade in Services (BiTS)* database at the IMF's Fund-wide Surveillance meeting on April 29, 2025. Data on cross-border services flows are often fragmented and limited. BiTS addresses this gap by compiling annual bilateral trade flows in services for the period 1985–2023 across a wide range of advanced, emerging, and developing economies. The data are harmonized under the BPM6 framework and disaggregated into 29 service categories.

The presentation featured two key findings: (1) unlike goods, there is no current evidence of geoeconomic fragmentation in services; and (2) as with goods, dominant currency exchange rates play a significant role in shaping service trade values.

Internal Presentation: Allocation of Talent and Income Differences Across Countries

Nan Li and Robert Zymek presented their upcoming research *Allocation of Talent and Income Differences Across Countries* at the IMF's Surveillance meeting on May 1, 2025. The study quantifies the macroeconomic impact of barriers that limit women's access to certain occupations, using a micro-founded occupational choice model to construct a cross-country, outcomes-based measure of gender-based labor market barriers.

Applying the model to harmonized income microdata for 43 countries, the authors find that 2015 gender barriers in some emerging and developing economies resemble those in the United States during the 1960s. Lowering these barriers to 2015 U.S. levels could yield double-digit gains in per-capita income and welfare—through higher participation and increased productivity via more efficient talent allocation. The findings highlight the growth and income convergence potential of policies that promote gender equality in occupational access.

Internal Presentation: Capital Allocation and Firm Dynamics in Small Open Economies

Felipe Camelo presented his upcoming IMF WP, *Capital Allocation and Firm Dynamics in Small Open Economies*, at the IMF's RES Lightning Seminar and the SPR Macrofinancial Seminar.

The paper analyzes the impact of large capital inflows on output, productivity, and firm-level resource allocation. Using balance of payments data from 85 countries (1975–2019), the study finds that capital inflow booms lead to persistent increases in private credit and temporary output gains, but sustained declines in total factor productivity (TFP). Firm-level data from 30 countries show short-lived gains at the firm level and a reallocation of capital and debt toward firms with high marginal returns. A dynamic small open economy model with firm heterogeneity and financial frictions suggests that shifts in firm entry and exit are key to explaining the aggregate TFP response.

Internal Presentation: Global Financial Flows Revisited — Research Agenda

Povilas Lastauskas presented an ongoing three-part research agenda on global financial flows—developed with Baoping Shang—at an IMF workshop hosted by the RES Department's Systemic Issues Division.

The first project, *Global Financial Flows Revisited: Trends and Dynamic Interactions*, introduces a newly constructed

database tailored for macroeconomic analysis of financial inflows, covering FDI, portfolio investments, remittances, and official flows across 181 countries. The second project focuses on official flows and aid, examining their measurement, long-term trends, macroeconomic implications, and the policy challenges posed by declining aid levels—particularly for LICs. The third project focuses on bilateral financial flows, aiming to quantify frictions—especially those affecting LICs—through structural modeling to derive policy-relevant counterfactuals.

Together, these projects aim to enhance understanding of financial flow dynamics in an evolving global environment.

Internal Presentation: Climate Shocks and the Growth Effect of Financial Flows

Alassane Drabo presented his upcoming paper at an internal seminar hosted by the IMF's SPR Climate Development Division. While financial flows to developing countries have increased in recent decades, their impact on growth remains debated. Much of the literature highlights how country-specific factors—such as limited human and physical capital, weak institutions, and poor macroeconomic policies—constrain absorptive capacity. This paper adds a new dimension by showing that climate shocks may weaken the growth-enhancing effects of FDI, official development assistance (ODA), and migrants' remittances.

Grounded in a neoclassical growth framework, the model shows that these financial flows support growth more strongly when absorptive capacity is high—but climate shocks significantly dampen these effects. Empirical analysis using data from low- and middle-income countries confirms the theoretical findings, applying robust methods to address endogeneity and testing across different climate shock measures and time periods. The results underscore the need for developing countries to strengthen climate resilience and for coordinated global efforts to reduce greenhouse gas emissions.

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The views expressed in this newsletter are those of the contributors and do not necessarily represent the views of the International Monetary Fund (IMF), or UK's Foreign, Commonwealth and Development Office (FCDO). For more information, please contact MacroResDev@imf.org or visit the IMF-FCDO Macroeconomic Research for Development [website](#).