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MACRO RESEARCH FOR DEVELOPMENT
An IMF-FCDO Collaboration

Book Chapters: The State of Globalisation

MRLIC contributed three chapters to the recently published CEPR book *The State of Globalisation*. The chapters offer new insights into how trade, investment, and services are evolving in an increasingly fragmented global economy, including in low-income countries. These are summarized below:

1. ***A New Cold War? How Trade and Investment Linkages are Changing:*** Gita Gopinath, Pierre-Olivier Gourinchas, Andrea Presbitero, and Petia Topalova provide empirical evidence that global economic flows are being rewired rather than simply reduced. The chapter highlights significant ‘tariff-jumping’ investment, as firms relocate production to avoid trade barriers, fundamentally restructuring global supply chains. The authors also identify the crucial role of ‘connector countries’, non-aligned economies that enable continued global integration by acting as intermediaries between geopolitical blocs.
2. ***Policies to Facilitate Adjustment to Globalisation:*** Prachi Mishra, Lorenzo Rotunno, Michelle Ruta, Petia Topalova, and Robert Zymek examine persistent policy gaps in areas essential to managing globalization and the societal transformation it induces. They show that policies for adjustment remain woefully inadequate globally, with trade adjustment assistance limited and insufficient investment in worker retraining and transition support. This represents a fundamental failure to address globalisation’s distributional consequences and long-term political sustainability.
3. ***Geoeconomic Fragmentation in Services? Evidence from a New Database:*** Nan Li and Robert Zymek analyze services trade using a new database, finding it to be less fragmented than goods trade due to technologies that facilitate cross-border services transactions. However, they also find that modern services, particularly intellectual property and telecommunications, show greater sensitivity to geopolitical alignment than traditional sectors like transport and travel, suggesting potential vulnerabilities as these high-value sectors expand.

Policy Paper: The 4th Financing for Development Conference – Contribution of the IMF to the International Financing for Development Agenda

On June 5th, the *Staff Paper* on the IMF’s contribution to the international financing for development agenda was published ahead of the *4th Financing for Development Conference*, held in Sevilla, Spain from June 30 to July 3, 2025. The paper outlines the challenging global context for development, updates staff’s assessment on the achievability of the Sustainable Development Goals (SDGs) and proposes actions to accelerate development progress.

The MRLIC contributed to some of the findings relevant to low-income countries (LICs). Recent global shocks have intensified existing development challenges, particularly for LICs and fragile countries. The paper calls for more differentiated reform and support strategies, given the diverse economic conditions and risk exposures across developing economies. Debt vulnerabilities in LICs are noted as a key concern.

The Staff Paper was discussed by the IMF Executive Board on June 3th.

Country Application: DIGNAD Application to The Gambia

Annex V of the *Country Report for The Gambia* draws on insights from the IMF-DIGNAD (Debt, Investment, Growth, and Natural Disasters) model, developed with support from the MRLIC program. The analysis illustrates how pre-emptive investment in resilient infrastructure can influence post-disaster output growth and public debt dynamics.

The simulation suggests that frontloading such investments may help alleviate the adverse effects of natural disasters in The Gambia. It also highlights the importance of improving public investment and tax collection efficiency as key measures to maintain the country's macroeconomic stability.

Country Application: DIGNAD Application to Kiribati

Kiribati, a collection of remote archipelagos consisting mostly of low-lying atolls, faces high exposure to natural hazards and an existential threat from rising sea levels. A *Selected Issues Paper* features the DIGNAD model – and MRLIC financed tool – to assess the macroeconomic implications of investing in climate-resilient infrastructure. The analysis highlights the need for public investment to safeguard the country's long-term prosperity.

To build moderate resilience, the paper underscores the importance of carefully designed fiscal policies and enhanced public investment efficiency. These measures are essential to alleviate the fiscal burden, maximize output gains from infrastructure, attract private investment, and maintain debt sustainability.

Country Application: DIGNAD Application to São Tomé and Príncipe

São Tomé and Príncipe is highly vulnerable to natural disasters. Strengthening resilience is macro-critical, yet the country faces major challenges, including weak infrastructure, insufficient flood protection, and scarce financial resources.

A *Selected Issues Paper* uses the MRLIC-financed DIGNAD model to simulate the impact of investing in climate-resilient infrastructure and improving public investment efficiency on economic growth and debt outcomes. These are compared against ex-post disaster management strategies and financial contingency funds. Given the country's substantial needs and debt vulnerabilities, international financial support is essential to bolster resilience.

