

MACRO RESEARCH FOR DEVELOPMENT

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Development

Macroeconomic Consequences of Remittances Seminar

Ralph Chami gave an internal training seminar “Macroeconomic Consequences of Remittances in LMICs and Fragile States,” on March 25, 2019. The seminar was a first such training on this topic at the IMF. Remittance flows are important private income transfers for at least 70 members of the IMF, and in many countries, they are the main source of foreign exchange, surpassing FDI and ODA. The event was oversubscribed, with many desks from remittance-dependent countries as well as functional departments staff in attendance. The discussion was spirited with desks inquiring about the policy implications for their countries. The IET seminar received outstanding evaluations. We will be designing and delivering a two-day course on this topic in 2020.

Understanding Export Diversification: Key Drivers and Policy Implications

Rahul Giri and Saad Quayyum presented their working paper [“Understanding Export Diversification: Key Drivers and Policy Implications”](#) on April 10 at the IMF’s Spring Meetings. The team along with Rujun Joy Yin identifies key factors from a large set of potential determinants that explain the variation in export diversification across countries and over time using Bayesian Model Averaging (BMA), which addresses model uncertainty. The paper’s analysis suggests, in order to diversify, policymakers should prioritize human capital accumulation and reduce barriers to trade. Other policy areas include (in order of importance) improving quality of institutions, quality of infrastructure. For commodity exporters reducing barriers to trade is the most important driver of diversification, followed by improving education outcomes at the secondary level and financial sector development.



Financial Deepening, Terms of Trade Shocks, and Growth Volatility in Low-Income Countries

[Kpodar, Le Goff and Singh \(2019\)](#) examine the relevance of the structure of the financial system—whether financial intermediation is performed through banks or markets—for macroeconomic volatility, against the backdrop of increased policy attention on strengthening growth resilience. With low-income countries (LICs) being the most vulnerable to large and frequent terms of trade shocks, the paper focuses on a sample of 38 LICs over the period 1978-2012 and finds that banking sector development acts as a shock-absorber in poor countries,

dampening the transmission of terms of trade shocks to growth volatility. Expanding the sample to 121 developing countries confirms this result, although this role of shock-absorber fades away as economies grow richer. Stock market development, by contrast, appears neither to be a shock-absorber nor a shock-amplifier for most economies. These findings are consistent across a range of econometric estimators, including fixed effect, system GMM and local projection estimates.

Human Capital and Gender Equality

In an IMF Selected Issues Paper, Vivian Malta and Monique Newiak document that education and health outcomes in [Nigeria](#) are among the weakest worldwide and are deteriorating in some parts of the country. Access to education is highly unequal across states and individuals' income and gender. Regional differences in health outcomes are vast. Using a micro-founded general equilibrium model, the paper finds narrowing gaps in education between boys and girls and between individuals at different parts of the income distribution would boost productivity, decrease income inequality, and narrow gender gaps in labor force participation rates and earnings. Closing the gender gap in years of schooling in each income quintile alone would boost long-term GDP by 5 percent, with much higher effects for more ambitious scenarios that also include anti-discrimination policies. Improving health outcomes, in particular for children, will support education outcomes and boost productivity of the labor force. Increased and regular funding for the education and health sector will be critical for supporting a range of reforms that includes all tiers of government.

Informality and Gender Gaps Going Hand in Hand

In sub-Saharan Africa women work relatively more in the informal sector than men. Many factors could explain this difference, including women's lower education levels, legal barriers, social norms and demographic characteristics. Cross-country comparisons indicate strong associations between gender gaps and higher female informality. [This paper](#), co-authored by Vivian Malta, Lisa Kolovich, Angelica Martinez and Marina Mendes Tavares, uses microdata from Senegal to assess the probability of a worker being informal. The main findings are: (i) in urban areas, being a woman increases this probability by 8.5 percent; (ii) education is usually more relevant for women; (iii) having kids reduces men's probability of being informal but increases women's.

Policy Trade-Offs in Building Resilience to Natural Disasters: The Case of St. Lucia

Resilience to climate change and natural disasters hinges on two fundamental elements: financial protection —insurance and self-insurance— and structural protection —investment in adaptation. Using a dynamic general equilibrium model calibrated to the St. Lucia's economy, [this paper](#) from Alessandro Cantelmo, Leo Bonato, Giovanni Melina and Gonzalo Salinas, shows that both strategies considerably reduce the output loss from natural disasters and studies the conditions under which each of the two strategies provides the best protection. While structural protection normally delivers a larger payoff because of its direct dampening effect on the cost of disasters, financial protection is superior when liquidity constraints limit the ability of the government to rebuild public capital promptly. The estimated trade-off is very sensitive to the efficiency of public investment.

Some Policy Lessons from Country Applications of the DIG and DIGNAR Models

Over the past seven years, the DIG and DIGNAR models have complemented the IMF and World Bank debt sustainability framework (DSF) analysis, over 65 country applications. They have provided useful insights in the context of program and surveillance work, based on qualitative and quantitative analysis of the macroeconomic effects of public investment scaling-ups. [This paper](#), co-authored by Daniel Gurara, Giovanni Melina and Luis-Felipe Zanna, takes stock of the model applications and extensions and extract five common policy lessons from the universe of country cases. First, improving public investment efficiency and/or raising the rate of return of public projects raises growth and lowers the risks associated with debt sustainability. Second, prudent and gradual investment scaling-ups are preferable to aggressive front-loaded ones, in terms of private sector crowding-out effects, absorptive capacity constraints, and debt sustainability risks. Third, domestic revenue mobilization helps create fiscal space for investment scaling-ups, by effectively containing public debt surges and their later-on repayments. Fourth, aid smoothens fiscal adjustments associated with public investment increases and may lower the risks of unsustainable debt. Fifth, external savings mitigate Dutch disease macroeconomic effects and serve as fiscal buffers. The paper also discusses how these models were used to estimate the quantitative macro-economic effects associated with these lessons.

Inequality Toolkit: Version 2.0

The inequality toolkit and the [working paper](#) (Adrian Peralta-Alva, Xuan Song Tam, Xin Tang, and Marina Mendes Tavares, 2018) explaining the analytical framework both receive major updates. The toolkit evaluates the macroeconomic, distributional, and welfare effects of fiscal reforms in the context of low-income countries using three broad tax instruments: value added tax (VAT), corporate income tax (CIT), and personal income tax (PIT). The analytical framework is a heterogeneous agents incomplete markets model extended to capture salient features of low-income countries by including multiple sectors and regions. Compared to the previous version, transitional dynamics and welfare effects evaluated by consumption equivalence changes can be computed. The welfare effects can be further decomposed to an aggregate and a distributional component. The toolkit was taught in a two-day workshop for IMF staff during May 14-15, 2019.

For more information, please contact MacroResDev@imf.org or visit the IMF-DFID Macroeconomic Research for Development [website](#).