

June 2024

MACRO RESEARCH FOR DEVELOPMENT
An IMF-FCDO Collaboration



[World Economic Outlook: Slowdown in Global Medium-Term Growth: What Will it Take to Turn the Tide?](#)

The April 2024 edition of the World Economic Outlook, the IMF's flagship publication, included an analytical chapter that delves into the drivers behind the projected [Slowdown in Global Medium-Term Growth](#). In this chapter, N. Li, C. Maggi, D. Noureldin, C. Okou, A. B. Sollaci, and R. Zymek identify a significant and widespread slowdown in total factor productivity, partly driven by increased misallocation of capital and labor between firms within sectors, as a key factor dragging down medium-term growth. Demographic pressures and a slowdown in private capital formation further depressed growth prospects. Absent policy action or technological advances, medium-term growth is projected to fall well below pre-pandemic levels. To bolster growth and turn the tide, urgent reforms are necessary to improve resource allocation to productive firms, boost labor force participation, and leverage artificial intelligence for productivity gains. Addressing these issues is critical, given the additional constraints that high public debt and geoeconomic fragmentation may impose on future growth. The support from the UK FCDO Macroeconomic Policy in Low-Income Countries program is gratefully acknowledged in the chapter.

The April 2024 edition of the World Economic Outlook has received worldwide attention, due to a high-level presentation at the [Analytical Corner](#) during the Spring Meetings and global outreach in Africa, Asia and the Pacific, Europe, and Latin America.

[Applications of FCDO Toolkits for Guinea: 2024 Article IV Consultation and Selected Issues Paper](#)

On May 17, 2024, an [Article IV Staff Report](#) and a [Selected Issues Paper](#) for Guinea were published, which include the applications of FCDO-supported analytical toolkits, the Multisector Incomplete Markets Macro-Inequality (MIMMI) app and the IMF's Debt, Investment, Growth, and Natural Resources (DIGNAR) model. The reports feature analysis by A. Badel and A. Sultanov on the short- and medium-term macroeconomic and distributional impacts of the Simandou project, a large mining project in Guinea.

The findings suggest that the Simandou project's success in boosting growth, reducing poverty, reducing inequality, and addressing climate change would heavily depend on proactive government policy, particularly in infrastructure and education. Without such policies, impact of the project would likely be limited. Additionally, extensions and refinements of the MIMMI app were made in the process, enhancing its analytical utility.

Natural Disasters and Climate Policies in Guinea

Natural disasters (especially floods) have become more frequent and severe in Guinea, and its large mining sector might push up carbon emissions significantly over time. In a [Selected Issues Paper](#) for Guinea, the team examines the country's exposure to natural disasters, and simulated their macroeconomic effect and explores options for closing the financing gap using the IMF's Debt, Investment, Growth, and Natural Disasters (DIGNAD) model.

Simulations show that ex ante resilience investment, financed by grants and complemented with public investment efficiency reforms, yields best macroeconomic outcomes after natural disasters. Accelerating the implementation of recent technical assistance recommendations on C-PIMA (Climate-Public Investment Management Assessment), as well as improving the collaborations between the Ministry of Environment and other project planning/implementation ministries, are crucial for enhancing the country's resilience. The authorities should also continue their ongoing efforts to mitigate emissions while ensuring the sustainable expansion of Guinea's renewable energy sector.

Côte d'Ivoire - DIGNAD Country Application in the Context of the Resilience and Sustainability Facility

To assess the macro-fiscal implications of strengthening resilience to climate change, several Debt, Investment, Growth, and Natural Disaster (DIGNAD) model scenarios were run as part of an [IMF Country Report for Côte d'Ivoire](#). The DIGNAD model is a dynamic general equilibrium model designed to study the effects of public investment on economic growth and debt sustainability in the context of natural disasters.

Through its simulations, the model presents macro-fiscal outcomes associated with public adaptation investment, economic growth, and debt, relative to those at steady state. The modeling scenarios highlight that Côte d'Ivoire would benefit from investments in resilient infrastructure and greater revenue mobilization to attenuate the negative effect of natural disasters on debt sustainability.

World Economic Outlook: Distributional Implications of Medium-Term Growth Prospects

The April 2024 edition of the World Economic Outlook, featured a research box in chapter 3 ([Slowdown in Global Medium-Term Growth: What Will It Take to Turn the Tide?](#)) titled "Distributional Implications of Medium-Term Growth Prospects". In this box, G. Cugat and C. v. Hombeeck examine how the medium-term growth slowdown could affect global income inequality and convergence between countries.

The research provides estimates for cross-country income convergence using a broad sample of countries and includes global inequality estimates. The box also presents an analysis of GDP and welfare drivers across different income groups, including advanced economies, emerging markets, and low-income countries.

From April 22 to May 3, 2024, IMF's Institute for Capacity Development conducted a technical assistance (TA) mission in Ghana under the Forecasting and Policy Analysis Systems (FPAS) TA project. The mission focused on building further analytical capacity and developing FPAS processes at the Bank of Ghana (BoG). The BoG's Quarterly Projection Model (QPM) was refined and extended with a detailed fiscal sector satellite, distinguishing between domestic and foreign debt, and featuring a fiscal authority concerned with debt stabilization and countercyclical support.