Working Paper: Bilateral Trade in Services: Insights from A New Database

An IMF Working Paper (WP) introduces the *Bilateral Trade in Services (BiTS) database*. Authored by Nan Li, Sergii Meleshchuk, Qiuyan Yin, Dennis Zhao, and Robert Zymek, the paper draws on a range of sources to provide a very comprehensive and consistent coverage of bilateral services trade from 1985 to 2023. The database spans 12 major services categories – 9 of which are further disaggregated into 26 distinct subcategories – and is harmonized under the BPM6 classification standard.

While historical data is only available for some advanced economies (AE) and emerging markets (EM), the BiTS database captures most global services trade flows from 2000 onwards, including to and from low-income countries. The authors showcase the database's applications through two research case studies. The first shows that "gravity forces" have become less powerful in explaining services trade patterns over time, due to a shift in the composition of trade towards less distance-sensitive services. The second documents that overall services trade remains resilient to growing geopolitical fissures, but that modern services appear more sensitive to geopolitical alignment than traditional services.

Working Paper: Growth, Interrupted: How Crises Delay Global Convergence

The IMF WP *Growth, Interrupted: How Crises Delay Global Convergence*, by Patrick Imam and Jonathan Temple, explores how major crises derail the transitional dynamics of conditional convergence across countries. Using a Markov chain framework, the authors link crises dynamics with convergence theory, showing how shocks trigger upward and downward mobility.

Their analysis highlights the outsized role of conflict and debt crises in keeping some countries stuck at low income levels. Convergence gained ground in the early 2000s (partly due to fewer and shorter crises), but a series of shocks since 2020 has likely slowed that progress. The paper highlights how the frequency and length of crises can decisively shape the global path of income convergence.

Working Paper: Forging Strength: Exploring the Dynamic Interplay between Institutions and State Capacity

The IMF WP *Forging Strength: Exploring the Dynamic Interplay between Institutions and State Capacity*, by Patrick Imam and João Jalles, examines how institutional quality and state capacity shape economic growth, both separately and together. Using data from 130 countries between 1970 and 2022, the authors employ a novel identification strategy that isolates large, exogenous governance shocks using both residual- and percentile-based methods. Using local projections, they estimate the dynamic impact of these shocks on real GDP per capita growth.

The findings show that both institutions and state capacity boost growth, with the strongest and most lasting gains in emerging and developing economies where governance gaps are greatest. Institutional reforms deliver the largest payoffs, while improvements in state capacity add further momentum when paired with stronger institutions. Robustness checks support the result underscoring that well-designed institutional reforms, backed by effective state structures, can yield substantial economic dividends.

Working Paper: The Impact of Central Bank Climate Communication on Green Bonds

The IMF WP *The Impact of Central Bank Climate Communication on Green Bonds*, authored by Marina Conesa Martinez, examines how central bank climate-related communications influences corporate financial decisions and instruments. The paper empirically shows that more active climate communication by central banks is associated with increased green bond issuance by firms.

The effect is particularly pronounced among commercial banks, firms that closely monitor central bank climate announcements, and those with greater exposure to weather-related risks and opportunities. The findings suggest that firms are likely responding strategically to anticipated regulatory and market shifts shaped by central bank guidance on climate issues.

Working Paper: Growth Strategies and Diversification in the Pacific Islands Countries

In the IMF WP *Growth Strategies and Diversification in the Pacific Island Countries*, Gabriela Cugat examines the role of tourism and economic diversification in driving growth in the Pacific Island Countries (PICs). The paper quantifies tourism's contribution to growth using panel regressions and estimates the scale of tourism expansion needed for PICs to match the growth rates of their peers. Given the significant increases required, the paper explores the benefits of an alternative strategy focused on diversification.

Diversification episodes in the PICs are identified and assessed using the synthetic control method, revealing mixed outcomes across countries. The paper concludes by presenting a framework for designing tailored growth strategies, centered on identifying and addressing the binding constraints to economic expansion in the region.

External Presentation: DIGNAD Outreach at the 2nd Forum on the Macroeconomics of Green and Resilient Transitions

Frank Zhang presented the MRLIC-financed *DIGNAD model* during a poster session at the 2nd Forum on the Macroeconomics of Green and Resilient Transitions, held in Copenhagen, Denmark, from June 16-18, 2025. The Forum brought together economic policymakers, applied economic modelers, and analysts to strengthen the evidence base for advancing green and resilient economic transitions.