Additional analytical tools broadened the coverage of model-based assessments. Historical shock decompositions helped identify the driving forces behind recent dynamics in key variables, while counterfactual simulations highlighted the major monetary policy trade-offs between price stability and economic growth during the recent period. Overall, the TA supported FPAS-based analytical work, which plays a key role in supporting the BoG's forward-looking monetary policy formulation.

[Column on 'Global Gender Gaps May Never Close on their Own'](#)

On May 16, 2024, A. Badel, S. Fabrizio, and R. Goyal published a [column](#) on VoxEU from the Center for Economic and Policy Research. The column calls for stronger policy efforts to increase female labor force participation globally, based on findings from the FCDO-supported IMF paper ['When Will Global Gender Gaps Close?'](#).

Despite progress in recent years, there appears to be no imminent prospect of gender equality. Based on data on labour force participation over the last 30 years, this column argues that, on current trends and policies, gender gaps should narrow but are unlikely to close. Preventing reversals or setbacks and accelerating reforms are necessary to decisively close gender gaps and unleash the benefits of female economic empowerment.

[Do Capital Inflows Spur Technology Diffusion? Evidence from a New Technology Adoption Index](#)

On March 1, 2024, G. Cugat and A. Manera published an [IMF working paper](#) introducing a new indicator of technology imports. In the paper, they construct a novel measure of technology adoption called the Embodied Technology Imports Indicator (ETI). The ETI measures the technological intensity of imports by country by leveraging patent data from *PATSTAT* and product-level trade data from *COMTRADE*. The index is used to assess the link between capital flows and the diffusion of new technologies across emerging economies and low-income countries.

Using a local projection difference-in-differences approach, the research establishes that variations in statutory capital flow regulations increase technological intensity between 7 and 9 percentage points over 5 to 10 years. This increase is accompanied by a significant 28-33 percentage point rise in the volume of gross capital inflows, driven primarily by foreign direct investment (21 percentage point increase), and a 9-12 percentage point shift in the level of real GDP per capita in purchasing power parity terms. The novel ETI indicator, which covers 181 countries, including most low-income countries over the period from 1970 to 2020, will soon be available online. Additionally, a high-level summary of the paper was featured in the [May 2024 IMF Research Perspectives newsletter](#).

[At the Threshold: The Increasing Relevance of The Middle-Income Trap](#)

On April 26, 2024, authors P. A. Imam and J. R. W. Temple published an [IMF working paper](#), investigating the existence of a middle-income trap using finite state Markov chains, constant growth thresholds, and mean passage times. The paper studies output per capita and the dynamics of its proximate determinants: total factor productivity (TFP), capital-output ratio, and human capital.

The authors find upward mobility for the capital-output ratio and human capital, but not for relative TFP. The lack of upward mobility in relative TFP, at least from an intermediate level, suggests that escaping the middle-income category can take many years, and such traps may become increasingly apparent in the future.

Mobile Internet, Collateral, and Banking

On March 29, 2024, an [IMF working paper](#) co-authored by A. D'Andrea, P. Hitayezu, K. R. Kpodar, N. Limodio, and A. F. Presbitero was published. The paper utilizes administrative data on credit, internet penetration and land reform in Rwanda. The paper demonstrates that the complementarity between technology and law can overcome financial frictions.

Leveraging quasi-experimental variation in 3G availability from lightning strikes and incidental coverage, the authors show that mobile connectivity steers borrowers from microfinance to commercial banks and improves loan terms. These effects are partly due to the role of 3G internet in facilitating the acquisition of land titles from the reform, which are used as collateral for bank loans and mortgages. The results indicate that the availability of collateral mediates 35% of the overall effect of mobile internet on credit and 80% for collateralized loans.

Foreign Aid and Big Shocks: Evidence from Natural Disasters

On April 26, 2024, R. Arezki presented an upcoming IMF Working Paper as part of an IMF seminar series. The paper analyzes the effect of big shocks on the allocation of bilateral aid, using natural disasters as natural experiments. Preliminary findings include that aid commitment increases following natural disasters, and that humanitarian aid precedes structural aid.

However, the effect is quantitatively small, and the poorest countries or those facing the most damaging natural disasters do not receive the most aid. There is no evidence that foreign aid commitment disburses faster following natural disasters. Further exploration into the mechanisms driving aid in disaster-affected countries points to the importance of political alignment with donors, especially in recipient countries with low state capacity.

Foreign Aid and Conflicts: The Effects of 9/11 on Donor Behavior

On April 24, 2024, R. Arezki presented preliminary results of an upcoming IMF Working Paper on development aid at a seminar in the Austrian Institute of Economic Research in Vienna, Austria. The paper finds evidence of changing relationship between bilateral aid commitments and the onset of armed conflicts in aid recipient countries, shifting from negative to positive after the year 2001.

The findings indicate that grants, rather than loans, and aid for health and humanitarian purposes drive this result. These

conclusions are robust to numerous checks, including substituting armed conflicts with terror attacks, accounting for debt relief initiatives, and using different estimators. The authors interpret these results as stemming from a shift in donors' preferences after the 9/11 attacks toward supporting conflict-affected countries, confirming the primacy of donors' interests over recipient needs.

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](#).