With over 250 participants from finance ministries, development banks, universities, and think tanks worldwide, the event fostered broad engagement. The DIGNAD presentation attracted significant interest, particularly from low-income countries facing high vulnerability to natural disasters and seeking to adopt disaster-resilient infrastructure solutions.

External Presentation: How Can Machine Learning Research Help Policy?

Raphael Espinoza presented the MRLIC-supported paper *The Urgency of Conflict Prevention – A Macroeconomic Perspective* at the Barcelona School of Economics Summer Forum – Machine Learning in Economics, held in Barcelona on June 12, 2025.

Authored by Hannes Mueller, Christopher Rauh, Benjamin Seimon, and Raphael Espinoza, the IMF WP 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.

External Presentation: Do Capital Inflows Spur Technology Diffusion? Evidence from a New Technology Adoption Index

Gabriela Cugat presented the MRLIC-financed paper '*Do Capital Inflows Spur Technology Diffusion? Evidence from a New Technology Adoption Index*' at the 2025 European Economic Association annual meeting. Co-authored with Andrea Manera, the paper introduces the Embodied Technology Imports Indicator (ETI), a novel measure of technology adoption spanning 181 countries from 1970-2020. The ETI leverages patent data from PATSTAT and trade data from COMTRADE to quantify the technological intensity of imports, with a focus on developing economies.

The study examines the relationship between capital flows and technology diffusion in emerging markets and LICs. Using a local projection difference-in-differences approach, the authors find that changes in capital flow regulations lead to a 7-9 percentage point increase in technological intensity over 5-10 years. This is accompanied by a 28-33 percentage point rise in gross capital inflows and a 9-12 percentage point increase in Real GDP per capita (in PPP terms). The findings underscore the important role of capital flow regulations, particularly FDI, in promoting technology adoption in developing countries.

External Presentation: Global Financial Flows Revisited – Composition Shifts and Dynamic Interactions

Povilas Lastauskas presented the upcoming IMF WP *Global Financial Flows Revisited: Composition Shifts and Dynamic Interactions*, coauthored with Baoping Shang, at the 7th Baltic Economic Association's Conference, held in Vilnius, Lithuania. The paper was discussed by Iikka Korhonen, Head of Research at the Bank of Finland. It introduces the newly constructed Financial Inflows, Macroeconomic and Institutional Database (FIMIDa), which covers 181 economies over more than five decades, to reassess the evolution and impact of global financial flows. Despite a recent decline in private inflows such as FDI and debt, the paper finds that LICs and EMs have largely avoided the sudden-stop crises seen in previous globalization waves.

The paper highlights four key findings:

1. Remittances have become critical stabilizers, especially for developing countries, as private inflows have waned.
2. Complementarities between FDI and portfolio equity are now mostly confined to developed economies, while LICs face a “double squeeze” from falling aid and rising remittances.
3. Unified Balance-of-Payments measures show that government inflows crowd out market finance in EMs but crowd in non-concessional debt in LICs.
4. Inflows remain procyclical in EMs, whereas government inflows help mitigate procyclicality in LICs.

The paper provides insights into the composition and dynamics of financial flows, with implications for macroeconomic stability and policy design in developing economies.

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

An upcoming IMF WP, Capital Allocation and Firm Dynamics in Small Open Economies, authored by Felipe Camelo, was presented at the Society for Economic Dynamics Annual Meeting in Copenhagen, (June 26-28) and the European Economic Association Annual Meeting in Bordeaux (August 25-28). The paper investigates the macroeconomic consequences of large capital inflows on output, productivity, and resource allocation across firms. Using balance of payments data from 85 countries (1975-2019), the study finds that capital inflow booms are associated with persistent increases in private credit and temporary output surges, but also with sustained declines in total factor productivity (TFP).

Firm-level data from 30 countries show that while individual firms experience short-lived booms, there is a significant reallocation of capital and debt toward firms with higher marginal returns on capital. To interpret these patterns, the author develops a small open economy firm dynamics model with heterogeneity and financial frictions, demonstrating that general equilibrium adjustments—through shifts in firm entry and exit—are crucial to understanding the aggregate TFP response.

[1]Information compiled by Hites Ahir (hahir@imf.org) and Ana Cepeda (acepedavalor@imf.org) with inputs from the authors. Final edits by Ana Cepeda.